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is sent to electronic payment system 521. For example, upon purchasing goods 503, item list 531 is sent to electronic payment system 521 and stored in data warehouse 532.

[0083] Propensity analysis module 534 can analyze user 507's purchases, including item list 531. From the analysis, propensity analysis module 534 can identify items or categories of items user 507 may be interested in. The items can be items user 507 has purchased in the past (e.g., an item in goods 503) or items related to items user 507 has purchases in the past. Propensity analysis module 534 can indicate identified items or categories of items to advertisement identification module 536. These identified items or categories are items that the user is likely interested in and, as such, may have a propensity toward buying these items. The propensity analysis module may use past purchases, personal preferences, lifestyle or demographic information or other data in the propensity analysis.

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[0084] Advertisement identification module 536 can then select advertisements from advertisements 538 that correspond to the identified items or categories of items. For example, advertisement identification module 536 can select advertisement 546 for presentation at mobile wallet application 511. Advertisement 546 can be an advertisement for a product made by a company in packaged goods companies 571. Additionally or alternatively, the advertisement 546 may be created by the merchant and may advertise products or services sold by that merchant.

[0085] Advertising module 533 can send selected advertisements to mobile wallet application 511. For example, advertising module 533 can send advertisement 546 (e.g., related to an item in goods 503) to mobile wallet application 511. In general, advertisements can include interactive content. For example, advertisement 546 includes content 573. Content 573 can be a video, a link to a company website (e.g., for a company in packaged goods companies 571), a call to action (such as a questionnaire), or some other content user 507 can interact with through digital device 508. User 507 can interact with content 573, for example, responding to questions in content 573. Advertisement response 574 can indicate how user 507 has interacted with content 573. In one embodiment, a call to action may be to post an update on Facebook® or some other website such as a retail establishment ranking website. If the user makes such a post or performs some other call to action, the user may be rewarded with a benefit. That benefit may be related to the product about which the user posted on the various websites.

[0086] Based on advertisement response 574, benefit determination module 576 can determine if a benefit is to be conferred upon user 507. Benefit determination module 576

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can refer to benefit rules 578 when making a determination whether or not to confer a benefit. Thus, when user 507 interacts with advertisement 546 in a specified way (e.g., completes a survey, watches a video, etc.), benefit rules 578 can indicate that a company benefit (e.g., benefit 577) is to be conferred upon user 507. For example, benefit determination module 576 can confer benefit 577 on user 507. When user 507 receives an advertisement for a razor, for instance, and answers a questionnaire on how often they shave, a razor manufacture can give user 507 a coupon for reduced cost or free razor blades.

**[0087]** When a benefit is to be conferred on a user, the benefit can be stored in the user's brand locker. For example, benefit determination module 576 can store benefit 577 in brand locker 572 (part of user mobile wallet 524). Benefit 577 can be a coupon, a reduced cost or free financial service, a voucher, a promotion, a free bill pay, etc.

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[0088] Benefit determination module 576 can also track aggregate statistics, such as, for example, specified number and/or type of advertisements received, for advertisements presented at native or third party mobile wallet application 511. Benefits can also be conferred upon users based on the aggregate statistics. For example, benefit determination module 576 can confer a benefit upon user 507 in response to twenty advertisements being presented at mobile wallet application 511. Thus, conferred benefits can be company-specified benefits or can be electronic payment system-specified benefits. Electronic payment system 521 can notify a user when a benefit is conferred. For example, electronic payment system 521 can send benefit notification 547 to mobile wallet application 511 to indicate benefit 577 being stored in brand locker 572.

[0089] When user 507 makes subsequent purchases through user mobile wallet 524, electronic payment system 521 can automatically check brand locker 572 for benefits related to any purchases items. If benefits for an item are identified, user 507 can be notified through mobile wallet application 511. In some cases, if benefits are identified, those benefits can be applied automatically when the user purchases that item or service. Thus, if the benefit is a coupon or a buy one get one free offer, that benefit may be applied automatically when the user uses his or her mobile wallet application 511 to purchase that item. Accordingly, embodiments of the invention permit user 507 to self monetize digital device 508 through agreeing to participate in opt-in advertising.

[0090] Although not depicted, various other modules from the architecture of Figures 1 or 2 can also be included electronic payment system 521. The modules expressly

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depicted in Figure 5 can interoperate with these other modules as appropriate to facilitate desired functionality.

[0091] Figures 7-9 will now be described in conjunction with the computer architecture 600 illustrated in Figure 6. Figure 6 depicts a mobile wallet platform 601 that may have an architecture as shown in Figure 1. As further depicted in Figure 6, mobile wallet platform 601 communicates with an agent terminal 602 or a customer 607 to process transactions using a native or third party mobile wallet 605. Mobile wallet platform 601 may also communicate with a third party processor 604 to process transactions using a mobile wallet or third party mobile wallet. Mobile wallet platform 601 may also communicate with a third party mobile wallet platform 603 to process transactions using a mobile wallet owned or managed by a third party mobile wallet provider.

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[0092] Mobile wallet platform 601 may also process the mobile wallet transaction or third party mobile wallet transaction internally, without the use of third party processors or third party mobile wallet platforms. In particular, mobile wallet platform 601 may process transactions using third party mobile wallets in the same or similar manner that transactions are processed as shown in Figures 2-5. Accordingly, the physical environment and corresponding computer system architecture 600 shown in Figure 6 allows a cloud-based transaction platform 601 to support multiple third party mobile wallet providers.

[0093] Mobile wallet platform 601 communicates with agent terminal 602, third party mobile wallet platform 603, third party processor 604, and customer's mobile phone 619 through a variety of communication channels. For example, the communication between mobile wallet platform 601 and any one of these entities may be through communication channels 111, notification channels 112, or third party systems 113, as shown in Figure 1. Communication between mobile wallet platform 601 and any one of these entities may also be through processor 121 shown in Figure 1.

**[0094]** With respect to the entire description of Figure 6, and as explained above, the term "mobile wallet" encompasses not only mobile wallets owned or managed by the mobile wallet platform, but also third party mobile wallets owned by third party mobile wallet providers or managed by third party mobile wallet platforms. In contrast, the term "third party mobile wallet" refers only to third party mobile wallets owned by third party mobile wallet providers or managed by third party mobile wallet platforms. Accordingly, cloud-based transaction platform 601 may manage and process transactions using mobile

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wallets 605, which may be mobile wallets owned by cloud-based transaction platform 601 or mobile wallets owned by a third party mobile wallet provider.

[0095] As shown in Figure 6, customer 607 initiates a mobile wallet transaction 608 at agent terminal 602. Agent terminal 602 may be part of an agent network consisting of one or more agent terminals that communicate with cloud-based transaction platform 601. Examples of agent terminals are stores and other commercial establishments. Alternatively, customer 607 may initiate a mobile wallet transaction 609 by communicating with cloud-based transaction platform 601 through a channel selected by the customer.

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[0096] Mobile wallet transactions 608 and 609 may be one or more of any type of transaction that can be performed using a mobile wallet, including but not limited to, a deposit, withdrawal, transfer, purchase, bill payment, topping up of a prepaid mobile account, or any other transaction described herein. Customer 607 may initiate transactions 608 and 609 in a variety of ways. For example, customer 607 can initiate a deposit into a mobile wallet, a withdrawal from a mobile wallet, a bill payment from a mobile wallet, topping up of a prepaid mobile account using a mobile wallet, a transfer from a mobile wallet, a remittance transaction, a selection of health care provider or payment of health services, a purchase of music, movies, games or other downloadable content, or other purchases using a mobile wallet.

[0097] After customer 607 initiates transaction 609 through agent terminal 602, agent terminal 602 then communicates with cloud-based transaction platform 601 by sending transaction data 610 to cloud-based transaction platform 601. Once cloud-based transaction platform 601 has received the transaction either through transaction data 610 from agent terminal 602 or from transaction 609 initiated by customer 607, cloud-based transaction platform 601 may then process the transaction in a variety of ways.

**[0098]** For example, cloud-based transaction platform 601 may process the transaction by communicating with third party processor 604 by sending third party transaction data 611, which may include some or all of the information in transaction data 610. Third party processor can then perform the requested transactional processing and respond by sending confirmation data 612 to cloud-based transaction platform 601. Confirmation data 612 can indicate whether the requested mobile wallet transaction was processed successfully or unsuccessfully.

[0099] In another example, cloud-based transaction platform 601 may process the transaction by communicating with third party mobile wallet platform 603 by sending

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third party transaction data 613, which may include some or all of the information in transaction data 610. Third party mobile wallet platform 603 may have any architecture which is suitable for processing mobile wallet transactions. Third party mobile wallet platform 603 may have an architecture that is the same or similar to the architecture shown in Figure 1.

**[00100]** Alternatively, third party mobile wallet platform 603 may have a different architecture. In addition, any aspects of cloud-based transaction platform 601 or functionality provided by that platform may also be present in third party mobile wallet platform 603. After receiving third party transaction data 613, third party mobile wallet platform 603 may process the transaction itself or forward the transaction to third party processor 604 by sending third party transaction data 614.

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[00101] Once processing of the transaction is complete, third party mobile wallet platform 603 may respond to cloud-based transaction platform 601 by sending confirmation data 615. Confirmation data 615 can indicate whether the requested mobile wallet transaction was processed successfully or unsuccessfully. In addition, following the processing performed by third party mobile wallet platform 603 after receiving third party transaction data 613, the third party mobile wallet platform 603 may provide a commission or transaction fee 616 to cloud-based transaction platform 601.

**[00102]** In a further example, mobile wallet platform 601 may process the transaction internally within cloud-based transaction platform 601. Specifically, cloud-based transaction platform 601 may process a transaction using a third party mobile wallet entirely within cloud-based transaction platform 601.

**[00103]** Once processing of the transaction is complete, cloud-based transaction platform 601 may communicate with agent terminal 602 by sending confirmation data 617 indicating information such as whether the transaction was successful or not. Also following processing of the transaction, mobile wallet platform may send customer notification 618 through an appropriate channel such as to the customer's mobile phone 619. For example, customer notification 618 may be sent using the notification services 102 and notification channels 112 (e.g. SMPP, SMTP, voice) of Figure 1.

**[00104]** With reference now to Figures 2, 6 and 7, the cloud-based transaction system 210 receives communication 226 from an agent terminal 223 over a communication channel connected to the cloud-based transaction platform 210/601 (act 710). The agent communication indicates that a customer 222/205 desires to perform a mobile wallet transaction using their third party mobile wallet 207. The cloud-based transaction system

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210 sends the agent communication to a third party mobile wallet platform 603 (act 720). The cloud-based transaction system 210 then receives communication 611 from the third party mobile wallet platform confirming processing of the transaction 612 (act 730) and sends communication 617 to the agent terminal 602 over communication channels 111 connected to the cloud-based transaction platform indicating confirmation of the processing of the transaction (act 740).

**[00105]** As mentioned above, multiple different types of transactions may be performed using the infrastructure provided by the cloud-based transaction system. The transactions may be a performed not only by a first customer that uses a first mobile wallet provider, but also by a second, different customer using a second, different third party mobile wallet provider. The third party mobile wallet platform may use a third party processor to perform (at least parts of) the transaction. The customer may be notified of confirmation of the processing of the transaction using the third party mobile wallet over various communication channels connected to the cloud-based transaction platform. In some cases, each third party mobile wallet provider has their own point of sale (POS) processing system 230. The third party mobile wallet providers' POS processing systems may communicate with each other using the cloud-based transaction platform to process the transaction.

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**[00106]** One of the transactions made possible by the cloud-based transaction platform 601 is depositing funds into a third party mobile wallet owned by an entity different than the customer. The cloud-based transaction system may receive a communication 226 from the agent terminal 223 over a communication channel connected to the cloud-based transaction platform. The agent communication indicates that the customer desires to deposit a specified amount of funds into their third party mobile wallet 605. The cloud-based transaction system may then credit the third party mobile wallet with the specified amount of funds.

[00107] Another transaction provided by the cloud-based transaction platform 601 is withdrawing funds from a third party mobile wallet owned by an entity different than the customer. The cloud-based transaction platform receives communication 208 from the customer 205 indicating that the customer desires to withdraw a specified amount of funds from the third party mobile wallet. The cloud-based transaction platform 601 returns a secure, perishable withdrawal code to the customer over at least one of the communication channels connected to the cloud-based transaction platform. It also receives communication from the agent terminal 223 indicating that the withdrawal code

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has been presented to an agent and debits the third party mobile wallet by the specified amount of funds.

[00108] Another transaction provided by the cloud-based transaction platform 601 is transferring money from a third party mobile wallet within the cloud-based transaction platform to a recipient at a second third party mobile wallet provided by a second mobile wallet provider. In this transaction, the platform 601 receives a customer communication 208 indicating that a customer 205 desires to transfer a specified amount of funds to a specified recipient using a specified payment method from the third party mobile wallet 606. The cloud-based transaction platform debits the third party mobile wallet by the specified amount of funds and transfers the specified amount of funds from the cloud-based transaction platform to the second different third party mobile wallet platform for delivery to the specified recipient. The specified amount of funds is then transferred to the second third party mobile wallet platform.

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[00109] Yet another transaction provided by the cloud-based transaction platform 601 is making a purchase from a third party mobile wallet managed by a third party mobile wallet platform. In this transaction, the cloud-based transaction platform receives communication 208 from the customer 205 indicating that the customer desires to purchase an item for a specified amount of funds using a specified payment method from the customer's third party mobile wallet 606. The cloud-based transaction platform returns a secure, perishable purchase code to the customer, receives communication 226 from the agent terminal 223 indicating that the purchase code has been presented to an agent, and debits the customer's third party mobile wallet by the specified amount of funds.

[00110] In another embodiment, as shown in Fig. 8, a cloud-based transaction system performs or facilitates a transaction using a third party point of sale (POS) system. The cloud-based transaction system receives communication 226 from a specified POS system 224 implemented at an agent terminal 223 over a communication channels 111 connected to the cloud-based transaction platform 210 (act 810). The POS communication indicates that a customer 205 has initiated a mobile wallet transaction using their third party mobile wallet 207. The cloud-based transaction system sends the POS communication to a corresponding third party POS transaction processing system 230 that has been established to process POS transactions from the specified POS system (act 820). The cloud-based transaction system then receives communication from the third party POS transaction processing system 230 confirming processing of the transaction (act 830) and

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sends communication to the specified POS system 224 implemented at the agent terminal 223 indicating confirmation of the processing of the transaction (act 840).

In some cases, transaction fees or commissions 616 may be paid by the third party mobile wallet platform to the cloud-based transaction platform for facilitating the transaction. One of the transactions allowed by the cloud-based transaction system is depositing funds into a third party mobile wallet provided by a third party mobile wallet provider. In this transaction, the cloud-based transaction platform 210 receives communication 226 from a specified POS system 224 implemented at the agent terminal 223 over a communication channels 111 connected to the cloud-based transaction platform. The POS communication indicates that the customer 205/222 desires to deposit a specified amount of funds into the third party mobile wallet 606 provided by the third party mobile wallet provider. The cloud-based transaction system validates the status of the third party mobile wallet provided by the third party mobile wallet provider, determines if the specified POS system implemented at the agent terminal is authorized to deposit money, performs a limit check or a velocity check on the third party mobile wallet provided by the third party mobile wallet provider, credits the third party mobile wallet provided by the third party mobile wallet provider with the specified amount of funds, returns a notification to the specified POS system implemented at the agent terminal confirming the deposit and notifies the customer that the specified amount of funds were deposited in the third party mobile wallet provided by the third party mobile wallet provider over a communication channel connected to the cloud-based transaction platform 210.

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[00112] Another transaction provided by the cloud-based transaction platform 210 is withdrawing funds from a third party mobile wallet provided by a third party mobile wallet provider. The cloud-based transaction platform 210 receives communication 208 from a customer 205 indicating that the customer desires to withdraw a specified amount of funds from the third party mobile wallet 606 provided by the third party mobile wallet provider. The cloud-based transaction platform 210 validates the status of the third party mobile wallet provider wallet provider, determines if the balance of the third party mobile wallet provided by the third party mobile wallet provider is sufficient to accommodate the requested withdrawal for the specified amount of funds, performs a limit check and/or a velocity check on the third party mobile wallet, returns a secure, perishable withdrawal code to the customer over a communication channel 111 connected to the cloud-based transaction platform, receives subsequent POS

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communication 226 indicating that the withdrawal code has been presented to an agent (e.g. at agent terminal 223), debits the third party mobile wallet provided by the third party mobile wallet provider by the specified amount of funds, returns a notification to the POS system at the agent terminal confirming the withdrawal and notifies the customer 205 (e.g. in confirmation 617) that the specified amount of funds were withdrawn from the third party mobile wallet.

In yet another transaction provided by the cloud-based transaction platform, money is transferred using a third party mobile wallet provided by a third party mobile wallet provider. The cloud-based transaction platform 210 receives customer communication 208 indicating that the customer 205 desires to transfer a specified amount of funds to a specified recipient having a third party mobile wallet 606, where the transfer uses a specified payment method from the customer's third party mobile wallet at the cloud-based transaction platform 210. The cloud-based transaction platform validates the status of the specified payment method, performs a limit check and/or a velocity check on the specified payment method, performs a check on the specified recipient having a third party mobile wallet to comply with the office of foreign assets control, debits the customer's mobile wallet at the cloud-based transaction platform by the specified amount of funds, transfers the specified amount of funds to third party mobile wallet provider for delivery to the third party mobile wallet of the specified recipient over a communication channel connected between the cloud-based transaction platform and the third party mobile wallet provider, and notifies the customer that the specified amount of funds was transferred to the specified recipient.

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[00114] In another transaction provided by the cloud-based transaction platform 210, a purchase is made from a third party mobile wallet provided by a third party mobile wallet provider. In this transaction, the cloud-based transaction system receives communication 208 from the customer 205 indicating that the customer desires to purchase an item for a specified amount of funds using a specified payment method from the customer's third party mobile wallet 606. The cloud-based transaction system returns a secure, perishable purchase code to the customer, receives subsequent agent terminal communication indicating that the purchase code has been presented to an agent, validates the status of the specified payment method, determines if the specified payment method can accommodate a purchase for the specified amount, performs a limit check and/or a velocity check on the specified payment method, debits the customer's third party mobile wallet by the specified amount of funds by sending communication to the third party

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mobile wallet provider, returns a notification to the POS system at the agent terminal authorizing the purchase and sends a receipt to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform.

[00115] Figure 9 describes a further embodiment in which a cloud-based transaction platform facilitates making a purchase from a third party mobile wallet provided by a third party mobile wallet provider. The cloud-based transaction system 210 receives communication 208 from a customer 205 over a communication channel connected to the cloud-based transaction platform (act 910). The customer communication indicating that a customer desires to purchase an item for a specified amount of funds using a specified payment method indicated by the customer's third party mobile wallet 606. The cloud-based transaction system returns a secure, perishable purchase code to the customer (act 920) and receives communication from an agent terminal 223 over at least one of the communication channels connected to the cloud-based transaction platform indicating that the purchase code has been presented to an agent (act 930). The cloud-based transaction system 210 then debits the customer's third party mobile wallet 606 by the specified amount of funds (act 940).

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[00116] Substantially any item may be purchased using this transaction technique including items provided directly by the cloud-based transaction system, or items provided by third party retailers through the cloud-based transaction system. These items may include health care services, physical, shippable items, music, games, movies or any other digital or downloadable content.

[00117] Embodiments of the invention can adhere to Know Your Customer (KYC) rules in the United States by performing Customer Identification Program (CIP) checks as required by the Bank Secrecy Act and U.S. PATRIOT Act. A minimum amount of information can be gathered about a customer, such as, for example, First Name, Last Name, Date of Birth, Government ID Type, Government ID Number, Address. The CIP processes are designed to validate customer identity against government blacklists and assist in the prevention of money laundering and terrorist financing. A combination of non-documentary and documentary verification can be used to ensure beyond a reasonable doubt the identity of the customer.

[00118] Non-Documentary Verification can occur through the presentment of the information that was collected from the user to an external third party, such as, for example, Lexis Nexis. Documentary Verification can occur if non-documentary verification fails, then the user is asked to present an unexpired government ID. Various

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differ forms of identification including Driver's license, Passport, Alien identification (e.g., green card or work visa), and Mexican Consular identification card, can be accepted.

[00119] Embodiments of the invention can perform Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT) checks. AML and CFT checks can be performed using transaction monitoring methods to flag names and suspicious transactions for further investigation. The mobile wallet platform can perform AML and CFT checks on all electronic financial transactions to ensure that electronic funds are not being used for money laundering or terrorism. 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. Velocity checks can also be performed. Velocity Checks ensure that subscribers are not abusing the mobile wallet platform within the allowable limits.

[00120] The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.

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### **CLAIMS**

What is claimed:

A cloud-based transaction platform including: one or more processors;

system memory;

one or more computer-readable storage media having stored thereon computerexecutable instructions that, when executed by the one or more processors, cause the computing system to perform a method for performing a transaction using a third party mobile wallet, the method comprising the following:

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

platform;

an act of sending the agent communication to a third party mobile wallet

an act of receiving communication from the third party mobile wallet platform confirming processing of the transaction; and

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an act of sending communication to the agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the communication indicating confirmation of the processing of the transaction.

- 2. The cloud-based transaction platform of claim 1, wherein a transaction is performed by a second, different customer using a second, different third party mobile wallet.
- 3. The cloud-based transaction platform of claim 1, wherein the third party mobile wallet platform comprises a third party processor.
- The cloud-based transaction platform of claim 1, wherein the transaction using a third party mobile wallet comprises one or more of a deposit, a withdrawal, a transfer, a purchase, a bill payment, or topping up of a prepaid mobile account.

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5. The cloud-based transaction platform of claim 1, further comprising an act of notifying the customer of confirmation of the processing of the transaction using the third party mobile wallet over at least one of the plurality of communication channels connected to the cloud-based transaction platform.

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6. The cloud-based transaction platform of claim 1, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

- 7. The cloud-based transaction platform of claim 1, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.
- 8. The cloud-based transaction platform of claim 7, wherein the third party mobile wallet providers' POS processing systems communicate with each other using the cloud-based transaction platform to process the transaction.
- 9. The cloud-based transaction platform of claim 1, wherein the transaction comprises depositing funds into a third party mobile wallet owned by an entity different than the customer, including:

an act of receiving communication from the agent terminal over one of the plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that the customer desires to deposit a specified amount of funds into their third party mobile wallet; and

an act of crediting the third party mobile wallet with the specified amount of funds.

10. The cloud-based transaction platform of claim 1, wherein the transaction comprises withdrawing funds from a third party mobile wallet owned by an entity different than the customer, including:

an act of receiving communication from the customer over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to withdraw a specified amount of funds from the third party mobile wallet;

an act of returning a secure, perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform;

an act of receiving communication from the agent terminal over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the withdrawal code has been presented to an agent; and

an act of debiting the third party mobile wallet by the specified amount of funds.

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11. The cloud-based transaction platform of claim 6, wherein the transaction comprises transferring money from a third party mobile wallet within the cloud-based transaction platform to a recipient at a second third party mobile wallet provided by a second mobile wallet provider, the method comprising:

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an act of receiving customer communication over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that a customer desires to transfer a specified amount of funds to a specified recipient using a specified payment method from the third party mobile wallet;

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an act of debiting the third party mobile wallet by the specified amount of funds; and

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an act of transferring the specified amount of funds from the cloud-based transaction platform to the second different third party mobile wallet platform for delivery to the specified recipient, the specified amount of funds being transferred over at least one of the plurality of channels connected to the second third party mobile wallet platform.

12. The cloud-based transaction platform of claim 1, wherein the transaction comprises making a purchase from a third party mobile wallet managed by a third party mobile wallet platform, including:

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an act of receiving communication from the customer over one of the plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to purchase an item for a specified amount of funds using a specified payment method from the customer's third party mobile wallet;

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an act of returning a secure, perishable purchase code to the customer over at least one of the plurality of channels connected to the cloud-based transaction platform;

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an act of receiving communication from the agent terminal over at least one of the plurality of channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the purchase code has been presented to an agent; and

an act of debiting the customer's third party mobile wallet by the specified amount of funds.

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13. A cloud-based transaction platform including: one or more processors; system memory;

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one or more computer-readable storage media having stored thereon computerexecutable instructions that, when executed by the one or more processors, cause the computing system to perform a method for performing a transaction using a third party point of sale (POS) system, the method comprising:

an act of receiving communication from a specified POS system implemented at an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the POS communication indicating that a customer has initiated a mobile wallet transaction using their third party mobile wallet;

an act of sending the POS communication to a corresponding third party POS transaction processing system that has been established to process POS transactions from the specified POS system;

an act of receiving communication from the third party POS transaction processing system confirming processing of the transaction; and

an act of sending communication to the specified POS system implemented at the agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the communication indicating confirmation of the processing of the transaction.

- 14. The cloud-based transaction platform of claim 13, further comprising the act of receiving a transaction fee paid by the specified POS system to the cloud-based transaction platform.
- 15. The cloud-based transaction platform of claim 13, wherein the transaction comprises depositing funds into a third party mobile wallet provided by a third party mobile wallet provider, including:

an act of receiving communication from the specified POS system implemented at the agent terminal over one of the plurality of channels connected to the cloud-based transaction platform, the POS communication indicating that the customer desires to deposit a specified amount of funds into the third party mobile wallet provided by the third party mobile wallet provider;

an act of validating the status of the third party mobile wallet provided by the third party mobile wallet provider; WO 2013/078176 37 PCT/US2012/066013

an act of determining if the specified POS system implemented at the agent terminal is authorized to deposit money;

an act of performing one or more of a limit check and a velocity check on the third party mobile wallet provided by the third party mobile wallet provider;

an act of crediting the third party mobile wallet provided by the third party mobile wallet provider with the specified amount of funds;

an act of returning a notification to the specified POS system implemented at the agent terminal confirming the deposit; and

an act of notifying the customer that the specified amount of funds were deposited in the third party mobile wallet provided by the third party mobile wallet provider over at least one of the plurality of communication channels connected to the cloud-based transaction platform.

16. The cloud-based transaction platform of claim 13, wherein the transaction comprises withdrawing funds from a third party mobile wallet provided by a third party mobile wallet provider, including:

an act of receiving communication from a customer over one of the plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to withdraw a specified amount of funds from the third party mobile wallet provided by the third party mobile wallet provider;

an act of validating the status of the third party mobile wallet provided by the third party mobile wallet provider;

an act of determining if the balance of the third party mobile wallet provided by the third party mobile wallet provider is sufficient to accommodate the requested withdrawal for the specified amount of funds;

an act of performing one or more of a limit check and a velocity check on the third party mobile wallet;

an act of returning a secure, perishable withdrawal code to the customer over at least one of the plurality of channels connected to the cloud-based transaction platform;

an act of receiving subsequent POS communication over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the POS communication indicating that the withdrawal code has been presented to an agent;

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an act of debiting the third party mobile wallet provided by the third party mobile wallet provider by the specified amount of funds;

an act of returning a notification to the POS system at the agent terminal confirming the withdrawal; and

an act of notifying the customer that the specified amount of funds were withdrawn from the third party mobile wallet over at least one of the plurality of communication channels connected to the cloud-based transaction platform.

17. The cloud-based transaction platform of claim 13, wherein the transaction comprises transferring money using a third party mobile wallet provided by a third party mobile wallet provider, including:

an act of receiving customer communication over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to transfer a specified amount of funds to a specified recipient having a third party mobile wallet, the transfer using a specified payment method from the customer's third party mobile wallet at the cloud-based transaction platform;

an act of validating the status of the specified payment method;

an act of performing one or more of a limit check and a velocity check on the specified payment method;

an act of performing a check on the specified recipient having a third party mobile wallet to comply with the office of foreign assets control;

an act of debiting the customer's mobile wallet at the cloud-based transaction platform by the specified amount of funds;

an act of transferring the specified amount of funds to third party mobile wallet provider for delivery to the third party mobile wallet of the specified recipient over at least one of the plurality of channels connected between the cloud-based transaction platform and the third party mobile wallet provider;

an act of notifying the customer that the specified amount of funds was transferred to the specified recipient over at least one of the plurality of channels connected to the cloud-based transaction platform.

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18. The cloud-based transaction platform of claim 13, wherein the transaction comprises making a purchase from a third party mobile wallet provided by a third party mobile wallet provider, including:

an act of receiving communication from the customer over one of the plurality of communication channels connected to the mobile wallet platform, the customer communication indicating that the customer desires to purchase an item for a specified amount of funds using a specified payment method from the customer's third party mobile wallet;

an act of returning a secure, perishable purchase code to the customer over at least one of the plurality of communication channels connected to the cloudbased transaction platform;

an act of receiving subsequent agent terminal communication over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the purchase code has been presented to an agent;

an act of validating the status of the specified payment method;

an act of determining if the specified payment method can accommodate a purchase for the specified amount;

an act of performing one or more of a limit check and a velocity check on the specified payment method;

an act of debiting the customer's third party mobile wallet by the specified amount of funds by sending communication to the third party mobile wallet provider;

an act of returning a notification to the POS system at the agent terminal authorizing the purchase; and

an act of sending a receipt to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform.

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19. A cloud-based transaction platform including: one or more processors;

system memory;

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one or more computer-readable storage media having stored thereon computerexecutable instructions that, when executed by the one or more processors, cause the computing system to perform a method for making a purchase from a third party mobile wallet provided by a third party mobile wallet provider, the method comprising the following:

an act of receiving communication from a customer over one of a plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that a customer desires to purchase an item for a specified amount of funds using a specified payment method indicated by the customer's third party mobile wallet;

an act of returning a secure, perishable purchase code to the customer over at least one the plurality of communication channels connected to the cloud-based transaction platform;

an act of receiving communication from an agent terminal over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the purchase code has been presented to an agent; and

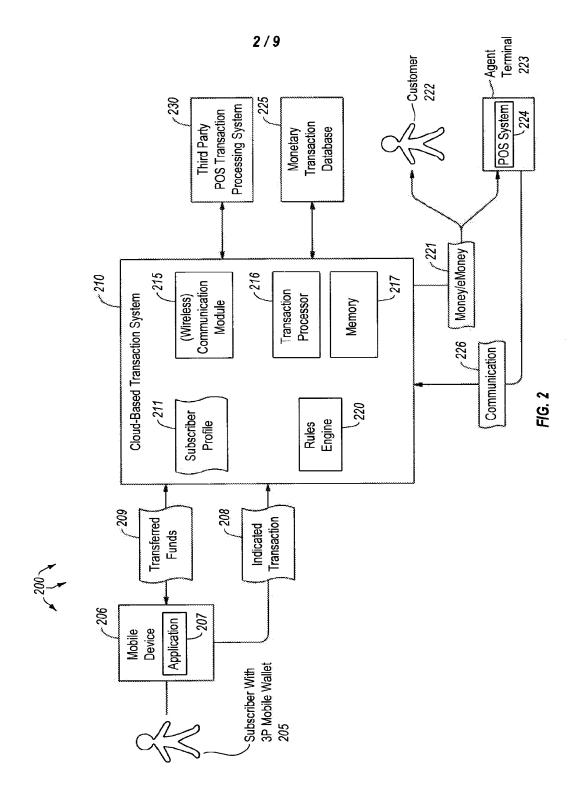
an act of debiting the customer's third party mobile wallet by the specified amount of funds.

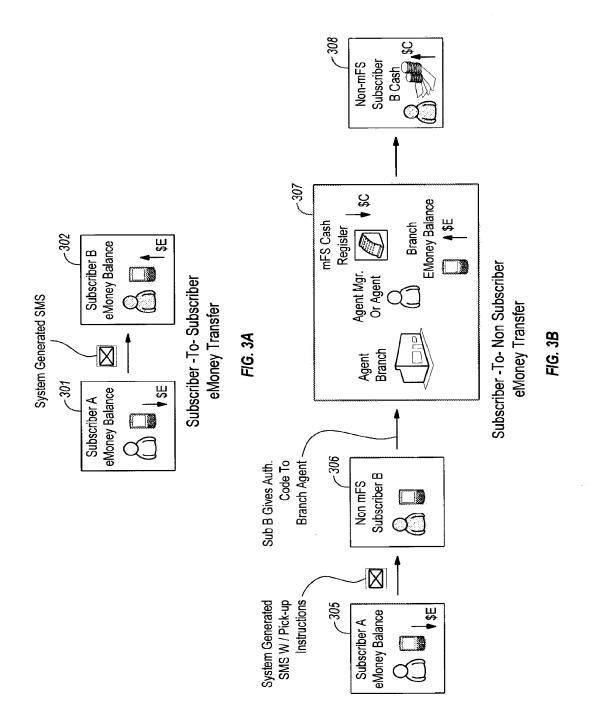
20. The cloud-based transaction platform of claim 19, wherein the item purchased by the customer comprises at least one of the following: health care services, music, games, and movies.

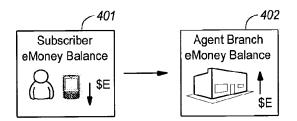
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Mobile Wallets Clearing House (Batch) Paymennt Handler GW(Credit/Debit) Processor 121 15 quqoT əmihiA Clearing House (Web Svc) Bill Payment (Direct & Fisery) Service Connectors 103 3rd Party Systems 113 MNO / MVNO (Billing System) Name Matching Engine GreenDot (MoneyPak Val) (Bancorp/Metal) Bank Ext. Processor (CDS & UCP) Rules Engine 109 Remittance (MGI & WU) Notifications 712 Voice Notification Services 102 SMTP Business Process Services 104 SWbb Money Container 12ME Platform Functional Architecture Profile stoejdO 108 Blackberry Database Tx History bionbnA Сотрапу Мұті əuoydi Integration Tier 101 Person JmgM Channels 111 assu ssn MCM ЧAW Authorization Services 107 Security Sevices 106 IΛΚ SOd Web STK SSH

FIG. 1

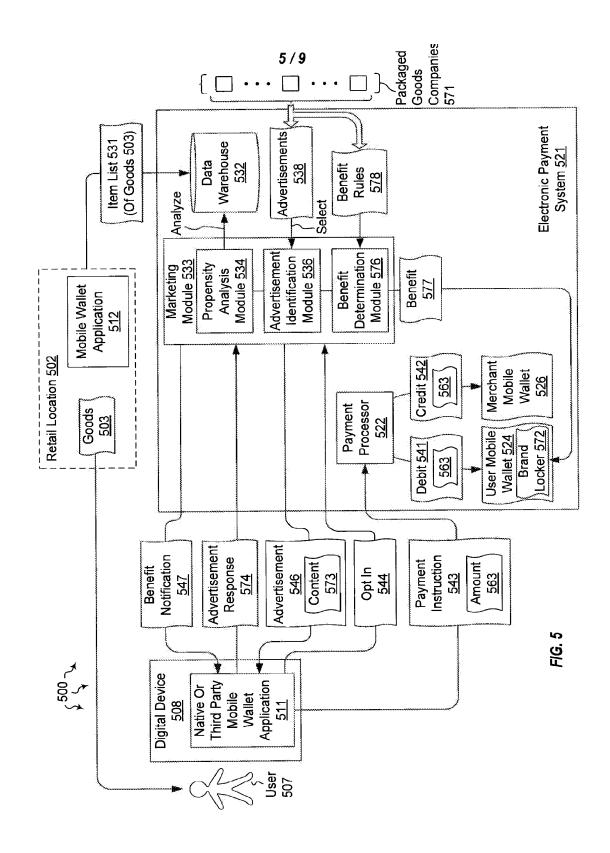




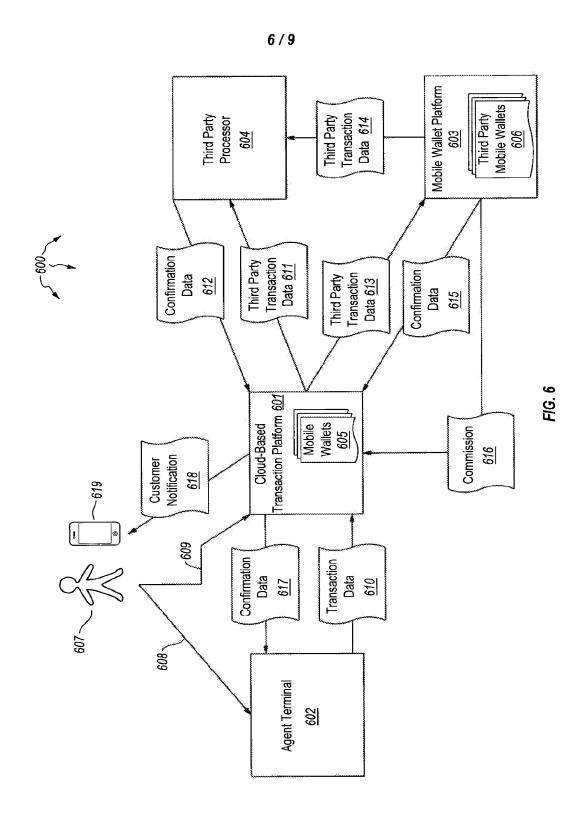


Subscriber Makes Retail Purchase

FIG. 4



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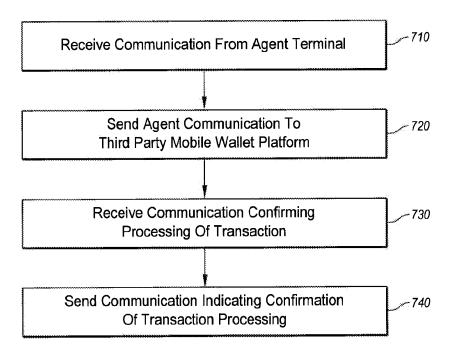


FIG. 7

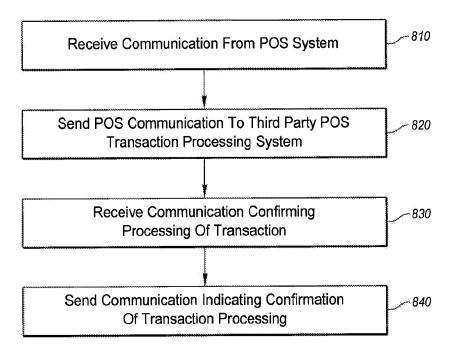


FIG. 8

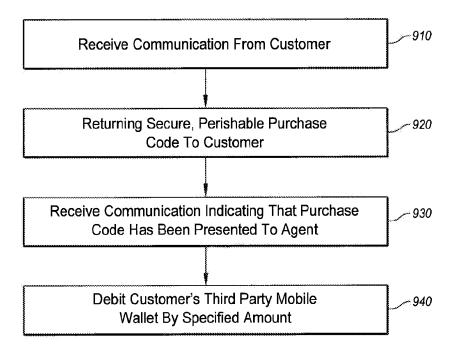


FIG. 9

## INTERNATIONAL SEARCH REPORT

International application No. PCT/US 12/66013

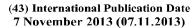
A. CLASSIFICATION OF SUBJECT MATTER  IPC(8) - G06Q 20/00 (2013.01)  USPC - 705/78  According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
IPC (8) - G06Q 20/00 (2013.01) USPC -705/78			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 705/64; 705/39 (See Keywords Below)			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Patbase; Google Scholar Search Terms: Mobile wallet, payment, third party, other provider, different provider, payment, transaction, purchase, deposit, withdraw, transfer, authorization code, point of sale, agent, operator, cloud, network, confirmation, notify, wallet provider, bill payment,			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	opropriate, of the relevant passages	Relevant to claim No.
Y	US 2008/0208762 A1 (ARTHUR et al.), 28 August 200 especially Abstract; para [0016], [0057], [0065], [0068] [0119], [0140]		1-20
Y	US 6,873,974 B1 (SCHUTZER), 29 March 2005 (29.0 Abstract; col 3, in 40 to col 4, in 20; col 8, in 60 to col 9		1-20
Υ	US 2007/0125840 A1 (LAW et al.), 07 June 2007 (07.06.2007), entire document, especially Abstract; para [0033]-[0035], [0042], [0117]-[0120], [0150]-[0152]		9-11 and 15-17
Α	US 2009/0234751 A1 (CHAN et al), 17 September 200	09 (17.09.2009), entire document	1-20
Α	US 2011/0196788 A1 (LU et al.), 11 August 2011 (11.08.2011), entire document		1-20
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Further documents are listed in the continuation of Box C.			
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Date of the actual completion of the international search Date		Date of mailing of the international search report	
15 January 2	2013 (15.01.2013)	29 JAN 20	13
Name and mailing address of the ISA/US Authorized officer:			
	T, Attn: ISA/US, Commissioner for Patents 0, Alexandria, Virginia 22313-1450	Lee W. Young	
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- (74) Agents: STRINGHAM, John, C. et al.; 60 East South Temple, Suite 1000, Salt Lake City, UT 84111 (US).
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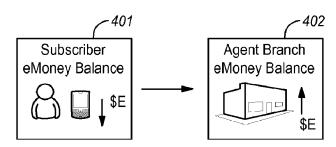
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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(54) Title: DISRUPTIVELY PRICED OR FREE FINANCIAL SERVICES OR ITEMS IN EXCHANGE FOR PARTICIPATION IN OPT IN ADVERTISING



### Subscriber Makes Retail Purchase

(57) Abstract: An electronic payment system is provided which provides monetary rewards in exchange for participation in opt-in advertising. The electronic payment system is configured to receive an indication that a user is initiating participation in opt-in advertising. The advertising is sent to the user from the electronic payment system in exchange for a monetary reward. In most cases, the user will have a mobile wallet account at the electronic payment system. The electronic payment system then sends advertisements to a mobile wallet application running on a digital device of the user, determines an appropriate monetary reward based on the number and/or type of advertisements sent to the user's mobile wallet application, and provides the determined monetary reward to the user via the mobile wallet application on the user's digital device.

# DISRUPTIVELY PRICED OR FREE FINANCIAL SERVICES OR ITEMS IN EXCHANGE FOR PARTICIPATION IN OPT IN ADVERTISING

### **CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] This application claims priority to and the benefit of U.S. Patent Application Ser. No. 13/874,192, entitled "Disruptively Priced or Free Financial Services or Items in Exchange for Participation in Opt-In Advertising", filed April 30, 2013. This application also claims priority to and the benefit of U.S. Provisional Patent Application Ser. No. 61/641,677, entitled "Providing Monetary Incentives in Exchange for Participation in Opt-In Advertising", filed on May 2, 2012. This application also claims priority to and is a continuation-in-part of U.S. Patent Application Ser. No. 13/528,720, entitled "Disruptively Priced or Free Financial Services or Items in Exchange for Participation in Opt-In Advertising", filed on June 20, 2012, which itself claims priority to and the benefit of U.S. Provisional Application Ser. No. 61/499,927, filed on June 22, 2011, entitled "Disruptively Priced or Free Financial Services or Items in Exchange for Participation in Opt In Advertising", which is incorporated herein by reference in its entirety. This application further claims priority to and the benefit of U.S. Patent Application Ser. No. 13/484,199, entitled "Monetary Transaction System", filed on May 30, 2012, which itself claims priority to U.S. Provisional Application Ser. No. 61/522,099, filed on August 10, 2011, entitled "Mobile Wallet Platform", and U.S. Provisional Application Ser. No. 61/493,064, filed on June 3, 2011, entitled "Mobile Wallet Platform". Each of the aforementioned applications is incorporated by reference herein in its entirety.

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### **BACKGROUND**

[0002] Mobile phones and other digital devices have become increasingly popular in recent years. Many mobile device users use their devices to perform countless different daily tasks. For instance, mobile devices allow users to check email, send and receive instant messages, check calendar items, take notes, set up reminders, browse the internet, play games or perform any number of different actions using specialized applications or "apps". These applications allow mobile devices to

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communicate with other computer systems and perform a wide variety of networkconnected tasks previously not possible with a mobile device.

### **BRIEF SUMMARY**

[0003] Embodiments described herein are directed to providing disruptively priced or free financial services or items in exchange for participation in opt-in advertising. A user may opt-in to receive some form of advertising on his or her phone. The advertising may appear in a mobile wallet application used to pay for goods or services. The advertising may be related to products the user has previously purchased using the mobile wallet application. The user has an account with a mobile payment system that provides the mobile wallet application. The mobile payment system can provide the user with a variety of functionality including purchasing items along with one or more of depositing funds, withdrawing funds, transferring funds, etc. Accordingly, the user can use a digital device (e.g., a computer or mobile phone) to interact with the electronic payment system to pay for goods and/or services.

[0004] In exchange for a financial benefit, the user opts in to receive advertisements, coupons, vouchers, promotions, Buy One Get One ("BOGO") offers or other benefits from the electronic payment system. Upon the user's agreement to participate in opt-in advertising, the electronic payment system may be permitted to store (e.g., by capturing purchase orders), track, and analyze items that the user purchases through their account with the electronic payment system. The electronic payment system stores and maintains a list of a user's purchased items in a data warehouse. The electronic payment system then analyzes the user's purchasing habits to identify advertisements and/or promotions that may be of interest to the user. The promotions (such as coupons) may then be sent to the user's mobile wallet application and applied automatically when the user purchases that item using the mobile wallet.

[0005] In other embodiments, an electronic payment system may be provided which provides monetary rewards in exchange for participation in opt-in advertising. For instance, the electronic payment system may be configured to receive an indication that a user is initiating participation in opt-in advertising. The advertising is sent to the user from the electronic payment system in exchange for a monetary reward. In most cases, the user will have a mobile wallet account at the electronic payment system. The electronic payment system then sends advertisements to a

mobile wallet application running on a digital device of the user, determines an appropriate monetary reward based on the number and/or type of advertisements sent to the user's mobile wallet application, and provides the determined monetary reward to the user via the mobile wallet application on the user's digital device.

[0006] In yet another embodiment, an electronic payment system may be provided which allows users to redeem monetary rewards received for participation in opt-in advertising. The electronic payment system receives an indication from a user's mobile wallet application that a user is attempting to pay for a good or service using monetary rewards received in exchange for participation in opt-in advertising. In most cases, as above, the user will have a mobile wallet account at the electronic payment system. The electronic payment system then validates the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds, including the monetary rewards, to pay for the specified good or service, and applies of the monetary rewards to the indicated good or service, allowing the user to purchase the indicated good or service using the received monetary rewards. In some cases, the electronic payment system may receive a subsequent indication from the user's mobile wallet application indicating that a coupon is to be applied for the purchase of the good or service. The electronic payment system may then determine whether the coupon applies to the indicated good or service and, if so, may apply the coupon to the indicated good or service, so that the user purchases the indicated good or service using the received monetary rewards at a price reduced by the amount of the coupon.

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[0007] This Summary is provided to introduce a selection of concepts in a simplified form that are further described below in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used as an aid in determining the scope of the claimed subject matter.

[0008] Additional features and advantages will be set forth in the description which follows, and in part will be apparent to one of ordinary skill in the art from the description, or may be learned by the practice of the teachings herein. Features and advantages of embodiments described herein may be realized and obtained by means of the instruments and combinations particularly pointed out in the appended claims. Features of the embodiments described herein will become more fully apparent from the following description and appended claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

- [0009] To further clarify the above and other features of the embodiments described herein, a more particular description will be rendered by reference to the appended drawings. It is appreciated that these drawings depict only examples of the embodiments described herein and are therefore not to be considered limiting of its scope. The embodiments will be described and explained with additional specificity and detail through the use of the accompanying drawings in which:
- [0010] Figure 1 illustrates a monetary transaction system architecture in which embodiments described herein may operate.
- 10 **[0011]** Figure 2 illustrates an alternate example embodiment of a monetary transaction system.
  - [0012] Figures 3A and 3B illustrate example data flows for performing subscriber-to-subscriber and subscriber-to-non-subscriber eMoney transfers via a mobile wallet, respectively.
- 15 [0013] Figure 4 illustrates an example data flow for making a retail purchase using a mobile wallet.
  - [0014] Figure 5 illustrates a monetary transaction system architecture in which free or reduced price items may be provided in exchange for opt-in advertising.
  - [0015] Figure 6 illustrates an example data flow for providing free or reduced price items in exchange for participation in opt-in advertising.

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- [0016] Figure 7 illustrates an example screen shot of a mobile wallet application with opt-in advertisements.
- [0017] Figure 8 illustrates an example data flow for providing monetary rewards in exchange for participation in opt-in advertising.
- 25 [0018] Figure 9 illustrates an example data flow for redeeming a monetary reward received for participation in opt-in advertising.

### **DETAILED DESCRIPTION**

[0019] Embodiments described herein are directed to providing disruptively priced or free financial services or items in exchange for participation in opt-in advertising. A user may opt-in to receive some form of advertising on his or her phone. The advertising may appear in a mobile wallet application used to pay for goods or services. The advertising may be related to products the user has previously

purchased using the mobile wallet application. The user has an account with a mobile payment system that provides the mobile wallet application. The mobile payment system can provide the user with a variety of functionality including purchasing items along with one or more of depositing funds, withdrawing funds, transferring funds, etc. Accordingly, the user can use a digital device (e.g., a computer or mobile phone) to interact with the electronic payment system to pay for goods and/or services.

[0020] In exchange for a financial benefit, the user opts in to receive advertisements, coupons, vouchers, promotions, Buy One Get One ("BOGO") offers or other benefits from the electronic payment system. Upon the user's agreement to participate in opt-in advertising, the electronic payment system may be permitted to store (e.g., by capturing purchase orders), track, and analyze items that the user purchases through their account with the electronic payment system. The electronic payment system stores and maintains a list of a user's purchased items in a data warehouse. The electronic payment system then analyzes the user's purchasing habits to identify advertisements and/or promotions that may be of interest to the user. The promotionsz (such as coupons) may then be sent to the user's mobile wallet application and applied automatically when the user purchases that item using the mobile wallet.

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[0021] In other embodiments, an electronic payment system may be provided which provides monetary rewards in exchange for participation in opt-in advertising. For instance, the electronic payment system may be configured to receive an indication that a user is initiating participation in opt-in advertising. The advertising is sent to the user from the electronic payment system in exchange for a monetary reward. In most cases, the user will have a mobile wallet account at the electronic payment system. The electronic payment system then sends advertisements to a mobile wallet application running on a digital device of the user, determines an appropriate monetary reward based on the number and/or type of advertisements sent to the user's mobile wallet application, and provides the determined monetary reward to the user via the mobile wallet application on the user's digital device.

[0022] In yet another embodiment, an electronic payment system may be provided which allows users to redeem monetary rewards received for participation in opt-in advertising. The electronic payment system receives an indication from a user's mobile wallet application that a user is attempting to pay for a good or service using

monetary rewards received in exchange for participation in opt-in advertising. In most cases, as above, the user will have a mobile wallet account at the electronic payment system. The electronic payment system then validates the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds, including the monetary rewards, to pay for the specified good or service, and applies of the monetary rewards to the indicated good or service, allowing the user to purchase the indicated good or service using the received monetary rewards. In some cases, the electronic payment system may receive a subsequent indication from the user's mobile wallet application indicating that a coupon is to be applied for the purchase of the good or service. The electronic payment system may then determine whether the coupon applies to the indicated good or service and, if so, may apply the coupon to the indicated good or service, so that the user purchases the indicated good or service using the received monetary rewards at a price reduced by the amount of the coupon.

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[0023] Embodiments described herein may comprise or utilize a special purpose or general-purpose computer including computer hardware, such as, for example, one or more processors and system memory, as discussed in greater detail below. Embodiments described herein also include physical and other computer-readable media for carrying or storing computer-executable instructions and/or data structures. Such computer-readable media can be any available media that can be accessed by a general purpose or special purpose computer system. Computer-readable media that store computer-executable instructions in the form of data are computer storage media. Computer-readable media that carry computer-executable instructions are transmission media. Thus, by way of example, and not limitation, embodiments described herein can comprise at least two distinctly different kinds of computer-readable media: computer storage media and transmission media.

[0024] Computer storage media includes RAM, ROM, EEPROM, CD-ROM, solid state drives (SSDs) that are based on RAM, Flash memory, phase-change memory (PCM), or other types of memory, or other optical disk storage, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store desired program code means in the form of computer-executable instructions, data or data structures and which can be accessed by a general purpose or special purpose computer.

[0025] A "network" is defined as one or more data links and/or data switches that enable the transport of electronic data between computer systems and/or modules and/or other electronic devices. When information is transferred or provided over a network (either hardwired, wireless, or a combination of hardwired or wireless) to a computer, the computer properly views the connection as a transmission medium. Transmission media can include a network which can be used to carry data or desired program code means in the form of computer-executable instructions or in the form of data structures and which can be accessed by a general purpose or special purpose computer. Combinations of the above should also be included within the scope of computer-readable media.

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[0026] Further, upon reaching various computer system components, program code means in the form of computer-executable instructions or data structures can be transferred automatically from transmission media to computer storage media (or vice versa). For example, computer-executable instructions or data structures received over a network or data link can be buffered in RAM within a network interface module (e.g., a network interface card or "NIC"), and then eventually transferred to computer system RAM and/or to less volatile computer storage media at a computer system. Thus, it should be understood that computer storage media can be included in computer system components that also (or even primarily) utilize transmission media.

[0027] Computer-executable (or computer-interpretable) instructions comprise, for example, instructions which cause a general purpose computer, special purpose computer, or special purpose processing device to perform a certain function or group of functions. The computer executable instructions may be, for example, binaries, intermediate format instructions such as assembly language, or even source code. Although the subject matter has been described in language specific to structural features and/or methodological acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the described features or acts described above. Rather, the described features and acts are disclosed as example forms of implementing the claims.

[0028] Those skilled in the art will appreciate that various embodiments may be practiced in network computing environments with many types of computer system configurations, including personal computers, desktop computers, laptop computers, message processors, hand-held devices, multi-processor systems, microprocessor-

based or programmable consumer electronics, network PCs, minicomputers, mainframe computers, mobile telephones, PDAs, tablets, pagers, routers, switches, and the like. Embodiments described herein may also be practiced in distributed system environments where local and remote computer systems that are linked (either by hardwired data links, wireless data links, or by a combination of hardwired and wireless data links) through a network, each perform tasks (e.g. cloud computing, cloud services and the like). In a distributed system environment, program modules may be located in both local and remote memory storage devices.

[0029] In this description and the following claims, "cloud computing" is defined as a model for enabling on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). The definition of "cloud computing" is not limited to any of the other numerous advantages that can be obtained from such a model when properly deployed.

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[0030] For instance, cloud computing is currently employed in the marketplace so as to offer ubiquitous and convenient on-demand access to the shared pool of configurable computing resources. Furthermore, the shared pool of configurable computing resources can be rapidly provisioned via virtualization and released with low management effort or service provider interaction, and then scaled accordingly.

[0031] A cloud computing model can be composed of various characteristics such as on-demand self-service, broad network access, resource pooling, rapid elasticity, measured service, and so forth. A cloud computing model may also come in the form of various service models such as, for example, Software as a Service ("SaaS"), Platform as a Service ("PaaS"), and Infrastructure as a Service ("IaaS"). The cloud computing model may also be deployed using different deployment models such as private cloud, community cloud, public cloud, hybrid cloud, and so forth. In this description and in the claims, a "cloud computing environment" is an environment in which cloud computing is employed.

[0032] Additionally or alternatively, the functionally described herein can be performed, at least in part, by one or more hardware logic components. For example, and without limitation, illustrative types of hardware logic components that can be used include Field-programmable Gate Arrays (FPGAs), Program-specific Integrated Circuits (ASICs), Program-specific Standard Products (ASSPs), System-on-a-chip

systems (SOCs), Complex Programmable Logic Devices (CPLDs), and other types of programmable hardware.

[0033] Still further, system architectures described herein can include a plurality of independent components that each contribute to the functionality of the system as a whole. This modularity allows for increased flexibility when approaching issues of platform scalability and, to this end, provides a variety of advantages. System complexity and growth can be managed more easily through the use of smaller-scale parts with limited functional scope. Platform fault tolerance is enhanced through the use of these loosely coupled modules. Individual components can be grown incrementally as business needs dictate. Modular development also translates to decreased time to market for new functionality. New functionality can be added or subtracted without impacting the core system.

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[0034] Various terminology will be used herein to describe the monetary transaction system (also referred to as a "mobile wallet platform", "mobile wallet program", "mobile wallet transaction system", "mobile financial services (mFS) platform" or "electronic payment system"). The term "agent" is used to refer to an individual with mFS transaction system tools and training to support specific mFS functions. These mFS functions include subscriber registration and activation, and the deposit and withdrawal of funds from the mFS transaction system. Agents are representatives of the mFS transaction system or "program". Agents can be employees or contractors of the program provider, or other companies and organizations that partner with the program provider to provide these services themselves. Agents may be found in every facet of a typical economy, and may include large retailers, mobile network operators (MNO) airtime sales agents, gas stations, kiosks, or other places of business.

[0035] The mobile wallet platform includes a mobile wallet application, web interface or some other type of functionality that allows the user to interact with the mFS platform using their mobile device. The mobile wallet application may include a subscriber identity module (SIM) application, an Unstructured Supplementary Service Data (USSD) application, a smartphone application, a web application, a mobile web application, a Wireless Application Protocol (WAP) application, a Java 2 Platform, Micro Edition (J2ME) application, a tablet application or any other type of application

or interface that provides tools for the agent to register, activate, and offer other services to the mFS subscriber.

As used herein, a mobile wallet application is a mobile wallet application [0036] installed on a SIM card. A USSD application is an application that implements USSD for various functionality including prepaid callback service, location-based content services, menu-based information services and other mobile wallet platform services. A web application is one that implements or uses the internet to provide mobile wallet platform functionality. A mobile web application is similar to a web application, but is tailored for mobile devices. A WAP application is one that uses the wireless application protocol to communicate with the mobile wallet platform to provide the platform's functionality. A J2ME application is an application developed in Java and is designed to provide mobile wallet functionality on a variety of different hardware. A tablet application is an application specifically designed for a touchscreen-based tablet that provides mobile wallet platform functionality for tablet devices. , and as part of configuring the phone on the network. Any of these applications (or any combination thereof) may be provided on the user's mobile device. This functionality can also be made available on a retail point of sale (POS) system or web site.

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[0037] The term "agent administrator" refers to an individual with mFS program tools and training to administrate the allocation of funds to agent branches (e.g. retail locations). As agents perform mFS transactions with subscribers, such as depositing and withdrawing money, the agents are adding and removing money from their own accounts. Any of the applications referred to above may be configured to provide tools used by the agent administrator to view the agent company balance, view the agent branch balances, and transfer funds into and out of agent branch mobile wallets. This functionality can also be made available on a website for easier access.

[0038] In some embodiments, the mFS platform application may utilize triple data encryption standard (3DES) encryption (or some other type of encryption), encrypted message signing, and password security on some or all of its communications with the mFS transaction system in order to ensure that the transactions are properly secured and authenticated.

[0039] The term "agent branch" refers to any location where an agent provides support for subscriber services of the mFS platform. Funds are allocated by the agent administrator from the agent company's main account to each agent branch to fund the

subscriber mFS functions such as depositing or withdrawing cash, in-store purchases, bill payments, prepaid airtime top-ups and money transfers. In some cases, multiple agents may work in a single branch. However, at least in some cases, monetary funds are allocated to from the agent company's main account on a per branch basis.

5 [0040] The term "agent branch account balance" refers to the amount of money residing in a particular agent branch account at a given time. Funds can be deposited into the branch account by the agent administrator, or the funds can come from participating in subscriber mFS transactions such as depositing or withdrawing cash from the subscriber's mobile wallet accounts, or making retail purchases with the mobile wallet.

[0041] In some embodiments, in countries with more developed economies, it may be beneficial to use program-issued pre-paid debit cards, pre-paid access accounts, stored value accounts or gift cards to conduct business along with the added convenience of card processing networks such as Cirrus, STAR, or Visa for POS and automated teller machine (ATM) functionality. Agents, particularly those in retail outlets and kiosks, can still support subscribers with deposits, withdrawals, and other transfers, but in this case bank external card processors manage the mobile wallet and branch account balances and provide the real-time transfer of funds.

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[0042] The term "agent branch ledger" refers to a written (or electronic) ledger maintained by the mFS platform. Agent branch transactions are performed on the agent's and subscriber's mobile phones where an electronic record of the transaction is generated and stored on the mFS platform. These electronic transactions are then reconciled with agent branch ledgers to ensure the security and integrity of the transaction. Agent branch ledgers are printed or electronic transaction logs that are distributed to the agent branch locations in hard copy form to serve as a backup record to the electronic transactions.

[0043] The term "agent company" refers to a business that registers to participate in the mFS program as a partner of the mFS program provider or owner. The agent company has one or more agent branches which conduct mFS business with mFS program subscribers. In some cases, the agent company may be referred to as a distributor or retailer.

[0044] The term "agent company account balance" refers to the sum of the funds deposited at a "partner bank" (defined below) by the agent company to fund the agent

company's daily transactions. The funds in the agent company account are then distributed to agent branches by the agent company's agent administrator to conduct everyday business such as accepting cash deposits and cash withdrawals from mFS subscribers. This balance is sometimes referred to as the "agent company float".

[0045] An "agent manager" is a supervisor of company agents for a given company. The agent manager has the training and tools to create, delete or modify agent accounts for a company, as well as monitor the transactions performed by agents. The agent manager may have a special application or an increased level of rights to access applications features not available to other users. The special application is a program installed on the agent manager's terminal. This application provides the agent manager the ability to securely perform agent manager functions such as registering and activating new agent accounts. The mFS agent manager application may be installed on any terminal or device. It communicates with the mFS platform using binary and/or text SMS messages. A wireless service provider or MNO provides the GSM SMS network infrastructure on which the mFS platform operates.

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[0046] As subscribers, agents, and other mFS program participants conduct business in the mFS program, value is transferred from one account to the next as payment for services rendered or goods purchased. This value can be in the form of real currency or the electronic representation referred to herein as eMoney. Among other situations, eMoney is used in mFS implementations where the real-time processing of financial transactions including card processing is not practical. The mFS platform utilizes an internal transaction processor for managing the real-time balance of mobile wallet and agent accounts as value (eMoney) is transferred from one mobile wallet to another in payment for services.

[0047] The term "mFS program master account" refers to a bank account maintained by the mFS program partner bank to provide funds and float for the operation of the mFS platform. Depending on the type of mFS implementation, the master account can include sub-accounts for each of the agent branches and subscriber mobile wallets, giving the bank visibility into all transactions on a per-user basis. The mFS platform can also manage the balance of sub-accounts and interact with the bank's master account when funds need to be deposited or withdrawn from the account.

[0048] The term mobile network operator (MNO) refers to a provider of mobile phone service including basic voice, SMS, unstructured supplementary service data (USSD) and data service, and may also be referred to as a "wireless service provider".

[0049] 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 mFS 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.

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[0050] The term "partner bank" refers to the primary bank participating in the mFS program. The partner bank is responsible for holding the mFS program master accounts that hold the funds for all mFS services and transactions. A "PIN" refers to a numeric password that may be required to perform a transaction via the mobile wallet application.

[0051] The term "subscriber" refers to a participant of the mFS mobile wallet platform. The subscriber maintains a mobile wallet balance and performs transactions using the mFS application. An "unbanked subscriber" is a subscriber that does not have (or does not have access to) a bank account or credit union account. The application or "mobile wallet application" provides mobile wallet functionality to the (unbanked) subscriber. The mobile wallet application is installed on a mobile device in the device's memory, on a SIM card (such as a GSM SIM card) or is otherwise accessible to the mobile device. The mobile wallet application provides the subscriber the ability to securely perform subscriber functions such as making retail purchases, paying bills, or transferring money to other mFS subscribers and non-subscribers. The mobile wallet application communicates with the mFS platform using binary and text SMS messages, among other forms of wireless communication. A wireless service provider or MNO provides the GSM network infrastructure on which the mFS platform operates.

[0052] Figure 1 illustrates an example system architecture for a mobile wallet platform. Integration tier 101 is configured to manage mobile wallet sessions and maintain integrity of financial transactions. Integration tier 101 can also include a

communication (c.g., Web services) API and/or other communication mechanisms to accept messages from channels 111. Other mechanisms include, but are not limited to: International Standards Organization ("ISO") 8583 for Point of Sale ("POS") and Automated Teller Machines ("ATM") devices and Advanced Message Queuing Protocol ("AMQP") for queue based interfaces. Each of channels 111 can be integrated to one or more mechanisms for sending messages to integration tier 101. Notification services 102 is configured to send various notifications through different notification channels 112, such as, for example, Short Message Peer-to-Peer ("SSMP") for Short Messaging Service ("SMS") and Simple Mail Transfer Protocol ("SMTP") for emails. Notification services 102 can be configured through a web services API.

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[0053] Service connectors 103 are a set of connectors configure to connect to 3rd party systems 113. Each connector can be a separate module intended to integrate an external service to the system architecture. Business process services 104 are configured to implement business workflows, including executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects. Payment handler 105 is configured to wrap APIs of different payment processors, such as, for example, banking accounts, credit/debit cards or processor 121. Payment handler 105 exposes a common API to facilitate interactions with many different kinds of payment processors.

[0054] Security services 106 are configured to perform subscriber authentication. Authorization services 107 are configured to perform client authorization, such as, for example, using a database-based Access Control List ("ACL") table.

[0055] Database 108 is configured to manage customer accounts (e.g., storing customer accounts and properties), manage company accounts (e.g., storing company accounts and properties), manage transaction histories (e.g., storing financial transaction details), store customer profiles, storing dictionaries used by the mobile wallet platform, such as, for example, countries, currencies, etc., and managing money containers. Rules engine 109 is configured to gather financial transaction statistics and uses the statistics to provide transaction properties, such as, for example, fees and bonuses. Rules engine 109 is also configured to enforce business constraints, such as, for example, transactions and platform license constraints.

[0056] Name matching engine 110 is configured to match different objects according to specified configuration rules. Matching engine 110 can be use to find similarities between names, addresses, etc. Transaction processor 121 is configured to manage financial accounts and transactions. The transaction processor 121 can be used to hold, load, withdraw and deposit funds to mobile wallet accounts. Transaction processor 121 can also be used as a common interface to a third party processor system. When used as a common interface, financial operations may be delegated to the external processor. A Clearing House subsystem of transaction processor 121 can be used to exchange the financial information with a bank.

[0057] Components of a mobile wallet platform can be connected to one another over (or be part of) a system bus and/or a network. Networks can include a Local Area Network ("LAN"), a Wide Area Network ("WAN"), and even the Internet. Accordingly, components of the mobile wallet platform can be "in the cloud". As such, mobile wallet platform components as well as any other connected computer systems and their components, can create message related data and exchange message related data (e.g., Internet Protocol ("IP") datagrams and other higher layer protocols that utilize IP datagrams, such as, Transmission Control Protocol ("TCP"), Hypertext Transfer Protocol ("HTTP"), Simple Mail Transfer Protocol ("SMTP"), etc.) over the system bus and/or network.

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[0058] The components depicted in Figure 1 can interoperate to provide a number of financial and other services including but not limited to enrolling a customer for a mobile wallet, adding a stored value account (either hosted by a mobile wallet platform or a third party), adding a bank or credit union account to a mobile wallet, adding a debit or credit card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds from a mobile wallet, paying bills from a mobile wallet, topping up a prepaid mobile account through a mobile wallet, transferring funds through a mobile wallet (nationally or internationally), making in-store purchases using a mobile wallet, and various other tasks as described herein below. These services will be described in greater detail below with regard to system Figures 1 and 2, as well as Figures 3-19B.

[0059] Figure 2 depicts a monetary transaction system 200 similar to that described in Figure 1. The monetary transaction system 200 may provide a more simplified system structure in which each of the above services may be provided. The

system includes a subscriber 205. The subscriber may have access to a bank account, or may be an unbanked subscriber. The subscriber has a profile 211 with the monetary transaction system 210. The profile includes the subscriber's know your customer (KYC) information, as well as any associated bank accounts, credit union accounts, bill pay accounts or other accounts. The subscriber has (or has access to) a mobile device 206 such as a phone or tablet. The mobile device runs the mobile wallet application (or mobile wallet application) 207.

[0060] The subscriber can indicate, using the mobile application 207 which transaction or other action he or she would like to perform. The indicated transaction 208 is sent to the mobile wallet platform 210 to be carried out by the platform. The transaction processor 216 (which may be similar to or the same as transaction processor 121 of Figure 1) performs the transaction(s) specified by the (unbanked) subscriber 205. The transaction processor may implement various other components to perform the transaction including memory 217, (wireless) communication module 215, rules engine 210 and/or transaction database 225.

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[0061] 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). Rules engine 220 may also be consulted to determine whether the subscriber has exceeded a specified number of allowed transactions. Then, if funds are available, and the transaction is otherwise permissible, the monetary transaction system can transfer money or eMoney 221 to or from an entity such as a user or agent (e.g. entity 222) to or from an establishment such as a retail store or agent company (e.g. entity 223).

[0062] In some cases, the monetary transaction system 210 application provides a web interface that allows subscribers to perform the same functions provided by the monetary transaction system application. For instance, mobile wallet application 207 may provide a web interface that allows a user to enroll for a mobile wallet. The web interface (or the mobile wallet application itself) receives a subscriber-initiated transaction over one of a plurality of channels (111 from Figure 1) connected to the monetary transaction system 210. The web interface or mobile wallet application may prompt for and receive enrollment information (e.g. KYC information) for the

(unbanked) subscriber 205 over at least one of the plurality of channels (e.g. web, point-of-sale (POS), interactive voice response (IVR, etc.). The web interface or mobile wallet application may then send activation instructions over the same or a different channel to activate the (unbanked) subscriber 205 and create a subscriber account for the (unbanked) subscriber.

[0063] Once the subscriber has an account, the monetary transaction system generates a corresponding mobile wallet for the unbanked subscriber (available via the web interface and/or the mobile wallet application. The system then presents the (unbanked) subscriber's account data associated with the mobile wallet and/or a notification indicating that enrollment was successful to the subscriber. Accordingly, the mobile wallet application or the web interface may be used to provide user enrollment functionality. It should also be understood that either the mobile wallet application or the web interface may be used to provide substantially all of the mobile wallet functionality described herein.

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[0064] It should also be noted that the mobile device 206 may be any type of plan-based phone or tablet, or prepaid phone or tablet. Many subscribers, such as unbanked subscribers, may primarily use prepaid phones. The mobile wallet application 207 may be installed on both plan-based phones and prepaid phones. The mobile wallet application may be installed on the device's SIM card, or on the device's main memory. Accordingly, the monetary transaction system 200 may be accessed and used via substantially any type of plan-based or prepaid mobile device.

[0065] The components depicted in Figure 1 can interoperate to provide a number of financial and other services including but not limited to enrolling a customer for a mobile wallet, adding a stored value account (either hosted by an electronic payment system or a third party), adding a bank/credit union account to a mobile wallet, adding a debit/credit card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds from a mobile wallet, paying bills from a mobile wallet, topping up a prepaid mobile account through a mobile wallet, transferring funds through a mobile wallet, making in store purchases from a mobile wallet, or transferring money or eMoney from one business account to another business account (i.e. from one business's mobile vault to another business's mobile vault, as will be shown in Figure 4).

[0066] Figure 3A depicts a subscriber-to-subscriber eMoney transfer. In a merchant and distributor scenario, either or both of the merchant and the distributor (including any delivery personnel) may be subscribers. To perform such a transfer, subscriber A (301) enters some type of identification information identifying subscriber B (e.g. subscriber B's phone number) and an amount of money he or she wishes to transfer. The transaction processor 216 of the monetary transaction system 210 determines if there are sufficient funds to complete the transfer. If sufficient funds are available, the monetary transaction system 210 decrements subscriber A's account and credits subscriber B's account (302). The system then sends some kind of notification (e.g. SMS) to subscriber B indicating that a certain amount of money was transferred to their account. Subscriber A may also receive a notification that the transfer was successful. Accordingly, eMoney may be transferred between two mFS platform subscribers, one or both of which may be unbanked. The monetary transaction system 210 processes the subscribers' requests, updates the subscribers' eMoney balances, logs the transactions, and sends transaction information to a specified bank when needed.

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[0067] Figure 3B illustrates a subscriber-to-non-subscriber eMoney transfer. Accordingly, as mentioned above, either or both of the merchant and the distributor may be non-subscribers. In graphic 305, subscriber A wishes to send eMoney to another individual that is not a subscriber to the mFS platform. The transaction is initiated in the same fashion as the subscriber-to-subscriber transfer scenario. However, since non-subscriber B does not have a mobile wallet account, the monetary transaction system 210 cannot credit them with eMoney. Instead, the monetary transaction system 210 sends a notification (e.g. via SMS) to non-subscriber B with instructions for how to pick-up the transferred money, along with an authorization code (306). The monetary transaction system 210 puts a hold on subscriber A's account for the amount transferred. Subscriber B then has a specified number of days to pick up the cash before the hold expires and the amount is credited back to subscriber A's eMoney account by the monetary transaction system 210.

[0068] When non-subscriber B goes to pick up the money at an agent branch, the agent branch's manager or agent verifies the authorization code via an agent manager or agent mobile wallet application (that, in turn, accesses the mFS platform). Once the transfer has been validated, the agent gives the cash to non-subscriber B. The agent

branch's mFS account is credited with the transfer amount (307) and the user leaves with the cash in hand (308). The mFS platform processes the transfer request, updates subscriber A's eMoney balance, logs the transaction, and sends transaction details to a platform-specified bank.

[0069] Figure 4 illustrates a mobile wallet subscriber making a retail purchase. Mobile wallet subscribers can make retail purchases at agent branches directly from their mobile device. Agent branches, as explained above, are retail stores or other entities that have registered with the mFS system and are able to accept mobile wallet payments. Accordingly, a subscriber can select the items they wish to purchase, and indicate (via the mobile wallet application) to the agent branch that they wish to pay for the items. The mobile wallet application then communicates with the agent branch and the monetary transaction system to indicate the price of the transaction. The monetary transaction system 210 then debits the subscriber's eMoney account (401) and credits the agent branch's eMoney account (402). The agent branch (and/or the agent manager or agent) receives confirmation that subscriber paid for the purchase. The subscriber may also receive a summary of the retail purchase and may be asked to confirm the purchase by entering a PIN. The monetary transaction system processes the purchase request, updates the agent branch and subscriber's eMoney balances, logs the transaction, and sends transaction details to a mFS platformspecified bank.

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[0070] In one embodiment, the monetary transaction system 210 is implemented to make a purchase from a mobile wallet. The communications module 215 of the monetary transaction system 210 receives a communication from a subscriber over a communication channel 111. The subscriber communication indicates that an unbanked subscriber 205 desires to purchase an item for a specified amount of funds using a specified payment method from the unbanked subscriber's mobile wallet.

[0071] The monetary transaction system 210 then returns a secure, perishable purchase code to the unbanked subscriber over at least one of the channels connected to the monetary transaction system and receives a subsequent agent branch communication over a channel indicating that the purchase code has been presented to an agent (branch). The monetary transaction system 210 validates the status of the specified payment method, determines if the specified payment method can accommodate a purchase for the specified amount, performs a limit check and/or a

velocity check on the selected payment method, debits the specified payment method by the specified amount of funds, returns a notification to the agent branch authorizing the purchase and sends a receipt to the unbanked subscriber over a communication channel. The monetary transaction system 210 may thus be used in this manner to make a retail purchase using a mobile wallet.

[0072] Figure 5 depicts a physical environment and corresponding computer system architecture 500 for providing disruptively priced or free financial services or items in exchange for participation in opt-in advertising. The environment 500, like the scenarios described in Figures 3A, 3B and 4, involves the use of a mobile wallet application 511. The mobile wallet application 511 can be used to provide disruptively priced or free financial services or items in exchange for participation in opt-in advertising. The mobile wallet application may be run on any type of digital device including a mobile phone, tablet, laptop or other digital device. Embodiments include providing digital data (e.g., coupons or vouchers) for obtaining disruptively priced or free items (e.g., consumer goods or groceries) to such digital devices.

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[0073] In some embodiments, a user has an account with a mobile payment system. The mobile payment system (e.g. 210 of Figure 2 or 521 of Figure 5) can provide the user 507 with a variety of functionality including purchasing items (see Figure 4), depositing funds, withdrawing funds, transferring funds (see Figures 3A and 3B), etc. Accordingly, the user can use a digital device to interact with the electronic payment system 521 to pay for goods and/or services.

[0074] In exchange for some type of financial benefit, the user opts in to receive advertisements. The financial benefits may include coupons, vouchers, promotions, Buy One Get One ("BOGO") offers or any other type of benefit (such as a reduced cost or free financial service or good) from the electronic payment system. The benefit may be targeted to the user based on the user's age, location or other demographic information, or based on the user's past purchases. At least in some embodiments, when the user agrees to participate in opt-in advertising, the electronic payment system 521 is permitted to store (e.g., by capturing purchase orders), track, and analyze items that the user purchases through their account with the electronic payment system. The electronic payment system stores and maintains lists of the users' purchased items in a data warehouse. The electronic payment system may also store information about the user (anonymous or otherwise) including age, income

level, an indication of whether kids are in the family, or other information that may be useful in targeting ads or benefits to the user.

[0075] The electronic payment system analyzes 534 the users purchasing habits to identify advertisements and/or promotions that may be of interest to the user. The advertisements and/or promotions can be for items the user has purchased 503. The advertisements and/or promotions can also be for items related to items the user has purchase. For example, if user has purchased a particular brand of razor, advertisements for the brand's shaving cream can be identified. Advertisements for related items can also be used for cross-promotion.

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[0076] From time to time, at specified intervals, or based on location (e.g., having a coupon for a merchant this is with a specified proximity) the electronic payment system sends identified advertisements and/or promotions to the user's digital device. When specified advertising thresholds are satisfied (e.g., a specified number and/or type of advertisements and/or promotions are presented), the electronic payment system confers a financial benefit on the user's account. For example, the electronic payment system can provide the user's account with a low cost (e.g., reduced fee) or free financial service, such as, for example, one reduced cost bill pay or one free bill pay. Alternately, the electronic payment system can provide the user's account with a coupon or voucher for an item (e.g., an item a user has pre-selected or an item the user has purchased in the past).

[0077] In some embodiments, a client application for the electronic payment system runs on the user's digital device (e.g. mobile wallet application 511). The user interacts with the electronic payment system through the client application. From a screen of the client application, the user can agree to accept opt in advertising. Accordingly, embodiments of the invention essentially permit a user to self-monetize themselves through their digital device.

[0078] As further depicted in Figure 5, computer architecture 500 includes digital device 508, retail location 502, and electronic payment system 521. Digital device 508 further includes mobile wallet application 511. Retail location 502 further includes its own mobile wallet application 512. Electronic payment system 521 includes marketing module 533, data warehouse 532, advertisements 538, payment processor 522, user mobile wallet 524 (user 507's mobile wallet), and merchant mobile wallet 526 (retail location 502's mobile wallet).

[0079] Generally, each company in packaged goods companies 571 (or retailers that sell the packaged goods or other goods or services) can send advertisement data to electronic payment system 521. Advertisements 538 represent the collection of advertisement data sent from packaged goods companies 571. Each company in packaged goods companies 571 can also submit benefit rules to electronic payment system 521. Benefit rules 578 represent the collection of benefit rules sent from packaged goods companies 571. Benefit rules 578 define when a benefit, such as, for example, a free financial service, a coupon, a promotion, etc, is to be granted to a user of electronic payment system 521. For example, in response to completing a questionnaire linked to a product advertisement, a user can be given a coupon for the product or for a related product.

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[0080] In general, user 507 can use mobile wallet application 511 to pay for goods purchased at retail location 502 (as shown in Figure 4). For example, user 507 can use mobile wallet application 511 to purchase goods 503. To pay for goods 503, mobile wallet application 511 can send payment instruction 543 in amount 563 to electronic payment system 521. Payment processor 522 can receive payment instruction 543. In response, payment processor 522 can debit 541 user mobile wallet 524 by amount 563. Payment processor 522 can also credit 542 merchant mobile wallet 526 by amount 563.

[0081] User 507 can use mobile wallet application 511 to participate in opt-in advertising. For example, user 507 can use mobile wallet application 511 to send opt-in 544 to electronic payment system 521. Advertising module 533 can receive opt-in 544 and record that mobile wallet application 511 has opted in for advertising. As such, when user 507 makes a purchase using mobile wallet application 511, a list of purchased items is sent to electronic payment system 521. For example, upon purchasing goods 503, item list 531 is sent to electronic payment system 521 and stored in data warehouse 532.

[0082] Propensity analysis module 534 can analyze user 507's purchases, including item list 531. From the analysis, propensity analysis module 534 can identify items or categories of items user 507 may be interested in. The items can be items user 507 has purchased in the past (e.g., an item in goods 503) or items related to items user 507 has purchases in the past. Propensity analysis module 534 can indicate identified items or categories of items to advertisement identification module

536. These identified items or categories are items that the user is likely interested in and, as such, may have a propensity toward buying these items. The propensity analysis module may use past purchases, personal preferences, lifestyle or demographic information or other data in the propensity analysis.

5 [0083] Advertisement identification module 536 can then select advertisements from advertisements 538 that correspond to the identified items or categories of items. For example, advertisement identification module 536 can select advertisement 546 for presentation at mobile wallet application 511. Advertisement 546 can be an advertisement for a product made by a company in packaged goods companies 571. Additionally or alternatively, the advertisement 546 may be created by the merchant and may advertise products or services sold by that merchant.

[0084] Advertising module 533 can send selected advertisements to mobile wallet application 511. For example, advertising module 533 can send advertisement 546 (e.g., related to an item in goods 503) to mobile wallet application 511. In general, advertisements can include interactive content. For example, advertisement 546 includes content 573. Content 573 can be a video, a link to a company website (e.g., for a company in packaged goods companies 571), a call to action (such as a questionnaire), or some other content user 507 can interact with through digital device 508. User 507 can interact with content 573, for example, responding to questions in content 573. Advertisement response 574 can indicate how user 507 has interacted with content 573. In one embodiment, a call to action may be to post an update on Facebook® or some other website such as a retail establishment ranking website. If the user makes such a post or performs some other call to action, the user may be rewarded with a benefit. That benefit may be related to the product about which the user posted on the various websites.

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[0085] Based on advertisement response 574, benefit determination module 576 can determine if a benefit is to be conferred upon user 507. Benefit determination module 576 can refer to benefit rules 578 when making a determination whether or not to confer a benefit. Thus, when user 507 interacts with advertisement 546 in a specified way (e.g., completes a survey, watches a video, etc.), benefit rules 578 can indicate that a company benefit (e.g., benefit 577) is to be conferred upon user 507. For example, benefit determination module 576 can confer benefit 577 on user 507. When user 507 receives an advertisement for a razor, for instance, and answers a

questionnaire on how often they shave, a razor manufacture can give user 507 a coupon for reduced cost or free razor blades.

[0086] When a benefit is to be conferred on a user, the benefit can be stored in the user's brand locker. For example, benefit determination module 576 can store benefit 577 in brand locker 572 (part of user mobile wallet 524). Benefit 577 can be a coupon, a reduced cost or free financial service, a voucher, a promotion, a free bill pay, etc.

[0087] Benefit determination module 576 can also track aggregate statistics, such as, for example, specified number and/or type of advertisements received, for advertisements presented at mobile wallet application 511. Benefits can also be conferred upon users based on the aggregate statistics. For example, benefit determination module 576 can confer a benefit upon user 507 in response to twenty advertisements being presented at mobile wallet application 511. Thus, conferred benefits can be company-specified benefits or can be electronic payment system-specified benefits. Electronic payment system 521 can notify a user when a benefit is conferred. For example, electronic payment system 521 can send benefit notification 547 to mobile wallet application 511 to indicate benefit 577 being stored in brand locker 572.

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[0088] When user 507 makes subsequent purchases through user mobile wallet 524, electronic payment system 521 can automatically check brand locker 572 for benefits related to any purchases items. If benefits for an item are identified, user 507 can be notified through mobile wallet application 511. In some cases, if benefits are identified, those benefits can be applied automatically when the user purchases that item or service. Thus, if the benefit is a coupon or a buy one get one free offer, that benefit may be applied automatically when the user uses his or her mobile wallet application 511 to purchase that item. Accordingly, embodiments of the invention permit user 507 to self monetize digital device 508 through agreeing to participate in opt-in advertising.

[0089] Although not depicted, various other modules from the architecture of Figures 1 or 2 can also be included electronic payment system 521. The modules expressly depicted in Figure 5 can interoperate with these other modules as appropriate to facilitate desired functionality.

**[0090]** In one embodiment, as shown in Figure 6, a method 600 for providing reduced cost or free services or goods in exchange for participation in opt-in advertising is described. This method is further described in conjunction with the electronic payment system 521 of Figure 5, as well as the example screenshot of a mobile wallet application 711 illustrated in Figure 7.

[0091] Method 600 includes receiving an indication that user 507 is opting in to receive opt-in advertising from electronic payment system 521 in exchange for a reduced cost or free financial service (step 610). The user has a mobile wallet account 524 with the electronic payment system 521. Next, method 600 includes receiving a list of one or more items 531 that the user has purchased using the mobile wallet account 524 (step 620) and analyzing 534 the list of items to identify items or item categories in which the user may be interested (and which the user may have a propensity toward buying) (step 630). Method 600 further includes selecting one or more advertisements 546 based on the identified items or item categories (step 640) and sending the selected advertisements to mobile wallet application 511 (which is tied to the user's mobile wallet account 524) for use by the user (step 650). Method 600 then includes determining that the user's interactions 574 with the selected advertisements 543 warrant conferring a benefit 577 to the user 507 (step 660), where the benefit is selected from among a reduced cost or free financial service, a coupon, a voucher, and a buy one get one free offer, and then conferring the selected benefit 577 upon the user by sending the benefit to the user's mobile wallet application 511 (step 670).

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[0092] After the benefit has been conferred upon the user, the user may use the benefit when purchasing a corresponding product or service. Accordingly, as shown in Figure 7, for example, if Ad 1 or Ad 2 (701) shows a name brand diaper and the user interacts with the ad in some way, the company that produces the diaper may send a coupon or other benefit to the user's mobile wallet 511. Then, when the user is at a retail location (e.g. 502), the user may purchase that name brand diaper using their mobile wallet (e.g. using the "Purchases" button 706). The coupon or other benefit sent by the diaper producer will be automatically applied at checkout, such that the user obtains the diapers for a discounted price. Many different coupons or other benefits may be stored in the user's brand locker 572, and each of these may be

applied automatically when the electronic payment system 521 determines that the user is purchasing that product or service.

[0093] Still further, as mentioned above, the user may use their mobile wallet application 711 to perform other tasks such as adding airtime to their phone (702), paying a bill (703), sending money to another party (704), transferring money (705) or withdrawing money (707) at an agent branch, for example. Many other functions may be provided by the mobile wallet application. As such, buttons 702-707 are merely examples of possible buttons. Moreover, the look and feel of mobile wallet application 711 may be as illustrated in Figure 7, or may be substantially different, or may be modified by the user. Accordingly, the layout shown in Figure 7 is just one example of a possible button and advertisement layout. Many such layouts are possible, and may be different for each phone or digital device.

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[0094] Thus, using the electronic payment system 521, a user may opt in to receive opt-in advertising. Then, after receiving that advertising (and possibly after interacting with it), the user may be conferred a benefit. This benefit may be used to receive reduced cost or free financial services or goods. The benefit may be applied automatically as the user is purchasing that good or service. At least in some cases, as will be described below in conjunction with Figures 8 and 9, the benefit may be a monetary reward.

[0095] The electronic payment system 521 of Figure 5 may be used to provide the monetary rewards. The monetary rewards may be sent as part of, or may be referred to with the other rewards, coupons and other benefits 577 described above. In some cases, the monetary rewards may be sent in lieu of other benefits such as coupons or buy-one-get-one-free offers. The monetary rewards may be calculated by the benefit determining module 576, as will be explained further below. In one embodiment, as described in Figure 8, a method 800 is provided for providing monetary rewards in exchange for participation in opt-in advertising.

[0096] Method 800 includes an act of receiving at the electronic payment system an indication that a user 507 of is initiating participation in opt-in advertising 546 sent from the electronic payment system 521 in exchange for a monetary reward 577, the user having a mobile wallet account 524 at the electronic payment system (act 810). In response, the electronic payment system 521 may send one or more advertisements 546 to a mobile wallet application 511 running on a digital device 508 of the user 505

(act 820). The electronic payment system 521 then determines an appropriate monetary reward 577 based on the number and/or type of advertisements 546 sent to the user's mobile wallet application 511 (act 830) and provides the determined monetary reward 577 to the user via the mobile wallet application 511 on the user's digital device 508 (act 840).

[0097] Once the monetary reward has been provided, the electronic payment system 521 may send a benefit notification 547 notifying the user 507 that the monetary reward is available. The monetary reward may be sent to one of the user's debit 541 or credit 542 accounts, or may be sent to another value store on (or accessible by) the mobile wallet application 511. The monetary rewards may be cash, credit or other forms of monetary value. The monetary rewards are sent to the user 507 after the user has opted in 544 to receive advertisements on their digital device 508 (either within the mobile wallet application 511 or one the user's device in some manner). In some cases, the benefit determination module 576 may analyze the user's interaction with the advertisement (e.g. determine whether the user has clicked on a corresponding web link, or watched a video, or otherwise interacted with the ad 546) and increase or decrease the user's monetary rewards accordingly. Thus, if a user views and interacts with more ads, the user may receive more monetary rewards.

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[0098] In some cases, the electronic payment system 521 may receive a list of items that a user has purchased using the mobile wallet account 524. The electronic payment system 521 may then analyze the list of items 531 (along with other items purchased by the user in the past) to identify items or categories of items the user is likely interested in. The advertisement identification module 536 may then select one or more advertisements that correspond to the determined items or categories of items. Thus, if a user appears to be interested in energy drinks, basketball shorts, ebooks, or any number of other goods or services, the advertisements sent to the user may be tailored to their interests. As such, goods and services producers (e.g. 571) may be able to directly target their ads to users that are interested in their products, and may further provide those users monetary rewards for viewing their ads, or at least for allowing the advertiser's ads to be shown on their digital devices.

[0099] Demographic information may be requested of and provided by the user 507. The demographic information may include age, marital status, education level, ethnicity, or other types of demographic information. The user may determine

whether to provide demographic information and which types of demographic information they want to provide. This information may be used by the advertisers and/or by the advertisement identification module 536 in determining which ads are to be shown to the user. In some cases, the user may provide an increased amount of personal data to receive an increased amount of monetary rewards. Some advertisers may pay more money for ads that are shown to people of certain demographics (e.g. males 18-24). If a user identifies himself as such a person, he may be able to receive a larger monetary reward as part of his agreement to participate in opt-in ads. In some cases, users may be given monetary rewards based on a percentage of the amount paid by the advertiser. For instance, if an advertiser paid to advertise on the mobile wallets of certain users (e.g. user 507) or users of certain demographics, and the user received those ads, the user may be given a small percentage of the amount paid by the advertiser. In some cases, the advertisements may be sold at auction and the user may receive a specified percentage of the advertisement's selling price. A user may thus be able to receive a larger monetary reward by allowing more ads (or more targeted ads based on demographic information) to be shown on their digital device.

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[00100] In some cases, a monetary reward may be customized based on the user's current location. For instance, if a user is in the United States, the reward may be given in dollars. If a user is in Mexico, the reward may be given in pesos, in an amount that is equivalent or at least related to the amount given in dollars. In some cases, producers may pay more for advertisements in certain countries, or in certain locations (e.g. states) within those countries. In such cases, the user may receive larger or smaller rewards depending on where they are currently located (according to GPS, device settings or other information). In some embodiments, the user 507 may not have a debit or credit account with a bank or credit card company. In such cases, the user may receive the monetary rewards in a value store associated with their mobile wallet account 524. If the user uses their mobile wallet to purchase goods or services from a certain store or location, the user may receive retailer- or producer-specific monetary rewards that are stored in a brand locker 572 associated with the user's mobile wallet account 524. Redeeming received monetary rewards is discussed further with regard to Figure 9 below.

[00101] In another embodiment, as shown in Figure 9, a method 900 is provided for redeeming a monetary reward received for participation in opt-in advertising an

clectronic payment system 521 receives a first indication from a user's mobile wallet application 511 that a user 507 is attempting to pay for a good 503 or service using one or more monetary rewards 577 received in exchange for participation in opt-in advertising 546, the user having a mobile wallet account 524 at the electronic payment system 521 (act 910). The electronic payment system then validates the user's mobile wallet account 524 to ensure that the user's mobile wallet account has sufficient funds, including the monetary rewards, to pay for the specified good 503 or service (act 920). Then, the electronic payment system 521 applies one or more of the monetary rewards 577 to the indicated good 503 or service, allowing the user 507 to purchase the indicated good or service using the received monetary rewards 577 (act 930).

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[00102] In this manner, a user can redeem monetary rewards received for participation in opt-in advertising to purchase a product or service. In some embodiments, as mentioned above, the monetary rewards may be stored in a value store in the mobile wallet application. In such cases, the monetary rewards may be applied automatically as the user pays for the specified good or service using the mobile wallet application. The electronic payment system 521 may send a notification to the user and/or the provider of the good or service indicating that the monetary rewards were applied to the purchase of the indicated good or service. Thus, the user knows that the product or service was purchased (in whole or in part) using the monetary rewards, and the advertiser or goods producer 571 knows that monetary rewards were used to pay for their product or service.

[00103] As mentioned above, some advertisements may have web links or other interactive content. In such cases, the digital device 508 or the mobile wallet application 511 on the digital device may receive inputs from the user 507 interacting with the advertisements 546. The digital device may track the user's interaction, and may send an indication of such to the electronic payment system 521. The electronic payment system 521 may then determine that the user's interactions with the advertisements warrants conferring a specified monetary reward to the user. This monetary reward 577 may then be conferred to the user via the mobile wallet application 511. This monetary reward may be stored for a period of time, and later used to purchase a product or service.

[00104] In some cases, coupons or other rewards or offers (i.e. benefits 577) may be applied in addition to using any monetary rewards. Thus, coupons or rewards stored in the user's brand locker 572 may be applied to the purchase of a specified good or service. The electronic payment system 521 may determine that the coupon applies to the indicated good or service and then apply the coupon to the indicated good or service. As such, the user purchases the indicated good or service using the received monetary rewards at a price reduced by the amount of the coupon or other stored offer. The coupons and/or monetary rewards may be applied automatically when purchasing the coupon's corresponding product or service. In this manner, coupons, monetary rewards and/or other benefits 577 may be applied (automatically or selectively) when purchasing a product or service using a mobile wallet 511.

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[00105] Embodiments of the invention can adhere to Know Your Customer (KYC) rules in the US by performing Customer Identification Program (CIP) checks as required by the Bank Secrecy Act and US PATRIOT Act. A minimum amount of information can be gathered about a customer, such as, for example, First Name, Last Name, Date of Birth, Government ID Type, Government ID Number, Address. The CIP processes are designed to validate customer identity against government blacklists and assists in the prevention of money laundering and terrorist financing. A combination of non-documentary and documentary verification can be used to ensure beyond a reasonable doubt the identity of the customer.

[00106] Non-Documentary Verification can occur through the presentment of the information that was collected from the user to an external third party, such as, for example, Lexis Nexis. Documentary Verification can occur if non-documentary verification fails, then the user is asked to present an unexpired government ID. Various differ forms of identification including Driver's license, Passport, Alien identification (e.g., green card or work visa), and Mexican Consular identification card, can be accepted.

[00107] Embodiments of the invention can perform Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT) checks. AML and CFT checks can be performed using transaction monitoring methods to flag names and suspicious transactions for further investigation. The electronic payment system can perform AML and CFT checks on all electronic financial transactions to ensure that electronic funds are not being used for money laundering or terrorism. 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. Velocity checks can also be performed. Velocity Checks ensure that subscribers are not abusing the electronic payment system within the allowable limits.

[00108] The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.

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## **CLAIMS**

What is claimed:

1. An electronic payment system comprising the following: one or more processors;

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one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors, cause the electronic payment system to perform a method for providing monetary rewards in exchange for participation in opt-in advertising, the method comprising the following:

an act of receiving at the electronic payment system an indication that a user of is initiating participation in opt-in advertising sent from the electronic payment system in exchange for a monetary reward, the user having a mobile wallet account at the electronic payment system;

an act of sending one or more advertisements to a mobile wallet application running on a digital device of the user;

an act of determining an appropriate monetary reward based on at least one of the number and type of advertisements sent to the user's mobile wallet application; and

an act of providing the determined monetary reward to the user via the mobile wallet application on the user's digital device.

- 2. The electronic payment system of claim 1, further comprising an act of sending a message to the user's mobile wallet application to notify the user that the monetary reward is available.
- 3. The electronic payment system of claim 1, further comprising: an act of receiving a list of items that a user has purchased using the mobile wallet account;

an act of analyzing the list of items to identify items or categories of items the user is likely interested in; and (along with other items purchased by the user)

an act of selecting the one or more advertisements corresponding to the determined items or categories of items.

4. The electronic payment system of claim 1, wherein the user opts in to receive a specified number of advertisements per time period.

- 5. The electronic payment system of claim 1, wherein the user provides an increased amount of personal data to receive an increased amount of monetary rewards.
- 6. The electronic payment system of claim 1, wherein monetary rewards are customized based on the user's current location.
- 7. The electronic payment system of claim 1, wherein one or more of the advertisements are sold at auction and wherein the user receives a specified percentage of the advertisement's selling price.
- 8. The electronic payment system of claim 1, wherein the digital device is a mobile telephone.
- 9. The electronic payment system of claim 1, wherein the digital device is a prepaid mobile telephone.
- 15 10. The electronic payment system of claim 1, wherein the user is an unbanked user.
  - 11. The electronic payment system of claim 1, wherein the user receives retailer- or producer-specific monetary rewards that are stored in a brand locker associated with the user's mobile wallet account.
  - 12. The electronic payment system of claim 1, wherein the indication further indicates the user's interest in certain products or types of products.
  - 13. The electronic payment system of claim 1, wherein the indication further includes one or more portions of demographic information for the user.
    - 14. An electronic payment system comprising the following: one or more processors;

system memory;

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one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors, cause the electronic payment system to perform a method for redeeming a monetary reward received for participation in opt-in advertising, the method comprising the following:

an act of receiving a first indication from a user's mobile wallet application that a user is attempting to pay for a good or service using one or

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more monetary rewards received in exchange for participation in opt-in advertising, the user having a mobile wallet account at the electronic payment system;

an act of validating the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds, including the monetary rewards, to pay for the specified good or service; and

an act of applying one or more of the monetary rewards to the indicated good or service, allowing the user to purchase the indicated good or service using the received monetary rewards.

- 15. The electronic payment system of claim 14, wherein the one or more monetary rewards are stored in the mobile wallet application, and wherein the one or more monetary rewards are applied automatically as the user pays for the specified good or service using the mobile wallet application.
- 16. The electronic payment system of claim 14, further comprising: an act of receiving one or more inputs from the user at the mobile wallet application interacting with one or more advertisements;

an act of determining that the user's interactions with the advertisements warrants conferring a specified monetary reward to the user; and

an act of conferring the specified monetary reward to the user.

- 17. The electronic payment system of claim 14, further comprising receiving an indication that the user has redeemed the conferred monetary reward.
- 18. The electronic payment system of claim 14, further comprising an act of sending a notification to at least one of the user and the provider of the good or service indicating that the one or more monetary rewards were applied to the purchase of the indicated good or service.
  - 19. An electronic payment system comprising the following: one or more processors; system memory;

one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors, cause the computing system to perform a method for redeeming a monetary reward received for participation in opt-in advertising, the method comprising the following:

an act of receiving a first indication from a user's mobile wallet application that a user is attempting to pay for a good or service using one or more monetary rewards received in exchange for participation in opt-in advertising, the user having a mobile wallet account at the electronic payment system;

an act of validating the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds, including the monetary rewards, to pay for the specified good or service;

an act of receiving a second indication from the user's mobile wallet application indicating that a coupon is to be applied for the purchase of the good or service;

an act of determining that the coupon applies to the indicated good or service; and

an act of applying the coupon to the indicated good or service, such that the user purchases the indicated good or service using the received monetary rewards at a price reduced by the amount of the coupon.

20. The electronic payment system of claim 19, wherein one or more coupons stored in a brand locker of the mobile wallet application are automatically applied when purchasing the coupon's corresponding product or service.

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Platform Functional Architecture

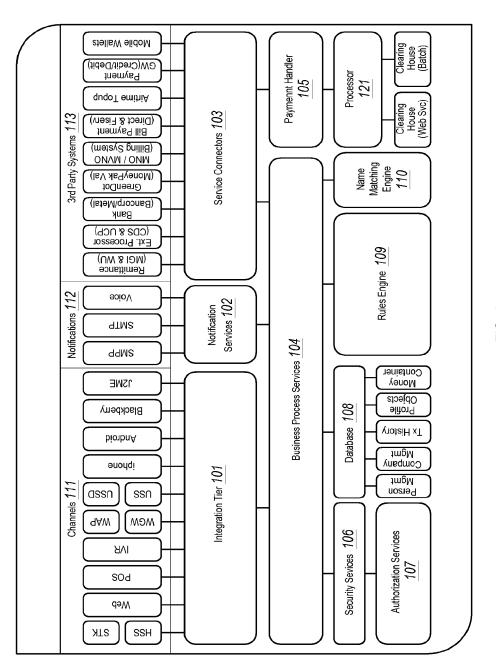
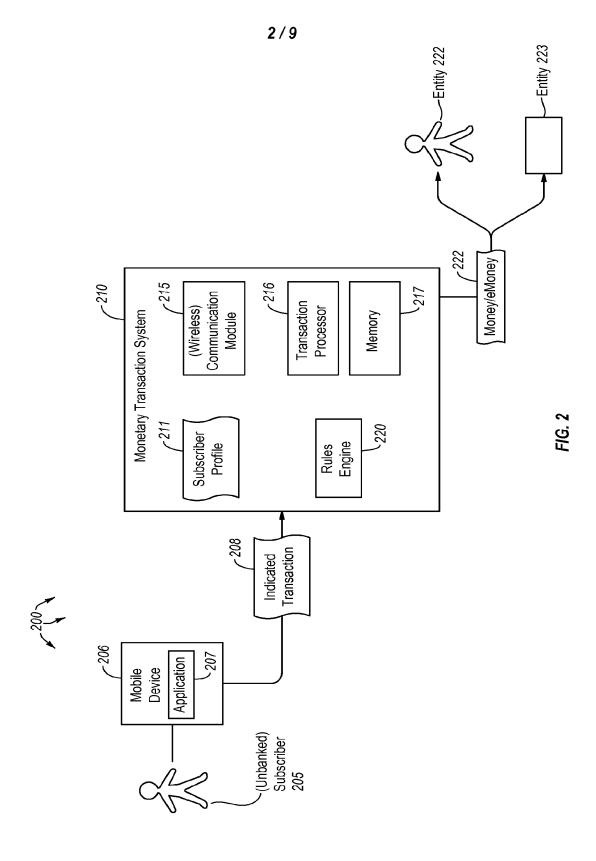
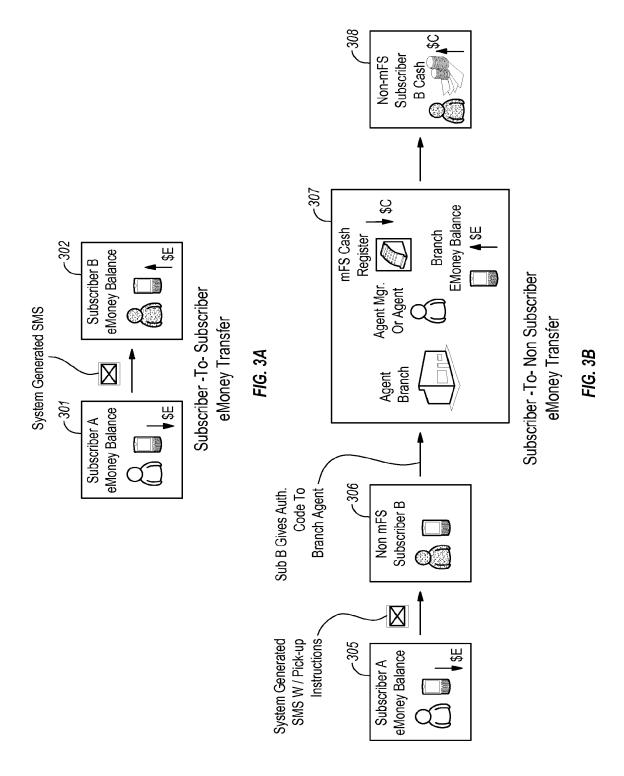


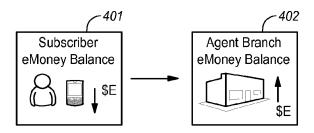
FIG. 1



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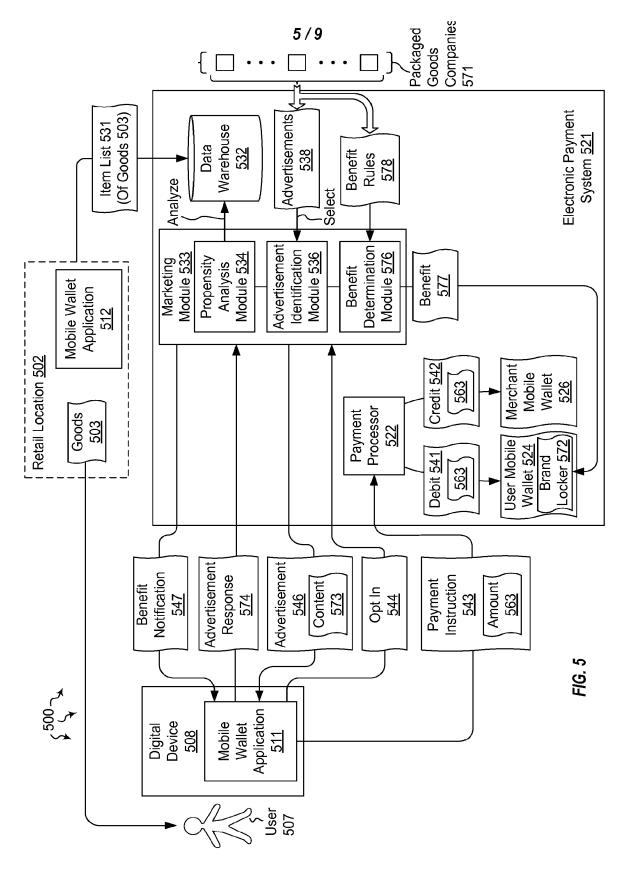


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Subscriber Makes Retail Purchase

FIG. 4







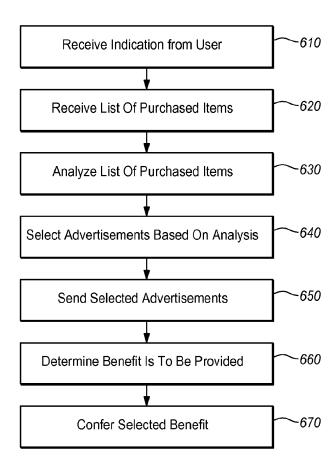


FIG. 6

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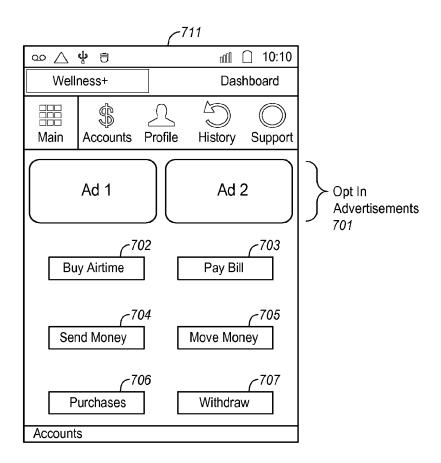


FIG. 7

WO 2013/166174 PCT/US2013/039100

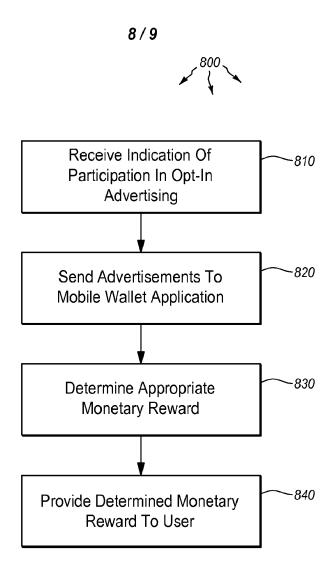


FIG. 8

WO 2013/166174 PCT/US2013/039100

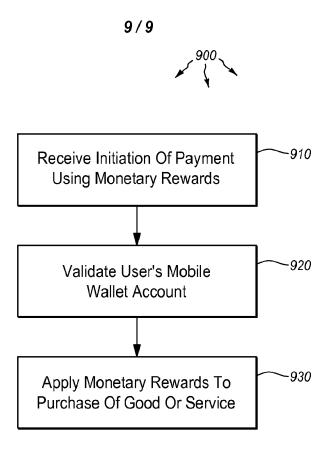


FIG. 9

#### INTERNATIONAL SEARCH REPORT

International application No. PCT/US2013/039100

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 30/02 (2013.01) USPC - 705/14.13 According to International Patent Classification (IPC) or to both national classification and IPC					
	DS SEARCHED				
Minimum do	ocumentation searched (classification system followed by SQ 30/00. 30/02 (2013.01) 1.1, 14.13, 14.14, 14.16, 14.23	classification symbols)			
	ion searched other than minimum documentation to the exp 30/00, 30/02 (2013.01)	stent that such documents are included in the	fields searched		
	ata base consulted during the international search (name of Patents, Google Scholar	of data base and, where practicable, search ter	ms used)		
C. DOCU	MENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.		
Y	US 2011/0258024 A1 (PRINCE) 20 October 2011 (20.	10.2011) entire document	1-20		
Υ	WO 2012/025824 A2 (YANG et al) 01 March 2012 (01	.03.2012) entire document	1-20		
Y	US 2009/0299844 A1 (REILLY et al) 03 December 200	09 (03.12.2009) entire document	10		
Y	US 6,175,823 B1 (VAN DUSEN) 16 January 2001 (16	.01.2001) entire document	15, 20		
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Furthe	er documents are listed in the continuation of Box C.				
"A" docume	categories of cited documents: ent defining the general state of the art which is not considered	"T" later document published after the interr date and not in conflict with the application the principle or theory underlying the in-	national filing date or priority ation but cited to understand		
to be of "E" earlier a	particular relevance polication or after the international	"X" document of particular relevance: the	laimed invention cannot be		
"L" docume	filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other company of particular relevance; the claimed invention cannot be				
special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other  considered to involve an inventive step when the document is combined with one or more other such documents, such combination					
"P" docume	· · · · · · · · · · · · · · · · · · ·				
	actual completion of the international search	Date of mailing of the international search	h report		
12 August 2	12 August 2013 2 3 AUG 2013				
Name and m	nailing address of the ISA/US	Authorized officer:			
	T, Attn: ISA/US, Commissioner for Patents 0, Alexandria, Virginia 22313-1450	Blaine R. Copenhea	ver		
	0. 571-273-3201	PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774			

Form PCT/ISA/210 (second sheet) (July 2009)

## PATENT COOPERATION TREATY

## **PCT**

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 18756.37.1A	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No.	International filing date (day/m	nonth/year) (Earliest) Priority Date (day/month/year)
PCT/US 12/66013	20 November 2012 (20.11.2012)	21 November 2011 (21.11.2011)
Applicant MOZIDO, LLC		
according to Article 18. A copy is bein	g transmitted to the International	I Searching Authority and is transmitted to the applicant Bureau.
This international search report consists  It is also accompanied by a	s of a total of sheets.  a copy of each prior art document	t cited in this report.
1. Basis of the report		
a. With regard to the language, the	e international search was carried	l out on the basis of:
the international app	lication in the language in which	it was filed.
	nternational application intoed for the purposes of internation	which is the language of nal search (Rules 12.3(a) and 23.1(b)).
	report has been established takir o this Authority under Rule 91 (F	ng into account the rectification of an obvious mistake Rule 43.6bis(a)).
c. With regard to any nucleo	tide and/or amino acid sequenc	e disclosed in the international application, see Box No. 1.
2. Certain claims were foun	d unsearchable (see Box No. II)	).
. 3. Unity of invention is lack	ing (see Box No. III).	
4. With regard to the title,		
the text is approved as sub		
the text has been established	ed by this Authority to read as for	llows:
5. With regard to the abstract,		
the text is approved as sub	mitted by the applicant.	
		is Authority as it appears in Box No. IV. The applicant mational search report, submit comments to this Authority.
6. With regard to the drawings,		
a. the figure of the drawings to be	published with the abstract is Fi	gure No. 2
as suggested by the	• •	
as selected by this A	uthority, because the applicant fa	ailed to suggest a figure.
as selected by this A	uthority, because this figure bette	er characterizes the invention.
b none of the figures is to be	published with the abstract.	

Form PCT/ISA/210 (first sheet) (July 2009)

### INTERNATIONAL SEARCH REPORT International application No. PCT/US 12/66013 CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 20/00 (2013.01) USPC - 705/78 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC (8) - G06Q 20/00 (2013.01) USPC -705/78 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 705/64; 705/39 (See Keywords Below) Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Patbase: Google Scholar Search Terms: Mobile wallet, payment, third party, other provider, different provider, payment, transaction, purchase, deposit, withdraw, transfer, authorization code, point of sale, agent, operator, cloud, network, confirmation, notify, wallet provider, bill payment, ..... DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 2008/0208762 A1 (ARTHUR et al.), 28 August 2008 (28.08.2008), entire document, especially Abstract; para [0016], [0057], [0065], [0068], [0069], [0071]-[0074], [0080], [0082], 1-20 [0119], [0140] US 6,873,974 B1 (SCHUTZER), 29 March 2005 (29.03.2005), entire document, especially Abstract; col 3, ln 40 to col 4, ln 20; col 8, ln 60 to col 9, ln 40 $\,$ 1-20 US 2007/0125840 A1 (LAW et al.), 07 June 2007 (07.06.2007), entire document, especially Abstract; para [0033]-[0035], [0042], [0117]-[0120], [0150]-[0152] 9-11 and 15-17 Α US 2009/0234751 A1 (CHAN et al), 17 September 2009 (17.09.2009), entire document 1-20 US 2011/0196788 A1 (LU et al.), 11 August 2011 (11.08.2011), entire document 1-20 Further documents are listed in the continuation of Box C. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 15 January 2013 (15.01.2013) 29 JAN 2013 Name and mailing address of the ISA/US Authorized officer: Mail Stop PCT, Attn: ISA/US, Commissioner for Patents Lee W. Young P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201

PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY				
To: JOHN C. STRINGHAM 60 EAST SOUTH TEMPLE, SUITE 1000 SALT LAKE CITY, UT 84111			PCT	
		****	ITTEN OPINION OF THE ONAL SEARCHING AUTHORITY	
			(PCT Rule 43bis.1)	
		Date of mailing (day/month/year)	2 9 JAN 201 <b>3</b>	
Applicant's or agent's file reference 18756.37.1A		FOR FURTHER A		
International application No. International fil	ling date (	day/month/year)	Priority date (day/month/year)	
PCT/US 12/66013 20 November	er 2012 (	(20.11.2012)	21 November 2011 (21.11.2011)	
International Patent Classification (IPC) or both national of IPC(8) - G06Q 20/00 (2013.01) USPC - 705/78 Applicant MOZIDO, LLC	classificati	on and IPC		
1. This opinion contains indications relating to the follows:	wing item	S:		
Box No. 1 Basis of the opinion				
Box No. II Priority				
Box No. III Non-establishment of opinion v	with regard	d to novelty, inventive	step and industrial applicability	
Box No. IV Lack of unity of invention				
Box No. V Reasoned statement under Rule citations and explanations supp	e 43bis.1(a) porting suc	)(i) with regard to nov th statement	elty, inventive step or industrial applicability;	
Box No. VI Certain documents cited				
Box No. VII Certain defects in the internation	onal applic	ation		
Box No. VIII Certain observations on the inte	ernational	application		
A TURBULE ACTION				
2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.				
For further options, see Form PCT/ISA/220.				
·				
Name and mailing address of the ISA/US Date of comple	etion of th	is opinion	Authorized officer:	
Mail Stop PCT, Attn: ISA/US Commissioner for Patents 16 January	v 2013 (*	16.01.2013)	Lee W. Young	
P.O. Box 1450, Alexandria, Virginia 22313-1450  Facsimile No 571-273-3201	, 2010 (	. 5.525 . 6,	PCT Helpdesk: 571-272-4300	

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/66013

Box	No. I	Basis of this opinion
1.	With r	the international application in the language in which it was filed.  a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43 bis.1(a))
3.		egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished:
		on paper in electronic form
	b. (tir	in the international application as filed
		together with the international application in electronic form subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additi	onal comments:

Form PCT/ISA/237 (Box No. I) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/66013

Box No. V		Reasoned statement under Rule $43bis.1(a)(i)$ with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1.	Statemer	nt				
	Nove	Ity (N)	Claims	1-20	YES	
	,		Claims	None	NO NO	
	Inven	tive step (IS)	Claims	None	YES	
			Claims	1-20	NO NO	
	Indus	trial applicability (IA)	Claims	1-20	YES	
			Claims	None	NO	
			Ciallis		NO	

#### Citations and explanations:

Claims 1-8, 12-14 and 18-20 lack an inventive step under PCT Article 33(3) as being obvious over US 2008/0208762 A1 to Arthur et al. (hereinafter 'Arthur') in view of US 6,873,974 B1 (Schutzer).

Regarding claim 1, Arthur teaches a cloud-based transaction platform including (Abstract): one or more processors (para [0016], [0065]); system memory (para [0065]); one or more computer-readable storage media having stored thereon computer executable instructions that, when executed by the one or more processors, cause the computing system to perform a method for performing a transaction using a mobile wallet, the method comprising the following (Abstract; para [0016], [0057], [0140]); an act of receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a mobile wallet transaction using their mobile wallet (para [0068]-[0069], [0071]-[0074], [0080], [0080], [0119]); an act of receiving communication from the mobile wallet platform confirming processing of the transaction (para [0087]-[0090], [0121]-[0125]); and an act of sending communication to the agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the communication indicating confirmation of the processing of the transaction (para [0087]-[0090], [0121]-[0125]). Arthur does not specifically teach the mobile wallet is a third party mobile wallet. However, Schutzer teaches a payment processing system, wherein the payment system accepts and process account transaction requests from third party mobile wallets (Abstract; col 3, In 40 to col 4, In 20; col 8, In 60 to col 9, In 40). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur with those of Schutzer since doing so would enhance the flexibility of mobile users by allowing payments using third party mobile wallets.

Regarding claim 2, Schutzer teaches a transaction is performed by a second, different customer using a second, different third party mobile wallet (col 7, in 7-53; col 8, in 60 to col 9, in 40).

Regarding claim 3, Schutzer teaches the third party mobile wallet platform comprises a third party processor (col 9, In 5-63).

Regarding claim 4, Schutzer teaches the transaction using a third party mobile wallet comprises one or more of a deposit, a withdrawal, a transfer, a purchase, a bill payment, or topping up of a prepaid mobile account (col 5, In 57 to col 6, In 10 - purchase).

Regarding claim 5, Arthur teaches comprising an act of notifying the customer of confirmation of the processing of the transaction using the mobile wallet over at least one of the plurality of communication channels connected to the cloud-based transaction platform (para [0121]-[0125]).

Regarding claim 6, Schutzer teaches the third party mobile wallet is provided by a third party mobile wallet provider (Abstract; col 3, In 40 to col 4, In 20; col 8, In 60 to col 9, In 40).

Regarding claim 7, Arthur teaches each mobile wallet provider has their own point of sale (POS) processing system (para [00068]-[0072], [0087]-[0090]).

Regarding claim 8, Arthur teaches the mobile wallet providers' POS processing systems communicate with each other using the cloud-based transaction platform to process the transaction (para [0068]-[0072], [0083]-[0087]).

Regarding claim 12, Arthur teaches the transaction comprises making a purchase from a mobile wallet managed by a mobile wallet platform, including: an act of receiving communication from the customer over one of the plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to purchase an item for a specified amount of funds using a specified payment method from the customer's mobile wallet (para [0080]-[0082], [0120]-[0123]); an act of returning a secure, perishable purchase code to the customer over at least one of the plurality of channels connected to the cloud-based transaction platform (para [0067]-[0070], [0073]-[0074]); an act of receiving communication from the agent terminal over at least one of the plurality of channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the purchase code has been presented to an agent (para [0067]-[0070], [0073]-[0074]); an act of debiting the customer's mobile wallet by the specified amount of funds (para [0087]-[0090], [0121]-[0125]).

--- (See Continuation in Supplemental Box ) ---

Form PCT/ISA/237 (Box No. V) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/66013

Suppl	leme	ntal	Box
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In case the space in any of the preceding boxes is not sufficient. Continuation of:
Box V.2 Citations and Explanations.

users by allowing payments using third party mobile wallets.

Regarding claim 13, Arthur teaches a cloud-based transaction platform including: one or more processors (para [0016], [0065]); system memory (para [00065]); one or more computer-readable storage media having stored thereon computer- executable instructions that, when executed by the one or more processors, cause the computing system to perform a method for performing a transaction using a point of sale (POS) system, the method comprising (Abstract; para [0016], [0057], [0140]); an act of receiving communication from a specified POS system implemented at an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the POS communication indicating that a customer has initiated a mobile wallet transaction using their mobile wallet (para [0068]-[0067]-[0074], [0080], [0082], [0119]); an act of sending the POS communication to a corresponding transaction processing system that has been established to process POS transactions from the specified POS system (para [0080]-[0082], [0120]-[0123]); an act of receiving communication from the POS transaction processing system confirming processing of the transaction (para [0087]-[0090], [0121]-[0125]); and an act of sending communication to the specified POS system implemented at the agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the communication indicating confirmation of the processing of the transaction (para [0087]-[0090], [0121]-[0125]). Arthur does not specifically teach the mobile wallet is a third party mobile wallet. However, Schutzer teaches a payment processing system, wherein the payment system accepts and process account transaction requests from third party mobile wallets (Abstract; col 3, In 40 to col 4, In 20; col 8, In 60 to col 9, In 40). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur with those of Schutzer since doing so would enhance the flexibility of mobile

Regarding claim 14, Arthur teaches the act of receiving a transaction fee paid by the specified POS system to the cloud-based transaction platform (para [0063]-[0068], [0084]-[0087]).

Regarding claim 18, Arthur teaches the transaction comprises making a purchase from a mobile wallet provided by a mobile wallet provider, including: an act of receiving communication from the customer over one of the plurality of communication channels connected to the mobile wallet platform, the customer communication indicating that the customer desires to purchase an item for a specified amount of funds using a specified payment method from the customer's mobile wallet (para [0080]-[0082], [0120]-[0123]); an act of returning a secure, perishable purchase code to the customer over at least one of the plurality of communication channels connected to the cloud based transaction platform and an act of receiving subsequent agent terminal communication over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the purchase code has been presented to an agent (para [0067]-[0070], [0073]-[0074]); an act of validating the status of the specified payment method and an act of determining if the specified payment method can accommodate a purchase for the specified amount (para [0067]-[0070], [0073]-[0074]); an act of performing one or more of a limit check and a velocity check on the specified payment method and an act of debiting the customer's mobile wallet by the specified amount of funds by sending communication to the mobile wallet provider and an act of returning a notification to the POS system at the agent terminal authorizing the purchase (para [0087]-[0090], [0121]-[0125]); an act of sending a receipt to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform (para [0121]-[0125]).

Regarding claim 19, Arthur teaches a cloud-based transaction platform including: one or more processors (para [0016], [0065]); system memory (para [0065]); one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors, cause the computing system to perform a method for making a purchase from a mobile wallet provided by a mobile wallet provider, the method comprising the following (Abstract; para [0016], [0057], [0140]): an act of receiving communication from a customer over one of a plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that a customer desires to purchase an item for a specified amount of funds using a specified payment method indicated by the customer's mobile wallet (para [0068]-[0069], [0071]-[0074], [0080], [0082], [0119]); an act of returning a secure, perishable purchase code to the customer over at least one the plurality of communication channels connected to the cloud-based transaction platform (para [0080]-[0082], [0120]-[0123]); an act of receiving communication from an agent terminal over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the purchase code has been presented to an agent (para [0087]-[0090], [0121]-[0125]); and an act of debiting the customer's mobile wallet by the specified amount of funds (para [0087]-[0090], [0121]-[0125]). Arthur does not specifically teach the mobile wallet is a third party mobile wallet. However, Schutzer teaches a payment processing system, wherein the payment system accepts and process account transaction requests from third party mobile wallets (Abstract; col 3, In 40 to col 4, In 20; col 8, In 60 to col 9, In 40). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur with those of Schutzer since doing so would enhance the flexibility of mobile users by a

Regarding claim 20, Schulzer teaches the item purchased by the customer comprises at least one of the following: health care services, music, games, and movies (col 6, In 10-38 - purchase goods or services available on the web site).

--- ( See Continuation in Supplemental Box ) ---

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/66013

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2 Citations and Explanations.

Claims 9-11 and 15-17 lack an inventive step under PCT Article 33(3) as being obvious over Arthur in view of Schutzer and further in view of US 2007/0125840 A1 to Law et al. (hereinafter 'Law').

Regarding claim 9, neither Arthur nor Schutzer teaches the transaction comprises depositing funds into a mobile wallet owned by an entity different than the customer, including: an act of receiving communication from the agent terminal over one of the plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that the customer desires to deposit a specified amount of funds into their mobile wallet; and an act of crediting the mobile wallet with the specified amount of funds However, Law teaches the transaction comprises depositing funds into a mobile wallet owned by an entity different than the customer, including: an act of receiving communication from the agent terminal over one of the plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that the customer desires to deposit a specified amount of funds into their mobile wallet (para [0033]-[0035], [0150]-[0152]); and an act of crediting the mobile wallet with the specified amount of funds (para [0042], [0150]-[0152]). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur and Schutzer with those of Law since doing so would allow easy and safe deposit of money to mobile wallet account.

Regarding claim 10, neither Arthur nor Schutzer teaches the transaction comprises withdrawing funds from a third party mobile wallet owned by an entity different than the customer, including: an act of receiving communication from the customer over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to withdraw a specified amount of funds from the third party mobile wallet; an act of returning a secure, perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform; an act of receiving communication from the agent terminal over at least one of the plurality of communication channels connected to the cloudbased transaction platform, the agent terminal communication indicating that the withdrawal code has been presented to an agent; and an act of debiting the third party mobile wallet by the specified amount of funds. However, Law teaches the transaction comprises withdrawing funds from a mobile wallet owned by an entity different than the customer, including: an act of receiving communication from the customer over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to withdraw a specified amount of funds from the mobile wallet (para [0149]-[0152]); an act of returning a secure, perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform and an act of receiving communication from the agent terminal over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the agent terminal communication indicating that the withdrawal code has been presented to an agent (para [0040]-[0043], [0117]-[0120]) an act of debiting the mobile wallet by the specified amount of funds (para [0102]-[0103], [0150]-[0151]). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur and Schutzer with those of Law since doing so would allow easy and safe withdrawal of money to mobile wallet account

Regarding claim 11, neither Arthur nor Schutzer teaches the transaction comprises transferring money from a third party mobile wallet within the cloud-based transaction platform to a recipient at a second third party mobile wallet provided by a second mobile wallet provider, the method comprising: an act of receiving customer communication over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that a customer desires to transfer a specified amount of funds to a specified recipient using a specified payment method from the third party mobile wallet; an act of debiting the third party mobile wallet by the specified amount of funds; and an act of transferring the specified amount of funds from the cloud-based transaction platform to the second different third party mobile wallet platform for delivery to the specified recipient, the specified amount of funds being transferred over at least one of the plurality of channels connected to the second third party mobile wallet platform. However, Law teaches the transaction comprises transferring money from a mobile wallet within the cloud-based transaction platform to a recipient at a second mobile wallet provided by a second mobile wallet provider, the method comprising: an act of receiving customer communication over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that a customer desires to transfer a specified amount of funds to a specified recipient using a specified payment method from the mobile wallet (para [0114]-[0118], [0140]-[0143]), an act of debiting the mobile wallet by the specified amount of funds and an act of transferring the specified amount of funds from the cloud-based transaction platform to the second different mobile wallet platform for delivery to the specified recipient, the specified amount of funds being transferred over at least one of the plurality of channels connected to the second mobile wallet platform (para [0114]-[0118], [0140]-[0143]). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur and Schutzer with those of Law since doing so would allow easy and safe transfer of money to mobile wallet account.

--- (See Continuation in Supplemental Box ) ---

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/66013

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2 Citations and Explanations.

Regarding claim 15, neither Arthur nor Schutzer the transaction comprises depositing funds into a third party mobile wallet provided by a third party mobile wallet provider, including: an act of receiving communication from the specified POS system implemented at the agent terminal over one of the plurality of channels connected to the cloud-based transaction platform, the POS communication indicating that the customer desires to deposit a specified amount of funds into the third party mobile wallet provided by the third party mobile wallet provider; an act of validating the status of the third party mobile wallet provided by the third party mobile wallet provider; an act of determining if the specified POS system implemented at the agent terminal is authorized to deposit money; an act of performing one or more of a limit check and a velocity check on the third party mobile wallet provided by the third party mobile wallet provider; an act o crediting the third party mobile wallet provided by the third party mobile wallet provider with the specified amount of funds; an act of returning a notification to the specified POS system implemented at the agent terminal confirming the deposit; and an act of notifying the customer that the specified amount of funds were deposited in the third party mobile wallet provided by the third party mobile wallet provider over at least one of the plurality of communication channels connected to the cloud-based transaction platform. However, Law teaches the transaction comprises depositing funds into a mobile wallet provided by a mobile wallet provider, including: an act of receiving communication from the specified POS system implemented at the agent terminal over one of the plurality of channels connected to the cloud-based transaction platform, the POS communication indicating that the customer desires to deposit a specified amount of funds into the mobile wallet provided by the mobile wallet provider (para [0033]-[0035], [0150]-[0152]); an act of validating the status of the mobile wallet provided by the mobile wallet provider and an act of determining if the specified POS system implemented at the agent terminal is authorized to deposit money and an act of performing one or more of a limit check and a velocity check on the mobile wallet provided by the mobile wallet provider (para [0040]-[0043], [0118]-[0123]); an act of crediting the mobile wallet provided by the mobile wallet provider (para [0040]-[0043], [0118]-[0123]); and the mobile wallet provided by the mobile wallet provider (para [0040]-[0043], [0118]-[0123]); and the mobile wallet provided by the mobile wallet provider (para [0040]-[0043], [0118]-[0123]); and the mobile wallet provided by the mobile wall with the specified amount of funds (para [0042], [0150]-[0152]); an act of returning a notification to the specified POS system implemented at the agent terminal confirming the deposit and an act of notifying the customer that the specified amount of funds were deposited in the mobile wallet provided by the mobile wallet provider over at least one of the plurality of communication channels connected to the cloud-based transaction platform (para [0147]-[0151]). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur and Schutzer with those of Law since doing so would allow easy and safe deposit of money to mobile wallet account.

Regarding claim 16, neither Arthur nor Schutzer teaches the transaction comprises withdrawing funds from a third party mobile wallet provided by a third party mobile wallet provider, including: an act of receiving communication from a customer over one of the plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to withdraw a specified amount of funds from the third party mobile wallet provided by the third party mobile wallet provider; an act of validating the status of the third party mobile wallet provided by the third party mobile wallet provider; an act of determining if the balance of the third party mobile wallet provided by the third party mobile wallet provider is sufficient to accommodate the requested withdrawal for the specified amount of funds; an act of performing one or more of a limit check and a velocity check on the third party mobile wallet; an act of returning a secure, perishable withdrawal code to the customer over at least one of the plurality of channels connected to the cloud-based transaction platform; an act of receiving subsequent POS communication over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the POS communication indicating that the withdrawal code has been presented to an agent; an act of debiting the third party mobile wallet provided by the third party mobile wallet provider by the specified amount of funds; an act of returning a notification to the POS system at the agent terminal confirming the withdrawal; and an act of notifying the customer that the specified amount of funds were withdrawn from the third party mobile wallet over at least one of the plurality of communication channels connected to the cloud-based transaction platform. However, Law teaches the transaction comprises withdrawing funds from a mobile wallet provided by a mobile wallet provider, including: an act of receiving communication from a customer over one of the plurality of channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to withdraw a specified amount of funds from the mobile wallet provided by the mobile wallet provider (para [0149]-[0152]); an act of validating the status of the mobile wallet provided by the mobile wallet provider and an act of determining if the balance of the mobile wallet provided by the mobile wallet provider is sufficient to accommodate the requested withdrawal for the specified amount of funds and an act of performing one or more of a limit check and a velocity check on the mobile wallet and an act of returning a secure, perishable on performing one or more of a limit check and a velocity check on the mobile wallet and an act or returning a secure, pershable withdrawal code to the customer over at least one of the plurality of channels connected to the cloud-based transaction platform (para [0040]-[0043], [0118]-[0123]); an act of receiving subsequent POS communication over at least one of the plurality of communication channels connected to the cloud-based transaction platform, the POS communication indicating that the withdrawal code has been presented to an agent (para [0040]-[0043], [0117]-[0120]); an act of debiting the mobile wallet provided by the mobile wallet provider by the specified amount of funds (para [0102]-[0103], [0150]-[0151]); an act of returning a notification to the POS system at the agent terminal confirming the withdrawal and an act of notifying the customer that the specified amount of funds were withdrawn from the mobile wallet over at least one of the plurality of communication channels connected to the cloud-based transaction platform (para [0147]-[0151]). It would have been obvious to one of ordinary skill in the art to combine the teachings of Arthur and Schutzer with those of Law since doing so would allow easy and safe withdrawal of money to mobile wallet account.

--- (See Continuation in Supplemental Box ) ---

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/66013

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of: Box V.2 Citations and Explanations.

Regarding claim 17, neither Arthur nor Schutzer teaches the transaction comprises transferring money using a third party mobile wallet provided by a third party mobile wallet provider, including: an act of receiving customer communication over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to transfer a specified amount of funds to a specified recipient having a third party mobile wallet, the transfer using a specified payment method from the customer's third party mobile wallet at the cloud-based transaction platform; an act of validating the status of the specified payment method; an act of performing one or more of a limit check and a velocity check on the specified payment method; an act of performing a check on the specified recipient having a third party mobile wallet to comply with the office of foreign assets control; an act of debiting the customer's mobile wallet at the cloud-based transaction platform by the specified amount of funds; an act of transferring the specified amount of funds to third party mobile wallet provider for delivery to the third party mobile wallet of the specified recipient over at least one of the plurality of channels connected between the cloud-based transaction platform and the third party mobile wallet provider; an act of notifying the customer that the specified amount of funds was transferred to the specified recipient over at least one of the plurality of channels connected to the cloud-based transaction platform. However, Law teaches the transaction comprises transferring money using a mobile wallet provided by a mobile wallet provider, including: an act of receiving customer communication over one of the plurality of communication channels connected to the cloud-based transaction platform, the customer communication indicating that the customer desires to transfer a specified amount of funds to a specified recipient having a mobile wallet, the transfer using a specified payment method from the customer's mobile wallet at the cloud-based transaction platform (para [0114]-[0118], [0140]-[0143]); an act of validating the status of the specified payment method and an act of performing one or more of a limit check and a velocity check on the specified payment method and an act of performing a check on the specified recipient having a mobile wallet to comply with the office of foreign assets control; an act of debiting the customer's mobile wallet at the cloud-based transaction platform by the specified amount of funds (para [0040]-[0043], [0118]-[0123]); an act of transferring the specified amount of funds to mobile wallet provider for delivery to the mobile wallet of the specified recipient over at least one of the plurality of channels connected between the cloud-based transaction platform and the mobile wallet provider (para [0114]-[0118], [0140]-[0143]); an act of notifying the customer that the specified amount of funds was transferred to the specified recipient over at least one of the plurality of channels connected to the cloud based transaction platform (para

Law since doing so would allow easy and safe tr				
Claims 1-20 have industrial applicability as defin-	ed by PCT Article 3	33(4), because the su	bject matter can be ma	ade or used in industry.

### PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 18756.8.1A	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item	5 below.
International application No.	International filing date (day/	nonth/year) (Earliest) Priority Date	(day/month/year)
PCT/US 12/40131	31 May 2012 (31.05.2012)	03 June 2011 (03.06.201	1)
Applicant MOZIDO, LLC			
This international search report has be according to Article 18. A copy is bein This international search report consists	g transmitted to the Internationa	l Searching Authority and is transmitte Bureau.	ed to the applicant
	a copy of each prior art documen	t cited in this report.	
1. Basis of the report			
a. With regard to the language, th			
. = "	olication in the language in which		
	nternational application into ed for the purposes of internation	which rall search (Rules 12.3(a) and 23.1(b)).	is the language of
	report has been established tak o this Authority under Rule 91 (	ng into account the rectification of an Rule $43.6bis(a)$ ).	obvious mistake
c. With regard to any nucleo	tide and/or amino acid sequen	e disclosed in the international applicat	ion, see Box No. 1.
2. Certain claims were foun	d unsearchable (see Box No. I	).	
3. Unity of invention is lack	ing (see Box No. III).		
4. With regard to the title,			
	• • • •		
the text has been establish	ed by this Authority to read as f	nows:	
5. With regard to the abstract,			
the text is approved as sub	mitted by the applicant.		
the text has been establish may, within one month fro	ed, according to Rule 38.2, by them the date of mailing of this into	is Authority as it appears in Box No. IV rnational search report, submit commen	7. The applicant ts to this Authority.
6. With regard to the drawings,			
a. the figure of the drawings to be	published with the abstract is f	igure No. 6B	
as suggested by the	applicant.		
as selected by this A	authority, because the applicant	ailed to suggest a figure.	
as selected by this A	authority, because this figure bet	er characterizes the invention.	
b. none of the figures is to be	published with the abstract.		

Form PCT/ISA/210 (first sheet) (July 2009)

#### INTERNATIONAL SEARCH REPORT International application No. PCT/US 12/40131 CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 20/00 (2012.01) USPC - 705/65 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC(8): G06Q 20/00 (2012.01) USPC: 705/65 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 705/73; 705/39; 902/2 (keyword limited; terms below) Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase; Google Scholar; Google Patents; FreePatentsOnline. Search terms used: financial-transaction monetary-transaction unbanked, subscriber member profile account, mobile-wallet mobile-purse mobile-payment Google-wallet smart-wallet mobile-banking mobile-commerce, fund account-balance account-amount available-fund stored-value top-up... DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category\* Citation of document, with indication, where appropriate, of the relevant passages US 2009/0119190 A1 (REALINI) 07 May 2009 (07.05.2009) entire document, especially Abstract; para [0028], [0029], [0033], [0135], [0136], [0171], [0176]-[0178], [0180], [0186], [0189], [0193], [0194], [0196], [0260], [0253], [0254], [0260], [0264], [0267], [0270], [0273], [0328], [0336], [0344], [0351], [0370], [0392], [0393], [0423], [0427], [0440], [0551], [0554], [0554], [0554], [0602], [0611], [0631], [0649], [0661], [0669], [0671], [0679], [0739], [0875], [0897], [0916], [0918], [1066], [1086], [1098], [1168] 20 1-19 US 2006/0253335 A1 (KEENA et al.) 09 November 2006 (09.11.2006) entire document, 1-19 especially Abstract; para [0012], [0038], [0042] US 2009/0265272 A1 (DILL et al.) 22 October 2009 (22.10.2009) entire document, especially Abstract; para [0005], [0067] US 2009/0081989 A1 (WUHRER) 26 March 2009 (26.03.2009) entire document, especially 16, 17 Abstract; para [0007], [0076], [0088], [0106] US 2007/0255652 A1 (TUMMINARO et al.) 01 November 2007 (01.11.2007) entire document 1 - 20 US 2007/0255620 A1 (TUMMINARO et al.) 01 November 2007 (01.11.2007) entire document 1 - 20 US 2006/0287004 A1 (FUQUA) 21 December 2006 (21.12.2006) entire document 1 - 20 Α US 2007/0265984 A1 (SANTHANA) 15 November 2007 (15.11.2007) entire document 1 - 20Further documents are listed in the continuation of Box C. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international filing date document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "E" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than the priority date claimed document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 09 January 2013 (09.01.2013) 29 JAN 2013 Authorized officer: Name and mailing address of the ISA/US Lee W. Young Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450

PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)

Facsimile No. 571-273-3201

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORI	ITY					
To: JOHN C. STRINGHAM 60 EAST SOUTH TEMPLE SUITE 1000			PCT			
SALT LAKE CITY, UT 84111			ITTEN OPINION OF THE ONAL SEARCHING AUTHORITY			
			(PCT Rule 43bis.1)			
		Date of mailing (day/month/year)	2 9 JAN 2013			
Applicant's or agent's file reference 18756.8.1A		FOR FURTHER A	CTION See paragraph 2 below			
International application No. Int	nternational filing date	(day/month/year)	Priority date (day/month/year)			
PCT/US 12/40131 31	1 May 2012 (31.05	5.2012)	03 June 2011 (03.06.2011)			
International Patent Classification (IPC) or both IPC(8) - G06Q 20/00 (2012.01) USPC - 705/65 Applicant MOZIDO, LLC	oth national classificat	tion and IPC				
1. This opinion contains indications relating to the following items:    Box No. I   Basis of the opinion						
International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.  If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  For further options, see Form PCT/ISA/220.						
Name and mailing address of the ISA/US   Di	Date of completion of the	his opinion	Authorized officer:			
Mail Stop PCT, Attn: ISA/US	09 January 2013 (	(09.01.2013)	Lee W. Young PCT Helpdesk: 571-272-4300			

Form PCT/ISA/237 (cover sheet) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/40131

Box	x No. 1 Basis of this opinion	
		-
1.	With regard to the language, this opinion has been established on the basis of:	
	the international application in the language in which it was filed.	
	a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).	
2.	This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))	
3.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:	
	a. (means)	
	on paper	
	in electronic form	
	b. (time)	
	in the international application as filed	
	together with the international application in electronic form	
	subsequently to this Authority for the purposes of search	
4.	In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the require statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	d
5.	Additional comments:	
	·	

Form PCT/ISA/237 (Box No. 1) (July 2011)

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/40131

Box No. V	Reasoned statement un citations and explanati		ois.1(a)(i) with regard to novelty, inventing such statement	ve step or industrial applicability;
1. Statemen	nt			
Nove	ty (N)	Claims	1-19	YES
		Claims	20	NO NO
Inven	ntive step (IS)	Claims	None	YES
		Claims	1 - 20	NO NO
Indus	strial applicability (IA)	Claims	1 - 20	YES
		Claims	None	_ NO

Claim 20 lacks novelty under PCT Article 33(2) as being anticipated by US 2009/0119190 A1 (Realini).

As to claim 20, Realini teaches a monetary transaction system, comprising: a mobile wallet application configured to perform one or more of the following: process incoming and outgoing transactions, authenticate transaction system subscribers, manage subscriber profiles, and manage interactions between monetary transaction system components (para [0875], [1168]); a monetary transaction processor configured to perform one or more of the following: manage account balances for mobile wallet subscribers, manage mobile wallet agent accounts, process balance inquiries, account debits, and transaction roll-backs (para [0336]); a mobile wallet auglet hat manages and applies rules and policies that are defined for transactions as the transactions are processed on the mobile wallet transaction system including rules that control at least one of the following: transaction fees, transaction limits, transaction velocity limits, commissions, mobile transaction system roles and permissions (para [0581]); a mobile wallet integration module that manages interaction between the mobile wallet transaction system and one or more external transaction systems including at least one of a wireless service provider's billing platform and a program partner bank (para [0669], [0875]); a mobile wallet database that stores mobile wallet transaction data used in mobile wallet transactions including one or more of the following: subscriber profiles, subscription data, transaction data, transaction logs, mobile wallet application configuration data and mobile wallet application run-time data (para [0423] - subscription fees; para [1065] - profile; para [1108] - runtime); and a mobile wallet wireless service that interfaces with the wireless service provider's network to allow communication between the mobile wallet application and other mobile wallet transaction system components via the wireless service provider's network (para [1098])

Claims 1-12, 14, 15, 18 and 19 lack an inventive step under PCT Article 33(3) as being obvious over Realini in view of US 2006/0253335 A1 to Keena et al. (hereinafter, 'Keena')

As to claim 1. Realini teaches a monetary transaction system for conducting monetary transactions between unbanked subscribers and other entities, the system comprising (para [0029]): a mobile device configured to run a monetary transaction system application (para [0029]); 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 (para [0264]); 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 (para [0033]);

but fails to explicitly disclose at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system.

However, Keena does teach at least one entity that is to be involved in the specified transaction, the at least one entity having a profile

with the monetary transaction system (para [0012] - profiles; para [0038] - subscribers are not banked).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the virtual pooled account for mobile banking of Realini with the cash based purchasing using mobile communication of Keena, because Realini and Keena are directed to systems and methods for monetary transaction system. Furthermore, users and designers benefit from systems and/or methods adapted for enabling service providers or suppliers to pay a commission to point of sale vendors for use of the vendor's account and point of sale device to perform transactions for customers, because such systems/methods provides a system and method for cash based purchasing using electronic commerce channels such as mobile telephone networks (Keena, para [0012]).

As to claim 2, in combination with Realini, Keena further discloses wherein the monetary transaction system application provides a web interface that allows subscribers to perform the same functions provided by the monetary transaction system application (para [0042]).

As to claim 3, in combination with Keena, Realini further discloses wherein the monetary transaction system application is provided on a prepaid or postpaid phone (para [0253]).

Please See Supplemental Box -

Form PCT/ISA/237 (Box No. V) (July 2011)

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/40131

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2. Citations and explanations:

As to claim 4, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to enroll a user for a mobile wallet, including the following steps: receiving a subscriber-initiated transaction over one of a plurality of channels connected to the monetary transaction system (para [0631]); prompting for and receiving enrollment information for the unbanked subscriber over at least one of the plurality of channels (para [0171]); sending activation instructions over a second channel to activate the unbanked subscriber and create a subscriber account for the unbanked subscriber (para [0344]); generating a mobile wallet for the unbanked subscriber (para [0440]); and presenting the unbanked subscriber's account data associated with the mobile wallet to the unbanked subscriber (para [0186], [0875]).

As to claim 5, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to add a nobile wallet platform stored value account to a mobile wallet, including the following steps: receiving subscriber data over one of a plurality of channels connected to the mobile wallet transaction system (para [0136], [0631]); performing one or more validation checks on the unbanked subscriber to validate that the unbanked subscriber is not exceeding a specified allowable number of accounts per subscriber (para [0351]); sending subscriber data to the at least one entity for identification of the unbanked subscriber, wherein the entity comprises a third party verification system (para [0270]-[0273]); receiving results from the third party verification system indicating that the subscriber data appropriately identifies the unbanked subscriber (para [0440]); creating a stored value account for the unbanked subscriber, wherein the monetary transaction system processor maintains a recorded balance for the created stored value account (para [0679]); adding the stored value account to the unbanked subscriber's mobile wallet (para [0679]); and notifying the unbanked subscriber of the addition of the stored value account over at least one other of the plurality of channels connected to the mobile wallet platform (para [0631], [0649]),

As to claim 6, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to add a third party stored value account to a mobile wallet, including the following steps: receiving unbanked subscriber data, including account details, over one of a plurality of channels connected to the monetary transaction system (para [0206], [0440], [0531]); performing one or more validation checks on the unbanked subscriber to validate that the unbanked subscriber is not exceeding a specified allowable number of accounts per subscriber (para [0440]); sending subscriber data to the at least one entity for identification of the unbanked subscriber, wherein the entity comprises a third party verification system (para [0186]); receiving results from the third party verification system indicating that the subscriber data appropriately identifies the unbanked subscriber (para [0270]-[0273]); submitting one or more of the unbanked subscriber's account details to a third party account processor (para [0440]); receiving an indication from the third party account processor that third party account processor created a third party stored value account for the subscriber (para [0679]); maintaining a link between the subscriber data and the third party stored value account (para [0679]); adding the third party stored value account to the unbanked subscriber's mobile wallet (para [0875]); and notifying the unbanked subscriber of the addition of the third party stored value account over at least one other of the plurality of channels connected to the monetary transaction system (para [0631], [0649]).

As to claim 7, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to deposit funds at an agent branch through a mobile wallet, including the following steps: receiving communication from an agent branch over one of a plurality of channels connected to the monetary transaction system, the agent communication indicating that the unbanked subscriber desires to deposit a specified amount of funds into the unbanked subscriber's mobile wallet account (para [0440]); validating the status of the unbanked subscriber's mobile wallet account (para [0351]); determining if the agent branch is authorized to receive deposited money (para [0586]); performing one or more of a limit check and a velocity check on the unbanked subscriber's mobile wallet account (para [0427], [0594]); crediting the unbanked subscriber's mobile wallet account with the specified amount of funds (para [0440], [0875]); returning a notification to the agent branch confirming the deposit (para [0739], [0918]); and notifying the subscriber that the specified amount of funds was deposited in the unbanked subscriber's mobile wallet account over at least one of the plurality of channels connected to the monetary transaction system (para [0897])

As to claim 8, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to withdraw funds at an agent branch using a mobile wallet, including the following steps: receiving a communication from the unbanked subscriber over one of a plurality of channels connected to the monetary transaction system, the communication indicating that the unbanked subscriber desires to withdraw a specified amount of funds from the unbanked subscriber's mobile wallet account at the agent branch (para [0586]); validating the status of the unbanked subscriber's mobile wallet account (para [0351]); determining if the balance of the unbanked subscriber's mobile wallet account is sufficient to accommodate the requested withdrawal for the specified amount of funds (para [0028]); performing one or more of a limit check and a velocity check on the unbanked subscriber's mobile wallet account (para [0427], [0594]); returning a secure, perishable withdrawal code to the subscriber over at least one of the plurality of channels connected to the monetary transaction system (para [0577]); receiving subsequent agent branch communication over at least one of the plurality of channels connected to the monetary transaction system, the agent branch communication indicating that the withdrawal code has been presented to the agent branch (para [1086]); debiting the unbanked subscriber's mobile wallet account by the specified amount of funds (para [0392]); returning a notification to the agent branch confirming the withdrawal (para [0739], [0918]); and notifying the subscriber that the specified amount of funds was withdrawn from the unbanked subscriber's mobile wallet account over at least one of the channels connected to the monetary transaction system (para [0897]).

As to claim 9, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to pay a bill from a mobile wallet, including the following steps: receiving a 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 pay a bill for a specified amount using a specified payment method from the unbanked subscriber's mobile wallet (para [0028]); validating the status of the selected payment method (para [0661], [0671]); performing one or more of a limit check and a velocity check on the selected payment method (para [0427], [0594]); debiting the specified payment method by the specified amount of funds (para [0392]); processing the bill payment via at least one of a direct biller connection and a bill pay aggregator (para [0028], [0254]); and notifying the unbanked subscriber that the bill was paid over at least one of the plurality of channels connected to the monetary transaction system (para [0897]).

- Please See Supplemental Box -

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/40131

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2. Citations and explanations:

As to claim 10, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to buy airtime on a prepaid mobile account from a mobile wallet, including 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 top up a prepaid mobile account by a specified amount using a specified payment method from the unbanked subscriber's mobile wallet (para [0440]); validating the status of the selected payment method (para [0612]); performing at least one of a limit check and a velocity check on the selected payment method (para [0427], [0594]); debiting the specified payment method by the specified amount of funds (para [0392]); processing the mobile top-up via at least one of a billing system integrator and an aggregator (para [0180]); and notifying the subscriber that the prepaid mobile account was topped up over at least one of the plurality of channels connected to the monetary transaction system (para [0180], [0897]).

As to claim 11, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to transfer money between mobile wallets, including 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 (para [0176], [0440]); validating the status of the selected payment method (para [0612]); performing at least one of a limit check and a velocity check on the selected payment method (para [0427], [0594]); validating the status of the specified recipient to ensure the specified recipient has a valid mobile wallet account (para [0612]); debiting the specified payment method by the specified amount of funds (para [0392]); transferring the specified amount of funds to the specified recipient over at least one of the plurality of channels connected to the monetary transaction system (para [0176]); notifying the unbanked subscriber that the specified amount of funds was transferred to the specified recipient over at least one of the plurality of channels connected to the monetary transaction system (para [0176], [0631]).

As to claim 12, in combination with Keena, Realini further discloses wherein validating the status of the specified recipient comprises performing a check on the specified recipient to comply with the office of foreign assets control (para [0580]).

As to claim 14, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to make a purchase from a mobile wallet, including the following steps: receiving a communication from a subscriber over one of a plurality of channels connected to the monetary transaction system, the subscriber communication indicating that an unbanked subscriber desires to purchase an item for a specified amount of funds using a specified payment method from the unbanked subscriber's mobile wallet (para [0529]); returning a secure, perishable purchase code to the unbanked subscriber over at least one of the plurality of channels connected to the monetary transaction system (para [0529], [0577]); receiving subsequent agent branch communication over at least one of the plurality of channels connected to the monetary transaction system, the agent branch communication indicating that the purchase code has been presented to an agent (para [0529]); validating the status of the specified payment method (para [0427]); determining if the specified payment method can accommodate a purchase for the specified amount (para [0524]); performing at least one of a limit check and a velocity check on the selected payment method (para [0529], [0427], [0594]); determining a notification to the agent branch authorizing the purchase (para [0529]); and sending a receipt to the unbanked subscriber over at least one of the plurality of channels connected to the monetary transaction system (para [0176], [0631]).

As to claim 15, Realini teaches a monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising: a mobile device configured to run a monetary transaction system application (para [0260], [0427]); a monetary transaction system subscriber that has a profile with the monetary transaction system, wherein the subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system (para [0530]); a monetary transaction system processor that performs the one or more transactions specified by the 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 subscriber's profile (para [0033], [0916]);

but fails to explicitly disclose at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system.

However, Keena does teach at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system (para [0012] - profiles; para [0038] - subscribers are not banked).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the virtual pooled account for mobile banking of Realini with the cash based purchasing using mobile communication of Keena, because Realini and Keena are directed to systems and methods for monetary transaction system. Furthermore, users and designers benefit from systems and/or methods adapted for enabling service providers or suppliers to pay a commission to point of sale vendors for use of the vendor's account and point of sale device to perform transactions for customers, because such systems/methods provides a system and method for cash based purchasing using electronic commerce channels such as mobile telephone networks (Keena, para [0012]).

As to claim 18, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to deposit funds into a bank or credit union account using a mobile wallet, including the following steps: receiving communication from an agent branch over one of a plurality of channels connected to the monetary transaction system, the agent communication indicating that a subscriber desires to deposit a specified amount of funds into a bank or credit union account (para [01777], [0529]); validating the status of the bank or credit union account (para [0427], [0594]); performing one or more of a limit check and a velocity check on the bank or credit union account (para [0427], [0594]); crediting the bank or credit union account with the specified amount of funds (para [0393]); returning a notification to the agent branch confirming the deposit (para [0739], [0918]); and notifying the subscriber that the specified amount of funds was deposited in the bank or credit union account over at least one of the plurality of channels connected to the monetary transaction system (para [0176], [0631]).

- Please See Supplemental Box -

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/40131

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2. Citations and explanations:

As to claim 19, in combination with Keena, Realini further discloses wherein the monetary transaction system is implemented to withdraw funds from a bank or credit union account through a mobile wallet, including the following steps: receiving communication from a subscriber over one of a plurality of channels connected to the monetary transaction system, the subscriber communication indicating that a subscriber desires to withdraw a specified amount of funds from a bank or credit union account (para [0178], [0602]); validating the status of the bank or credit union account (para [0370]); determining if the balance of the bank or credit union account is sufficient to accommodate the requested withdrawal for the specified amount of funds (para [0328]); performing at least one of a limit check and a velocity check on the bank or credit union account (para [0427], [0594]); returning a secure, perishable withdrawal code to the subscriber over at least one of the plurality of channels connected to the monetary transaction system (para [0577]); receiving subsequent agent branch communication over at least one of the plurality of channels connected to the monetary transaction system, the agent branch communication indicating that the withdrawal code has been presented to an agent (para [1086]); debiting the bank or credit union account by the specified amount of funds (para [0521]); returning a notification to the agent branch confirming the withdrawal (para [0529]); and notifying the subscriber that the specified amount of funds were withdrawn from the bank or credit union account over at least one of the plurality of channels connected to the monetary transaction system (para [0176], [0631]).

Claim 13 lacks an inventive step under PCT Article 33(3) as being obvious over Realini in view of Keena, and further in view of US 2009/0265272 A1 to Dill et al. (hereinafter, 'Dill').

As to claim 13, the combination of Realini and Keena teaches the monetary transaction system of claim 11, but fails to explicitly disclose wherein the money is transferred internationally between the mobile wallets. However, Dill does teach wherein the money is transferred internationally between the mobile wallets (para [0067]). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the virtual pooled account for mobile banking of Realini (as enhanced by Keena) with the money transfers utilizing a unique receiver identifier of Dill, because Realini, Keena and Dill are directed to systems and methods for monetary transaction system. Furthermore, users and designers benefit from systems and/or methods adapted for enabling the data of the request to be verified by the mobile application of the money transfer facilitator, the response may include information related to and/or describing fees, legal notices, etcj., because such systems/methods allow for allowing financial transfers that utilize a unique identifier to facilitate flexible payment options for the transaction (Dill, para [0005]).

Claims 16 and 17 lack an inventive step under PCT Article 33(3) as being obvious over Realini in view of Keena, and further in view of US 2009/0081989 A1 (Wuhrer).

As to claim 16, the combination of Realini and Keena teaches the monetary transaction system of claim 15, and Realini further teaches wherein the monetary transaction system is implemented to add a bank or credit union account to a mobile wallet, including the following steps: receiving subscriber data, including bank or credit union account details, over at least one of a plurality of channels connected to the monetary transaction system (para [0177], [0875]); sending subscriber data to a third party verification system for identification of the subscriber (para [0194]); receiving results from the third party system indicating that the subscriber data appropriately identifies the subscriber (para [0189], [0193]); submitting bank or credit union account details for validation by the transaction processor (para [0196]): receiving an indication that the bank or credit union account details correspond to a valid bank or credit union account (para [0135]); maintaining a link between the subscriber data and the bank or credit union account (para [0176]); and notifying the subscriber of the bank or credit union account validation over at least one of the plurality of channels connected to the monetary transaction system (para [0176],

but fails to explicitly disclose performing one or more validation checks on the subscriber to validate that the subscriber is not exceeding a

specified allowable number of accounts per subscriber.

However, Wuhrer does teach performing one or more validation checks on the subscriber to validate that the subscriber is not exceeding a specified allowable number of accounts per subscriber (para [0076], [0088], [0106]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the virtual pooled account for mobile banking of Realini (as enhanced by Keena) with the system and method for financial transaction interoperability across multiple mobile networks of Wuhrer, because Realini, Keena and Wuhrer are directed to systems and methods for monetary transaction system. Furthermore, users and designers benefit from systems and/or methods adapted for enabling a mobile device to execute transactions via the system, and in some embodiments, transactions originate from a third party application through system platform APIs for the reload application and the gifting application; the system is coupled to multiple accounts of the user, including for example, a system account, a debit card account, a credit card account, a PayPal account, multiple prepaid accounts 364 and a bank account, because such systems/methods provide a platform and application layer that can function across an array of payment platforms or network types (Wuhrer, para [0007]).

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#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/40131

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As to claim 17, the combination of Realini and Keena teaches the monetary transaction system of claim 1, and Realini further teaches wherein the monetary transaction system is implemented to add a debit or credit card account to a mobile wallet, including the following steps: receiving subscriber data, including a debit or credit card account number, over one of a plurality of channels connected to the monetary transaction system (para [0136]); sending subscriber data to a third party verification system for identification of the subscriber (para [0194]); receiving results from the third party system indicating that the subscriber data appropriately identifies the subscriber (para [0189], [0193]); securely storing the debit or credit card account number for access by the mobile wallet (para [0267], [0875]); adding the debit or credit card account number to the subscriber's mobile wallet (para [0267], [0875]); and notifying the subscriber of the addition of the debit or credit card account number over at least one of the plurality of channels connected to the monetary transaction system (para [0176], [0631]);

but fails to explicitly disclose performing one or more validation checks on the subscriber to validate that the subscriber is not exceeding a specified allowable number of accounts per subscriber.

However, Wuhrer does teach performing one or more validation checks on the subscriber to validate that the subscriber is not exceeding a specified allowable number of accounts per subscriber (para [0076], [0088], [0106]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the virtual pooled account for mobile banking of Realini (as enhanced by Keena) with the system and method for financial transaction interoperability across multiple mobile networks of Wuhrer, because Realini, Keena and Wuhrer are directed to systems and methods for monetary transaction system. Furthermore, users and designers benefit from systems and/or methods adapted for enabling a mobile device to execute transactions via the system, and in some embodiments, transactions originate from a third party application through system platform APIs for the reload application and the gifting application; the system is coupled to multiple accounts of the user, including for example, a system account, a

debit card account, a credit card account, a PayPal account, multiple prepaid accounts 364 and a bank account, because such systems/methods provide a platform and application layer that can function across an array of payment platforms or network types (Wuhrer, para [0007]).					
Claims 1 - 20 have industrial applicability as defined by PCT Article 33(4), because the subject matter can be made or used in industry.					

### PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 18756.20A	FOR FURTHER ACTION 2S W	see Form PCT/ISA/220 ell as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year,	(Earliest) Priority Date (day/month/year)				
PCT/US 12/43321	20 June 2012 (20.06.2012)	20 June 2011 (20.06.2011)				
Applicant MOZIDO, LLC						
according to Article 18. A copy is bein This international search report consists	g transmitted to the International Bureau.	g Authority and is transmitted to the applicant				
1. Basis of the report						
a. With regard to the language, the	e international search was carried out on the	e basis of:				
the international app	lication in the language in which it was file	d.				
	nternational application intoed for the purposes of international search (	which is the language of Rules 12.3(a) and 23.1(b)).				
	report has been established taking into account to this Authority under Rule 91 (Rule 43.6b)	count the rectification of an obvious mistake is(a)).				
c. With regard to any nucleo	tide and/or amino acid sequence disclose	I in the international application, see Box No. I.				
2. Certain claims were foun	2. Certain claims were found unsearchable (see Box No. 11).					
3. Unity of invention is lack	ing (see Box No. III).					
4. With regard to the title,						
the text is approved as sub	mitted by the applicant.					
the text has been established	ed by this Authority to read as follows:					
5. With regard to the abstract,						
the text is approved as sub	mitted by the applicant.					
1 —	• • •	y as it appears in Box No. IV. The applicant				
may, within one month from	m the date of mailing of this international se	arch report, submit comments to this Authority.				
6. With regard to the drawings,						
a. the figure of the drawings to be	published with the abstract is Figure No. 2	<u> </u>				
as suggested by the a						
as selected by this A	uthority, because the applicant failed to sug	gest a figure.				
as selected by this A	uthority, because this figure better characte	rizes the invention.				
b none of the figures is to be	published with the abstract.					

Form PCT/ISA/210 (first sheet) (July 2009)

INTERNATIONAL SEARCH REPOR	.1	International appli			
		PCT/US 12	/43321		
A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 20/00 (2012.01) USPC - 705/78					
According to International Patent Classification (IPC) or to both	national classification a	nd IPC			
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by IPC(8): G06Q 20/00 (2012.01) USPC: 705/78	classification symbols)				
Documentation searched other than minimum documentation to the e USPC: 705/64; 235/379 (keyword limited; terms below)	xtent that such document	s are included in the	fields searched		
Electronic data base consulted during the international search (name of PubWEST (PGPB, USPT, EPAB, JPAB); Google Scholar; Google payment electronic-wallet electronic-payment mobile-purse electronic wallet-balance purse-balance mobile-vault wallet-sufficient	Patents; FreePatentsOn	line. Search terms u	sed: mobile-wallet mobile-		
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category* Citation of document, with indication, where a	ppropriate, of the releva	ant passages	Relevant to claim No.		
Y US 2008/0275779 A1 (LAKSHMINARAYANAN) 06 Not document, especially Abstract; Figs. 6, 8; para [0006] [0054], [0056]-[0059], [0062], [0073], [0075], [0077], [0131], [0133]	[0023], [0031], [0033],	[0041], [0047],	1 - 20		
	US 2007/0255620 A1 (TUMMINARO et al.) 01 November 2007 (01.11.2007) entire document, especially Abstract; para [0021], [0187], [0202], [0203], [0208], [0255], [0256], [0258], [0367]-[0372], [0590], [0702], [0739], [0882], [1135]				
A US 2010/0030651 A1 (MATOTEK et al.) 04 February	2010 (04.02.2010) entire	e document	1 - 20		
Further documents are listed in the continuation of Box C.					
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> </ul>	date and not in co		national filing date or priority ation but cited to understand nyention		
"E" earlier application or patent but published on or after the international filing date	"X" document of part considered novel	icular relevance; the o	claimed invention cannot be ered to involve an inventive		
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be					
"O" document referring to an oral disclosure, use, exhibition or other means considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art					
"P" document published prior to the international filing date but later than the priority date claimed	·	r of the same patent f			
Date of the actual completion of the international search 09 August 2012 (09.08.2012)	Date of mailing of the	P 2012	en report		
Name and mallion address of the 10 to 710					
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents	Authorized officer	Lee W. Young			
P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	)			

Form PCT/ISA/210 (second sheet) (July 2009)

## PATENT COOPERATION TREATY

From th	ie JATIONAL SEARCHIN	NG AUTHO	ORITY				
To: JOHN M. GUYNN 60 EAST SOUTH TEMPLE SUITE 1000				PCT			
	ALT LAKE CITY, UT	84111			RITTEN OPINION OF THE IONAL SEARCHING AUTHORITY		
					(PCT Rule 43bis.1)		
				Date of mailing (day/month/year)	0 6 SEP 2012		
Applic 18756	ant's or agent's file refer	rence		FOR FURTHER A	ACTION See paragraph 2 below		
Interna	tional application No.		International filing date	(day/month/year)	Priority date (day/month/year)		
PCT/L	JS 12/43321		20 June 2012 (20.0	6.2012)	20 June 2011 (20.06.2011)		
IPC(8)	itional Patent Classificati ) - G06Q 20/00 (20 ; - 705/78	ion (IPC) o )12.01)	or both national classificat	tion and IPC			
Applic	ant MOZIDO, LLC						
1. Th	vis opinion contains indic	cations rela	ating to the following iten	ns:			
	Box No. I Basi:	is of the opi	inion				
	Box No. II Prior	rity					
	Box No. III Non-	-establishm	nent of opinion with regar	rd to novelty, inventive	e step and industrial applicability		
	Box No. IV Lack	k of unity o	of invention				
			ment under Rule 43bis.1(a oplanations supporting su		velty, inventive step or industrial applicability;		
	Box No. VI Certa	tain docume	ents cited				
L	Box No. VII Certa	ain defects	in the international appli	cation			
L	Box No. VIII Certa	ain observa	ations on the international	l application			
2. FU	URTHER ACTION						
lni otl op	If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.						
a١	written reply together, wl	here approp	considered to be a writter priate, with amendments, a of 22 months from the p	before the expiration	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Fom trexpires later.		
	or further options, see Fo	-	•	,			
	-						
Name a	and mailing address of th	ne ISA/US	Date of completion of the	his opinion	Authorized officer:		
Commis	p PCT, Attn: ISA/US sioner for Patents		09 August 2012 (0	9.08.2012)	Lee W. Young		
P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201					PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774		

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/43321

Вох	No. I	Basis of this opinion
1.	With re	gard to the language, this opinion has been established on the basis of: the international application in the language in which it was filed. a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.	establis	gard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been hed on the basis of a sequence listing filed or furnished:  ans)  on paper  in electronic form
	b. (tin	in the international application as filed together with the international application in electronic form subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additio	nal comments:
٠		

Form PCT/ISA/237 (Box No. 1) (July 2011)

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/43321

Box No. V	Reasoned statement un citations and explanati		nis.1(a)(i) with regard to novelty, inventions such statement	ive step or industrial applicability;
1. Statem	ent			
Nov	elty (N)	Claims	1 - 20	YES
	·	Claims	None	NO NO
Inve	entive step (IS)	Claims	None	YES
		Claims	1 - 20	NO NO
Indu	ustrial applicability (IA)	Claims	1 - 20	YES
		Claims	None	NO

#### Citations and explanations:

Claims 1 - 20 lack an inventive step under PCT Article 33(3) as being obvious over US 2008/0275779 A1 (Lakshminarayanan) in view of US 2007/0255620 A1 to Tumminaro et al. (hereinafter, Tumminaro').

As to claim 1, Lakshminarayanan teaches a computer system comprising the following: one or more processors (para [0041]); system memory (para [0131]); one or more computer-readable storage media having stored thereon computer executable instructions (para [0047]) that, when executed by the one or more processors, causes the computing system to perform a method for allowing a merchant to pay a distributor for delivered goods using an electronic payment system, the method comprising the following: receiving a payment pay a distributor for delivered goods using an electronic payment system, the method comprising the following: receiving a payment instruction from a merchant, the payment instruction indicating that a distributor's invoice for a specified amount is to be paid from the merchant's mobile wallet, the invoice being generated for one or more goods physically delivered from the distributor to the merchant, the merchant and the distributor both having mobile wallets (para [0031], [0054], [0075]-[0077], [0083]; Fig.6); but fails to explicitly disclose validating that the merchant's mobile wallet has a balance of funds sufficient to pay the amount specified in the invoice; debiting the merchant's mobile wallet by the specified amount of funds; crediting the distributor's mobile wallet by the specified amount of funds; and sending a notification to the distributor indicating that the invoice has been paid.

However, Tumminaro does teach validating that the merchant's mobile wallet has a balance of funds sufficient to pay the amount

specified in the invoice (para [0203], [0208]), debiting the merchant's mobile wallet by the specified amount of funds (para [0202]); crediting the distributor's mobile wallet by the specified amount of funds (para [0202]); and sending a notification to the distributor indicating that the invoice has been paid (para [0258]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile payment services of Lakshminarayanan with transacting mobile person-to-person payments of Tumminaro, because Lakshminarayanan and Tumminaro are directed to systems and methods for business to business mobile vault. Furthermore, users and designers benefit from systems and/or methods adapted for allowing the payment server to validate each transaction and transfers funds or responds to the account holder's request for account information, because such systems/methods allow registered users or members in a mobile payment system to send payment to other member or unregistered users or nonmembers, in which a person-to-person payment system allows existing members of a payment system to send funds to nonmembers with the intent that the nonmember becomes a member (Tumminaro, para [0021]).

As to claim 2, in combination with Tumminaro, Lakshminarayanan further discloses wherein the merchant's payment instruction is received from the merchant's mobile device using wireless communication (para [0057]).

As to claim 3, in combination with Tumminaro, Lakshminarayanan further discloses sending a payment received notification to the merchant's mobile device (para [0057]).

As to claim 4, in combination with Tumminaro, Lakshminarayanan further discloses wherein the indication sent to the distributor is sent to the distributor's mobile device using wireless communication (para [0031]-[0033]).

As to claim 5, in combination with Tumminaro, Lakshminarayanan further discloses wherein the distributor's invoice is submitted to the merchant's mobile device by a delivery person on behalf of the distributor (para [0056]).

As to claim 6, in combination with Lakshminarayanan, Tumminaro further discloses prior to receiving the payment instruction from the merchant mobile device, receiving invoice submission data from the delivery person's mobile device using wireless communication, the invoice submission data indicating that the merchant is to be invoiced in the specified amount for the physically delivered goods (para [0256], [0739]).

As to claim 7, in combination with Tumminaro, Lakshminarayanan further discloses sending an electronic invoice to the merchant's mobile device in response to receiving a request from the merchant and in response to receiving the invoice submission data from the delivery person on behalf of the distributor, the electronic invoice indicating that the merchant owes the distributor the specified amount for the physically delivered goods (para [0031], [0059], [0092]).

As to claim 8, in combination with Tumminaro, Lakshminarayanan further discloses wherein receiving a payment instruction from a merchant mobile device using wireless communication comprises receiving a payment instruction indicating that the electronic invoice is to be paid from the merchant's mobile wallet (para [0096]).

- Please See Supplemental Box -

Form PCT/ISA/237 (Box No. V) (July 2011)

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/43321

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2. Citations and explanations:

As to claim 9, in combination with Lakshminarayanan, Tumminaro further discloses wherein receiving a payment instruction from the merchant mobile device using wireless communication comprises receiving a payment instruction indicating that a paper invoice is to be paid from the merchant's mobile wallet (para [0256]).

As to claim 10, in combination with Lakshminarayanan, Tumminaro further discloses sending the merchant an additional notification notifying the merchant of a pending delivery (para [0702]).

As to claim 11, in combination with Lakshminarayanan, Tumminaro further discloses wherein the additional notification indicates a delivery date and time window in which the deliver is to occur (para [0590]).

As to claim 12, in combination with Lakshminarayanan, Tumminaro further discloses wherein subsequent notifications are sent to the merchant automatically upon the occurrence of a delay (para [0367]-[0372]).

As to claim 13, in combination with Tumminaro, Lakshminarayanan further discloses sending the merchant a real-time inventory adjustments notification that indicates the merchant's newly received goods (para [0023], [0081]).

As to claim 14, in combination with Lakshminarayanan, Tumminaro further discloses automatically closing out a merchant accounts receivable (A/R) account upon completion of the transaction (para [1132]).

As to claim 15, in combination with Lakshminarayanan, Tumminaro further discloses wherein the electronic payment system utilizes an internal processor to maintain individual merchant mobile wallet balances in addition to distributor mobile wallet balances (para [1135]).

As to claim 16, Lakshminarayanan teaches a mobile payment platform, the mobile payment platform including: an electronic payment system, the electronic payment system including one or more computer storage devices having stored thereon computer executable instructions representing a payment processor, an invoice processor, a merchant mobile wallet, and a distributor mobile vault, the distributor mobile vault including a distributor mobile wallet and distributor invoicing data, the merchant mobile wallet for a merchant, the distributor mobile vault for a distributor (para [0006], [0056], [0096]); record generation of the electronic invoice in the distributor's mobile distribution mobile value for a distribution (para [0005], [00

having stored thereon computer executable instructions representing an invoicing application; and an merchant mobile device, the merchant mobile device including one or more computer storage devices having stored thereon computer executable instructions representing a mobile wallet application; and wherein the invoice processor is configured to: receive invoice submission data from the distributor's mobile device, the invoice submission data indicating that goods valued at a specified amount were physically delivered to the merchant; generate an electronic invoice based on the invoice submission data; submit the generated electronic invoice to the merchant's

However, Tumminaro does teach a distributor mobile device, the distributor mobile device including one or more computer storage devices having stored thereon computer executable instructions representing an invoicing application (para [0256], [0882]); and an merchant mobile device, the merchant mobile device including one or more computer storage devices having stored thereon computer executable instructions representing a mobile wallet application (para [0253]-[0255], [0882]); and wherein the invoice processor is configured to: receive invoice submission data from the distributor's mobile device, the invoice submission data indicating that goods valued at a specified amount were physically delivered to the merchant (para [0256]); generate an electronic invoice based on the invoice

submission data (para [0256]); submit the generated electronic invoice to the merchant's mobile device (para [0882]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile payment services of Lakshminarayanan with transacting mobile person-to-person payments of Tumminaro, because Lakshminarayanan and Tumminaro are directed to systems and methods for business to business mobile vault. Furthermore, users and designers benefit from systems and/or methods adapted for allowing the small business to select an invoicing option that puts the invoice from the accounting program into OFX format, because such systems/methods allow registered users or members in a mobile payment system to send payment to other member or unregistered users or nonmembers, in which a person-to-person payment system allows existing members of a payment system to send funds to nonmembers with the intent that the nonmember becomes a member (Tumminaro, para [0021]).

As to claim 17, in combination with Tumminaro, Lakshminarayanan further discloses wherein the payment processor is configured to: receive a payment instruction from a merchant, the payment instruction indicating that a distributor's invoice for a specified amount is to be paid from the merchant's mobile wallet, the invoice being generated for one or more goods physically delivered from the distributor to the merchant, the merchant and the distributor both having mobile wallets (para [0031], [0096]); validate that the merchant's mobile wallet has a balance of funds sufficient to pay the amount specified in the invoice (para [0096]); debit the merchant's mobile wallet by the specified amount of funds (para [0105]); credit the distributor's mobile wallet by the specified amount of funds (para [0058]-[0062], [0105]; Fig.8); and send a notification to the distributor indicating that the invoice has been paid (para [0092]).

As to claim 18, in combination with Tumminaro, Lakshminarayanan further discloses wherein the generated electronic invoice is submitted to the merchant's mobile device by a delivery person on behalf of the distributor (para [0083]).

As to claim 19, in combination with Lakshminarayanan, Tumminaro further discloses the merchant uses the mobile payment platform for performing at least one of the following in addition to making payments for received goods: bill payments, remittances, mobile phone airtime top-up and retail purchases (para [0187] - pay their bills or top-off minutes via their service account).

- Please See Supplemental Box -

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/43321

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2. Citations and explanations:

As to claim 20, Lakshminarayanan teaches a mobile payment platform, the mobile payment platform including: an electronic payment system, the electronic payment system including one or more computer storage devices having stored thereon computer executable instructions representing a payment processor, an invoice processor, a merchant mobile wallet, and a distributor mobile vault, the distributor mobile vault including a distributor mobile wallet and distributor invoicing data, the merchant mobile wallet for a merchant, the distributor mobile vault for a distributor (para [0031], [0054], [0075]-[0077], [0083]; Fig.6); a distributor mobile device, the distributor mobile device including one or more computer storage devices having stored thereon computer executable instructions representing an invoicing application (para [0031], [0054], [0056], [0075]-[0077], [0083]); and an merchant mobile device, the merchant mobile device including one or more computer storage devices having stored thereon computer executable instructions representing a mobile wallet application (para [0096]); and wherein the invoice processor is configured to: receive invoice submission data from the distributor's mobile device, the invoice submission data indicating that goods valued at a specified amount were physically delivered to the merchant (para [0083]); generate an electronic invoice based on the invoice submission data (para [0056]); submit the generated electronic invoice to the merchant's mobile device (para [0083]); record generation of the electronic invoice in the distributor's mobile vault (para [0083]); receive an indication that an electronic invoice has been paid (para [0092]); and record the indication that the electronic invoice has been paid in the distributor's mobile vault (para [0092]); and wherein the payment processor is configured to: receive a payment instruction from a merchant, the payment instruction indicating that a distributor's invoice for a specified amount is to be paid from the merchant's mobile wallet, the invoice being generated for one or more goods physically delivered from the distributor to the merchant, the merchant and the distributor both having mobile wallets (para [0096], [0133]);

but fails to explicitly disclose validate that the merchant's mobile wallet has a balance of funds sufficient to pay the amount specified in the invoice; debit the merchant's mobile wallet by the specified amount of funds; credit the distributor's mobile wallet by the specified amount of funds; and send a notification to the distributor indicating that the invoice has been paid.

However, Tumminaro does teach validate that the merchant's mobile wallet has a balance of funds sufficient to pay the amount specified in the invoice (para [0203], [0208]); debit the merchant's mobile wallet by the specified amount of funds (para [0202]); credit the distributor's mobile wallet by the specified amount of funds (para [0202]); and send a notification to the distributor indicating that the invoice has been paid (para [0258]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile payment services of Lakshminarayanan with transacting mobile person-to-person payments of Tumminaro, because Lakshminarayanan and Tumminaro are directed to systems and methods for business to business mobile vault. Furthermore, users and designers benefit from systems and/or methods adapted for allowing the payment server to validate each transaction and transfers funds or responds to the account holder's request for account information, because such systems/methods allow registered users or members in a mobile payment system to send payment to other member or unregistered users or nonmembers, in which a person-to-person payment system allows existing members of a payment system to send funds to nonmembers with the intent that the nonmember becomes a member (Tumminaro, para [0021]).

Claims 1 - 20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

## PATENT COOPERATION TREATY

## **PCT**

#### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

18756.36.1A	FOR FURTHER ACTION	as well	see Form PCT/ISA/220 as, where applicable, item 5 below.
International application No.	International filing date (day/n	nonth/year)	(Earliest) Priority Date (day/month/year)
PCT/US 12/58849	05 October 2012 (05.10.2012)		05 October 2011 (05.10.2011)
Applicant LIBERTY, MICHAEL A.			
according to Article 18. A copy is being	g transmitted to the International	Bureau.	Authority and is transmitted to the applicant report.
1. Basis of the report			
a. With regard to the language, the	e international search was carried	dout on the b	asis of:
the international app	lication in the language in which	it was filed.	
	nternational application intoed for the purposes of internation	nal search (Ru	which is the language of ales 12.3(a) and 23.1(b)).
	report has been established taking this Authority under Rule 91 (I		ant the rectification of an obvious mistake a)).
c. With regard to any nucleon	tide and/or amino acid sequenc	e disclosed in	n the international application, see Box No. I.
2. Certain claims were found	d unscarchable (see Box No. II)	).	
3. Unity of invention is lack	ing (see Box No. III).		
4. With regard to the title,			
the text is approved as sub-	mitted by the applicant.		
the text has been established	ed by this Authority to read as fo	llows:	
5. With regard to the abstract,			
the text is approved as sub-	mitted by the applicant.		
			is it appears in Box No. IV. The applicant ch report, submit comments to this Authority.
6. With regard to the drawings,	-		
a. the figure of the drawings to be	published with the abstract is Fi	gure No. 1	
as suggested by the a	applicant.		
as selected by this A	uthority, because the applicant fa	ailed to sugge	est a figure.
	uthority, because this figure bett		
b. none of the figures is to be	published with the abstract.		

Form PCT/ISA/210 (first sheet) (July 2009)

### INTERNATIONAL SEARCH REPORT International application No. PCT/US 12/58849 CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 30/00 (2012.01) USPC - 705/2 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC(8): G06Q 30/00 (2012.01) USPC: 705/2 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 705/3; 705/2; 705/4; Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Patbase(ALL); PubWEST(PGPB,USPT,EPAB,JPAB): Google Scholar; wallet, mobile, digital, electronic, HIPAA, receive, send, transmit, ad, advertisement, coupon, discount, promotion, C. DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 2008/0097851 A1 (Bemmel et al.) 24 April 2008 (24.04.2008) entire document (especially 1-2, 4-9, 11-14, 16-20 para [0003[, [0010], [0023], [0033]-[0034], [0067], [0073], [0089]-[0091]) 3, 10, 15 US 2007/0198432 A1 (Pitroda et al.) 23 August 2007 (23.08.2007) (para [0305], [0420]-[0421]) 3, 10, 15 US 2008/0208741 A1 (Arthur et al.) 28 August 2008 (28.08.2008) entire document 1-20 US 2008/0255947 A1 (Friedman) 16 October 2008 (16.10.2008) entire document 1-20 US 2004/0215491 A1 (Clark et al.) 28 October 2004 (28.10.2004) entire document 1-20 US 6,256,614 B1 (Wecker et al.) 03 July 2001 (03.07.2001) entire document 1-20 Further documents are listed in the continuation of Box C. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to be of particular relevance document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone earlier application or patent but published on or after the international filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than document member of the same patent family the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 04 JAN 2013 01 December 2012 (01.12.2012) Name and mailing address of the ISA/US Authorized officer: Mail Stop PCT, Attn: ISA/US, Commissioner for Patents Lee W. Young P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHO	ORITY		
To: JOHN C. STRINGHAM 60 EAST SOUTH TEMPLE, SI SALT LAKE CITY, UT 84111	UITE 1000		PCT
			ITTEN OPINION OF THE IONAL SEARCHING AUTHORITY
			(PCT Rule 43bis.1)
		Date of mailing (day/month/year)	0 4 JAN 2013
Applicant's or agent's file reference 18756.36.1A	·	FOR FURTHER A	CTION See paragraph 2 below
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)
PCT/US 12/58849	05 October 2012 (0		05 October 2011 (05.10.2011)
International Patent Classification (IPC) o	l or both national classificat	tion and IPC	:
IPC(8) - G06Q 30/00 (2012.01) USPC - 705/2			
Applicant LIBERTY, MICHAEL A.			
<u> </u>			·-
This opinion contains indications related to the second seco		ns:	
Box No. I Basis of the op	nnion		
Box No. II Priority		4	
		rd to novelty, inventiv	e step and industrial applicability
Box No. IV Lack of unity of			
	ment under Rule 4 <i>bis</i> .1(axplanations supporting su		velty, inventive step or industrial applicability;
Box No. VI Certain docum	ents cited		
Box No. VII Certain defects	in the international appli	cation	
Box No. VIII Certain observe	ations on the internationa	l application	
2. FURTHER ACTION			
If a demand for international prelimi International Preliminary Examining	Authority ("IPEA") exce d the chosen IPEA has no	pt that this does not ap otified the International	considered to be a written opinion of the oply where the applicant chooses an Authority Il Bureau under Rule 66.1 bis(b) that written
	priate, with amendments,	before the expiration	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Fomer expires later.
For further options, see Form PCT/IS	SA/220.		
		<u> </u>	
Name and mailing address of the ISA/US	Date of completion of the	his opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450	02 December 201:	2 (02.12.2012)	Lee W. Young
Facsimile No. 571-273-3201			PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/58849

Box	No. I	Basis of this opinion
1.	With r	the international application in the language in which it was filed.  a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43 bis.1(a))
3.	establi	egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished:  eans)  on paper  in electronic form
,	b. (tin	in the international application as filed together with the international application in electronic form subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additi	onal comments:

Form PCT/ISA/237 (Box No. I) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/58849

Box	x No. V	Reasoned statement un citations and explanati		ois.1(a)(i) with regard to novelty, inventive ste ng such statement	p or industrial applicability;
1.	Statemen	nt			
	Nove	elty (N)	Claims	3, 10, 12-19	YES
			Claims	1-2, 4-9, 11, and 20	NO NO
	Inven	ntive step (IS)	Claims	None	YES
			Claims	1-20	NO
	Indus	strial applicability (IA)	Claims	1-20	YES
			Claims	None	NO

#### 2. Citations and explanations:

Claims 1-2, 4-9, 11, and 20 lack novelty under PCT Article 33(2) as being anticipated by US 2008/0097851 A1 to Bemmel et al. (hereinafter Bemmel).

As per claims 1, and 20, Bemmel teaches at an electronic payment system (para [0033], [0037]), the electronic payment system including one or more processors and system memory (para [0033], [0064]-[0065]), the electronic payment system being wirelessly connected to a plurality of mobile devices (para [0034], [0075], [0083]),

a method for providing a health related service in exchange for participating in opt-in advertising (para [0036]-[0038], [0055], [0091]), the method comprising: an act of receiving health related information from a user of the electronic payment system (para [0038], [0090]), the health related information including an indication that the user is initiating participation in opt-in advertising sent from the electronic payment system in exchange for health related services (para [0038]),

the user having a digital device and a mobile wallet account at the electronic payment system, the mobile wallet account being accessible to the through a mobile wallet application running on the user's digital device (para [0033], [0091]);

an act sending one or more interactive advertisements to the user's mobile wallet application for presentation to the user (para [0023], [0067], [0073], [0089]-[0091]);

an act of receiving one or more inputs from the user at the digital device, wherein at least one of the inputs provides interaction with the presented interactive advertisements (para [0023],[0067], [0073], [0089]-[0091]);

an act determining that the user's interactions with the presented advertisements warrant conferring a health related benefit to the user (para [0089]-[0090]); and

an act of indicating to the user that the benefit is available for subsequently purchased health related items (para [0033], [0087], [0089]-[0091]).

As per claim 2, Bemmel teaches the digital device is a mobile telephone (para [0003], [0036], [0042]).

As per claim 4, Bemmel the benefit is derived from and is related to the health related information provided by the user (para [0089]-[0090]).

As per claim 5, Bemmel teaches the benefit is selected from among a reduced cost or free health related service, a coupon, a voucher, and a buy one get one free offer (para [0089]-[0090]).

As per claim 6, Bemmel teaches further comprising an act of recording an indication that the health related benefit was conferred to the user such that the benefit can be used (para [0085], [0087]-[0089]).

As per claim 7, Bernmel teaches the act of recording an indication that the health related benefit was conferred to the user comprises an act of storing the benefit in a brand locker associated with the user's mobile wallet account (para [0038], [0060],[0085], [0087]-[0089]).

As per claim 8, Bemmel teaches the act of an act of recording an indication that the health related benefit was conferred to the user comprises an act of recording a benefit defined by a company that produces at least one of the items advertised in the presented advertisements (para [0038], [0060], [0085], [0087]-[0089]).

As per claim 9, Bemmel teaches the act of recording an indication that the health related benefit was conferred to the user comprises an act of recording a benefit defined by the electronic payment system (para [0038], [0060], [0085], [0087]-[0089]).

As per claim 11, Bemmel teaches the act of determining that the user's interactions with presented advertisements warrants conferring a health related benefit to the user comprises an act of determining that a health related benefit is to be conferred on the user based on the user participating in a call to action contained in the content of the advertisement (para [0023],[0067], [0073], [0089]-[0090]).

-Continuation in the Supplemental Box-

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/58849

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Box V, 2: Citations and Explanations

Claims 12-14, and 16-19 lack an inventive under PCT Article 33(3) as being obvious over Bemmel.

As per claim 12, Bemmel teaches offers related to an individual's healthcare or for age-restricted products (para [0010]), enabling a healthcare service to distribute information or alerts to participants with certain health needs or conditions (para [0090]), but fails to teach the health related benefit conferred to the user comprises a prescription refill discount. Since Bemmel teaches enabling a healthcare service to distribute information or alerts to participants with certain health needs or conditions, it would have been obvious to one of ordinary skill in the art to have modified the syste of Bernmel by including a prescription refill discount because the modification would provide the user with discounts on regularly purchased healthcare items.

As per claim 13, Bemmel teaches a loyalty program (para [0038],[0079], [0091]), but fails to teach the amount of the benefit conferred to the user IS proportional to the user's amount of interaction with the presented advertisements. However, it is well known in the art that loyalty programs provide the user with a discount based on the amount spent or purchases made for one or more products. Therefore, it would have been obvious to one of ordinary skill in the art to have modified the system of Bemmel by including the amount of the benefit conferred to the user is proportional to the user's amount of interaction with the presented advertisements because the modification would identify the purchases made for a particular product using the advertisements and provide the user with additional discounts.

As per claim 14, Bemmel teaches an electronic payment system that is wirelessly connected to a plurality of mobile devices (para [0033]-[0034], [0075], [0083]), comprising the following: one or more processors (para [0033], [0064]-[0065]); system memory (para [0033], [0064]-[0065]); one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or

more processors (para [0033], [0064]-[0065]), causes the computing system to perform a method for providing a health related service in exchange for participating in opt-in advertising

(para [0036]-[0038], [0055], [0091]), the method comprising the following: an act of receiving health related information from a user of the electronic payment system (para [0038], [0090]), the health related

information including an indication that the user is initiating participation in opt-in advertising sent from the electronic payment system in

exchange for health related services (para [0038]), the user having a digital device and a mobile wallet account at the electronic payment system, the mobile wallet account being accessible to the user through a mobile wallet application running on the user's digital device (para [0033], [0091]);

an act sending one or more interactive advertisements to the user's mobile wallet application for presentation to the user (para

[0023],[0067], [0073], [0089]-[0091]); an act determining that the user at the digital device, wherein at least one of the inputs provides interaction with the presented interactive advertisements (para [0023],[0067], [0073], [0089]-[0091]); an act determining that the user's interactions with the presented advertisements warrant conferring a health related benefit to the user (para [0089]-[0090]), and

an act of indicating to the user that the benefit is available for subsequently purchased health related items (para [0038], [0060],[0085], [0087]-[0089]). Bernmel further teaches a loyalty program (para [0038],[0079], [0091]), but fails to teach the amount of the benefit conferred to the user is proportional to the user's amount of interaction with the presented advertisements.

However, it is well known in the art that loyalty programs provide the user with a discount based on the amount spent or purchases made for one or more products. Therefore, it would have been obvious to one of ordinary skill in the art to have modified the system of Bemmel by including the amount of the benefit conferred to the user is proportional to the user's amount of interaction with the presented advertisements because the modification would identify the purchases made for a particular product using the advertisements and provide the user with additional discounts.

As per claim 16, Bemmel teaches the health related benefits are automatically applied to the user's mobile wallet account (para [0083]-[0084], [0091]).

As per claim 17, Bemmel teaches the health related benefits are automatically applied at checkout to the purchase of at least one of the items that was advertised in the presented advertisements (para [0033], [0083]-[0084], [0091]).

As per claim 18, Bemmel teaches the health related benefits are provided by at least one of a retail goods store and an item's manufacturer (para [0083]-[0084], [0091]).

As per claim 19, Bemmel teaches the user's interaction with the advertisements comprises at least one of playing a video, viewing an advertisement, answering one or more questions about a product and providing a rating or review of a product (para [0067], [0073], (00911).

Continuation	in i	Next	Supp	lemental	Box-
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#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/58849

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:
-Continuation in Preceding Supplemental Box-

Claims 3, 10, and 15 lack an inventive step under PCT Article 33(3) as being obvious over Bemmel in view of US 2007/0198432 A1 to Pitroda et al. (hereinafter Pitroda).

As per claim 3, Bemmel fails to teach the health related information received in a Health Insurance Portability and Accountability Act (HIP AA) compliant manner.

However, Pitroda, in an analogous art, teaches the health related information received in a Health Insurance Portability and Accountability Act (HIP AA) compliant manner (para [0421]). It would have been obvious to one of ordinary skill in the art to have modified the system of Bemmel by including the health related information received in a Health Insurance Portability and Accountability Act (HIP

AA) compliant manner as taught by Pitroda because the modification would increase security by protecting the user's sensitive/private information. As per claims 10 and 15, Bemmel fails to teach the act of indicating to the user that the benefit is available for subsequently purchased health related items comprises indicating to the user by sending a message to the mobile wallet application for the user in a HIP AA However, Pitroda, in an analogous art, teaches the act of indicating to the user that the benefit is available for subsequently purchased health related items comprises indicating to the user by sending a message to the mobile wallet application for the user in a HIP AA compliant matter (para [0305], [0420]-[0421]). It would have been obvious to one of ordinary skill in the art to have modified the system of Bemmel by including the act of indicating to the user that the benefit is available for subsequently purchased health related items comprises indicating to the user by sending a message to the mobile wallet application for the user in a HIP AA compliant matter as taught by Pitroda because the modification would increase security by protecting the user's sensitive/private information. Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

## PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER		see Form PCT/ISA/220
18756.21A	ACTION	as well	as, where applicable, item 5 below.
International application No.	International filing date (day/r	nonth/year)	(Earliest) Priority Date (day/month/year)
PCT/US 12/43458	21 June 2012 (21.06.2012)		03 June 2011 (03.06.2011)
Applicant MOZIDO, LLC			
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.  This international search report consists of a total of			
It is also accompanied by a copy of each prior art document cited in this report.			
1. Basis of the report			
a. With regard to the language, the international search was carried out on the basis of:			
the international application in the language in which it was filed.			
a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).			
b. This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).			
c. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.			
2. Certain claims were found unsearchable (see Box No. II).			
3. Unity of invention is lacking (see Box No. III).			
4. With regard to the title,			
the text is approved as submitted by the applicant.			
the text has been established by this Authority to read as follows:			
5. With regard to the abstract,			
the text is approved as submitted by the applicant.			
			is it appears in Box No. IV. The applicant ch report, submit comments to this Authority.
6. With regard to the drawings,			
a. the figure of the drawings to be published with the abstract is Figure No. 1			
as suggested by the applicant.			
as selected by this Authority, because the applicant failed to suggest a figure.			
as selected by this Authority, because this figure better characterizes the invention.			
b none of the figures is to be published with the abstract.			

Form PCT/ISA/210 (first sheet) (July 2009)

	INTERNATIONAL SEARCH REPOR	T	International appl	ication No	
			PCT/US 12		
A. CLA	SSIFICATION OF SUBJECT MATTER		<u> </u>		
	G06Q 30/00 (2012.01)				
	705/14.13		1 IDC		
<del></del>	o International Patent Classification (IPC) or to both n	ational classification a	nd IPC		
<b></b>	DS SEARCHED ocumentation searched (classification system followed by	- classification symbols)			
	14.13; IPC(8): G06Q 30/00 (2012.01)	Classification symbols)			
	ion searched other than minimum documentation to the ex 1.1, 14.1, 14.13, 30, 35, 40; 700/1, 90; IPC(8): G06Q 3		ts are included in the	fields searched	
	ata base consulted during the international search (name o			rms used)	
DialogWeb:	Google Scholar; Google Web; Google Patents; PubWeins: ADVERTISE, COMPUTER, PROCESSOR, MEMOR	st; Thomson Innovation		•	
	UCED, COST, PRICE, FREE, DISCOUNT, SERVICE,				
2 2001	TO DE DEL EVANT		<del></del>		
	MENTS CONSIDERED TO BE RELEVANT			т -	
Category*	Citation of document, with indication, where a	ppropriate, of the releva	ant passages	Relevant to claim No.	
Y	US 2010/0250356 A1 (Gillenson et al.) 30 September especially para [0040], [0066], [0068], [0084], [0115]-[0[0136]-[0137], [0139]-[0140], [0144], [0157], [0160], [0	0117], [0120], [0123], [0		1-20	
Y	US 7,548,915 B2 (Ramer et al.) 16 June 2009 (16.06.6 in 10-28; col. 9, in 64 to col. 10, in 28; col. 27, in 12-46		, especially col. 3,	1-20	
А	US 7,689,506 B2 (Fei et al.) 30 March 2010 (30.03.20	10), entire document		1-20	
A	US 7,694,876 B2 (Barnes et al.) 13 April 2010 (13.04.2	2010), entire document		1-20	
A	US 2011/0047016 A1 (Cook) 24 February 2011 (24.02	2.2011), entire documer	nt	1-20	
ļ					
	er documents are listed in the continuation of Box C.				
"A" docume	categories of cited documents: ant defining the general state of the art which is not considered	date and not in co	onflict with the applic	national filing date or priority ation but cited to understand	
"E" earlier a	f particular relevance application or patent but published on or after the international		heory underlying the i ticular relevance: the		
filing d "L" docume	filing date  "L"  document which may throw doubts on priority claim(s) or which is  clearly to perablish the publication date of enother citation or other				
special	reason (as specified) ent referring to an oral disclosure, use, exhibition or other	considered to in combined with on	ivolve an inventive s	claimed invention cannot be step when the document is documents, such combination e art	
"P" docume	ent published prior to the international filing date but later than trity date claimed		er of the same patent f		
	actual completion of the international search	Date of mailing of the			
27 July 2012	2 (27.07.2012)	1.7	AUG 201	2	
	nailing address of the ISA/US	Authorized officer			
	T, Attn: ISA/US, Commissioner for Patents  i0, Alexandria, Virginia 22313-1450		Lee W. Young		
	0. 571-273-3201	PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	J		

Form PCT/ISA/210 (second sheet) (July 2009)

## PATENT COOPERATION TREATY

From the	IONAL SEARCHI	ING AUTHO	ORITY		
To: JÖHN C. STRINGHAM 60 EAST SOUTH TEMPLE SUITE 1000				PCT	
SALT LAKE CITY, UT 84111					RITTEN OPINION OF THE IONAL SEARCHING AUTHORITY
					(PCT Rule 43bis.1)
				Date of mailing (day/month/year)	17 AUG 2012
Applicant's	or agent's file ref	erence		FOR FURTHER A	-
18756.21	-				See paragraph 2 below
Internationa	al application No.		International filing date	(day/month/year)	Priority date (day/month/year)
PCT/US 1	2/43458		21 June 2012 (21.0	6.2012)	03 June 2011 (03.06.2011)
IPC(8) -	al Patent Classifica G06Q 30/00 (2 705/14.13	ation (IPC) o 2012.01)	r both national classifica	tion and IPC	
	MOZIDO, LLC				
	,				
1. This of	pinion contains inc	dications rela	ating to the following iter	ns:	
	Box No. I Ba	sis of the op	inion		
		•			
		iority			
	Box No. III No	n-establishn	nent of opinion with rega	rd to novelty, inventiv	e step and industrial applicability
	Box No. IV La	ck of unity o	f invention	,	
			ment under Rule 43bis.1(acplanations supporting su		velty, inventive step or industrial applicability;
	Box No. VI Ce	rtain docume	ents cited		
	Box No. VII Ce	rtain defects	in the international appli	cation	
	Box No. VIII Ce	rtain observa	ations on the internationa	l application	
2. FURT	HER ACTION				
Interna other ti	tional Preliminary han this one to be	Examining the IPEA and	Authority ("IPEA") exce	pt that this does not ap tified the Internationa	considered to be a written opinion of the oply where the applicant chooses an Authority all Bureau under Rule 66.1 bis(b) that written
a writte	en reply together, v	where approp		before the expiration	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Fomer expires later.
For further options, see Form PCT/ISA/220.					
<u> </u>					
	nailing address of	the ISA/US	Date of completion of the	nis opinion	Authorized officer:
Commissione		a 22313-1450	27 July 2012 (27.0	7.2012)	Lee W. Young
1	to. 571-273-3201	a 22013-1430			PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/43458

Box	No. I	Basis of this opinion
1.	With r	the international application in the language in which it was filed.  a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.	establi	egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished:
	a. (m	eans)  on paper  in electronic form
	b. (tir	ne) in the international application as filed together with the international application in electronic form
	E	subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additio	onal comments:
		·
		·

Form PCT/ISA/237 (Box No. 1) (July 2011)

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

DCT/IIS 12/43/458

				F C1703 12/43430		
Box No. V	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
I. Stateme	ent					
Nov	elty (N)	Claims	1-20	YES		
		Claims	None	NO NO		
Inve	ntive step (IS)	Claims	None	YES		
mve	nuve step (13)	Claims	1-20	1L3		
Indu	strial applicability (IA)	Claims	1-20	YES		
		Claims	None	NO NO		
Regarding cla one or more p system memo one or more c when execute a reduced cos following: receiving an ir cost or free fin analyzing the selecting one sending the se [0120]); determining the being selected	rocessors (para [0068]); ry (para [0116]); orp (para [0116]); orp (para [0116]); or do by the one or more procest or free financial service in adication that a user is optimancial service or good (paralist of items to identify items or more advertisements baselected advertisements to a lat the user's interactions will from among a reduced cos	computer sys  media (para [C ssors (para [O exchange for g in to receive g [0120]); or item categ ed on the ide mobile wallet	tem (para [0068]) comprising the followard [0068]), cause the computing system to participation in opt-in advertising (page opt-in advertising from an electronic participation in the user may be internatified items or item categories (para application for the user that is tied to discover its para advertisements warrant conferring	er-executable instructions (para [0115]) that, to (para [0068]) perform a method for providing ara [0160]), the method comprising the c payment system in exchange for a reduced ested (para [0040]);		
conferring the Gillenson doe: comprises recomprises recombined to the method cocol. 10, in 28). It would have a mobile walle has purchased methods of electrical discountry.	s not expressly disclose tha elving a list of one or more in her discloses that the user hamprises receiving a list of o been obvious to one having t account with the electronic dusing the mobile wallet ac- ectronic incentive mobile col-	t the user have tems that the laving a mobiline or more ite ordinary skill c payment sys- count, as discontent placement	user has purchased using the mobile e wallet account with the electronic perms that the user has purchased using in the art to modify the system and retem and the method comprises reclosed by Ramer, because Gillenson and. Furthermore, users of such systems.	electronic payment system and the method		

has purchased using the mobile wallet account, because such systems and methods overcome the difficulties including the inability to display appropriate content, difficulty entering queries and taking other suitable actions such as navigation in an environment adapted to full screen displays, full-sized keyboards, and high-speed network connections (Gillenson para [0066]; Ramer col. 3, In 10-28).

Regarding claim 2, in the combination of Gillenson and Ramer, Gillenson further discloses further comprising: recording an indication that the benefit was conferred to the user such that the benefit can be used for subsequently purchased items (para [0130]); and indicating that the benefit is available to the user by sending a message to the mobile wallet application for the user (para [0123]).

Regarding claim 3, in the combination of Gillenson and Ramer, Gillenson further discloses that recording an indication that the benefit was conferred to the user comprises storing the benefit in a brand locker associated with the user's mobile wallet account (para [0131]).

Regarding claim 4, in the combination of Gillenson and Ramer, Gillenson further discloses that recording an indication that the benefit was conferred to the user comprises recording a benefit defined by a producer of a product in an advertisement sent to the mobile wallet application (para [0160]).

-- Please See Continuation Sheet--

Form PCT/ISA/237 (Box No. V) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/43458

Box No. VII	Certain defects in the international application
The following Claim 9 contain	defects in the form or contents of the international application have been noted: typographic errors.
Claim 9 recites: basis for "digital Report, claim 9	"The computer system of claim 3, wherein the digital device is a mobile telephone." Claim 3 fails to provide antecedent device." However, claim 8 provides antecedent basis for "digital device." For the purposes of this International Search is interpreted as depending from claim 8.

Form PCT/ISA/237 (Box No. VII) (July 2011)

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US 12/43458

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V. 2. Citations and explanations:

Regarding claim 5, in the combination of Gillenson and Ramer, Gillenson further discloses that recording an indication that the benefit was conferred to the user comprises recording a benefit defined the electronic payment system (para [0130]).

Regarding claim 6, in the combination of Gillenson and Ramer, Gillenson further discloses that determining when the user's interactions with the selected advertisements warrants conferring a benefit to the user comprises determining that a benefit is to be conferred on the user based on the user participating in a call to action contained in the content of the advertisement (para [0120]).

Regarding claim 7, in the combination of Gillenson and Ramer, Gillenson further discloses that electronic payment system is wirelessly connected to a plurality of mobile telephones their corresponding mobile wallet users (para [0157])

Regarding claim 8, in the combination of Gillenson and Ramer, Gillenson further discloses that the mobile wallet application is running on a digital device (para [0117]).

Regarding claim 9, in the combination of Gillenson and Ramer, Gillenson further discloses that the digital device is a mobile telephone (para (01231).

Regarding claim 10, in the combination of Gillenson and Ramer, Gillenson further discloses that the received list of one or more items is analyzed along with one or more other items previously purchased by the user to determine items or item categories in which the user may be interested (para [0136]).

Regarding claim 11, in the combination of Gillenson and Ramer, Gillenson further discloses further comprising receiving an indication that the user has redeemed the conferred benefit (para [0140]).

Regarding claim 12, in the combination of Gillenson and Ramer, Gillenson further discloses that the conferred benefit comprises a coupon for a specified item and wherein the coupon is applied automatically as the user pays for the specified item using the mobile wallet application (para [0144]).

Regarding claim 13, Gillenson discloses a computer system (para [0068]) comprising the following:

one or more processors (para [0068]);

system memory (para [0116]);

one or more computer-readable storage media (para [0084]) having stored thereon computer-executable instructions (para [0115]) that, when executed by the one or more processors (para [0068]), cause the computing system (para [0068]) to perform a method for redeeming a benefit received for participation in opt-in advertising (para [0068]), the method comprising the following: validating the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds to pay for the specified good

or service (para [0120]); receiving a second indication from the user's mobile wallet application that a specified benefit is to be applied for the purchase of the good

or service (para [0139]);

determining that the specified benefit applies to the indicated good or service (para [0140]); and applying the specified benefit to the indicated good or service, such that the user purchases the indicated good or service at a price reduced by the amount of the benefit (para [0144]).

receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application (col. 27, In 12-46);

Gillenson does not expressly disclose receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application.

However, Ramer discloses receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or service

using a mobile wallet application (col. 27, in 12-46). It would have been obvious to one having ordinary skill in the art to modify the system and method of Gillenson so as to receive a first indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application, as disclosed by Ramer, because Gillenson and Ramer are directed to systems and methods of electronic incentive mobile content placement. Furthermore, users of such systems and methods benefit from receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application, because such systems and methods overcome the difficulties including the inability to display appropriate content, difficulty entering queries and taking other suitable actions such as navigation in an environment adapted to full screen displays, full-sized keyboards, and high-speed network connections (Gillenson para [0066]; Ramer col. 3. In 10-28).

Regarding claim 14, in the combination of Gillenson and Ramer, Gillenson further discloses that the specified benefit is applied automatically as the user purchases the indicated good using the mobile wallet application (para [0144]).

Regarding claim 15, in the combination of Gillenson and Ramer, Gillenson further discloses further comprising sending a notification to the user indicating that the specified benefit was applied to the purchase of the indicated good (para [0131]).

--Please See Continuation Sheet--

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US 12/43458

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V. 2. Citations and explanations:

Regarding claim 16, in the combination of Gillenson and Ramer, Gillenson further discloses further comprising sending a notification to the producer of the good indicating the benefit was applied to the purchase of producer's good (para [0131]).

Regarding claim 17, in the combination of Gillenson and Ramer, Gillenson further discloses that the producer of the good provides an additional benefit to the user for purchasing the producer's goods (para [0162]).

Regarding claim 18, in the combination of Gillenson and Ramer, Gillenson further discloses that the additional benefit is stored in a brand locker in the user's mobile wallet application (para [0131]).

Regarding claim 19, Gillenson discloses a computer system (para [0068]) comprising the following: one or more processors (para [0068]);

system memory (para [0116]);

one or more computer-readable storage media (para [0084]) having stored thereon computer-executable instructions (para [0115]) that, when executed by the one or more processors (para [0068]), cause the computing system (para [0068]) to perform a method for redeeming a coupon received for participation in opt-in advertising (para [0068]), the method comprising the following: validating the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds to pay for the specified good

or service (para [0120]);

receiving a second indication from the user's mobile wallet application that the coupon is to be applied for the purchase of the good or service (para [0139]); determining that the coupon applies to the indicated good or service (para [0140]); and

applying the coupon to the indicated good or service, such that the user purchases the indicated good or service at a price reduced by the

amount of the coupon (para [0144]). Gillenson does not expressly disclose receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or

service using a mobile wallet application.

However, Ramer discloses receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application (col. 27, in 12-46). It would have been obvious to one having ordinary skill in the art to modify the system and method of Gillenson so as to receive a first

indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application n, as disclosed by Ramer, because Gillenson and Ramer are directed to systems and methods of electronic incentive mobile content placement.

Furthermore, users of such systems and methods benefit from receiving a first indication from a user's mobile wallet that a user is attempting to pay for a good or service using a mobile wallet application, because such systems and methods overcome the difficulties including the inability to display appropriate content, difficulty entering queries and taking other suitable actions such as navigation in an environment adapted to full screen displays, full-sized keyboards, and high-speed network connections (Gillenson para [0066]; Ramer col. 3. In 10-28).

Regarding claim 20, in the combination of Gillenson and Ramer, Gillenson further discloses that coupons stored in the user's brand locker (para [0131]) are automatically applied when purchasing the coupon's corresponding product or service (para [0144]).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4), because the subject matter can be made or used in industry.

## PATENT COOPERATION TREATY

# **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 18756.21.1.1A	FOR FURTHER ACTION	as well	see Form PCT/ISA/220 as, where applicable, item 5 below.
International application No.	International filing date (day)	month/year)	(Earliest) Priority Date (day/month/year)
PCT/US2013/039100	01 May 2013		02 May 2012
ABZI68, LLC			
This international search report has be according to Article 18. A copy is bein	en prepared by this Internation	nal Searching A al Bureau.	Authority and is transmitted to the applicant
This international search report consists  It is also accompanied by	s of a total of $\underline{\mathcal{U}}$ sheets a copy of each prior art docume		report.
1. Basis of the report			
a. With regard to the language, th	e international search was carri	ed out on the b	asis of:
the international app	olication in the language in which	ch it was filed.	
a translation of the i	nternational application intoed for the purposes of internation	onal search (Ru	which is the language of the l
b. This international search		ing into accou	nt the rectification of an obvious mistake
c. With regard to any nucleo	tide and/or amino acid sequer	ice disclosed in	the international application, see Box No. I.
2. Certain claims were foun	d unsearchable (see Box No. I	I).	
3. Unity of invention is lack	ing (see Box No. III).		
4. With regard to the title,			
the text is approved as sub	mitted by the applicant.		
the text has been established	ed by this Authority to read as f	ollows:	
		•	•
5. With regard to the abstract,	,		
the text is approved as sub	mitted by the applicant.		
the text has been establish	ed, according to Rule 38.2, by t	his Authority a ernational searc	s it appears in Box No. IV. The applicant ch report, submit comments to this Authority.
6. With regard to the drawings,			
a. the figure of the drawings to be	published with the abstract is l	Figure No. 4	
as suggested by the	applicant.		
as selected by this A	uthority, because the applicant	failed to sugge	st a figure.
	uthority, because this figure be	tter characterize	es the invention.
b. none of the figures is to be	published with the abstract.		

Form PCT/ISA/210 (first sheet) (July 2009)

## INTERNATIONAL SEARCH REPORT International application No. PCT/US2013/039100 CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 30/02 (2013.01) USPC - 705/14.13 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) IPC(8) - G06Q 30/00, 30/02 (2013.01) USPC -705/1.1, 14.13, 14.14, 14.16, 14.23 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched CPC - G06Q 30/00, 30/02 (2013.01) Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Orbit, Google Patents, Google Scholar DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category\* US 2011/0258024 A1 (PRINCE) 20 October 2011 (20.10.2011) entire document WO 2012/025824 A2 (YANG et al) 01 March 2012 (01.03.2012) entire document 1-20 US 2009/0299844 A1 (REILLY et al) 03 December 2009 (03.12.2009) entire document 10 US 6,175,823 B1 (VAN DUSEN) 16 January 2001 (16.01.2001) entire document 15, 20 Further documents are listed in the continuation of Box C. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international " $\chi$ " filing date document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than the priority date claimed document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 12 August 2013 23 AUG 2013 Authorized officer: Name and mailing address of the ISA/US Blaine R. Copenheaver Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 PCT Helpdesk; 571-272-4300 PCT OSP; 571-272-7774 Facsimile No. 571-273-3201

Form PCT/ISA/210 (second sheet) (July 2009)

# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORIT	Y				
To: JOHN C. STRINGHAM 60 EAST SOUTH TEMPLE, SUITE SALT LAKE CITY, UT 84111					
	WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY				
	(PCT Rule 43bis.1)				
·	Date of mailing (day/month/year) 2 3 AUG 2013				
Applicant's or agent's file reference	FOR FURTHER ACTION				
18756.21.1.1A	See paragraph 2 below  rnational filing date (day/month/year)  Priority date (day/month/year)				
· · ·	May 2013  O2 May 2012				
International Patent Classification (IPC) or bot IPC(8) - G06Q 30/02 (2013.01)					
USPC - 705/14.13					
Applicant MOZIDO, LLC					
1. This opinion contains indications relating to the following items:					
Mail Stop PCT, Attn: ISA/US	Authorized officer:  Blaine R. Copenheaver  PCT Helpdesk: 571-272-4300 PCT OSP: 571-277-774				

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/039100

Box	No. I	Basis of this opinion	
1.	With r	the international application a translation of the internation	onion has been established on the basis of:  in the language in which it was filed.  onal application into which is the language of a purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been establ to this Authority under Rule	ished taking into account the <b>rectification of an obvious mistake</b> authorized by or notified 91 (Rule 43 <i>bis</i> .1(a))
3.	With re	egard to any nucleotide and, shed on the basis of a sequen	or amino acid sequence disclosed in the international application, this opinion has been ce listing filed or furnished:
	a. (m	eans) on paper in electronic form	
	b. (tir	in the international applition together with the international	cation as filed tional application in electronic form nority for the purposes of search
4.		statements that the informat	nore than one version or copy of a sequence listing has been filed or furnished, the required on in the subsequent or additional copies is identical to that in the application as filed or cation as filed, as appropriate, were furnished.
5.	Additio	onal comments:	
			·
		·	
-			

Form PCT/ISA/237 (Box No. 1) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/039100

Box No. V Reasoned statemen citations and explan		ois.1(a)(i) with regard to novelty, inventive ste ng such statement	p or industrial applicability;
1. Statement			
Novelty (N)	Claims	1-20	YES
·	Claims	None .	. NO
Inventive step (IS)	Claims	None	YES
•	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

#### 2. Citations and explanations:

Claims 1-9, 11-14, 16- 19 lack an inventive step under PCT Article 33(3) as being obvious over Prince and in view of Yang et al., hereinafter referred to as Yang.

Regarding claim 1, Prince discloses an electronic payment system (advertising referral incentive system with monetary payments, abstract) comprising the following: one or more processors (digital processing apparatus and the software is execution by processors, para 0041), 0042); system memory (flash memory, digital memory device, para 0041); one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors (the computer readable medium has modules with software execution by processors, para 0041, 0042), cause the electronic payment system to perform a method for providing monetary rewards in exchange for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 is paid to users who watch an advertisement 110 which is focused on users demographic, para 0044, see fig. 1; each user 100A, 100B, 100C provide information about the user to the advertising server 20 for targeted ads, para 0047; user selects a new account and demographic information 560, para 0085, 0086 [participation initiation]), the method comprising the following: an act of receiving at the electronic payment system an indication that a user of is initiating participation in opt-in advertising sent from the electronic payment system in exchange for a monetary reward (incentive advertising apparatus 10 and payment 30 [monetary reward] is paid to users who watch an advertisement 110 which is focused on users demographic, para 0044, see fig. 1; each user 100A, 100B, 100C provide information about the user to the advertising server 20 for targeted ads, para 0047; user selects a new account and demographic information about the user to the advertising server 20 for targeted ads, para 0047; user selects a new account and demographic information 560 and once the user views an ad, gets a payment 660, para 0085, 0086 [participation initiation), the user having an account at the electronic payment system (user selects an account 520 and logs in, pa

Form PCT/ISA/237 (Box No. V) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

customer of multiple loyalty cards by replacing them with one account (Yang, abstract).

International application No

PCT/US2013/039100

### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 14, Prince discloses an electronic payment system (advertising referral incentive system with monetary payments, abstract) comprising the following: one or more processors (digital processing apparatus and the software is execution by processors, para 0041, 0042); system memory (flash memory, digital memory device, para 0041); one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors (the computer readable medium has modules with software execution by processors, para 0041, 0042), cause the electronic payment system to perform a method for redeeming a monetary reward received for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 is paid to users who watch an advertisement 110 which is focused on users demographic, para 0044, see fig. 1; each user 100A, 100B, 100C provide information about the user to the advertising server 20 for targeted ads, para 0047; user selects a new account and demographic information 560, para 0085, 0086 (participation initiation), user present the device at POS and access the saved value system to redeem the value, para 0092), the method comprising the following: an act of receiving a first indication from a user's mobile that a user is attempting to pay for a good or service using one or more monetary rewards received in exchange for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 [monetary rewards received in exchange for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 [monetary rewards received in exchange for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 [monetary rewards received in exchange for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 [monetary rewards received and users who watch an advertisement 110 which is focused on users demographic, para 0047; user selects a new account

Regarding claim 19, Prince discloses an electronic payment system (advertising referral incentive system with monetary payments, abstract) comprising the following: one or more processors (digital processing apparatus and the software is execution by processors, para 0041, 0042); system memory (flash memory, digital memory device, para 0041); one or more computer-readable storage media having stored thereon computer-executable instructions that, when executed by the one or more processors (the computer readable medium has modules with software execution by processors, para 0041, 0042), cause the computing system to perform a method for redeeming a monetary reward received for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 is paid to users who watch an advertisement 110 which is focused on users demographic, para 0044, see fig. 1; each user 100A, 100B, 100C provide information about the user to the advertising server 20 for targeted ads, para 0047; user selects a new account and demographic information 560, para 0085, 0086 [participation initiation], user present the device at POS and access the saved value system to redeem the value, para 0092), the method comprising the following: an act of receiving an indication from a user's mobile that a user is attempting to pay for a good or service using one or more monetary rewards received in exchange for participation in opt-in advertising (incentive advertising apparatus 10 and payment 30 [monetary reward] is paid to users who watch an advertisement 110 which is focused on users demographic, para 0044, see fig. 1; each user 100A, 100B, 100C provide information about the user to the advertising server 20 for targeted ads, para 0047; user selects a new account and demographic information 560 and once the user views an ad, gets a payment 660, para 0085, 0086; the value is associated with an account of the user, para 0090); an act of receiving an indication from the user's mobile indicating that a coupon is to be applied for the p

invention to use the teachings of Yang to incorporate the virtual wallet loyalty system in the invention of Prince for the purpose of ridding a

monetary rewards at a price reduced by the amount of the coupon.

Yang is in the field of a customer loyalty system using a virtual wallet (abstract) and further teaches a mobile wallet application running on a digital device of a user used for providing rewards to the user (pay for goods and services from his account in system (such as through a "virtual wallet") and to accumulate bonus points, reward points, on this account and the user access his account to his one or more virtual wallets, page 9, paragraph 4- page 10, paragraph 1, see fig. 1); validating the user's mobile wallet account to ensure that the user's mobile wallet account has sufficient funds, including the monetary rewards, to pay for the specified good or service (a customer 105 may use the loyalty system 200 to discover how much money he has in his virtual wallet [sufficient funds in the mobile wallet], page 16, paragraphs 1, 2) and user purchases indicated service using the received rewards at a price reduced by the amount of a coupon (customer 105 orders an item via the loyalty system 200 and receives bonus points and discounts on the entire order, in addition to any promotion or discount offered for connecting with the loyalty system [here the bonus discount to the promotion or discount is reducing the total amount], page 16, paragraphs 1, 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallet loyalty system in the invention of Prince for the purpose of ridding a customer of multiple loyalty cards by replacing them with one account (Yang, abstract).

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/039100

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 2, Prince teaches an act of sending a message to the user's mobile to notify the user that the monetary reward is available (an alert, a text, a beep notifying the user of a coupon, promotion or discount or other "value add", para 0017; notice to user's mobile device of a coupon or a discount, para 0090). Prince lacks the teaching of a mobile wallet application running on a digital device of the user. Yang teaches a mobile wallet application running on a digital device of a user used for providing rewards to the user (pay for goods and services from his account in system (such as through a "virtual wallet") and to accumulate bonus points, reward points, on this account and the user access his account to his one or more virtual wallets, page 9, paragraph 4- page 10, paragraph 1, see fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallet loyalty system in the invention of Prince for the purpose of ridding a customer of multiple loyalty cards by replacing them with one account (Yang, abstract).

Regarding claim 3, Prince teaches analyzing a list of items to identify items or categories of items the user is likely interested in (each user may provide demographic information, interests and self-select products or services that are interesting to the user, para 0047); and (along with other items purchased by the user) an act of selecting the one or more advertisements corresponding to the determined items or categories of items (this selection helps in selecting advertisements customized based on personal preferences, para 0047, 0048). Prince lacks the teaching a list of items that a user has purchased using the mobile wallet account. However, Prince teaches a history of rewards earned in the past (saved value system has the rewards earned by the user in the past, para 0092). Further, Yang teaches a list of items user has purchased using the mobile wallet account (web server in communication with a database (card server) of customers, which contains information about their virtual wallets, orders, history of visits, etc. page 10, paragraph 3, see fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallet loyalty system in the invention of Prince for the purpose of ridding a customer of multiple loyalty cards by replacing them with one account (Yang, abstract).

Regarding claim 4, Prince lacks the teaching wherein the user opts in to receive a specified number of advertisements per time period. However, Prince teaches wherein the advertiser opts in to specify the number of advertisements per time period the user receives (advertiser desires to specify the number of advertisements played to an individual user in a single day [time period], para 0100). Furthermore, defining a condition by an advertiser or user would have been a matter of design choice. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Prince to incorporate a specified number of advertisements per time period in the invention for the purpose of providing an advertiser to restrict their advertisements to a target demographic (Prince, para 0099).

Regarding claim 5, Prince lacks the teaching wherein the user provides an increased amount of personal data to receive an increased amount of monetary rewards. However, Prince teaches wherein the user provides referrals of his friends to receive an increased amount of monetary rewards (The user may choose to send invitations to their friends 540 into join or log on the service. If friends sign up 690, the user may receive one or more of many different kinds of bonuses 700. There may be one time bonuses, reciprocal bonuses, extra entries, prizes, drawings or other incentives for those who succeed in referrals, para 0087). Further, Yang teaches wherein the user provides an increased amount of personal data to receive extra features (if customer provides his name, his photo, or a code word, the customer will be rewarded with extra features). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the extra features in the invention of Prince for the purpose of giving the customer an extra feature of accessing the virtual wallets without entering a promotional code (Yang, page 18, paragraph 2).

Regarding claim 6, Prince teaches wherein monetary rewards are customized based on the user's current location (system detects the user is within a mile from a restaurant and the reward is a discount for dinner or a free appetizer, para 0089, 0090).

Regarding claim 7, Prince lacks the teaching wherein one or more of the advertisements are sold at auction and wherein the user receives a specified percentage of the advertisement's selling price. However, Prince teaches advertisement bids and wherein the user receives a higher payment value for viewing the advertisement (advertisement bids and for priority viewing of this advertisement, the value is higher, para 0118). Furthermore, defining the specifics of bidding for an advertisement would have been a matter of design choice. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Prince to incorporate the advertisement bids in the invention for the purpose of aiding aid the advertiser in attracting further interest in an embarrassing or unpopular, but needed product (Prince, para 0118).

Regarding claim 8, Prince teaches wherein the digital device is a mobile telephone (digital device through which the advertisement is delivered is a mobile device 140 which is a smartphone, para 0051, 0052).

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/039100

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of

Regarding claim 9, Prince teaches wherein the digital device is a prepaid mobile telephone (digital device through which the advertisement is delivered is a mobile device 140 which is a smartphone, cell phones [mobile phones are prepaid or postpaid], para 0051, 0052).

Regarding claim 11, Prince teaches wherein the user receives retailer- or producer-specific monetary rewards (system detects the user is within a mile from a restaurant and the reward is a discount for dinner or a free appetizer [retailer specific reward], para 0089, 0090) but lacks that the rewards are stored in a brand locker associated with the user's mobile wallet account. Yang teaches storing rewards in a brand locker associated with the user's mobile wallet account (each virtual wallet is associated with a separate establishment or a chain connected to or participating in the loyalty system, page 10, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallets in the invention of Prince for the purpose of providing a virtual wallet for each establishment (Yang, page 10, paragraph 1).

Regarding claim 12, Prince teaches wherein the indication further indicates the user's interest in certain products or types of products (each user may provide demographic information, interests and self-select products or services that are interesting to the user, para 0047).

Regarding claim 13, Prince teaches wherein the indication further includes one or more portions of demographic information for the user (each user may provide demographic information, interests and self-select products or services that are interesting to the user, para 0047).

Regarding claim 16, Prince teaches an act of receiving one or more inputs from the user at the mobile interacting with one or more advertisements (each user 100A, 100B, 100C provide information about the user to the advertising server 20 for targeted ads, para 0047; viewing the ad, user required to pass an integrity check 640, add a rating [user input], para 0086); an act of determining that the user's interactions with the advertisements warrants conferring a specified monetary reward to the user (user required to pass an integrity check 640, such as a CAPTCHA, add a rating complete a survery or questionaire which proves that the person has viewed the content and may qualify the user for payment [conferring a monetary reward nased on user's interactions], para 0086); and an act of conferring the specified monetary reward to the user (once the user is passed, the user may receive payment 660 and other benefits, para 0086). Prince lacks the teaching of a mobile wallet application. Yang teaches a mobile wallet application running on a digital device of a user used for providing rewards to the user (pay for goods and services from his account in system (such as through a "virtual wallet") and to accumulate bonus points, reward points, on this account and the user access his account to his one or more virtual wallets, page 9, paragraph 4- page 10, paragraph 1, see fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallet loyalty system in the invention of Prince for the purpose of ridding a customer of multiple loyalty cards by replacing them with one account (Yang, abstract).

Regarding claim 17, Prince teaches receiving an indication that the user has redeemed the conferred monetary reward (if 20 people use the coupon at a checkout [indication of coupon being used] the coupon increases to 50%, para 0114, 0115).

Regarding claim 18, Prince teaches an act of sending a notification to at least one of the user and the provider of the good or service indicating that the one or more monetary rewards were applied to the purchase of the indicated good or service (the user can redeem the stored value, the system can communicate with the user in different ways, para 0091, 0092; and as shown in fig. 11 [970], 12, rewards display shows the amount of rewards claimed).

Claim 10 lacks an inventive step under PCT Article 33(3) as being obvious over Prince and in view of Yang and further in view of Reilly et al., hereinafter referred to as Reilly.

Regarding claim 10, Prince lacks the teaching wherein the user is an unbanked user. Reilly is in the field of prepaid reloadable transaction cards with loyalty programs (abstract) and teaches a unbanked user with a prepaid transaction card for loyalty programs (the present invention provides a reloadable prepaid electronic transaction card 10 that is tied either electronically or physically with a loyalty reward program, para 0018-0020, see fig. 1, 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Reilly to incorporate the unbanked user feature in the invention of Prince for the purpose of providing unbanked users to access services that were previously unavailable or inconvenient to access (Reilly, para 0008).

Claims 15, 20 lack an inventive step under PCT Article 33(3) as being obvious over Prince and in view of Yang and further in view of Van Dusen.

Regarding claim 15, Prince lacks the teaching wherein the one or more monetary rewards are stored in the mobile wallet application, and wherein the one or more monetary rewards are applied automatically as the user pays for the specified good or service using the mobile wallet application. Yang teaches storing rewards in a brand locker associated with the user's mobile wallet account (each virtual wallet is associated with a separate establishment or a chain connected to or participating in the loyalty system, page 10, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallets in the invention of Prince for the purpose of providing a virtual wallet for each establishment (Yang, page 10, paragraph 1). Van Dusen is in the field of electronic gift card systems (title, abstract) and further teaches rewards applied automatically as the user pays for the goods or services (once the gift certificate is applied, it is automatically redeemed when a good is purchase, abstract, col 2, lines 64-67; claims 13, 24). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Van Dusen to incorporate the automatic reward feature in the invention of Prince for the purpose of providing an easy method for the user to redeem a reward without entering the promotional code again and again.

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/039100

Supplemental Box							
In case the space in any of the preceding Continuation of:	boxes is not sufficien	ıt.					
Continuation of:  Regarding claim 20, Prince lacks the teaching wherein one or more coupons stored in a brand locker of the mobile wallet application are automatically applied when purchasing the coupon's corresponding product or service. Yang teaches storing rewards in a brand locker associated with the user's mobile wallet account (each virtual wallet is associated with a separate establishment or a chain connected to or participating in the loyalty system, page 10, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yang to incorporate the virtual wallets in the invention of Prince for the purpose of providing a virtual wallet for each establishment (Yang, page 10, paragraph 1). Van Dusen is in the field of electronic gift card systems (title, abstract) and further teaches rewards applied automatically as the user pays for the goods or services (once the gift certificate is applied, it is automatically redeemed when a good is purchase, abstract, col 2, lines 64-67; claims 13, 24). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Van Dusen to incorporate the automatic reward feature in the invention of Prince for the purpose of providing an easy method for the user to redeem a reward without entering the promotional code							
again and again.  Claims 1-20 meet the criteria set out in PCT	Article 33(4), and thus	s have industrial app	licability bed	cause the subje	ect matter claim	ed can be	
made or used in industry.				•			
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### PATENT COOPERATION TREATY

# **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 18756-8-3-1A	FOR FURTHER ACTION	as well	see Form PCT/ISA/220 as, where applicable, item 5 below.					
International application No. PCT/US2015/058886	International filing date (day/mont 03 November 2015	h/year)	(Earliest) Priority Date (day/month/year) 05 November 2014					
Applicant MOZIDO, INC.								
according to Article 18. A copy is bein This international search report consists	This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.  This international search report consists of a total of							
1. Basis of the report  a. With regard to the language, the international search was carried out on the basis of:								
within one month from the  6. With regard to the drawings,  a. the figure of the drawings to be  as suggested by the as selected by this A  as selected by this A	d, according to Rule 38.2, by this Audate of mailing of this international published with the abstract is Figure	e No. 1						

Form PCT/ISA/210 (first sheet) (January 2015)

### INTERNATIONAL SEARCH REPORT

International application No. PCT/US2015/058886

IPC(8) - G	A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06Q 20/36 (2015.01)				
	06Q 20/36 (2015.12) o International Patent Classification (IPC) or to both n	ational classification and IPC			
	DS SEARCHED				
IPC(8) - G06	ocumentation searched (classification system followed by Q 20/00; 06; 20; 36 (2015.01) 20/065; 202; 36 (2015.12)	classification symbols)			
	on searched other than minimum documentation to the ex 21; 705/41 (Keyword delimited)	tent that such documents are included in the	fields searched		
Orbit, Google	ta base consulted during the international search (name of Patents, Google Scholar, Google sused: country, transaction, cloud, regulation	f data base and, where practicable, search te	rms used)		
C. DOCU	MENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where ap	opropriate, of the relevant passages	Relevant to claim No.		
× Y	US 2009/0024526 A1 (ERICKSON) 22 JANUARY 2009	9 (22.01.2009) entire document	1-4, 9-11, 14  5-8, 12, 13		
X Y	US 2013/0132219 A1 (MOZIDO LLC) 23 MAY 2013 (23.05.2013) entire document				
Y	US 2013/0346309 A1 (GIORI) 26 DECEMBER 2013 (2	26.12.2013) entire document	5-8, 13		
A	US 2013/0073377 A1 (HEATH) 21 MARCH 2013 (21.0	3.2013) entire document	1-20		
	er documents are listed in the continuation of Box C.	See patent family annex.			
"A" docume to be of	categories of cited documents:  Int defining the general state of the art which is not considered  particular relevance  upplication or patent but published on or after the international	"T" later document published after the inter date and not in conflict with the applic the principle or theory underlying the "X" document of particular relevance; the	eation but cited to understand invention		
filing d	ate ent which may throw doubts on priority claim(s) or which is	considered novel or cannot be considered step when the document is taken alone	ered to involve an inventive		
"O" docume means					
	"P" document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed				
Date of the	actual completion of the international search	Date of mailing of the international sear	ch report		
23 December 2015 0 4 FEB 2016					
1	nailing address of the ISA/	Authorized officer  Blaine R. Copenhea	ver		
P.O. Box 145	Mail Stop PCT, Attn: ISA/US, Commissioner for Patents       Blaine R. Copenheaver         P.O. Box 1450, Alexandria, VA 22313-1450       PCT Helpdesk: 571-272-4300         Facsimile No. 571-273-8300       PCT OSP: 571-272-7774				

Form PCT/ISA/210 (second sheet) (January 2015)

### PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHO	RITY			
To: JOHN C. STRINGHAM 60 EAST SOUTH TEMPLE, SU SALT LAKE CITY, UT 84111	JITE 1000	PCT		
SALI LAKE CITT, OT 04111			ITTEN OPINION OF THE ONAL SEARCHING AUTHORITY	
			(PCT Rule 43bis.1)	
		Date of mailing	0.4550.001	
		(day/month/year)	0 4 F E B 2016	
Applicant's or agent's file reference 18756-8-3-1A		FOR FURTHER A	CTION See paragraph 2 below	
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)	
PCT/US2015/058886	03 November 2015		05 November 2014	
International Patent Classification (IPC) or IPC(8) - G06Q 20/36 (2015.01) CPC - G06Q 20/36 (2015.12)	r both national classifica	tion and IPC		
Applicant MOZIDO, INC.				
This opinion contains indications relat	ting to the following iten	ns:		
Box No. I Basis of the opinion				
Box No. II Priority				
Box No. III Non-establishm	ent of opinion with regar	rd to novelty, inventive	e step and industrial applicability	
Box No. IV Lack of unity of	finvention			
	nent under Rule 43 <i>bis.</i> 1(a planations supporting su		lty, inventive step and industrial applicability;	
Box No. VI Certain docume	ents cited			
Box No. VII Certain defects	in the international appli	cation		
Box No. VIII Certain observa	tions on the internationa	l application		
2 FURTHER ACTION				
International Preliminary Examining A	Authority ("IPEA") exce d the chosen IPEA has n	pt that this does not ap otified the Internation	be considered to be a written opinion of the ply where the applicant chooses an Authority all Bureau under Rule 66.1 bis(b) that written	
	riate, with amendments,	before the expiration of	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Form or expires later.	
For further options, see Form PCT/IS.	-	, , ,	·	
Name and mailing address of the ISA/	Date of completion of the	his opinion	Authorized officer	
Mail Stop PCT, Attn: ISA/US Commissioner for Patents	•	·	Blaine R. Copenheaver	
P.O. Box 1450, Alexandria, VA 22313-1450 Facsimile No. 571-273-8300	23 December 201	J	PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	

Form PCT/ISA/237 (cover sheet) (January 2015)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

INTERNATIONAL SEARCHING AUTHORITT	PCT/US2015/058886					
Box No. 1 Basis of this opinion						
With regard to the language, this opinion has been established on the basis of:						
the international application in the language in which it was filed.						
a translation of the international application into furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).	which is the language of a translation					
2. This opinion has been established taking into account the rectification of an obthis Authority under Rule 91 (Rule 43bis.1(a)).	ovious mistake authorized by or notified to					
With regard to any nucleotide and/or amino acid sequence disclosed in the been established on the basis of a sequence listing:	international application, this opinion has					
a. forming part of the international application as filed:						
in the form of an Annex C/ST.25 text file.						
on paper or in the form of an image file.						
b. furnished together with the international application under PCT Rule search only in the form of an Annex C/ST.25 text file.	13ter.1(a) for the purposes of international					
c. furnished subsequent to the international filing date for the purposes o	f international search only:					
in the form of an Annex C/ST.25 text file (Rule 13ter.1(a)).						
on paper or in the form of an image file (Rule 13ter.1(b) and Ac	Aministrative Instructions, Section 713).					
<ol> <li>In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</li> <li>Additional comments:</li> </ol>						
5. Additional comments.						

Form PCT/ISA/237 (Box No. 1) (January 2015)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2015/058886

Statement			
Novelty (N)	Claims	2, 3, 5-10, 12, 13	YE
, , ,	Claims	1, 4, 11, 14-20	NO
Inventive step (IS)	Claims	None	YE
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YE
	Claims	None	NO

#### 2. Citations and explanations:

Claims 1, 4, 11, and 14 lack novelty under PCT Article 33(2) as being anticipated by ERICKSON.

Regarding claim 1, Erickson discloses an cloud-based, mobile global exchange platform ([0021]A wireless network generally includes any communication network or wireless technology platform which is, or can be used by a mobile device to access data from another location, such as a computer server; [0058]In a preferred embodiment seen in FIG. 8, the functions of the aggregator 104 are performed with software located on servers 178 connected to the internet 172. Preferably, a dedicated server 174 belonging to the MNO 104 is located at the same location 176 and on the same intranet as the aggregator servers 178, allowing the main MNO servers 170 to selectively transfer data to the dedicated server 174; [0040] allowing the content provider 108 to access mobile device markets in many different countries), comprising the following:

one or more processors ([0009] in the form of a server connected to the internet);

a hardware receiver configured to receive an indication that a specified sum is to be transferred between a first transaction system and a second transaction system ([0024] a data aggregator 106 collects and distributes user registration and financial data, allowing a user to selectively release this data to third party content providers 108 via a mobile device 102; [0025] the user can selectively transfer money by mobile device between the aggregator 106 [first transaction system] and various third party content providers 108 [second transaction system]; [0039] Some factors to be considered, for example, are the country location of the user, the country location of the third party content provider 108, and the size of the transaction);

a determining component configured to determine a country of origin for the first transaction system ([0039] Some factors to be considered, for example, are the country location of the user),

and further determine a country of origin for the second transaction system ([0039] Some factors to be considered, for example, are... the country location of the third party content provider 108); a data accessing component configured to access a database with a first data structure indicating a first regulatory scheme under which

a data accessing component configured to access a database with a first data structure indicating a first regulatory scheme under which the first transaction system currently operates ([0038] These regulations can be difficult for a third party content provider to comply with, especially when targeting customers in many different countries... a financial transaction method dictated by one country [first regulatory scheme] will be insufficient for complying with a second country's regulations; [0030] the aggregator 106 may query the MNO 104 (as seen with the two way communication arrows in FIG. 1) for user data; [0039] when the user selects the aggregator 106 for use with a third party content provider 108, the aggregator 106 determines the transaction type appropriate to abide by the financial regulations of a specific country...element 152 illustrates a transaction in which the aggregator collects financial data (e.g., financial institution number, account number, etc.)... the aggregator 106 collects and stores the user's financial data...transmits this data to the third party provider 108 to perform the financial transaction [database]);

and further configured to access a second data structure indicating a second regulatory scheme under which the second transaction system currently operates ([0038] These regulations can be difficult for a third party content provider to comply with, especially when targeting customers in many different countries...a financial transaction method dictated by one country will be insufficient for complying with a second country's regulations [second regulatory scheme]; [0039] when the user selects the aggregator 106 for use with a third party content provider 108, the aggregator 106 determines the transaction type appropriate to abide by the financial regulations of a specific country):

the first and second regulatory schemes indicating a plurality of rules that are to be enforced when transferring value in or out of the country of origin ([0038] different countries have different regulations regarding financial transactions [plurality]), the first regulatory scheme having at least one rule that is different than the second regulatory scheme ([0038] different countries have different regulations regarding financial transactions...a financial transaction method dictated by one country will be insufficient for complying with a second country's regulations [different rule]);

an analysis engine configured to conduct a real-time analysis of the current regulatory schemes for the first and second transaction systems to determine which specific rules apply when transferring the specified sum between the first and second transaction systems in accordance with each system's respective regulatory scheme ([0039] when the user selects the aggregator 106 for use with a third party content provider 108, the aggregator 106 determines the transaction type appropriate to abide by the financial regulations of a specific country. Some factors to be considered, for example, are the country location of the user, the country location of the third party content provider 108, and the size of the transaction. Based on these factors, a type of transaction is selected and performed); and a value transferring component configured to electronically transfer the specified sum in compliance with the regulatory schemes of the first and second transaction systems, such that the specified sum is transferred from the first transaction system to the second transaction system according to each system's respective current regulatory schemes ([0039] Based on these factors, a type of transaction is selected and performed. For example, element 152 illustrates a transaction in which the aggregator collects financial data (e.g., financial institution number, etc.) then conducts the desired transaction for the third party content provider 108).

Form PCT/ISA/237 (Box No. V) (January 2015)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2015/058886

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of

Regarding claim 4, Erickson further discloses, wherein at least one bank is involved in the transfer between the first and second transaction systems ([0035] transfer money from an account with the aggregator 106 to a bank or transfer money from a bank into an account with the aggregator 106).

Regarding claim 11, Erickson discloses a computer program product comprising one or more computer storage media having thereon computer-executable instructions that, when executed by one or more processors of a computing system ([0009] in the form of a server connected to the internet, cause the computing system to instantiate a user interface ([0020]) The term mobile device used in this application generally includes hand-held electronic devices including a display, an input and a wireless transceiver (e.g., CDMA, Wifi or Bluetooth) capable of sending and receiving communications such as voice or data... generally includes a touch screen display and miniature keyboard, a pager which generally includes a small display and a plurallty of navigational buttons) that includes the following: a first button that, when selected, transmits one or more portions of data indicating that a specified sum is to be transferred between a first transaction system and a second transaction system ([0020]) plurality of navigational buttons; Fig 7 #102, first button; [0026] When the user selects content such as gambling or adult media that requires additional information or financial details, the mobile device 102 is directed to a computer server of aggregator 106; [0025] Further, the user can selectively transfer money by mobile device between the aggregator 106 and various third party content providers 108 or any other organization affiliated with the aggregator 106. For example, users may receive payout from winnings on gambling sites, and then transfer that money to payoff credit card balances. Thus, the aggregator 106 acts like an electronic bank account, enabling the user to perform relatively complex and time user input with the aggregator. The user can selectively transmit their user data quickly (e.g., with the selection of a single link) via their mobile device between the aggregator may to payoff credit card balances; [0052] a request may be sent to the user's mobile device look when the aggregator may obtain the user da

aggregator 106 (e.g., on a server) as seen in element 113.);
a graphical indicator indicating that the transfer is currently being processed ([0028] if user data is present, the user data is either automatically transmitted to the specified content provider or the user is provided a simple transmitting option (e.g., a "Submit Data" button or similar "one click" mechanism) [graphical indicator]; and

an electronic receipt indicator configured to show that the sum was transferred between the first transaction system and the second transaction system (([0034]If the user does not wish to transfer funds to their account with the aggregator 106, the registration process ends with a confirmation message sent to the user (e.g., by text message or email) as seen in element 132. If the user wishes to transfer funds, the aggregator 106 attempts the fund transfer with the financial institution as seen in element 134. As seen in element 136, if the transfer is not successful, the remediation process of element 138 attempts the transfer again. If the transfer is successful, the registration process ends with a confirmation message [electronic indicator]).

Regarding claim 14, Erickson further disclose, wherein the user interface includes a third button that allows a user to add a third transaction system, such that transfers between the first transaction system and the third transaction system, or between the second transaction system and the third transaction system ([0020] plurality of navigational buttons; Fig 7 #102, third button; [0025]Further, the user can selectively transfer money by mobile device between the aggregator 106 first transaction system] and various third party content providers 108 or any other organization affiliated with the aggregator 106 [third transaction system]).

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

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#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Claims 15-20 lack novelty under PCT Article 33(2) as being anticipated by MOZIDO LLC (hereinafter MOZIDO).

Regarding claim 15, Mozido discloses a cloud-based mobile global exchange platform ([0003] methods, systems, and computer program products for a cloud-based transaction platform... include an infrastructure that can be used with third party mobile wallets provided by third party mobile wallet providers.), comprising the following:
one or more processors ([0023] one or more processors);
an integration tier configured to manage mobile wallet sessions and maintain the integrity of financial transactions ([0053] Integration tier

101 is configured to manage mobile wallet sessions and maintain integrity of financial transactions);

integration tier also comprised of a communication API and other communication mechanisms to accept messages from channels ([0053] Integration tier 101 can also include a communication (e.g., Web services) API and/or other communication mechanisms to accept messages from channels 111);

notification services configured to send notifications through different notification channels including short message peer-to-peer, short-message services and simple mail transfer protocol emails ([0053] notification channels 112, such as, for example, Short Message Peer-to-Peer ("SSMP") for Short Messaging Service ("SMS") and Simple Mail Transfer Protocol ("SMTP") for emails0; service connectors configured to connect to third party systems ([0054]Service connectors 103 are a set of connectors configure to connect to 3rd party systems 113);

each connector deployed as a separate module intended to integrate an external service to the system architecture ([0054] connector can be a separate module intended to integrate an external service to the system architecture);

business process services configured to implement business workflows, including executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects ([0054] Business process services 104 are configured to implement business workflows, including executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects. a payment handler configured to wrap APIs of different payment processors including banking accounts, credit and debit cards or processors);

payment handler exposing a common API to facilitate interactions with many different kinds of payment processors ([0054] Payment handler 105 exposes a common API to facilitate interactions with many different kinds of payment processors); security services configured to perform subscriber authentication ([0055]Security services 106 are configured to perform subscriber

authorization services configured to perform client authorization using a database-based access control list table ([0055] Authorization

services 107 are configured to perform client authorization, such as, for example, using a database-based Access Control List ("ACL")

database configured to manage customer accounts, manage company accounts manage transaction histories, store financial transaction details, store customer profiles, store dictionaries used by the mobile wallet platform including countries and currencies, and managing money containers ([0056]Database 108 is configured to manage customer accounts (e.g., storing customer accounts and properties), manage company accounts (e.g., storing company accounts and properties), manage transaction histories (e.g., storing financial transaction details), store customer profiles, storing dictionaries used by the mobile wallet platform, such as, for example, countries, currencies, etc., and managing money containers);

a rules engine configured to gather financial transaction statistics and use the gathered statistics to provide transaction properties including fees and bonuses ([0056] Rules engine 109 is configured to gather financial transaction statistics and uses the statistics to provide transaction properties, such as, for example, fees and bonuses);

rules engine also configured to enforce business constraints including transaction and platform license constraints ([0056] Rules engine 109 is also configured to enforce business constraints, such as, for example, transactions and platform license constraints); one or more computer-readable storage media having stored thereon computer-executable instructions ([0023] Computer-readable media

that store computer-executable instructions in the form of data are computer storage media) that, when executed by the one or more processors, ([0023] one or more processors) cause the computing system to perform a remittance ([0096] a remittance transaction), the method comprising the following:
receiving subscriber communication over one of a plurality of channels connected to the mobile global exchange platform ([0063] The web

interface (or the mobile wallet application itself) receives a subscriber-initiated transaction over one of a plurality of communication

channels (111 from FIG. 1) connected to the cloud-based transaction system 210.);
message received using an API of the integration tier, the subscriber communication indicating that a subscriber desires to transfer a specified sum to a recipient using a selected transfer method from the subscriber ([0061]The subscriber can indicate, using the mobile wallet application 207, which transaction or other action he or she would like to perform; [0067] perform such a transfer, subscriber A (301) enters some type of identification information identifying subscriber B (e.g. subscriber B's phone number) and an amount of money he or she wishes to transfer.):

verifying that the selected transfer method is capable of providing the specified sum ([0062]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 221 in his or her stored value account, or has enough money in his or her bank account)).

validation performed by the rules engine in accordance with business constraints ([0056] Rules engine 109 is also configured to enforce business constraints, such as, for example, transactions and platform license constraints);

validating the status of the recipient to ensure the recipient has a valid subscriber account ([0062] Rules engine 220 may also be consulted to determine whether the subscriber has exceeded a specified number of allowed transactions); subscriber account comprised within the database ([0060] The subscriber may have access to a bank account, or may be an unbanked

debiting the selected transfer method by the specified sum ([0067] If sufficient funds are available, the monetary transaction system 210 decrements subscriber A's account and credits subscriber B's account (302)); debit performed by an API of the payment handler ([0054] Payment handler 105 is configured to wrap APIs of different payment

processors, such as, for example, banking accounts, credit/debit cards or processor 121. Payment handler 105 exposes a common API to facilitate interactions with many different kinds of payment processors); transferring the specified sum to the recipient over at least one of the plurality of channels connected to the mobile global exchange platform ([0063] The web interface (or the mobile wallet application itself) receives a subscriber-initiated transaction over one of a plurality

of communication channels (111 from FIG. 1) connected to the cloud-based transaction system 210);

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

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#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

transfer completed using a service connector ([0054]Service connectors 103 are a set of connectors configure to connect to 3rd party systems); and

notifying the subscriber that the specified sum was transferred to the recipient over at least one of the plurality of channels connected to the mobile global exchange platform ([0067] The system then sends some kind of notification (e.g. SMS) to subscriber B indicating that a certain amount of money was transferred to their account);

notification completed by the notification services ([0053] Notification services 102 is configured to send various notifications through different notification channels 112).

Regarding claim 16, Mozido further discloses, wherein validating the status of the recipient comprises performing a check on the specified recipient to comply with a financial regulatory scheme ([0062] Rules engine 220 may also be consulted to determine whether the subscriber has exceeded a specified number of allowed transactions);

Regarding claim 17, Mozido further discloses, wherein the sum is transferred internationally between mobile wallet applications ([0059] transferring funds through a third party mobile wallet (nationally or internationally)).

Regarding claim 18, Mozido further discloses, wherein the transferred sum is available in the subscriber's mobile wallet application ([0067] The transaction processor 216 of the monetary transaction system 210 determines if there are sufficient funds to complete the transfer. If sufficient funds are available, the monetary transaction system 210 decrements subscriber A's account and credits subscriber B's account (302). The system then sends some kind of notification (e.g. SMS) to subscriber B indicating that a certain amount of money was transferred to their account).

Regarding claim 19, Mozido further discloses, wherein the subscriber is an unbanked subscriber ([0052] An "unbanked subscriber" is a subscriber that does not have (or does not have access to) a bank account or credit union account).

Regarding claim 20, Mozido further discloses, comprising performing at least one of a limit check and a velocity check on the selected payment method ([0072] The monetary transaction system 210 validates the status of the specified payment method, determines if the specified payment method can accommodate a purchase for the specified amount, performs a limit check and/or a velocity check).

Claims 2, 3, 9, and 10 lack an inventive step under PCT Article 33(3) as being obvious over ERICKSON.

Regarding claim 2, Erickson does not explicitly disclose, wherein the first transaction system and the second transaction system are located in countries that use different currencies

However Erickson teaches wherein the first transaction system and the second transaction system are located in countries that use currencies ([0039] Some factors to be considered, for example, are the country location of the user, the country location of the third party content provider 108, and the size of the transaction; [0038] different countries have different regulations regarding financial transactions. Furthermore the "different currencies" would have been a matter of design choice and well known in the art at the time of the invention. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate different currencies, as disclosed, within the invention of Erickson because they add robustness to the factors being considered (Erickson [0039]).

Regarding claim 3, Erickson does not explicitly disclose, wherein the cloud-based mobile global exchange platform ties each of the first and second transaction systems to a centralized exchange rate.

However Erickson teaches wherein the cloud-based mobile global exchange platform ties each of the first and second transaction systems to financial data (([0021]A wireless network generally includes any communication network or wireless technology platform which is, or can be used by a mobile device to access data from another location, such as a computer server; [0039] the aggregator 106 determines the transaction type appropriate to abide by the financial regulations of a specific country. Some factors to be considered, for example, are the country location of the user, the country location of the third party content provider 108, and the size of the transaction. Based on these factors, a type of transaction is selected and performed. For example, element 152 illustrates a transaction in which the aggregator collects financial data (e.g., financial institution number, account number, etc.) then conducts the desired transaction for the third party content provider 108). Furthermore the "a centralized exchange rate", as financial data, would have been a matter of design choice and well known in the art at the time of the invention.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a centralized exchange rate, as disclosed, within the invention of Erickson because they add robustness to the use of the financial data (Erickson [0039]).

Regarding claim 9, Erickson further discloses, wherein a mobile wallet application communicates with the mobile global exchange platform using local financial regulations, regardless of which country the mobile wallet application is communicating from ([0025] aggregator 106 acts like an electronic bank account, enabling the user to perform relatively complex and time consuming financial transactions quickly over a mobile device 102...the user can selectively transfer money by mobile device between the aggregator 106 and various third party content providers 108 or any other organization affiliated with the aggregator 106. [mobile wallet]).

Regarding claim 10, Erickson further discloses, wherein the first country of origin for the first monetary transaction system is determined based on a location indicator received from a mobile device, the location indicator being generated based on wireless data received on a wireless radio of the mobile device ([0053] Many mobile devices 102 now include location tracking mechanisms, such as GPS receivers, which allow the mobile device 102 to determine a user's location).

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2015/058886

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Claims 5-8 and 13 lack an inventive step under PCT Article 33(3) as being obvious over ERICKSON in view of GIORI.

Regarding claim 5, Erickson does not explicitly disclose, wherein the sum is transferred from the first transaction system to the second

However Erickson teaches wherein the sum is transferred from the first transaction system to the second transaction system using a transaction type ([0025] the user can selectively transfer money by mobile device between the aggregator 106 [first transaction system] and various third party content providers 108 [second transaction system]; [0039]As seen in element 150, when the user selects the aggregator 106 for use with a third party content provider 108, the aggregator 106 determines the transaction type appropriate to abide by the financial regulations of a specific country. Based on these factors, a type of transaction is selected and performed). Giori is also in the field of international transactions ([0001] the present invention relates to a system and method for providing fungible electronic money that can be exchanged between parties, nationally and internationally) and discloses wherein the sum is transferred from the first transaction system to the second transaction system using a SWIFT exchange ([0051] the GSMT provides an open loop system by integrating existing money transfer systems (e.g., MTO systems, mobile money systems, etc.) with the institutional systems used within the financial framework of commercial banks and Central Banks (e.g., the... Society for Worldwide Interbank Financial Telecommunication

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate using a SWIFT exchange, as disclosed in Giori, within the invention of Erickson because it is an appropriate transaction type used to abide by the financial regulations of a specific country (Erickson [0039]).

Regarding claim 6, Erickson does not explicitly disclose, wherein the SWIFT exchange transfer from the first transaction system to the

second transaction system is performed according to a fee schedule.

However Erickson teaches wherein the transfer from the first transaction system to the second transaction system is performed according to factors ([0025] the user can selectively transfer money by mobile device between the aggregator 106 [first transaction system] and various third party content providers 108 [second transaction system]; [0039]As seen in element 150, when the user selects the aggregator 106 for use with a third party content provider 108, the aggregator 106 determines the transaction type appropriate to abide by the financia regulations of a specific country. Based on these factors, a type of transaction is selected and performed). Furthermore the "a fee schedule", as a factor, would have been a matter of design choice and well known in the art at the time of the invention. Giori discloses wherein the SWIFT exchange transfer from the first transaction system to the second transaction system is performed ([0051] the GSMT provides an open loop system by integrating existing money transfer systems (e.g., MTO systems, mobile money systems, etc.) with the institutional systems used within the financial framework of commercial banks and Central Banks (e.g., the...

Society for Worldwide Interbank Financial Telecommunication (SWIFT)).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate using a fee schedule, as disclosed, within the invention of Erickson because it is adds robustness to the factors used (Erickson [0039]).

In addition, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the SWIFT exchange, as disclosed in Giori, within the invention of Erickson because it is an appropriate transaction type used to abide by the financial regulations of a specific country (Erickson [0039]).

Regarding claim 7, Erickson does not explicitly disclose, wherein the fee schedule specifies higher fees for transactions that are processed sooner, and lower fees for transactions that are processed later.

However Erickson teaches wherein the factors specify transactions that are processed ([0039] Based on these factors, a type of transaction is selected and performed). Furthermore the "the fee schedule specifies higher fees for transactions that are processed sooner and lower fees for transactions that are processed later", as a factor, would have been a matter of design choice and well known in the an at the time of the invention.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the fee schedule

specifications, as disclosed, within the invention of Erickson because it is adds robustness to the factors used to perform the transaction (Erickson [0039]).

Regarding claim 8, Erickson does not explicitly disclose, wherein the transactions are processed together in a bulk transaction. However Erickson teaches transactions are processed in a transaction ([0039] Based on these factors, a type of transaction is selected and performed. For example, element 152 illustrates a transaction in which the aggregator collects financial data (e.g., financial institution number, account number, etc.) then conducts the desired transaction...The content provider 108 then stores this data for future transactions. Furthermore the "together in a bulk transaction", would have been a matter of design choice and well known in the art at the time of the invention.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate together in a bulk transaction, as disclosed, within the invention of Erickson because they add robustness to the processing of the transaction (Erickson (100391).

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2015/058886

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding claim 13, Erickson does not explicitly disclose, wherein the money sum is transferred from the first monetary transaction system to the second monetary transaction system using a SWIFT exchange, based on a determination that the transaction is being initiated from a certain country.

However Erickson teaches wherein the money sum is transferred from the first monetary transaction system to the second monetary transaction system using a transaction type based on a determination that the transaction is being initiated from a certain country ([0025] the user can selectively transfer money by mobile device between the aggregator 106 [first transaction system] and various third party content providers 108 [second transaction system]; [0039] the aggregator 106 determines the transaction type appropriate to abide by the financial regulations of a specific country. Some factors to be considered, for example, are the country location of the user, the country location of the third party content provider 108, and the size of the transaction. Based on these factors, a type of transaction is selected and performed).

Giori discloses wherein the money sum is transferred from the first monetary transaction system to the second monetary transaction system using a SWIFT exchange ([0051] the GSMT provides an open loop system by integrating existing money transfer systems (e.g., MTO systems, mobile money systems, etc.) with the institutional systems used within the financial framework of commercial banks and Central Banks (e.g., the... Society for Worldwide Interbank Financial Telecommunication (SWIFT)). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the SWIFT exchange, as

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the SWIFT exchange, as disclosed in Giori, within the invention of Erickson because it is an appropriate transaction type used to abide by the financial regulations of a specific country (Erickson [0039]).

Claim 12 lacks an inventive step under PCT Article 33(3) as being obvious over ERICKSON in view of MOZIDO LLC (hereinafter MOZIDO).

Regarding claim 12, Erickson does not explicitly disclose, wherein the user interface further includes an indication of the mobile wallet user's current stored value account balance

However Erickson teaches wherein the user interface further includes an indication of the mobile wallet user's current stored value account ([0024] data aggregator 106 collects and distributes user registration and financial data; [0025] For example, users may receive payout from winnings on gambling sites, and then transfer that money to payoff credit card balances. Thus, the aggregator 106 acts like an electronic bank account, enabling the user to perform relatively complex and time consuming financial transactions quickly over a mobile device 102).

Mozido discloses wherein the user interface further includes an indication of the mobile wallet user's current stored value account balance ([0050] 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).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate current stored value account balance, as disclosed in Mozido, within the invention of Erickson because they add robustness to the use of the aggregator as an electronic bank account (Erickson [0025]).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

Electronic Acknowledgement Receipt			
EFS ID:	29976601		
Application Number:	15201152		
International Application Number:			
Confirmation Number:	2611		
Title of Invention:	MONETARY TRANSACTION SYSTEM		
First Named Inventor/Applicant Name:	Michael A. Liberty		
Customer Number:	22913		
Filer:	John C. Stringham/Sarah Warcup		
Filer Authorized By:	John C. Stringham		
Attorney Docket Number:	18756.8.1.1.1.1.1		
Receipt Date:	03-AUG-2017		
Filing Date:	01-JUL-2016		
Time Stamp:	15:20:50		
Application Type:	Utility under 35 USC 111(a)		

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Submitted with Payment		no				
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/201,152	07/01/2016	Michael A. Liberty	18756.8.1.1.1.1.1.1	2611
22913 Workman Nyde	7590 07/24/201	7	EXAM	IINER
60 East South T Suite 1000			CHANG, I	EDWARD
Salt Lake City,	UT 84111		ART UNIT	PAPER NUMBER
			3696	
			NOTIFICATION DATE	DELIVERY MODE
			07/24/2017	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing@wnlaw.com

	Application No.	Applicant(s)					
Applicant-Initiated Interview Summary	15/201,152	LIBERTY, MICH	AEL A.				
Approant-initiated interview Summary	Examiner	Art Unit					
	EDWARD CHANG	3696					
All participants (applicant, applicant's representative, PTO	personnel):						
(1) <u>EDWARD CHANG</u> .	(3) John C. Stringham.						
(2) <u>W. Brad Barger</u> .	(4)						
Date of Interview: 18 July 2017.							
Type: 🔀 Telephonic 🔲 Video Conference 🔲 Personal [copy given to: 🔲 applicant 🔲 applicant's representative]							
Exhibit shown or demonstration conducted:  Yes  No. If Yes, brief description:							
Issues Discussed \( \sum 101 \) \( \sum 112 \) \( \sum 102 \) \( \sum 103 \) \( \sum 0 \) thers  (For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)							
Claim(s) discussed: <u>1</u> .							
Identification of prior art discussed: <u>n/a</u> .							
Substance of Interview (For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc)							
Applicant and examiner discussed about the current 101 rejection and the possible amendments. Examiner will wait for the formal response.							
<b>Applicant recordation instructions:</b> The formal written reply to the last C section 713.04). If a reply to the last Office action has already been filed, a thirty days from this interview date, or the mailing date of this interview sun interview	oplicant is given a non-extendable peri	od of the longer of or	e month or				
<b>Examiner recordation instructions</b> : Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.							
☐ Attachment							
/EDWARD CHANG/ Primary Examiner, Art Unit 3696							

#### **Summary of Record of Interview Requirements**

#### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

# Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- -Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by
  attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does
  not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Doc code: RCEX Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Request for Continued Examination (RCE)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL (Submitted Only via EFS-Web)						
Application 15004	150	Filing		Docket Number		Art	nene
Number 15201	132	Date	2016-07-01	(if applicable)	18756.8.1.1.1.1.1	Unit	3696
First Named Inventor	A. Liberty	y		Examiner Name	Edward Chang		
This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.  Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV							
		S	UBMISSION REQ	UIRED UNDER 37	CFR 1.114		
•	d unless a	applicant ins	structs otherwise. If a	applicant does not wi	nents enclosed with the RCE w sh to have any previously filed		
Previously submitt submission even it			• • • • • • • • • • • • • • • • • • • •	any amendments file	d after the final Office action m	ay be cons	sidered as a
Consider th	e argume	nts in the A	appeal Brief or Reply	Brief previously filed	on		
Other							
	ıt/Reply						
Information	Disclosur	re Statemer	nt (IDS)				
Affidavit(s)/	Affidavit(s)/ Declaration(s)						
Other	Other						
			MIS	CELLANEOUS			
· · ·				requested under 37 (ler 37 CFR 1.17(i) re	CFR 1.103(c) for a period of m quired)	onths	
Other							
				FEES			
	ereby auth			FR 1.114 when the F ment of fees, or cred	RCE is filed. it any overpayments, to		
	S	SIGNATUF	RE OF APPLICAN	T, ATTORNEY, OF	R AGENT REQUIRED		
X Patent Practition	ner Signa	ature					
Applicant Sign	ature						

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	Signature of Registered U.S. Patent Practitioner					
Signature	/W. Brad Barger/	Date (YYYY-MM-DD)	2017-07-18			
Name	W. Brad Barger	Registration Number	69566			

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

# **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
and approximent of	Michael A. Liberty	, )
Serial No.:		, ) Art Unit ) 3696
Filed:	July 1, 2016	)
Conf. No.:	2611	) )
For:	MONETARY TRANSACTION SYSTEM	) )
Examiner:	Edward Chang	) )
Customer No.:	22913	) )

TRANSMITTAL FOR AMENDMENT "B" AND RESPONSE AFTER FINAL WITH RCE

VIA eFILE AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith is an Amendment "B" and Response for entry in the above-identified application.

X To render the transmitted Amendment "B" and Response timely filed enclosed are the following:

X Request for Continued Examination (\$600.00).

The fee has been calculated as follows:

			SMALL	ENTITY	LARGE	ENTITY
CLAIMS REMAINING AFTER	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDT'L FEE	RATE	ADDT'L FEE
TOTAL 3	MINUS 8	= 0	X		X \$40.00	00.00
INDEPENDENT 3	MINUS 4	= 0	X		X \$210.00	00,00
I <sup>SI</sup> PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+=		+=	
			TOTAL		TOTAL	00.00

X Payment in the amount of \$600.00 using the Credit Card payment option in E-Filer with RAM will be used to cover the payment of the fees with respect to this Extension of Time and Excess Independent Claim.

X The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to **Deposit Account No. 23-3178**: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37 CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefore and charge any additional fees that may be required to **Deposit Account No. 23-3178**.

Dated this 18th day of July, 2017.

Respectfully submitted,

/W. BRAD BARGER/

JOHN C. STRINGHAM Registration No. 40,831 W. BRAD BARGER Registration No. 69,566 WORKMAN | NYDEGGER Attorneys for Applicant Customer No. 22913

Electronic Patent Application Fee Transmittal							
Application Number:	15:	201152					
Filing Date:	01-	-Jul-2016					
Title of Invention:	МС	ONETARY TRANSAC	TION SYSTEM				
First Named Inventor/Applicant Name:	Michael A. Liberty						
Filer:	Wi	lliam Brad Barger/L	indsey Gifford				
Attorney Docket Number:	18	756.8.1.1.1.1.1					
Filed as Small Entity							
Filing Fees for Utility under 35 USC 111(a)							
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Basic Filing:							
Pages:							
Claims:							
Miscellaneous-Filing:							
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
Extension-of-Time:							

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
RCE- 1st Request	2801	1	600	600
	Total in USD (\$)		600	

Electronic Acknowledgement Receipt				
EFS ID:	29820516			
Application Number:	15201152			
International Application Number:				
Confirmation Number:	2611			
Title of Invention:	MONETARY TRANSACTION SYSTEM			
First Named Inventor/Applicant Name:	Michael A. Liberty			
Customer Number:	22913			
Filer:	William Brad Barger			
Filer Authorized By:				
Attorney Docket Number:	18756.8.1.1.1.1.1			
Receipt Date:	18-JUL-2017			
Filing Date:	01-JUL-2016			
Time Stamp:	21:25:50			
Application Type:	Utility under 35 USC 111(a)			

# **Payment information:**

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$600
RAM confirmation Number	071917INTEFSW21274400
Deposit Account	233178
Authorized User	Willilam Barger

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)37 CFR 1.20 (Post Issuance fees)37 CFR 1.21 (Miscellaneous fees and charges)

# **File Listing:**

Document Number	<b>Document Description</b>	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
			164471		
1	Response After Final Action	se After Final Action 18756-8-1-1-1-1-1_2017-07-1 8_Amendment-B.pdf		no	14
Warnings:			'		
Information:					
			714467		
2	Request for Continued Examination (RCE)	18756-8-1-1-1-1-1-1_2017-07-1 8_RCE.pdf	94b8b0afb4caf6735c332696206d5ae345d 73bfd	no	3
Warnings:			'	'	
Information:					
		18756-8-1-1-1-1-1_2017-07-1	108318		
3	3 Transmittal Letter	8_Transmittal-for-	6ba5dceb1c2dac5fa3f99bf9fbdfdf095d3ba a5f	no	2
Warnings:					
Information:					
			30377		
4	Fee Worksheet (SB06)	fee-info.pdf	1005c25ed0d163b49842a5eae2efc2c5334 8ce45	no	2
Warnings:					
Information:					
		Total Files Size (in bytes)	10	17633	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:  Michael A. Liberty ) )	
,	
Serial No.: 15/201,152 ) Art V	
Confirmation No.: 2611 )	<i>)</i>
Filed: July 1, 2016 )	
For: MONETARY TRANSACTION SYSTEM )	
Examiner: Edward Chang )	

# AMENDMENT B AND RESPONSE AFTER FINAL WITH RCE

VIA eFILE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action of June 15, 0217 ("Office Action"), (Paper No. 20170611), please amend and reconsider the above-identified application, in which:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

#### **AMENDMENTS TO THE CLAIMS**

## **Listing of Claims:**

1. (Currently Amended) A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;

notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;

business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;

database services operable to store financial transaction details, store customer profiles, and manage money containers;

a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;

a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce constraints including transaction constraints;

a security service operable to perform subscriber authentication;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; wherein the at least one entity is the agent; and

wherein the monetary transaction system is implemented to deposit funds at an agent branch, the funds being deposited by a subscriber at the agent branch using a mobile device configured to run a monetary transaction system application, the monetary transaction system performing the following steps:

receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system, the

communication message being received by an API associated with the integration tier of the monetary transaction system, the communication message indicating that the subscriber desires to deposit a specified amount of funds into the subscriber's account;

validating the status of the subscriber's account, wherein validating the status of the subscriber's account comprises communicating from the integration tier to the database services to query attributes of the subscriber's account;

committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services;

receiving a confirmation from the business process services that the pending transaction has been committed;

sending, through the notification services, a receipt notification to the mobile device; and

upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services; and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account;

validating, through communication with the security services, one or more
of a PIN number and an access control list;

applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler, loading the funds to the subscriber account using the payment handler; and updating, using the database services, a pending transaction history record to reflect the funds.

## 2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain the integrity of financial transactions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;

notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;

business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;

a security service operable to perform subscriber authentication;

database services operable to store financial transaction details, store customer profiles, and manage money containers;—and

a mobile device configured to run a monetary transaction system application;

a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;

a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce business constraints including transaction constraints;

a security service operable to perform subscriber authentication;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; wherein the at least one entity is the agent;

a monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system, wherein the subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system;

wherein the monetary transaction system is implemented to withdraw funds at an agent branch using the mobile device configured to run a monetary transaction system application, including performing the following steps:

receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system, the communication message being received by an API associated with the integration tier of the monetary transaction system, the communication message indicating that the subscriber desires to withdraw a specified amount of funds from an account associated with the subscriber, the communication comprising a secure, perishable code;

determining that the transaction is valid and in progress, wherein determining that the transaction is valid comprises validating the secure, perishable code and communicating from the integration tier to the database services to query attributes of the subscriber's account;

committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services;

receiving a confirmation from the business process services that a pending transaction has been committed;

sending, through the notification services, a receipt notification to the mobile device; and

upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services; and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account;

validating, through communication with the security services, one or more of a PIN number and an access control list;

applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler, loading the funds to the subscriber account using the payment handler, and updating, using the database services, a pending transaction history record to reflect the funds.

5. (Currently Amended) A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain the integrity of financial transactions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;

notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;

business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;

database services operable to store financial transaction details, store customer profiles, and manage money containers; and

a monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system, wherein the subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system;

a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;

a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce business constraints including transaction constraints;

a security service operable to perform subscriber authentication;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; wherein the at least one entity is the agent;

wherein the monetary transaction system is implemented to transfer funds using the mobile device configured to run a monetary transaction system application, including performing the following steps:

receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system, the communication message being received by an API associated with the integration tier of the monetary transaction system, the communication message indicating that the subscriber desires to transfer a specified amount of funds from the subscriber's account to a recipient;

validating the status of the subscriber's account, wherein validating the status of the subscriber's account comprises communicating from the integration tier to the database services to query attributes of the subscriber's account;

committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services;

receiving a confirmation from the business process services that a pending transaction has been committed;

sending, through the notification services, a receipt notification to the mobile device; and

upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services, and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account; validating, through communication with the security services, one or more of a PIN number and an access control list;

applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler, loading the funds to the subscriber account using the payment handler; and

updating, using the database services, a pending transaction history record to reflect the funds.

- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Cancelled)

## **REMARKS**

The Non-Final Office Action ("Office Action"), mailed June 15, 2017, considered claims1, 2, 4, 5, 9, and 10.

By this amendment claims 1, 4, and 5 have been amended. Claims 2, 9, and 10 are cancelled. Accordingly, claims 1, 4, and 5 are pending, each of which is an independent claim. Support for the claim amendments is found throughout the originally filed application and claims, including previously pending Dependent Claims 2, 9, and 10.

# **Telephonic Interview**

Initially, Applicant thanks the Examiner for the courtesies extended during the recent telephonic interview held on July 18<sup>th</sup> at 11:00 AM Eastern Time. The claim amendments and arguments submitted in this paper are consistent with the amendments and arguments presented during the course of the interview. Accordingly, entry of this amendment and reconsideration of the pending claims is respectfully requested.

# **Claim Objections**

The *Office Action* objected to Claims 2, 9, and 10 "as being dependent upon rejected base claims 1, 4, and 5." Nevertheless, the *Office Action* found that the objected claims "would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims."

In accordance with the direction provided by the *Office Action*, Applicants have amended Independent Claims 1, 4, and 5 to include the allowable subject matter of Dependent Claims 2, 9, and 10. As such, Applicants respectfully submit that any remaining rejections asserted by the *Office Action* are now moot.

Further, Applicants respectfully submit that the pending claims are allowable at least for the reason that when considered as a whole they provide a technical solution to a technical problem. As described with the specification, the claimed embodiment is directed towards computer systems for performing monetary transactions between users. Importantly, the pending claims are <u>not</u> directed towards the abstract idea of exchanging money and do not preempt the field. Instead, the claims focus on the complex computer systems and methods that are utilized to securely transfer money between individuals – in particular, when those individuals are not banked. In conventional monetary transactions, a bank acts as a middleman to both account for the money and to effectuate the transfer. In contrast, as depicted at least in Figure 2 and paragraph [0089], the disclosed invention is configurable to operate with an unbanked subscriber. In such a case, there is no centralized bank that is able to act as a hub to the different agent branches. Instead, a computer system with appropriate security controls and validations must be in place to handle the decentralized transfer of money. These technical challenges are overcome, at least in part, by the following limitations which were found allowable:

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account; validating, through communication with the security services, one or more of a PIN number and an access control list;

applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler; loading the funds to the subscriber account using the payment handler; and updating, using the database services, a pending transaction history record to reflect the fund

Additionally, Applicants note that the USPTO directs that "it is particularly critical to address the <u>combination</u> of additional elements, because while individually-viewed elements may not appear to add significantly more, those additional elements when viewed in combination may amount to significantly more than the exception by meaningfully limiting the judicial exception." In view of this direction from the USPTO, the present claims when viewed as a whole are directed towards substantially technical systems that address the unique technical problem of monetary exchanges within a system that does not require a centralized banking server to manage the transaction.

Accordingly, Applicants respectfully submit that the present claims are in condition for allowance and request prompt action on this application.

#### **Conclusion**

In view of the foregoing, Applicants respectfully submit that the remaining rejections of record are also now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that Applicants have not acquiesced to any of the purported teachings or assertions made in the Office Action regarding the cited art or the pending application, including any official notice. Instead, Applicants reserve the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any official notice, explicitly or implicitly, Applicants specifically request that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

<sup>1</sup> See page 3 of the May 4, 2016 memorandum.

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In the event the Examiner finds any other issues that would need to be addressed before

allowance, the Examiner is invited to contact Applicants' undersigned Attorneys directly.

The Commissioner is hereby authorized to charge payment of any of the following fees

that may be applicable to this communication, or credit any overpayment, to Deposit Account No.

23-3178: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and

reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37

CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise

been requested, please consider this a petition therefor and charge any additional fees that may be

required to Deposit Account No. 23-3178.

Dated this 18th day of July, 2017.

Respectfully submitted,

/W. Brad Barger/

John C. Stringham

Registration No.: 40831

W. Brad Barger

Registration No. 69,566

Attorneys for Applicant

Customer No. 22913

WORKMAN NYDEGGER

1000 Eagle Gate Tower

60 East South Temple

Salt Lake City, UT 84111

Phone: 801-533-9800

Fax: 801-328-1707

Page 14 of 14

APPL-1002

APPLE INC. / Page 1361 of 1744

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

PATENT APPLICATION FEE DETERMINATION RECOR Substitute for Form PTO-875				N RECORD	Application or Docket Number 15/201,152		Filing Date 07/01/2016	To be Mailed			
	ENTITY: LARGE SMALL MICRO										
	APPLICATION AS FILED – PART I										
			(	Column 1	)	(Column 2)					
	FOR		NU	MBER FIL	.ED	NUMBER EXTRA		RATE	= (\$)	F	FEE (\$)
Ľ	BASIC FEE (37 CFR 1.16(a), (b), or (c))			N/A		N/A		N/	Α		
	SEARCH FEE (37 CFR 1.16(k), (i), o	or (m))		N/A		N/A		N/	Α		
	EXAMINATION FE (37 CFR 1.16(o), (p),			N/A		N/A		N/	Α		
	TAL CLAIMS CFR 1.16(i))			min	us 20 = *			X \$	=		
IND	EPENDENT CLAIM CFR 1.16(h))	IS		mi	inus 3 = *			X \$	=		
	APPLICATION SIZE (37 CFR 1.16(s))	FEE	of pap for sm fractio	er, the a	application size · /) for each addit	gs exceed 100 s fee due is \$310 ( ional 50 sheets o C. 41(a)(1)(G) and	\$155 or				
	MULTIPLE DEPEN	NDENT CLA	NM PRE	SENT (37	7 CFR 1.16(j))						
* If	the difference in colu	umn 1 is les	s than z	ero, ente	r "0" in column 2.			TOT	AL		
		(Colum	n 1)		APPLICAT	COlumn 3		ART II			
TN:	07/18/2017 CLAIMS REMAINING AFTER AMENDMENT				HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE	≣ (\$)	ADDITIO	ONAL FEE (\$)
ME	Total (37 CFR 1.16(i))	* 3		Minus	** 20	= 0		x \$40 =			0
AMENDMENT	Independent (37 CFR 1.16(h))	* 3		Minus	***3	= 0		x \$210	=		0
AM	Application Size Fee (37 CFR 1.16(s))										
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
							<u></u>	TOTAL A	DD'L FEE		0
		(Colum	n 1)		(Column 2)	(Column 3	)				
L		CLAIM REMAIN AFTE AMENDM	NING ER		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE	≣ (\$)	ADDITIO	ONAL FEE (\$)
ENT	Total (37 CFR 1.16(i))	*		Minus	ww	=		X \$	=		
ENDM	Independent (37 CFR 1.16(h))	*		Minus	***	=		X \$	=		
NEN	Application Size Fee (37 CFR 1.16(s))										
AM	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL A	DD'L FEE		
** If	If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".  If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
15/201,152 07/01/2016 22913 7590 06/26/2017 Workman Nydegger		Michael A. Liberty	18756.8.1.1.1.1.1.1	2611	
			EXAMINER		
60 East South Suite 1000			CHANG, EDWARD		
Salt Lake City, UT 84111			ART UNIT	PAPER NUMBER	
·			3696		
			NOTIFICATION DATE	DELIVERY MODE	
			06/26/2017	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing@wnlaw.com

	Application No.	Applicant(s)			
Applicant-Initiated Interview Summary	15/201,152	LIBERTY, MICHAEL A.			
Approant initiated interview Cummary	Examiner	Art Unit	AIA (First Inventor to File) Status	Page	
	EDWARD CHANG	3696	No	1 of 1	

All participants (applicant, applicant's representative, PTO personnel):

EDWARD CHANG (Primary Examiner);
 WebEx/Video Conference

2. Brad Barger (Attorney); WebEx/Video Conference

Date of Interview: 06 April 2017

Claim(s) discussed: 1

Brief Description of main topic of discussion: Applicant and examiner discussed about the current 101 rejection.

#### Issues Discussed:

Item(s) under 35 U.S.C. 101:

No agreement was reached regarding Alice 101 rejection

/EDWARD CHANG/	
Primary Examiner, Art Unit 3696	
Timary Examiner, Art Onit 6000	

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable time limit of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicant's responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04

Please further see:

MPEP 713.04

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing

U.S. Patent and Trademark Office

PTOL-413/413b (Rev. 01/01/2015)

**Interview Summary** 

Paper No. 20170619

	Application No.	Applicant(s)			
Applicant-Initiated Interview Summary	15/201,152	LIBERTY, MICHAEL A.			
Approant initiated interview Cummary	Examiner	Art Unit	AIA (First Inventor to File) Status	Page	
	EDWARD CHANG	3696	No	1 of 1	

All participants (applicant, applicant's representative, PTO personnel):

EDWARD CHANG (Primary Examiner);
 WebEx/Video Conference

2. Brad Barger (Attorney); WebEx/Video Conference

Date of Interview: 06 April 2017

Claim(s) discussed: 1

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/EDWARD CHANG/	
Primary Examiner, Art Unit 3696	
Filliary Examiner, Art Onit 3696	

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Please further see:

MPEP 713.04

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing

U.S. Patent and Trademark Office

PTOL-413/413b (Rev. 01/01/2015)

**Interview Summary** 

Paper No. 20170619



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
	15/201,152 07/01/2016		Michael A. Liberty	18756.8.1.1.1.1.1.1	2611		
22913 7590 06/15/2017 <b>Workman Nydegger</b>				EXAMINER			
60 East South Temple Suite 1000				CHANG, EDWARD			
Salt Lake City, UT 84111		UT 84111		ART UNIT	PAPER NUMBER		
				3696			
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				06/15/2017	ELECTRONIC		

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The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing@wnlaw.com

			<b>Application No.</b> 15/201,152		S) MICHAEL A.		
	Office Action Summary	<b>Examine</b> EDWAR	er D CHANG	Art Unit 3696	AIA (First Inventor to File) Status No		
 Period for	The MAILING DATE of this communicat Reply	tion appears on ti	he cover sheet with the	corresponder	nce address		
A SHOR THIS COMI - Extensic after SI - If NO pe - Failure t Any rep	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status							
	esponsive to communication(s) filed c						
	A declaration(s)/affidavit(s) under <b>37 (</b>	CFR 1.130(b) wa	s/were filed on				
2a)🛛 T	his action is <b>FINAL</b> . 2b)	This action is	non-final.				
3) <b>□</b> A	n election was made by the applicant	•	•		ing the interview on		
	; the restriction requirement and		·				
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	n of Claims*	andor Expanto G	addy,0, 1000 0.5. 11,	100 0.0. 210	'		
-	Flaim(s) <u>1,2,4,5,9 <i>and 10</i></u> is/are pending	g in the application	on.				
	a) Of the above claim(s) is/are v						
	slaim(s) is/are allowed.						
7) 🛛 C	slaim(s) <u>1, 2, 4, 5, 9, and 10</u> is/are reje	ected.					
	claim(s) is/are objected to.						
9)□ C	laim(s) are subject to restriction	n and/or election	requirement.				
	ns have been determined <u>allowable,</u> you m				hway program at a		
-	intellectual property office for the correspondent		·				
http://www.u	spto.gov/patents/init_events/pph/index.jsp	or send an inquiry	to PPHteedback@uspto	.gov.			
Application	-						
•	ne specification is objected to by the E			_			
	ne drawing(s) filed on is/are: a)				_, ,		
	pplicant may not request that any objection	- , ,	•		` '		
	eplacement drawing sheet(s) including the	e correction is requ	ired if the drawing(s) is o	bjected to. See	37 CFR 1.121(d).		
-	der 35 U.S.C. § 119						
•	cknowledgment is made of a claim for	foreign priority u	nder 35 U.S.C. § 119(	a)-(d) or (f).			
	ed copies:						
	<ul><li>All b) Some** c) None of the</li><li>. Certified copies of the priority do</li></ul>		aan raasiyad				
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	. Copies of the certified copies of		• • • • • • • • • • • • • • • • • • • •				
Ū	application from the International Bureau (PCT Rule 17.2(a)).						
** See the at	* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s	s)						
`	of References Cited (PTO-892)		3) Interview Summa	y (PTO-413)			
2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date  Paper No(s)/Mail Date							

U.S. Patent and Trademark Office PTOL-326 (Rev. 11-13)

Application/Control Number: 15/201,152 Page 2

Art Unit: 3696

1. The present application is being examined under the pre-AIA first to invent provisions.

## **DETAILED ACTION**

#### Status of Claims

- **1.** This action is in reply to the response filed on 24<sup>th</sup> of April 2017.
- 2. Claims 1, 2, 4, and 5 were amended.
- **3.** Claims 3, 6-8 were cancelled.
- 4. Claims 9 and 10 were newly added.
- **5.** Claims 1, 2, 4, 5, 9, and 10 are currently pending and have been examined.

#### **Response to Arguments**

- **6.** Applicant's arguments filed 24<sup>th</sup> of April 2017 have been fully considered but they are not persuasive.
- 7. With regard to the limitations of claims 1, 2, 4, 5, 9, and 10, Applicant arguments and amendments were noted. However, what makes the invention viewed as whole "significantly more" was found in dependent claims 2, 9, and 10. Please see the claim objection below.

## **Claim Objections**

**8.** Claims 2, 9, and 10 are objected to as being dependent upon a rejected base claims 1, 4, and 5, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

# Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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10. Claims 1, 2, 4, 5, 9, and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea. The claim(s) is/are directed to a method of organizing human activities and a fundamental economic practice. The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: mere instructions to implement the idea on a computer and recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Therefore, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

#### <u>Analysis</u>

11. The elements of each of the claims, when taken alone or in combination, each or together execute in a manner routinely and conventionally expected of these elements. That is, a module and a processor are used to calculate the data and process the data. All the steps in the claims are directed to a series of behavioral activities including e.g. receiving subscriber communication..., validating the status..., performing...limit check and a velocity check..., crediting the subscriber's account..., returning a secure, perishable code..., receiving a subsequent agent branch communication...., debiting the subscriber's account..., returning a notification..., transferring the specified amount..., and notifying the subscriber..., which, when viewed individually and in combination, constitute an abstract idea of certain methods of organizing human activity. These particular behaviors are "interpersonal activities" of "managing relationships or transactions between people, social activities, or behaviors," "satisfying or avoiding a legal obligation," and "advertising, marketing, and sales activities or behaviors," which are subcategories of activities that the precedential courts have found to be abstract idea under "certain

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Art Unit: 3696

methods of organizing human activity." As stated in the "Ultramercial, LLC v. Hulu, LLC and WildTangent" decision, the current claims viewed individually or order combination does "not transform the abstract idea (organizing human activities – series of steps of conducting transactions between subscribers and other entities) that they recite into patent-eligible subject matter because "the claims simply instruct the practitioner to implement the abstract idea with routine, conventional activity". Secondly, "conducting transactions between subscribers and other entities" is a "fundamental economic practice"; as stated by the precedential courts (buySAFE, Bilski) and in the July 2015 Update, "...phrase "fundamental economic practices" is used to describe concepts relating to the economy and commerce such as agreements between people in the form of contracts, legal obligations, and business relations..."

Therefore it is clear that these claims are directed to an abstract idea. These are reasons why all claim elements both individually and in combination; do not amount to significantly more than an abstract idea. Regarding "significantly more", the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception, such as:

- Improvement to another technology or technical field.
- Improvements to the functioning of the computer itself.
- Applying the judicial exception with, or by use of, a particular machine.
- Effecting a transformation or reduction of a particular article to a different state or thing.
- Adding a specific limitation other than what is well-understood, routine and conventional
  in the field, or adding unconventional steps that confine the claim to a particular useful
  application.
- Other meaningful limitations beyond generally linking the use of an abstract idea to a
  particular technological environment.
- 12. Rather, all the claims require no more than adding insignificant extra-solution activity to the judicial exception, e.g., mere collecting data (e.g. "receiving subscriber communication...") and performing of generic computer functions (e.g. processing transaction (debiting, transferring, crediting funds), automating mental tasks (validating, performing a limit check and velocity check), and transmitting information/notification via network) that are well-understood, routine and

Art Unit: 3696

conventional activities previously known to the industry. None of these foregoing functions are distinguishable from what the courts have recognized as well-understood, routine, and conventional generic computer functions; rather, each of these particular functions fall under at least one of the following computer functions that the courts already recognized as "merely generic": performing repetitive calculations, receiving, processing, and storing data, electronic recordkeeping, automating mental tasks, and receiving or transmitting data over a network, e.g., using the Internet to gather data.

- 13. See July 2015 Update: Subject Matter Eligibility, 4,

  http://www.uspto.gov/sites/default/files/documents/ieg-july-2015-update.pdf. Please see where it states "the courts have recognized the following computer functions to be well understood, routine, and conventional functions when they are claimed in a merely generic manner;..."
- Regarding "...mobile device configured to run a monetary transaction system application, including performing the following steps...", and automating it. In the recent CAFC (Eon Corp vs. AT&T mobility) decision directed to 112(f), the CAFC ruled that Alapat has been superseded by Bilski and Alice. Simply put, the programming of a general purpose computer or a microprocessor does nothing to limit the scope of the claim and such programming does not create a "significantly more" limitation.
- The elements of the claims, when taken in combination, together do not offer substantially more than the sum of the functions of the elements when each is taken alone. That is, the elements involved in the recited process undertake their roles in performance of their activities according to their generic functionalities which are well-understood, routine and conventional. The elements together execute in routinely and conventionally accepted coordinated manners and interact with their partner elements to achieve an overall outcome which, similarly, is merely the combined and coordinated execution of generic computer functionalities which are well-understood, routine and conventional activities previously known to the industry.

#### Conclusion

Art Unit: 3696

The claims as a whole including dependent claims, does not amount to significantly more than the abstract idea itself. This is because the claim does not effect an improvement to another technology or technical field; the claim does not amount to an improvement to the functioning of a computer itself; and the claim does not move beyond a general link of the use of an abstract idea to a particular technological environment.

Accordingly, the Examiner concludes that there are no meaningful limitations in the claim that transform the judicial exception into a patent eligible application such that the claim amounts to significantly more than the judicial exception itself.

Art Unit: 3696

## Conclusion

**10. THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3696

Any inquiry of a general nature or relating to the status of this application or concerning

this communication or earlier communications from the Examiner should be directed to Edward

Chang whose telephone number is 571.270.3092. The Examiner can normally be reached on

Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are

unsuccessful, the Examiner's supervisor, KIMBERLY BERONA can be reached at 571.272.6909.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://portal.uspto.gov/external/portal/pair <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a> Should you have

questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866.217.9197 (toll-free).

Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks** 

P.O. Box 1450 Alexandria, VA 22313-1450

or faxed to 571-273-8300.

Hand delivered responses should be brought to the United States Patent and

**Trademark Office Customer Service Window:** 

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

June 11, 2017

/Edward Chang/ Examiner, Art Unit 3696

APPLE INC. / Page 1374 of 1744

# **EAST Search History**

# **EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	exceed with number with account with allowable with committing with velocity	US- PGPUB; USPAT; USOCR	OR	OFF	2017/06/11 22:27
L2	0	exceed with number with account with allowable with commit\$4 with velocity	US- PGPUB; USPAT; USOCR	OR	ON	2017/06/11 22:27
L5	0	validat\$3 with account with status with commit\$4 with velocity	US- PGPUB; USPAT	OR	ON	2017/06/11 22:28
S1	100	("20120209762" "6142369" "6725303" "6976011" "20060265339" "20070063017" "20070106564" "20080270253" "20080314971" "20100030651" "7819307" "7822688" "20030004876" "20050187873" "20070095892" "20080162318" "20100088188" "20120197794" "20120259698" "20090055913" "20100274678" "20110137791" "20110145086" "20110145139" "20110313924" "20120226611" "20120290449" "6338140" "20100023417" "20040169073" "5315636" "5514862" "5848161" "5943624" "6038548" "6178335" "6185436" "6726092" "6913191" "7546944" "7784693" "20010007132" "20030078789" "20030121967" "20030177088" "20040243477" "20050164739" "20090106119" "20090233577" "20120036067" "20120108204" "20120172089" "20040039651" "2009097658" "5557518" "5621797" "5642419" "5815657" "5878139" "5963924" "6016484" "6019284" "6116506" "6230971" "4260055" "4992646" "5221838" "5671280" "5703949" "5745886" "5890052" "5940510" "5949880" "5949045" "6029151" "6068183" "6081790" "6088797" "6112984" "6175921" "6205436" "6315195" "6394343" "6425522" "6450407" "6502748" "6702181" "6905072" "6913193" "6970852" "7040533" "7140550" "7201313" "7207477" "7216800" "7344066" ).pn.	US- PGPUB; USPAT; USOCR	OR	OFF	2012/12/14 13:15
S2	391	exceed with number with account	US- PGPUB; USPAT; USOCR	OR	OFF	2012/12/15 14:40
S3	4	exceed with number with account with	US-	OR	OFF	2012/12/15

		allowable	PGPUB; USPAT; USOCR			14:40
S4	3699	(705/40).ccls.	US- PGPUB; USPAT; USOCR	OR	OFF	2012/12/16 00:43
S5	9891	(705/35).cds.	US- PGPUB; USPAT; USOCR	OR	OFF	2013/06/01 01:40
S11	397	(705/78).cds.	US- PGPUB; USPAT; USOCR	OR	OFF	2014/02/15 07:04
S13	12	"limit check" with "velocity check"	US- PGPUB; USPAT; USOCR	OR	OFF	2016/10/17 14:10
S14	9	"limit check" with "velocity check" with mobile	US- PGPUB; USPAT; USOCR	OR	OFF	2016/10/17 14:10
S15	0	"limit check" with "velocity check" with sufficient with fund	US- PGPUB; USPAT; USOCR	OR	OFF	2016/10/17 14:10

# **EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	0	exceed with number with account with allowable with commit\$4 with velocity	US- PGPUB; USPAT	OR	ON	2017/06/11 22:27
L4	0	validat\$3 with account with status with commit\$4 with velocity	US- PGPUB; USPAT	OR	ON	2017/06/11 22:28
S6	10170	(705/35).ccls.	US- PGPUB; USPAT	OR	OFF	2013/06/01 01:40
S7	4020	(705/40).ccls.	US- PGPUB; USPAT	OR	OFF	2013/06/01 01:40
S8	28	Perform\$3 with limit with check with velocity with check	US- PGPUB; USPAT	OR	OFF	2013/06/01 01:41
S9	3	Perform\$3 with limit with check with velocity with check with unbanked	US- PGPUB; USPAT	OR	OFF	2013/06/01 01:41
S10	3	Perform\$3 with limit with check with velocity with check with unbanked with subscriber	US- PGPUB; USPAT	OR	OFF	2013/06/01 01:42
S12	397	(705/78).ccls.	US- PGPUB; USPAT	OR	OFF	2014/02/15 07:04

6/11/2017 10:29:18 PM

C:\ Users\ echang1\ Documents\ EAST\ Workspaces\ Application -- 15201152 -- Monetary Transaction System -- CON 3.wsp

# Search Notes



App	lication	/Contro	ol No.
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15201152

Applicant(s)/Patent Under Reexamination

LIBERTY, MICHAEL A.

Examiner

EDWARD CHANG

Art Unit

3696

CPC- SEARCHED				
Symbol	Date	Examiner		
G06Q 20/0855	10/17/2016	EC		

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED				
Class	Subclass	Date	Examiner	
705	40	10/17/2016	EC	
705	78	10/17/2016	EC	

SEARCH NOTES		
Search Notes	Date	Examiner
EAST - Keyword Search	6/11/2017	EC

INTERFERENCE SEARCH				
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner	
705	40	10/17/2016	EC	
705	78	10/17/2016	EC	

/EDWARD CHANG/ Primary Examiner.Art Unit 3696
Timary Examiner. Art offic 5550

U.S. Patent and Trademark Office Part of Paper No. : 20170611

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:		)
**	Michael A. Liberty	ý
Serial No.:	15/201,152	) Art Unit ) 3696
Confirmation No.:	2611	)
Filed:	July 1, 2016	)
For:	MONETARY TRANSACTION SYSTEM	)
Examiner:	Edward Chang	) ) )

# AMENDMENT A AND RESPONSE AFTER NON-FINAL

VIA eFILE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action of October 25, 2016 ("Office Action"), (Paper No. 20161016), please amend and reconsider the above-identified application, in which:

**Amendments to the Figures** are reflected in the listing of claims which begins on page 2 of this paper.

**Amendments to the Specification** are reflected in the listing of claims which begins on page 3 of this paper.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 5 of this paper.

Remarks/Arguments begin on page 17 of this paper.

# **AMENDMENTS TO THE FIGURES**

Please replace Sheets 1-21 containing Figures 1-19B with REPLACEMENT SHEETS 1-46, containing new Figures 1A and corrected Figures 20A through 22J.

Attachment: Replacement Sheets

## **AMENDMENTS TO THE SPECIFICATION**

Please amend the specification text of Applicant's Application Publication 2016/314,443 ("'443 App Pub") in as shown below, and as further shown in the attached substitute specifications entitled - CLEAN VERSION OF AMENDED SPECIFICATION and MARK-UP VERSION OF AMENDED SPECIFICATION.

After current ¶ 0033 of the '443 App Pub, and before the DETAILED DESCRIPTION, please add new ¶¶ 0034-0036 as shown below in markup:

[0034] Figures 20A-20F illustrate embodiments of communications between specific components within a monetary transaction system during an operation to deposit of funds within a financial account.

[0035] Figures 21A-21I illustrate embodiments of communications between specific components within a monetary transaction system during an operation to withdraw of funds from a financial account.

[0036] Figures 22A-22J illustrate embodiments of communications between specific components within a monetary transaction system during an operation to transfer funds between financial accounts.

After current ¶ 0160 of the '443 App Pub, and before current ¶ 0161, please add new ¶¶ 0161-0163 and amend current ¶0161 as shown below in markup:

[0161] Figures 20A through 20F depicts relationships between embodiments of various components within the monetary transaction system depicted in Figure 1. In particular, Figures 20A through 20F depict communications between the specific components within the monetary transaction system during an operation to deposit of funds within a financial account. The depicted interactions are representative of computer executed functions that enable the deposit of money through a mobile transaction system that is capable of functioning without an associated bank account.

[0162] Figures 21A through 21I depicts relationships between embodiments of various components within the monetary transaction system depicted in Figure 1. In particular, Figures 21A through 21I depict communications between the specific components within the monetary transaction system during an operation to withdraw of funds from a financial account. The depicted interactions are representative of computer executed functions that enable the withdrawal of money through a mobile transaction system that is capable of functioning without an associated bank account.

[0163] Figures 22A through 22J depicts relationships between embodiments of various components within the monetary transaction system depicted in Figure 1.

In particular, Figures 22A through 22J depict communications between the specific components within the monetary transaction system during an operation to transfer funds between financial accounts. The depicted interactions are representative of computer executed functions that enable the transfer of money through a mobile transaction system that is capable of functioning without an associated bank account.

[94640164] The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be con-sidered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.

## **AMENDMENTS TO THE CLAIMS**

## **Listing of Claims:**

1. (Currently Amended) A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain the integrity of financial transactions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;

notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;

a service connector layer comprised of a plurality of service connector modules operable to connect to third party systems, wherein each service connector module is deployed as a separate module intended to integrate an external service to at least a portion of system architecture:

business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;

a payment handler service operable to use the APIs of different payment processors including one or more APIs of banks, credit and debit eards processors, bill payment processors; the payment handler service using a common API wrapper to facilitate interactions with many different kinds of payment processors;

a security service operable to perform subscriber authentication;

an authorization service operable to perform client authorization using a databasebased access control list table:

\*\*-database \*\*services\* operable to store financial transaction details, store customer profiles, and manage money containers; and

a rules engine operable to gather financial transaction statistics and use the gathered statistics to enforce business constraints including transaction constraints;

a mobile device configured to run a monetary transaction system application;

a monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system, wherein the 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 subscriber, wherein performing the specified transactions includes communicating with the monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile determination made by the rules oneine of the monetary transaction system:

at least one ontity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; and

wherein the monetary transaction system is implemented to deposit funds at an agent branch, the funds being deposited by a subscriber at the agent branch using the a mobile device configured to run a monetary transaction system application, including the monetary transaction system performing the following steps:

receiving a communication <u>message</u> from <u>the mobile device an agent branch</u> over one of a plurality of channels connected to the monetary transaction system, <u>the communication</u> message <u>being</u> received by an <u>API associated with the integration</u> tier of the monetary transaction system, the <u>agent</u>-communication <u>message</u> indicating that the subscriber desires to deposit a specified amount of funds into the subscriber's account;

validating the status of the subscriber's account, wherein validating the status of the subscriber's account comprises communicating from the integration tier to the database services to query attributes of the subscriber's account;

committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services;

receiving a confirmation from the business process services that the pending transaction has been committed;

sending, through the notification services, a receipt notification to the mobile device; and

upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services.

determining if the agent branch is authorized to receive deposited money;

performing one or more of a limit check and a velocity check on the subscriber's account, the limit check determining whether sufficient funds are available to make the deposit amount, the velocity check determining whether the subscriber has exceeded a specified number of transactions within a specified time period;

erediting the subscriber's account with the specified amount of funds from the agent branch that is authorized to receive the deposited money;

returning a notification to the agent branch confirming the deposit; and notifying the subscriber that the specified amount of funds was deposited in the subscriber's account over at least one of the plurality of channels connected to the monetary transaction system.

(Currently Amended) The monetary transaction system of claim 1, wherein the monetary
transaction system application provides a web interface that allows subscribers to perform the
same functions provided by the monetary transaction system application further comprising:

a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;

a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce business constraints including transaction constraints;

a security service operable to perform subscriber authentication;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; wherein the at least one entity is the agent; and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account:

validating, through communication with the security services, one or more
of a PIN number and an access control list;

applying with the rules engine, velocity rules:

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler:

loading the funds to the subscriber account using the payment handler;

updating, using the database services, a pending transaction history record to reflect the funds.

# 3. (Cancelled)

4. (Currently Amended) A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain the integrity of financial transactions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;

notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;

a service connector layer comprised of a plurality of service connector modules operable to connect to third party systems, wherein each service connector module is deployed as a separate module intended to integrate an external service to at least a portion of system architecture:

business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;

a payment handler service operable to use the APIs of different payment processors including one or more APIs of banks, credit and debit eards processors, bill payment processors; the payment handler service using a common API wrapper to facilitate interactions with many different kinds of payment processors;

a security service operable to perform subscriber authentication;

an authorization service operable to perform client authorization using a databasebased access control list table:

a-database <u>services</u> operable to store financial transaction details, store customer profiles, and manage money containers; and

a rules engine operable to gather financial transaction statistics and use the gathered statistics to enforce business constraints including transaction constraints;

a mobile device configured to run a monetary transaction system application;

a monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system, wherein the 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 subscriber, wherein performing the specified transactions includes communicating with the monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile determination made by the rules engine of the monetary transaction system;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; and

wherein the monetary transaction system is implemented to withdraw funds at an agent branch using the mobile device configured to run a monetary transaction system application, including performing the following steps:

receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system, the communication message being received by an API associated with the integration tier of the monetary transaction system, the communication message indicating that the subscriber desires to withdraw a specified amount of funds from an account associated with the subscriber, the communication comprising a secure, perishable code;

determining that the transaction is valid and in progress, wherein determining that the transaction is valid comprises validating the secure, perishable code and communicating from the integration tier to the database services to query attributes of the subscriber's account;

committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services;

receiving a confirmation from the business process services that a pending transaction has been committed;

sending, through the notification services, a receipt notification to the mobile device;

upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services.

receiving a communication from the subscriber from the mobile device configured to run the monetary transaction system, the communication indicating that the subscriber desires to withdraw a specified amount of funds from the subscriber's account at the agent branch:

validating the status of the subscriber's account;

determining if the balance of the subscriber's account is sufficient to accommodate the requested withdrawal for the specified amount of funds;

performing one or more of a limit check and a velocity check on the subscriber's account, the limit check determining whether sufficient funds are available to make the deposit amount, the velocity check determining whether the subscriber has exceeded a specified number of transactions within a specified time period;

returning a secure, perishable code to the subscriber over at least one of the plurality of channels connected to the monetary transaction system;

receiving subsequent agent branch communication over at least one of the plurality of channels connected to the monetary transaction system, the agent branch communication indicating that the withdrawal code has been presented to the agent branch;

debiting the subscriber's account by the specified amount of funds;

returning a notification to the agent branch confirming the withdrawal; and

notifying the subscriber that the specified amount of funds was withdrawn from the subscriber's account over at least one of the channels connected to the monetary transaction system.

5. (Currently Amended) A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain the integrity of financial transactions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;

notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;

a service connector layer comprised of a plurality of service connector modules operable to connect to third party systems, wherein each service connector module is deployed as a separate module intended to integrate an external service to at least a portion of system architecture:

business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;

a payment handler service operable to use the APIs of different payment processors including one or more APIs of banks, credit and debit eards processors, bill payment processors; the payment handler service using a common API wrapper to facilitate interactions with many different kinds of payment processors;

a security service operable to perform subscriber authentication;

an authorization service operable to perform client authorization using a database-based access control list table:

a-database <u>services</u> operable to store financial transaction details, store customer profiles, and manage money containers; and

a rules engine operable to gather financial transaction statistics and use the gathered statistics to enforce business constraints including transaction constraints;

a mobile device configured to run a monetary transaction system application;

a monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system, wherein the 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 subscriber, wherein performing the specified transactions includes communicating with the monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile determination made by the rules engine of the monetary transaction system;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; and

wherein the monetary transaction system is implemented to transfer funds using the mobile device configured to run a monetary transaction system application, including performing the following steps:

receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system, the communication message being received by an API associated with the integration tier of the monetary transaction system, the communication message indicating that the subscriber desires to transfer a specified amount of funds from the subscriber's account to a recipient:

validating the status of the subscriber's account, wherein validating the status of the subscriber's account comprises communicating from the integration tier to the database services to query attributes of the subscriber's account;

committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services:

receiving a confirmation from the business process services that a pending transaction has been committed;

sending, through the notification services, a receipt notification to the mobile device; and

upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services.

receiving subscriber communication from the mobile device configured to run the monetary transaction system, the subscriber communication indicating that the subscriber desires to transfer a specified amount of funds to specified recipient using a specified payment method from the subscriber's account:

validating the status of the subscriber's account;

performing at least one of a limit check and a velocity check on the selected payment method, the limit check determining whether sufficient funds are available to make the deposit amount, the velocity check determining whether the subscriber has exceeded a specified number of transactions within a specified time period:

validating the status of the specified recipient to ensure the specified recipient has a valid account:

debiting the subscriber's account by the specified amount of funds;
transferring the specified amount of funds to the specified recipient over at
least one of the plurality of channels connected to the monetary transaction system;
notifying the subscriber that the specified amount of funds was transferred

to the specified recipient over at least one of the plurality of channels connected to the monetary transaction system.

- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Cancelled)

## 9. (New) The monetary transaction system of claim 4, further comprising:

a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;

a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce business constraints including transaction constraints;

a security service operable to perform subscriber authentication;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; wherein the at least one entity is the agent; and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account; validating, through communication with the security services, one or more of a PIN number and an access control list;

applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler; loading the funds to the subscriber account using the payment handler; updating, using the database services, a pending transaction history record to reflect the funds.

10. (New) The monetary transaction system of claim 5, further comprising:

a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;

a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce business constraints including transaction constraints;

a security service operable to perform subscriber authentication;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; wherein the at least one entity is the agent; and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

ensuring, via the database services, that the subscriber has an active account; validating, through communication with the security services, one or more of a PIN number and an access control list;

applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;

holding funds from the agent account balance using the payment handler; loading the funds to the subscriber account using the payment handler; updating, using the database services, a pending transaction history record to reflect the funds.

## **REMARKS**

The Non-Final Office Action ("Office Action"), mailed October 25, 2016, considered claims 1-8.

By this amendment claims 1, 2, 4, 5 have been amended. Claims 3, 6-8 are cancelled and new claims 9 and 10 are added. Accordingly, claims 1, 2, 4, 5, 9, and 10 are pending, of which claims 1, 4, 5 are the only independent claims at issue. Figures 20A-22J have also been added. Additionally, this amendments adds new ¶[0034-0036] and [0161-0163] and amends newly numbered ¶0164. Support for the claim amendments is found throughout the originally filed application and claims, including the disclosure presented within Figures 7A-7F, 8A-8I, and 11A-11J of provisional application No. 61/493,064, which is incorporated by reference into the present application. Applicants respectfully submit that no new matter was added.

## **Telephonic Interview**

Initially, Applicant thanks the Examiner for the courtesies extended during the recent telephonic interview held on April 6, 2017. The arguments submitted in this paper are consistent with the arguments presented during the course of the interview. Accordingly, entry of this amendment and reconsideration of the pending claims is respectfully requested.

## 35 U.S.C. § 101 Rejection of Claims 1-8

The Office Action rejected claims 1-8 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Applicants respectfully traverse the rejection and submit that the claims are directed towards patent subject matter. The Office Action asserted that claims 1-8 are directed merely to "a method of organizing human activities and a fundamental economic practice." The Office Further asserted that "[t]he additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: mere instructions to

implement the idea on a computer and recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry." Applicants respectfully submit that the claims are directed towards patentable subject matter and in view of the lack of rejections over prior art should be allowed to issue.

When determining whether a claim is directed to a judicial exception to §101, an Examiner must follow a two-step analysis found in the 2014 Interim Guidance on Patent Subject Matter Eligibility. In Step 2A of this analysis, the Examiner first determines whether the claim is directed to a judicial recognized exception (e.g., an Abstract Idea), and in Step 2B the Examiner determines whether the claim recites additional elements that amount to significantly more than the judicial exception. The Office has provided additional guidance for how these steps are to be applied. For example, in its May 4, 2016 memorandum<sup>2</sup> the Office details how each of these steps are to be applied, and in its May 16, 2016 memorandum in view of *Enfish*, *LLC*. *v. Microsoft Corp.* and *TLI Communications LLC v. A.V. Automotive LLC*,<sup>3</sup> the office further describes how to apply Step 2A to claims representing improvements to computer-related technology.

With respect to Step 2A, the Office directs that "when an examiner determines that a claim is directed to an abstract idea (Step 2A), the rejection should identify the abstract idea as it is recited (i.e., set forth or described) in the claim, and explain why it corresponds to a concept that the courts have identified as an abstract idea." The Office further directs that "a subject matter eligibility rejection should point to the specific claim limitation(s) that recites (i.e., sets for or describes) the judicial exception. The rejection must identify the specific claim limitations and explain why those claim limitations set forth a judicial exception." In doing so, the Federal circuit has "cautioned against describing the claim at a high level of abstraction untethered from the language of the claim when determining the focus of the claimed invention."

In performing Step 2A in the §101 rejection of the present claims, the *Office Action* has divorced the claim limitations from all meaning and context and ignored the bulk of the limitations

<sup>&</sup>lt;sup>1</sup> *Id.* at p. 4.

<sup>&</sup>lt;sup>2</sup> "Formulating a Subject Matter Eligibility Rejection and Evaluating the Applicant's Response to a Subject Matter Eligibility Rejection."

<sup>&</sup>lt;sup>3</sup> "Recent Subject Matter Eligibility Decisions (Enfish, LLC. v. Microsoft Corp. and TLI Communications LLC v. A.V. Automotive LLC)."

<sup>&</sup>lt;sup>4</sup> See page 1 of the May 4, 2016 memorandum, emphasis added.

<sup>&</sup>lt;sup>5</sup> See page 2 of the May 4, 2016 memorandum, emphasis added.

<sup>&</sup>lt;sup>6</sup> See page 1 of the May 16, 2016 memorandum.

in the claims by classifying these claims as directed towards organizing human activity and a fundamental economic practice." <sup>7</sup> In doing so, the *Office Action* merely recites at a high level of abstraction untethered from any analysis of the actual the language of the claim that the claims are directed towards organizing human behavior and a fundamental economic principle.

To support its rejection, the *Office Action* relied upon *Ultramercial*, *Inc. v. Hulu*, *LLC*. However, Applicants submit that *Ultramercial* is not analogous to the present claims. For example, Claim 1 of *Ultramerical* is reproduced below:

1. A method for distribution of products over the Internet via a facilitator, said method comprising the steps of:

a first step of receiving, from a content provider, media products that are covered by intellectual-property rights protection and are available for purchase, wherein each said media product being comprised of at least one of text data, music data, and video data;

a second step of selecting a sponsor message to be associated with the media product, said sponsor message being selected from a plurality of sponsor messages, said second step including accessing an activity log to verify that the total number of times which the sponsor message has been previously presented is less than the number of transaction cycles contracted by the sponsor of the sponsor message;

a third step of providing the media product for sale at an Internet website;

a fourth step of restricting general public access to said media product;

a fifth step of offering to a consumer access to the media product without charge to the consumer on the precondition that the consumer views the sponsor message;

a sixth step of receiving from the consumer a request to view the sponsor message, wherein the consumer submits said request in response to being offered access to the media product;

a seventh step of, in response to receiving the request from the consumer, facilitating the display of a sponsor message to the consumer;

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<sup>&</sup>lt;sup>7</sup> See pages 4 of the Office Action.

an eighth step of, if the sponsor message is not an interactive message, allowing said consumer access to said media product after said step of facilitating the display of said sponsor message;

a ninth step of, if the sponsor message is an interactive message, presenting at least one query to the consumer and allowing said consumer access to said media product after receiving a response to said at least one query;

a tenth step of recording the transaction event to the activity log, said tenth step including updating the total number of times the sponsor message has been presented; and

an eleventh step of receiving payment from the sponsor of the sponsor message displayed.

The claims of *Ultramercial* deal with a process for displaying copyrighted content to a user in exchange for the user viewing advertisements. In particular, the claims of *Ultramercial* are directed towards abstract steps that are divorced from any novel implementation of system. In essence, the claims of *Ultramercial* sought to preempt the claimed idea by presenting the claims without any underlying technological. In contrast to the claims of *Ultramercial*, the present recite at length novel and non-obvious systems. In fact, the *Office Action* has failed to provide any prior art or other evidence to indicate that a single limitation of the present claims is known in the art.

The *Office Action* further relied upon *buySAFE*, *Inc.* v *Google Inc.* to support its rejection. A representative claims from the case is reproduced below<sup>8</sup>:

## 1. A method, comprising:

receiving, by at least one computer application program running on a computer of a safe transaction service provider, a request from a first party for obtaining a transaction performance guaranty service with respect to an online commercial transaction following closing of the online commercial transaction;

processing, by at least one computer application program running on the safe transaction service provider computer, the request by

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<sup>&</sup>lt;sup>8</sup> See, Example 7 from USPTO Guidlines

underwriting the first party in order to provide the transaction performance guaranty service to the first party,

wherein the computer of the safe transaction service provider offers, via a computer network, the transaction performance guaranty service that binds a transaction performance guaranty to the online commercial transaction involving the first party to guarantee the performance of the first party following closing of the online commercial transaction.

Similar to the claims in *Ultramercial*, the claims of *buySAFE* were predominately divorced from technical details regarding the actual implementation or system that encompassed the claims. As such, these claims also sought to preempt an idea without any support for novel technological detail.

Applicants submit that the Office Action's overly broad abstraction of the claims ignores the large portions of the claims that are directed towards technological systems that enable the transfer of finds within a digital world. In arriving at its sweeping conclusion that the claims are "directed to the judicial exception of organizing human behavior and fundamental economic principles" the analysis of the Office Action seemed to fixate on the mere mention of monetary transactions and from there automatically assume the claims are per se unpatentable. This assumption is not supported by current Alice examination guidelines. For example, in contrast to the claims and analysis of Ultramercial and buySAFE, Example 21 within the July 2015 Update provides eligible claims directed towards the transmission of stock quotes. Importantly, the mere presence of financial instruments (i.e., stocks) within the claims did not automatically render the claims ineligible for being directed towards an economic principle. Instead, the analysis found the claims allowable when it focused on the ordered combination of the claims to find that they amounted to significantly more than the abstract idea. As such, Applicant respectfully submits that this §101 rejection is facially deficient for at least this reason, and respectfully requests withdrawal of the §101 rejection on these grounds.

Moreover, Applicant also notes that, with respect to Step 2B, the Office directs that "[f]or the second part of the analysis (Step 2B), the rejection should identify the additional elements in the claim and explain why the elements taken *individually and in combination* do not amount to a claim as a whole that is significantly more than the judicial exception identified in Step 2A." In

<sup>&</sup>lt;sup>9</sup> See page 1 of the May 4, 2016 memorandum, emphasis added.

performing Step 2B in the §101 rejection of the present claims, the *Office Action* merely attempts to encapsulate the various limitations of the claims within abstract ideas that are wholly untethered from the language of the actual limitations. For example, the *Office Action* broadly states that "[a]ll the steps in the claims are directed to a series of behavioral activities including:... **returning a secure, perishable code**." Applicants respectfully submit that on its face, the use of a secure, perishable code extends far beyond "behavioral activities." As such, Applicants respectfully request reconsideration of the claim limitations, both individually and as an ordered whole.

Applicants note that the Office directs that "it is particularly critical to address the <u>combination</u> of additional elements, because while individually-viewed elements may not appear to add significantly more, those additional elements when viewed in combination may amount to significantly more than the exception by meaningfully limiting the judicial exception." As such, Applicant respectfully submits that this §101 rejection is deficient for at least this additional reason, and respectfully requests withdrawal of the §101 rejection on these grounds.

In view of the foregoing remarks, Applicant respectfully submits that the claims as previously presented were directed to statutory subject matter, and further that the claims as now presented are also directed to statutory subject matter, and respectfully requests favorable reconsideration of the present claims in view of §101.

#### **Conclusion**

In view of the foregoing, Applicants respectfully submit that the remaining rejections of record are also now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that Applicants have not acquiesced to any of the purported teachings or assertions made in the Office Action regarding the cited art or the pending application, including any official notice. Instead, Applicants reserve the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any official notice, explicitly or

<sup>&</sup>lt;sup>10</sup> See page 3 of the Office Action.

<sup>&</sup>lt;sup>11</sup> See page 3 of the May 4, 2016 memorandum.

implicitly, Applicants specifically request that the Examiner provide references supporting the

teachings officially noticed, as well as the required motivation or suggestion to combine the relied

upon notice with the other art of record.

In the event the Examiner finds any other issues that would need to be addressed before

allowance, the Examiner is invited to contact Applicants' undersigned Attorneys directly.

The Commissioner is hereby authorized to charge payment of any of the following fees

that may be applicable to this communication, or credit any overpayment, to Deposit Account No.

23-3178: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and

reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37

CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise

been requested, please consider this a petition therefor and charge any additional fees that may be

required to Deposit Account No. 23-3178.

Dated this 24th day of April, 2017.

Respectfully submitted,

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# FILED VIA E-FILING

PATENT APPLICATION Docket No.: 18756.8.1.1.1.1.1

# UNITED STATES PATENT APPLICATION

Of

Michael A. Liberty

For

MONETARY TRANSACTION SYSTEM

#### MONETARY TRANSACTION SYSTEM

# **CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] This application is a continuation of U.S. Patent Application Serial No. 14/213,543, entitled "Monetary Transaction System", filed March 14, 2014, which is a continuation of U.S. Patent Application Serial No. 13/964,707, entitled "Monetary Transaction system", filed August 12, 2013, which application is a continuation of U.S. Patent Application Serial No. 13/484,199, filed May 30, 2012, entitled "Monetary Transaction System", which application claims priority to and the benefit of U.S. Provisional Application Ser. No. 61/522,099, filed on August 10, 2011, entitled "Mobile Wallet Platform", and also claims priority to and the benefit of U.S. Provisional Application Ser. No. 61/493,064, filed on June 3, 2011, entitled "Mobile Wallet Platform". All of the aforementioned applications are incorporated by reference herein in their entirety.

## **BACKGROUND**

[0002] Mobile phones and other digital devices have become increasingly popular in recent years. Many mobile device users use their devices to perform countless different daily tasks. For instance, mobile devices allow users to check email, send and receive instant messages, check calendar items, take notes, set up reminders, browse the internet, play games or perform any number of different things using specialized applications or "apps". These applications allow mobile devices to communicate with other computer systems and perform a wide variety of network-connected tasks previously not possible with a mobile device.

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Docket No. 18756,8,1,1,1,1,1

## **BRIEF SUMMARY**

[0003] Embodiments described herein are directed to monetary transaction system for conducting monetary transactions between transaction system subscribers and other entities. In one embodiment, the monetary transaction system includes a mobile device configured to run a monetary transaction system application. The monetary transaction system also includes a monetary transaction system subscriber that has a profile with the system. The subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system. The system further includes a monetary transaction system processor that performs the transactions specified by the subscriber. Performing these transactions includes communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile.

[0004] The monetary transaction system also includes at least one entity that is to be involved in the specified transaction, where the entity has a profile with the monetary transaction system. This entity may be a person, a retail store, an agent or other entity. The subscriber may have access to a bank account, or may be an "unbanked user" that does not have access to a bank account. Each of the terms included above will be described in greater detail below in conjunction with the drawings.

[0005] The monetary transaction system may be used for many different tasks including enrolling a customer for a mobile wallet, adding a stored value account (either hosted by a mobile wallet platform or a third party), adding a bank or credit union account to a mobile wallet, adding a debit or credit card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds from a mobile wallet, paying bills from a

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WORKMAN NYDEGGEI A PROFESSIONAL CORPORATION ATTORNEYS AT LAW 60 EAST SOUTH TEMPLE mobile wallet, topping up a prepaid mobile account through a mobile wallet, transferring

funds through a mobile wallet (nationally or internationally), making in-store purchases

using a mobile wallet, and various other tasks as described herein below.

[0006] This Summary is provided to introduce a selection of concepts in a simplified

form that are further described below in the Detailed Description. This Summary is not

intended to identify key features or essential features of the claimed subject matter, nor is

it intended to be used as an aid in determining the scope of the claimed subject matter.

[0007] Additional features and advantages will be set forth in the description which

follows, and in part will be apparent to one of ordinary skill in the art from the description,

or may be learned by the practice of the teachings herein. Features and advantages of

embodiments described herein may be realized and obtained by means of the instruments

and combinations particularly pointed out in the appended claims. Features of the

embodiments described herein will become more fully apparent from the following

description and appended claims.

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## **BRIEF DESCRIPTION OF THE DRAWINGS**

[0008] To further clarify the above and other features of the embodiments described herein, a more particular description will be rendered by reference to the appended drawings. It is appreciated that these drawings depict only examples of the embodiments described herein and are therefore not to be considered limiting of its scope. The embodiments will be described and explained with additional specificity and detail through the use of the accompanying drawings in which:

[0009] Figure 1 illustrates a monetary transaction system architecture in which embodiments described herein may operate.

[0010] Figure 2 illustrates an alternate example embodiment of a monetary transaction system.

[0011] Figure 3 illustrates an example data flow for performing a subscriber deposit via a mobile wallet.

[0012] Figure 4 illustrates an example data flow for performing a subscriber withdrawal via a mobile wallet.

[0013] Figures 5A and 5B illustrate example data flows for performing subscriber-to-subscriber and subscriber-to-non-subscriber eMoney transfers via a mobile wallet, respectively.

[0014] Figures 6A and 6B illustrate example data flows for performing subscriber-to-subscriber and subscriber-to-non-subscriber international eMoney transfers via a mobile wallet, respectively.

[0015] Figure 7 illustrates an example data flow for performing a subscriber airtime purchase via a mobile wallet.

[0016] Figure 8 illustrates an example data flow for performing a subscriber-initiated bill pay via a mobile wallet.

[0017] Figure 9 illustrates an example data flow for performing a subscriber-initiated retail purchase via a mobile wallet.

[0018] Figures 10A and 10B illustrate example data flows for requesting and repaying micro-loans via a mobile wallet, respectively.

[0019] Figure 11A illustrates an example data flow of a subscriber receiving a direct deposit via a mobile wallet.

[0020] Figure 11B illustrates an example data flow of a subscriber receiving a governmental welfare payment via a mobile wallet.

[0021] Figure 12A illustrates an example data flow of an agent administrator distributing eMoney via a mobile wallet.

[0022] Figure 12B illustrates an example data flow of an agent company making a deposit using a mobile wallet.

[0023] Figure 13 illustrates an example data flow of an agent company making a withdrawal using a mobile wallet.

[0024] Figure 14 illustrates an example data flow of a subscriber making a deposit at an agent branch using a mobile wallet.

[0025] Figure 15 illustrates an example data flow of a subscriber making a deposit with a non-agent using a mobile wallet.

[0026] Figure 16 illustrates an example data flow of a subscriber making a withdrawal with an agent using a mobile wallet.

[0027] Figure 17A illustrates an example data flow of a subscriber making a withdrawal from an ATM using a mobile wallet.

[0028] Figure 17B illustrates an example data flow of a subscriber-to-subscriber money transfer using a mobile wallet.

[0029] Figure 17C illustrates an example data flow of a subscriber-to-non-subscriber money transfer using a mobile wallet.

[0030] Figure 18A illustrates an example data flow of a subscriber-to-subscriber international money transfer using a mobile wallet.

[0031] Figure 18B illustrates an example data flow of a subscriber-to-non-subscriber international money transfer using a mobile wallet.

[0032] Figure 19A illustrates an example data flow of a subscriber-to-subscriber international money transfer using a mobile wallet.

Figure 19B illustrates an example data flow of a non-subscriber-to-subscriber international money transfer using a mobile wallet.

100341 Figures 20A-20F illustrate embodiments of communications between specific components within a monetary transaction system during an operation to deposit of funds within a financial account.

199351 Figures 21A-211 illustrate embodiments of communications between specific components within a monetary transaction system during an operation to withdraw of funds from a financial account.

[8833][9036] Figures 22A-22J illustrate embodiments of communications between specific components within a monetary transaction system during an operation to transfer funds between financial accounts.

## **DETAILED DESCRIPTION**

for conducting monetary transactions between transaction system subscribers and other entities. In one embodiment, the monetary transaction system includes a mobile device configured to run a monetary transaction system application. The monetary transaction system also includes a monetary transaction system subscriber that has a profile with the system. The subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system. The system further includes a monetary transaction system processor that performs the transactions specified by the subscriber. Performing these transactions includes communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile.

The monetary transaction system also includes at least one entity that is to be involved in the specified transaction, where the entity has a profile with the monetary transaction system. This entity may be a person, a retail store, an agent or other entity. The subscriber may have access to a bank account, or may be an "unbanked user" that does not have access to a bank account. Each of the terms included above will be described in greater detail below in conjunction with the drawings.

The monetary transaction system may be used for many different tasks including enrolling a customer for a mobile wallet, adding a stored value account (either hosted by a mobile wallet platform or a third party), adding a bank or credit union account to a mobile wallet, adding a debit or credit card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds from a mobile wallet, paying bills from a

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mobile wallet, topping up a prepaid mobile account through a mobile wallet, transferring

funds through a mobile wallet (nationally or internationally), making in-store purchases

using a mobile wallet, and various other tasks as described herein below.

The following discussion now refers to a number of methods and method

steps or acts that may be performed. It should be noted, that although the method steps may

be discussed in a certain order or illustrated in a flow chart as occurring in a particular

order, no particular ordering is necessarily required unless specifically stated, or required

because a step is dependent on another step being completed prior to the step being

performed.

Embodiments of the mobile transaction system or "mobile wallet platform"

described herein may comprise or utilize a special purpose or general-purpose computer

including computer hardware, such as, for example, one or more processors and system

memory, as discussed in greater detail below. Embodiments described herein also include

physical and other computer-readable media for carrying or storing computer-executable

instructions and/or data structures. Such computer-readable media can be any available

media that can be accessed by a general purpose or special purpose computer system.

Computer-readable media that store computer-executable instructions in the form of data

are computer storage media. Computer-readable media that carry computer-executable

instructions are transmission media. Thus, by way of example, and not limitation,

embodiments described herein can comprise at least two distinctly different kinds of

computer-readable media: computer storage media and transmission media.

Computer storage media includes RAM, ROM, EEPROM, CD-ROM, solid

state drives (SSDs) that are based on RAM, Flash memory, phase-change memory (PCM),

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or other types of memory, or other optical disk storage, magnetic disk storage or other

magnetic storage devices, or any other medium which can be used to store desired program

code means in the form of computer-executable instructions, data or data structures and

which can be accessed by a general purpose or special purpose computer.

Minetwork" is defined as one or more data links and/or data switches that

enable the transport of electronic data between computer systems and/or modules and/or

other electronic devices. When information is transferred or provided over a network

(either hardwired, wireless, or a combination of hardwired or wireless) to a computer, the

computer properly views the connection as a transmission medium. Transmission media

can include a network which can be used to carry data or desired program code means in

the form of computer-executable instructions or in the form of data structures and which

can be accessed by a general purpose or special purpose computer. Combinations of the

above should also be included within the scope of computer-readable media.

Further, upon reaching various computer system components, program code

means in the form of computer-executable instructions or data structures can be transferred

automatically from transmission media to computer storage media (or vice versa). For

example, computer-executable instructions or data structures received over a network or

data link can be buffered in RAM within a network interface module (e.g., a network

interface card or "NIC"), and then eventually transferred to computer system RAM and/or

to less volatile computer storage media at a computer system. Thus, it should be

understood that computer storage media can be included in computer system components

that also (or even primarily) utilize transmission media.

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Computer-executable (or computer-interpretable) instructions comprise, for

example, instructions which cause a general purpose computer, special purpose computer,

or special purpose processing device to perform a certain function or group of functions.

The computer executable instructions may be, for example, binaries, intermediate format

instructions such as assembly language, or even source code. Although the subject matter

has been described in language specific to structural features and/or methodological acts,

it is to be understood that the subject matter defined in the appended claims is not

necessarily limited to the described features or acts described above. Rather, the described

features and acts are disclosed as example forms of implementing the claims.

Those skilled in the art will appreciate that various embodiments may be

practiced in network computing environments with many types of computer system

configurations, including personal computers, desktop computers, laptop computers,

message processors, hand-held devices, multi-processor systems, microprocessor-based or

programmable consumer electronics, network PCs, minicomputers, mainframe computers,

mobile telephones, PDAs, tablets, pagers, routers, switches, and the like. Embodiments

described herein may also be practiced in distributed system environments where local and

remote computer systems that are linked (either by hardwired data links, wireless data

links, or by a combination of hardwired and wireless data links) through a network, each

perform tasks (e.g. cloud computing, cloud services and the like). In a distributed system

environment, program modules may be located in both local and remote memory storage

devices.

In this description and the following claims, "cloud computing" is defined

as a model for enabling on-demand network access to a shared pool of configurable

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computing resources (e.g., networks, servers, storage, applications, and services). The definition of "cloud computing" is not limited to any of the other numerous advantages that can be obtained from such a model when properly deployed.

For instance, cloud computing is currently employed in the marketplace so as to offer ubiquitous and convenient on-demand access to the shared pool of configurable computing resources. Furthermore, the shared pool of configurable computing resources can be rapidly provisioned via virtualization and released with low management effort or service provider interaction, and then scaled accordingly.

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Still further, system architectures described herein can include a plurality of independent components that each contribute to the functionality of the system as a whole.

This modularity allows for increased flexibility when approaching issues of platform

scalability and, to this end, provides a variety of advantages. System complexity and

growth can be managed more easily through the use of smaller-scale parts with limited

functional scope. Platform fault tolerance is enhanced through the use of these loosely

coupled modules. Individual components can be grown incrementally as business needs

dictate. Modular development also translates to decreased time to market for new

functionality. New functionality can be added or subtracted without impacting the core

system.

Warious terminology will be used herein to describe the monetary

transaction system (also referred to as a "mobile wallet platform", "mobile wallet program"

or "mobile wallet transaction system"). The term "agent" is used to refer to an individual

with mobile financial services (mFS) transaction system tools and training to support

specific mFS functions. These mFS functions include subscriber registration and

activation, and the deposit and withdrawal of funds from the mFS transaction system.

Agents are representatives of the mFS transaction system or "program". Agents can be

employees or contractors of the program provider, or other companies and organizations

that partner with the program provider to provide these services themselves. Agents may

be found in every facet of a typical economy, and may include large retailers, mobile

network operators (MNO) airtime sales agents, gas stations, kiosks, or other places of

business.

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subscriber.

The mobile wallet platform includes a mobile wallet application, web interface or some other type of functionality that allows the user to interact with the mFS platform using their mobile device. The mobile wallet application may include a subscriber identity module (SIM) application, an Unstructured Supplementary Service Data (USSD) application, a smartphone application, a web application, a mobile web application, a Wireless Application Protocol (WAP) application, a Java 2 Platform, Micro Edition (J2ME) application, a tablet application or any other type of application or interface that provides tools for the agent to register, activate, and offer other services to the mFS

installed on a SIM card. A USSD application is an application that implements USSD for various functionality including prepaid callback service, location-based content services, menu-based information services and other mobile wallet platform services. A web application is one that implements or uses the internet to provide mobile wallet platform functionality. A mobile web application is similar to a web application, but is tailored for mobile devices. A WAP application is one that uses the wireless application protocol to communicate with the mobile wallet platform to provide the platform's functionality. A J2ME application is an application developed in Java and is designed to provide mobile wallet functionality on a variety of different hardware. A tablet application is an application specifically designed for a touchscreen-based tablet that provides mobile wallet platform functionality for tablet devices., and as part of configuring the phone on the network. Any of these applications (or any combination thereof) may be provided on the user's mobile

device. This functionality can also be made available on a retail point of sale (POS) system

or web site.

The term "agent administrator" refers to an individual with mFS program

tools and training to administrate the allocation of funds to agent branches (e.g. retail

locations). As agents perform mFS transactions with subscribers, such as depositing and

withdrawing money, the agents are adding and removing money from their own accounts.

If there are insufficient funds in the agent's account to complete a transaction, additional

money will need to be transferred from the agent company's master account to that agent

branch account to cover that transaction. An agent administrator is responsible for these

funds transfers. Any of the applications referred to above may be configured to provide

tools used by the agent administrator to view the agent company balance, view the agent

branch balances, and transfer funds into and out of agent branch mobile wallets. This

functionality can also be made available on a website for easier access.

The term "agent administrator mobile wallet application" refers to a

software program or application installed on the agent administrator's terminal in the agent

administrator's mobile device (such as a mobile phone or tablet). This software application

provides the agent administrator the ability to securely perform agent administrator

functions such as querying the agent company account balance or transferring funds into

and out of agent branch accounts. The agent administrator's mobile wallet application may

be installed on a global system for mobile communications (GSM) SIM card (or on any

other type of SIM card), and may be accessed using a GSM mobile phone. The agent

administrator's application may also be installed on a code division multiple access

(CDMA) mobile phone, a 3G, 4G, 4G LTE (Long Term Evolution) or other wireless carrier

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standard. The application may, additionally or alternatively, be installed directly on the

agent administrator's mobile device. The application communicates with the mFS

transaction system using binary and/or text short message service (SMS) messages. A

wireless service provider or MNO provides the GSM SMS network infrastructure on which

the mFS platform operates.

In some embodiments, the mFS platform application may utilize triple data

encryption standard (3DES) encryption (or some other type of encryption), encrypted

message signing, and password security on some or all of its communications with the mFS

transaction system in order to ensure that the transactions are properly secured and

authenticated.

The term "agent branch" refers to any location where an agent provides

support for subscriber services of the mFS platform. Funds are allocated by the agent

administrator from the agent company's main account to each agent branch to fund the

subscriber mFS functions such as depositing or withdrawing cash, in-store purchases, bill

payments, prepaid airtime top-ups and money transfers. In some cases, multiple agents may

work in a single branch. However, at least in some cases, monetary funds are allocated to

from the agent company's main account on a per branch basis.

The term "agent branch account balance" refers to the amount of money

residing in a particular agent branch account at a given time. Funds can be deposited into

the branch account by the agent administrator, or the funds can come from participating in

subscriber mFS transactions such as depositing or withdrawing cash from the subscriber's

mobile wallet accounts, or making retail purchases with the mobile wallet.

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Each agent branch is to maintain a balance in their branch account. This

applies more strongly in countries where mFS program and financial services infrastructure

is still developing. In cases where real-time processing of financial transactions including

card processing is not practical, subscribers leverage the applications on their mobile

phones to submit transactions and conduct business with retailers, businesses, and other

subscribers. 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 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.

[may 10062] In some embodiments, in countries with more developed economies, it may

be beneficial to use program-issued pre-paid debit cards, pre-paid access accounts, stored

value accounts or gift cards to conduct business along with the added convenience of card

processing networks such as Cirrus, STAR, or Visa for POS and automated teller machine

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(ATM) functionality. Agents, particularly those in retail outlets and kiosks, can still support

subscribers with deposits, withdrawals, and other transfers, but in this case bank external

card processors manage the mobile wallet and branch account balances and provide the

real-time transfer of funds.

The term "agent branch ledger" refers to a written (or electronic) ledger

maintained by the mFS platform. Agent branch transactions are performed on the agent's

and subscriber's mobile phones where an electronic record of the transaction is generated

and stored on the mFS platform. These electronic transactions are then reconciled with

agent branch ledgers to ensure the security and integrity of the transaction. Agent branch

ledgers are printed or electronic transaction logs that are distributed to the agent branch

locations in hard copy form to serve as a backup record to the electronic transactions.

The term "agent company" refers to a business that registers to participate

in the mFS program as a partner of the mFS program provider or owner. The agent

company has one or more agent branches which conduct mFS business with mFS program

subscribers. In some cases, the agent company may be referred to as a distributor or retailer.

The term "agent company account balance" refers to the sum of the funds

deposited at a "partner bank" (defined below) by the agent company to fund the agent

company's daily transactions. The funds in the agent company account are then distributed

to agent branches by the agent company's agent administrator to conduct everyday business

such as accepting cash deposits and cash withdrawals from mFS subscribers. This balance

is sometimes referred to as the "agent company float".

An "agent manager" is a supervisor of company agents for a given

company. The agent manager has the training and tools to create, delete or modify agent

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accounts for a company, as well as monitor the transactions performed by agents. The agent

manager may have a special application or an increased level of rights to access

applications features not available to other users. The special application is a program

installed on the agent manager's terminal. This application provides the agent manager the

ability to securely perform agent manager functions such as registering and activating new

agent accounts.

1996-11 The mFS agent manager application may be installed on any terminal or

device. It communicates with the mFS platform using binary and/or text SMS messages.

A wireless service provider or MNO provides the GSM SMS network infrastructure on

which the mFS platform operates. The mFS platform mobile wallet applications may utilize

3DES encryption (or any other type of encryption), encrypted message signing, and

password security on some or all of its communications with the mFS platform in order to

ensure that the transactions are properly secured and authenticated.

The term "agent application" refers to an application that provides all the

tools necessary for an agent to register, activate, and offer other services to the mFS

subscriber. The agent application is a program installed on the agent's SIM card or

otherwise installed in the agent's mobile device's memory. This application provides the

agent the ability to securely perform agent functions such as registering and activating new

subscribers and depositing and withdrawing funds from mobile wallet accounts. The mFS

agent application may be installed on a GSM SIM card or mobile phone and may be

accessed using a GSM or CDMA mobile phone. A wireless service provider or MNO

provides the data and SMS network infrastructure on which the mFS platform operates.

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The terms "mFS platform", "mobile wallet platform" and "monetary

transaction system" refer to an overall platform or ecosystem of different components that

work together to provide the various functions described herein on a global scale. At least

some of the various logic components include the following: the application. The "mobile

wallet application" or "mFS application" manages the processing of incoming transactions

regardless of their source. The application handles end-user authentication, transaction

processing, subscriber profile management, and further manages interactions between the

various platform components.

The mFS platform further includes a transaction processor. This component

is used when the mFS application is implemented in a country where real-time processing

of financial transactions is not practical (or not possible). The transaction processor

manages the balance of mobile wallet accounts, agent accounts, and the accounts of any

other program participant. The transaction processor handles balance inquiries, credits,

debits, and transaction roll-backs.

The mFS platform further includes a rules engine that manages and applies

the rules and policy that are defined for transactions as they are processed on the mFS

platform. Rules impact transaction fees, limits, velocity limits, and commissions as well as

program actor roles and permissions. Rules can be customized for each implementation.

The mFS platform also includes an integration interface that manages the integration and

interaction between external systems (i.e. external to the mFS platform) and the mFS

platform. Connectivity to the wireless service provider's pre-paid airtime billing platform

and the program partner bank, for example, are managed by the integration interface.

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The mFS platform further includes a transaction database that stores the

data that supports the mFS platform. This includes subscriber profiles and subscription

data, transaction data and logs, and application configuration and run-time data, among

other types of data. Another component of the mFS platform is a handset support service

that interfaces with the wireless service provider's SMS network to allow communication

between the mobile wallet applications and the back-office systems via SMS messaging or

some other form of data transfer. Still further, another component of the mFS platform is a

web component that provides a web interface to the mFS program participants that allows

the subscriber to perform the same functions in the web interface that they would have

available through their applications.

1007741 The term "bill pay company" refers to a business that signs-up to participate

in the mFS transaction system. As a participant in the mFS transaction system, the company

accepts payment from mFS mobile wallet accounts, either in the form of eMoney or

through periodic settlements.

At least in some embodiments, financial transactions that take place in the

mFS mobile wallet platform are funded through pre-paid mobile wallet accounts. Mobile

wallet platform subscribers can deposit cash into their mobile wallet account through a

process referred to herein as 'cash-in'. The cash-in process is supported by mFS agents at

agent branch locations. The agent accepts the cash from the subscriber and transfers the

equivalent amount of eMoney to the subscriber's mobile wallet account. This process is

similar to withdrawing cash from a bank account.

As mentioned above, in some embodiments, financial transactions that take

place in the mobile wallet platform are funded through pre-paid mobile wallet accounts.

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Mobile wallet platform subscribers can withdraw cash from their mobile wallet account

through a process known as "cash-out". The cash-out process is supported by mFS agents

at agent branch locations. The subscriber transfers eMoney from their mobile wallet

account to the agent's eMoney account. Upon receiving the eMoney, the agent gives the

subscriber cash from their branch cash register.

Accounts managed on the mFS platform by the mFS eMoney transaction

processor maintain the mobile wallet balance of mFS program participants including

subscribers, agent branches, agent companies, and non-agent companies. eMoney is moved

between Mobile Wallet accounts by the transaction processor based on mFS transaction

processing. Only when transactions involving cash (i.e. depositing or withdrawing funds

from the mFS program) or the movement of money from mFS participants to non-mFS

program participants are funds moved from the master bank accounts.

19974 As subscribers, agents, and other mFS program participants conduct

business in the mFS program, value is transferred from one account to the next as payment

for services rendered or goods purchased. This value can be in the form of real currency or

the electronic representation referred to herein as eMoney.

Among other situations, eMoney is used in mFS implementations where the

real-time processing of financial transactions including card processing is not practical.

The mFS platform utilizes an internal transaction processor for managing the real-time

balance of mobile wallet and agent accounts as value (eMoney) is transferred from one

mobile wallet to another in payment for services.

As subscribers conduct business with mFS agents, they deposit or withdraw

cash from their mobile wallet accounts. Virtual or eMoney credits are transferred between

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the subscriber mobile wallet accounts and the agent branch accounts 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 example, 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 or her register, and transfer \$10 from the agent branch eMoney account into the

subscriber's mobile wallet account. While the agent acquired \$10 in his or her register, the

agent transferred-out \$10 of eMoney credits from his or her branch eMoney account. This

will be explained in greater detail below.

[99771[9980] In some embodiments, employers may wish to participate in the mFS

program by allowing the direct deposit of paychecks into subscribers' mobile wallet

accounts. Accordingly, each payday, the user's pay is directly transferred to the subscribers'

mobile wallet.

The term "know your customer" or "KYC" refers to information collected

about an individual that identifies that individual. Such information is used to establish a

mobile wallet account with the mobile wallet platform. Regulatory requirements in some

countries require that new bank account creation must be preceded by a display of a valid

government ID. These KYC regulations may vary from country to country. Accordingly,

different KYC information may be requested from subscribers in different countries in

order to establish a mobile wallet account.

The term micro-finance institution (MFI) refers to a lender that issues small

loans. MFls participating in the mFS program lend to mFS program subscribers and accept

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loan repayment either in the form of eMoney or settlements with the mFS platform

provider.

The term "mFS program", like the term "mFS platform" refers to the

ecosystem of companies, service providers, and subscribers that participate in providing

mobile financial services to their customers. In some embodiments, there may be one mFS

program implementation per country. Each program includes a program owner and

operator, a program platform, a partner wireless services provider or MNO, and a partner

bank.

The term "mFS program master account" refers to a bank account

maintained by the mFS program partner bank to provide funds and float for the operation

of the mFS platform. Depending on the type of mFS implementation, the master account

can include sub-accounts for each of the agent branches and subscriber mobile wallets,

giving the bank visibility into all transactions on a per-user basis. The mFS platform can

also manage the balance of sub-accounts and interact with the bank's master account when

funds need to be deposited or withdrawn from the account.

The term mobile network operator (MNO) refers to a provider of mobile

phone service including basic voice, SMS, unstructured supplementary service data

(USSD) and data service, and may also be referred to as a "wireless service provider".

100861 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 mFS

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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.

The term "non-agent company" refers to a mFS program participant who

accepts payments from mFS subscribers but does not provide the same services as mFS

agent companies. Payment is accepted either in the form of eMoney or through periodic

settlements with the mFS platform provider. Examples of non-agent companies include bill

pay providers and micro-finance lenders.

The term "non-mFS subscribers" refers to unregistered users that

participates in various use cases in the mFS program. Non-mFS subscribers can send

money to or receive money from mFS subscribers through interaction with the mFS

program agents or with international remittance providers.

10086 The term "partner bank" refers to the primary bank participating in the mFS

program. The partner bank is responsible for holding the mFS program master accounts

that hold the funds for all mFS services and transactions. A "PIN" refers to a numeric

password that may be required to perform a transaction via the mobile wallet application.

A "transaction processor" refers to an application or service that manages the mFS program

account balances. The transaction processor determines the amount of funds or eMoney is

in a particular account at any given time, and manages account balances. Mobile

transaction system requests to credit, debit, or view the balance of a particular mobile

wallet or program account are handled by the transaction processor (in conjunction with

other components of the mobile wallet platform).

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The term "sub-accounts" refers to accounts that are maintained within the

mFS platform or by an external card processor. A partner bank may elect to maintain a

separate bank account for each subscriber and/or agent branch, or a single master account

may be established that contains the funds for all of the subscriber mobile wallet and agent

branch accounts (at least within a country or other geographical region). The balance of

each individual user may be managed by the mFS transaction processor.

When using a master account, the bank is involved only in transactions that

require the movement of funds external to the mFS program. For example, subscriber cash-

in and cash-out transactions involve the addition and removal of cash from the mFS

program and would consequently include a deposit or withdrawal from the master account.

Retail purchases from participating mFS program retailers or the exchange of funds

between mFS subscribers results in no net change in the mFS program balance and thus do

not require involvement by the partner bank.

The term "subscriber" refers to a participant of the mFS mobile wallet

platform. The subscriber maintains a mobile wallet balance and performs transactions

using the mFS application. An "unbanked subscriber" is a subscriber that does not have (or

does not have access to) a bank account or credit union account. The application or "mobile

wallet application" provides mobile wallet functionality to the (unbanked) subscriber. The

mobile wallet application is installed on a mobile device in the device's memory, on a SIM

card (such as a GSM SIM card) or is otherwise accessible to the mobile device. The mobile

wallet application provides the subscriber the ability to securely perform subscriber

functions such as making retail purchases, paying bills, or transferring money to other mFS

subscribers and non-subscribers. The mobile wallet application communicates with the

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mFS platform using binary and text SMS messages, among other forms of wireless

communication. A wireless service provider or MNO provides the GSM network

infrastructure on which the mFS platform operates.

Figure 1 illustrates an example system architecture for a mobile wallet

platform. Integration tier 101 is configured to manage mobile wallet sessions and maintain

integrity of financial transactions. Integration tier 101 can also include a communication

(e.g., Web services) API and/or other communication mechanisms to accept messages from

channels 111. Other mechanisms include, but are not limited to: International Standards

Organization ("ISO") 8583 for Point of Sale ("POS") and Automated Teller Machines

("ATM") devices and Advanced Message Queuing Protocol ("AMQP") for queue based

interfaces. Each of channels 111 can be integrated to one or more mechanisms for sending

messages to integration tier 101. Notification services 102 is configured to send various

notifications through different notification channels 112, such as, for example, Short

Message Peer-to-Peer ("SSMP") for Short Messaging Service ("SMS") and Simple Mail

Transfer Protocol ("SMTP") for emails. Notification services 102 can be configured

through a web services API.

Service connectors 103 are a set of connectors configure to connect to 3rd

party systems 113. Each connector can be a separate module intended to integrate an

external service to the system architecture. Business process services 104 are configured

to implement business workflows, including executing financial transactions, auditing

financial transactions, invoking third-party services, handling errors, and logging platform

objects. Payment handler 105 is configured to wrap APIs of different payment processors,

such as, for example, banking accounts, credit/debit cards or processor 121. Payment

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handler 105 exposes a common API to facilitate interactions with many different kinds of

payment processors.

Security services 106 are configured to perform subscriber authentication.

Authorization services 107 are configured to perform client authorization, such as, for

example, using a database-based Access Control List ("ACL") table.

Database 108 is configured to manage customer accounts (e.g., storing

customer accounts and properties), manage company accounts (e.g., storing company

accounts and properties), manage transaction histories (e.g., storing financial transaction

details), store customer profiles, storing dictionaries used by the mobile wallet platform,

such as, for example, countries, currencies, etc., and managing money containers. Rules

engine 109 is configured to gather financial transaction statistics and uses the statistics to

provide transaction properties, such as, for example, fees and bonuses. Rules engine 109 is

also configured to enforce business constraints, such as, for example, transactions and

platform license constraints.

Name matching engine 110 is configured to match different objects

according to specified configuration rules. Matching engine 110 can be use to find

similarities between names, addresses, etc. Transaction processor 121 is configured to

manage financial accounts and transactions. The transaction processor 121 can be used to

hold, load, withdraw and deposit funds to mobile wallet accounts. Transaction processor

121 can also be used as a common interface to a third party processor system. When used

as a common interface, financial operations may be delegated to the external processor. A

Clearing House subsystem of transaction processor 121 can be used to exchange the

financial information with a bank.

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Components of a mobile wallet platform can be connected to one another over (or be part of) a system bus and/or a network. Networks can include a Local Area

over (or be part of) a system bus and/or a network. Networks can include a Local Area

Network ("LAN"), a Wide Area Network ("WAN"), and even the Internet. Accordingly,

components of the mobile wallet platform can be "in the cloud". As such, mobile wallet

platform components as well as any other connected computer systems and their

components, can create message related data and exchange message related data (e.g.,

Internet Protocol ("IP") datagrams and other higher layer protocols that utilize IP

datagrams, such as, Transmission Control Protocol ("TCP"), Hypertext Transfer Protocol

("HTTP"), Simple Mail Transfer Protocol ("SMTP"), etc.) over the system bus and/or

network.

The components depicted in Figure 1 can interoperate to provide a number of financial and other services including but not limited to enrolling a customer for a mobile

wallet, adding a stored value account (either hosted by a mobile wallet platform or a third

party), adding a bank or credit union account to a mobile wallet, adding a debit or credit

card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds

from a mobile wallet, paying bills from a mobile wallet, topping up a prepaid mobile

account through a mobile wallet, transferring funds through a mobile wallet (nationally or

internationally), making in-store purchases using a mobile wallet, and various other tasks

as described herein below. These services will be described in greater detail below with

regard to system Figures 1 and 2, as well as Figures 3-19B.

Figure 2 depicts a monetary transaction system 200 similar to that described

in Figure 1. The monetary transaction system 200 may provide a more simplified system

structure in which each of the above services may be provided. The system includes a

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subscriber 205. The subscriber may have access to a bank account, or may be an unbanked

subscriber. The subscriber has a profile 211 with the monetary transaction system 210. The

profile includes the subscriber's KYC information, as well as any associated bank accounts,

credit union accounts, bill pay accounts or other accounts. The subscriber has (or has access

to) a mobile device 206 such as a phone or tablet. The mobile device runs the mobile wallet

application (or mobile wallet application) 207.

1999 The subscriber can indicate, using the mobile application 207 which

transaction or other action he or she would like to perform. The indicated transaction 208

is sent to the mobile wallet platform 210 to be carried out by the platform. The transaction

processor 216 (which may be similar to or the same as transaction processor 121 of Figure

1) performs the transaction(s) specified by the (unbanked) subscriber 205. The transaction

processor may implement various other components to perform the transaction including

memory 217, (wireless) communication module 215, rules engine 210 and/or transaction

database 225.

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). Rules engine 220 may also be consulted to determine whether the

subscriber has exceeded a specified number of allowed transactions. Then, if funds are

available, and the transaction is otherwise permissible, the monetary transaction system

can transfer money or eMoney 221 to or from an entity such as a user or agent (e.g. entity

222) to or from an establishment such as a retail store or agent company (e.g. entity 223).

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In some cases, the monetary transaction system 210 application provides a web interface that allows subscribers to perform the same functions provided by the monetary transaction system application. For instance, mobile wallet application 207 may provide a web interface that allows a user to enroll for a mobile wallet. The web interface (or the mobile wallet application itself) receives a subscriber-initiated transaction over one of a plurality of channels (111 from Figure 1) connected to the monetary transaction system 210. The web interface or mobile wallet application may prompt for and receive enrollment information (e.g. KYC information) for the (unbanked) subscriber 205 over at least one of the plurality of channels (e.g. web, point-of-sale (POS), interactive voice response (IVR, etc.). The web interface or mobile wallet application may then send activation instructions over the same or a different channel to activate the (unbanked) subscriber 205 and create a subscriber account for the (unbanked) subscriber.

generates a corresponding mobile wallet for the unbanked subscriber (available via the web interface and/or the mobile wallet application. The system then presents the (unbanked) subscriber's account data associated with the mobile wallet and/or a notification indicating that enrollment was successful to the subscriber. Accordingly, the mobile wallet application or the web interface may be used to provide user enrollment functionality. It should also be understood that either the mobile wallet application or the web interface may be used to provide substantially all of the mobile wallet functionality described herein.

It should also be noted that the mobile device 206 may be any type of plan-based phone or tablet, or prepaid phone or tablet. Many subscribers, such as unbanked subscribers, may primarily use prepaid phones. The mobile wallet application

207 may be installed on both plan-based phones and prepaid phones. The mobile wallet application may be installed on the device's SIM card, or on the device's main memory. Accordingly, the monetary transaction system 200 may be accessed and used via substantially any type of plan-based or prepaid mobile device.

Figure 3 shows three different graphics (301-303) and corresponding method steps (310-370) that illustrate an unbanked subscriber making a deposit using a mobile wallet (and, by extension, using the mobile wallet transaction system 210). In at least some of the embodiments described below, the actions of each participant are shown and described. This will also, at least in some embodiments, include an illustration of money flow throughout the mobile wallet transaction system. In the graphics, various terms are used as follows: \$C = Cash Balance and \$E = Electronic Money (eMoney) Balance.

has already registered and activated an eMoney account at an agent branch location (e.g. a retail store, gas station, or other location that has registered to be an agent branch). 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, logs the transaction, and sends details (such as eMoney account balances, transaction logs, etc.) to bank specified by the mobile wallet platform. These details may be sent instantaneously as transactions occur, or in batches at pre-determined intervals.

In one embodiment, the monetary transaction system 210 of Figure 2 is implemented to deposit funds at an agent branch using a mobile wallet. The monetary transaction system 210 receives communication from an agent branch over one of a plurality of channels (e.g. 111) connected to the monetary transaction system (step 310). The agent communication indicates that the unbanked subscriber 205 desires to deposit a specified amount of funds into the unbanked subscriber's mobile wallet account. The transaction processor 216 then validates the status of the unbanked subscriber's mobile wallet account (step 320) and determines if the agent branch is authorized to receive deposited money (i.e. determine if it has pre-registered as an official agent branch) (step 330).

The monetary transaction system may then use rules engine 220 to perform a limit check (to determine whether sufficient funds are available) and/or a velocity check (to determine whether the user has exceeded a specified number of (hourly,

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daily, or weekly) transactions) on the unbanked subscriber's mobile wallet account (step

340). The transaction system then credits the unbanked subscriber's mobile wallet account

with the specified amount of funds (step 350) and returns a notification to the agent branch

confirming the deposit (step 360) and returns another notification to the subscriber

notifying the subscriber that the specified amount of funds was deposited in the their

mobile wallet account (step 370). Any of channels 111 may be used to perform these

communications.

Figure 4 shows three different graphics (401-403) and

corresponding method steps (410-490) that illustrate an unbanked subscriber making a

withdrawal using a mobile wallet (and, by extension, using the mobile wallet transaction

system 210). As above, the terms in the graphics include "\$C" representing cash balance

and "\$E" representing eMoney balance.

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

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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. The mobile wallet platform processes the request, updates

the agent branch's and subscriber's eMoney balances, logs the transaction, and sends

transaction details to a specified bank at pre-determined intervals.

for the specified amount of funds (step 430).

In one embodiment, the monetary transaction system 210 is implemented to withdraw funds at an agent branch using a mobile wallet. The communication module 215 receives a communication from an unbanked subscriber over one of a plurality of channels 111 connected to the monetary transaction system 210 (step 410). The communication indicates that the unbanked subscriber 205 desires to withdraw a specified amount of funds from the unbanked subscriber's mobile wallet account at the agent branch. The monetary transaction system 210 validates the status of the unbanked subscriber's mobile wallet account (step 420) and determines if the balance of the unbanked subscriber's mobile wallet account is sufficient to accommodate the requested withdrawal

The transaction processor 216 performs one or more of a limit check (to verify sufficient funds) and a velocity check (to verify the subscriber hasn't exceeded specified transfer limits) on the unbanked subscriber's mobile wallet account (step 440). The monetary transaction system 210 then returns a secure, perishable withdrawal code to the subscriber 205 over at least one of the plurality of channels 111 connected to the monetary transaction system (step 450). The monetary transaction system 210 receives subsequent agent branch communication over at least one of the plurality of channels

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connected to the monetary transaction system indicating that the withdrawal code has been presented to the agent branch (step 460). The monetary transaction system 210 then debits the unbanked subscriber's mobile wallet account by the specified amount of funds (step 470), returns a notification to the agent branch confirming the withdrawal (step 480) and notifies the subscriber that the specified amount of funds was withdrawn from the unbanked subscriber's mobile wallet account over at least one of the channels 111 connected to the monetary transaction system (step 490). Accordingly, the monetary transaction system 210 may be used to allow subscribers to withdraw cash using their mobile wallet applications at any store or other entity registered as an agent branch.

Figure 5A depicts a subscriber-to-subscriber eMoney transfer. To perform such a transfer, subscriber A (501) enters some type of identification information identifying subscriber B (e.g. subscriber B's phone number) and an amount of money he or she wishes to transfer. The transaction processor 216 of the monetary transaction system 210 determines if there are sufficient funds to complete the transfer. If sufficient funds are available, the monetary transaction system 210 decrements subscriber A's account and credits subscriber B's account (502). The system then sends some kind of notification (e.g. SMS) to subscriber B indicating that a certain amount of money was transferred to their account. Subscriber A may also receive a notification that the transfer was successful. Accordingly, eMoney may be transferred between two mFS platform subscribers, one or both of which may be unbanked. The monetary transaction system 210 processes the subscribers' requests, updates the subscribers' eMoney balances, logs the transactions, and sends transaction information to a specified bank when needed.

transfer. In graphic 505, subscriber A wishes to send eMoney to another individual that is not a subscriber to the mFS platform. The transaction is initiated in the same fashion as the subscriber-to-subscriber transfer scenario. However, since non-subscriber B does not have a mobile wallet account, the monetary transaction system 210 cannot credit them with eMoney. Instead, the monetary transaction system 210 sends a notification (e.g. via SMS) to non-subscriber B with instructions for how to pick-up the transferred money, along with an authorization code (506). The monetary transaction system 210 puts a hold on subscriber A's account for the amount transferred. Subscriber B then has a specified number of days to pick up the cash before the hold expires and the amount is credited back to subscriber A's eMoney account by the monetary transaction system 210.

When non-subscriber B goes to pick up the money at an agent branch, the agent branch's manager or agent verifies the authorization code via an agent manager or agent mobile wallet application (that, in turn, accesses the mFS platform). Once the transfer has been validated, the agent gives the cash to non-subscriber B. The agent branch's mFS account is credited with the transfer amount (507) and the user leaves with the cash in hand (508). The mFS platform processes the transfer request, updates subscriber A's eMoney balance, logs the transaction, and sends transaction details to a platform-specified bank.

Figure 6A illustrates a subscriber-to-subscriber international eMoney transfer. This embodiment is, at least in some respects, similar to sending eMoney to an mFS subscriber domestically. In this case the monetary transaction system 210 leverages one or more existing international money transfer organizations or "remittance"

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companies" such as MoneyGram®. In some embodiments, MoneyGram® is pre-integrated to the monetary transaction system 210, but other international money transfer organizations may also be used. Still further, at least in some embodiments, subscriber B may need to have an eMoney account with a foreign mFS program that is also affiliated with MoneyGram® or another international money transfer organization.

transfer at 601, the international money transfer organization (e.g. MoneyGram®) transfers the eMoney to subscriber B at 602 and subscriber B's eMoney balance is increased by the transferred amount. Thus, subscriber A requests to send eMoney from his or her eMoney account via the mobile wallet application. The eMoney is transferred using an international money transfer organization, and subscriber B receives a notification (that may, for example, include a reference number, among other information) that their eMoney balance has increased by the transfer amount. The monetary transfer system 210 processes subscriber A's request, updates subscriber A's and subscriber B's eMoney balances, logs the transaction, and send transaction details to a mFS platform-specified bank.

eMoney transfer. In this illustration, subscriber A wishes to send cash to subscriber B who is not an mFS program subscriber. Similar to the scenario described in Figure 6A, the monetary transaction system 210 leverages various international money transfer organizations or remittance companies such as MoneyGram® to transfer the eMoney. Subscriber A initiates a typical eMoney transfer at 605 by providing non-subscriber B's identification information, as well as the amount to be transferred. The Monetary transaction system 210 recognizes the eMoney transfer is not destined for a domestic phone

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number and routes the request to the international money transfer organization (e.g. MoneyGram®) (606).

The international money transfer organization sends non-subscriber B a notification (e.g. via SMS) with instructions for how and where to pick up the money (in embodiments where MoneyGram® transfers the eMoney, the notification may include a MoneyGram® reference number (MGRN)) (607). Non-subscriber B can then show the MGRN to an agent at an agent branch (608) and then receive the cash (609). The monetary transaction system 210 then decrements subscriber A's eMoney account for the transferred amount. The monetary transfer system 210 thus processes subscriber A's transfer request, updates subscriber A's eMoney balance, logs the transaction, and sends transaction detail to a platform-specified bank. It should also be noted that an mFS subscriber may also receive money in a foreign country from either a subscriber or a non-subscriber in a similar manner.

Figure 7 illustrates a subscriber purchasing airtime using a mobile wallet. Mobile wallet platform subscribers may buy airtime by using their mobile wallet application 207. The monetary transaction system 210 will reload their airtime account within the mobile network operator's (MNO's) systems. The subscriber requests to purchase airtime by entering the request via the mobile wallet application or via a mobile wallet web interface. The monetary transaction system 210 then decrements the subscriber's eMoney account (701), while crediting the mFS platform's eMoney account (702). The purchased airtime is then added to the subscriber's airtime balance (703). The monetary transaction system 210 processes the subscriber's request, updates the

subscriber's eMoney balances as well as its own eMoney balance, logs the transaction, and sends transaction detail to a mFS platform-specified bank.

In one embodiment, the monetary transaction system 210 is implemented to top up a prepaid mobile account from a mobile wallet. The communication module 215 of the monetary transaction system 210 receives a subscriber communication over one of a plurality of channels 111 connected to the monetary transaction system (step 710). The subscriber communication indicates that an unbanked subscriber 205 desires to top up a prepaid mobile account by a specified amount using a specified payment method from the unbanked subscriber's mobile wallet. The transaction processor 216 validates the status of the selected payment method (step 720) and performs a limit check and/or a velocity check on the selected payment method (step 730). The monetary transaction system 210 then debits the specified payment method by the specified amount of funds (step 740) and processes the mobile top-up via a billing system integrator and/or an aggregator (step 750), and notifies the subscriber that the prepaid mobile account was topped up over at least one of the channels connected to the monetary transaction system (step 760).

Figure 8 illustrates an embodiment where a mFS subscriber pays a bill using a mobile wallet. At least in some embodiments, the company that the subscriber wishes to pay needs to have signed-up to be part of the mFS platform. The mFS platform may publish a list of company names that have registered to be part of the mFS platform. This list of companies may include company IDs so that subscribers can know which company ID to enter in their mobile wallet application. Once the company ID is known, the subscriber can pay a bill by entering the company ID and the amount to be paid. The

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monetary transaction system 210 then decrements the subscriber's eMoney account (801) and credits the identified company's eMoney account (802). Accordingly, in response to the subscriber's request to pay bill via their mobile wallet application, the monetary transaction system 210 processes the request, updates the bill pay company's and the subscriber's eMoney balances, logs the transaction, and sends transaction details to the mFS

platform-specified bank.

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), processes the bill payment via a direct biller connection or a bill pay aggregator (step 850), and notifies the unbanked subscriber that the bill was paid using a communication channel (e.g. SMS) connected to the monetary transaction system (step 860). Thus, in this manner, a subscriber may use a mobile wallet to pay various bills including rent, utility, mortgage, phone, cable, medical and other bills.

Figure 9 illustrates a mobile wallet subscriber making a retail purchase.

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branches directly from their mobile device. Agent branches, as explained above, are retail stores or other entities that have registered with the mFS system and are able to accept mobile wallet payments. Accordingly, a subscriber can select the items they wish to purchase, and indicate (via the mobile wallet application) to the agent branch that they wish to pay for the items. The mobile wallet application then communicates with the agent branch and the monetary transaction system to indicate the price of the transaction. The monetary transaction system 210 then debits the subscriber's eMoney account (901) and credits the agent branch's eMoney account (902). The agent branch (and/or the agent manager or agent) receives confirmation that subscriber paid for the purchase. The subscriber may also receive a summary of the retail purchase and may be asked to confirm the purchase by entering a PIN. The monetary transaction system processes the purchase request, updates the agent branch and subscriber's eMoney balances, logs the transaction, and sends transaction details to a mFS platform-specified bank.

In one embodiment, the monetary transaction system 210 is implemented to make a purchase from a mobile wallet. The communications module 215 of the monetary transaction system 210 receives a communication from a subscriber over a communication channels 111 (step 910). The subscriber communication indicates that an unbanked subscriber 205 desires to purchase an item for a specified amount of funds using a specified payment method from the unbanked subscriber's mobile wallet.

The monetary transaction system 210 then returns a secure, perishable purchase code to the unbanked subscriber over at least one of the channels connected to the monetary transaction system (step 920) and receives a subsequent agent

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branch communication over a channel indicating that the purchase code has been presented to an agent (branch) (step 930). The monetary transaction system 210 validates the status of the specified payment method (step 940), determines if the specified payment method can accommodate a purchase for the specified amount (step 950), performs a limit check and/or a velocity check on the selected payment method (960), debits the specified payment method by the specified amount of funds (970), returns a notification to the agent branch authorizing the purchase (980) and sends a receipt to the unbanked subscriber over a communication channel. The monetary transaction system 210 may thus be used to make a retail purchase using a mobile wallet.

Financial institutions and potentially other mFS program participants may sign up to become money or eMoney lenders. Mobile wallet subscribers may be able to use their mobile wallets to request micro-loans from these approved lenders. The micro-loans are tracked by the monetary transaction system 210, and repayment reminders, interest and commissions are managed by the monetary transaction system. The subscriber requests a micro-loan from a lender, indicating the amount in the request, as well as other information such as the repayment date and the commission (i.e. interest rate). Potential lenders then have a chance to counter the loan request with their own terms. Once the lender approves the subscriber's request, the lender's eMoney account balance is debited for the specified amount (1001) and the subscriber's eMoney account is credited with the requested amount (1002). The monetary transaction system 210 processes the micro-loan requests, update the lender and subscriber's eMoney balances, sets up repayment schedules and reminders, logs the transaction, and sends transaction detail to a mFS bank. It should also be noted that

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while the term "micro-loan" is used herein, the loan may be for substantially any amount of money.

illustrates a subscriber repaying a micro-loan. The subscriber may repay the loan using functionality provided in the mobile wallet application or in a similar web interface. Repayments can be made in installments or in full depending on the rules of the micro-loan. The subscriber enters the amount they wish to repay and the loan ID. The subscriber's eMoney account is then debited for the specified amount (1005), while the lender's eMoney account is credited the specified amount (1006). Both the lender and the subscriber may receive confirmation that the loan has been repaid via SMS or some other communication channel. The mFS platform thus processes the subscriber's micro-loan repayment request, updates lender and subscriber's eMoney balances, updates repayment schedule and reminders, logs the transaction, and sends transaction details to a specified mFS platform bank.

Figure 11A illustrates a subscriber receiving a direct deposit from an employer or other entity. Subscribers to the mFS platform have the ability to receive any direct deposit into their eMoney account. Subscribers may be asked by their employers to provide account information in order to set up direct deposit. The employer then submits a direct deposit request using their existing processes (i.e the processes they use for a normal checking or savings bank account). Once the direct deposit is set up and a payday arrives, the employer's bank account is debited for the proper amount (1101) and the employer's mFS account is credited with that amount (1102). Then, once the funds have been received at the mFS platform bank, the mFS platform bank sweeps the employers

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direct deposit balance (1103) into a mFS platform master account (1104) and notifies the mFS platform of each account to be incremented (including the subscriber's mobile wallet (eMoney) account). The subscriber's eMoney account is then credited with the paycheck amount (1105) upon which the eMoney may be used to pay for goods, pay bills, top up

airtime, transfer to other entities or for cash withdrawal.

The subscriber does not need to have a bank account to participate in direct deposit. The employer's bank can communicate with the mFS platform's bank to perform the necessary steps in directly depositing the subscriber's paycheck in his or her eMoney mobile wallet account. The bank facilitates monetary deposit into the employer's bank account for direct deposit and performs an automated sweep of recent deposits from the employer's bank account into the mFS platform's master bank account. The bank also sends transaction details to the monetary transaction system 210 including transaction logs. The monetary transaction system receives a list of eMoney accounts that are to be credited directly from the employer (or bank), processes the list and requests to establish a direct deposit, updates subscriber's eMoney balance, log the transaction, and sends transaction details to the mFS platform bank.

In a similar manner, a subscriber may receive a government welfare payment directly on their mobile device. Figure 11B illustrates a subscriber receiving a government social welfare payment directly into their eMoney account. In some embodiments, subscribers may need to opt-in and register with the government program for which they choose to receive the payment via their mobile wallet. Once the funds have been received, the subscriber can use that eMoney for any goods or services, as described above. Once the direct deposit has been established and a payout has been initiated, the

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government's welfare account deposits the money (1110) into the government's bank account for welfare payments (1111) and performs an automated sweep of recent deposits

from the government's bank account (1112) into the mFS program's master bank account

(1113). The bank then sends transaction details to the monetary transaction system 210

regarding the deposit. The subscriber receives a notification that the welfare payment has

been credited to their eMoney account (1114). The mFS platform receives an indication of

eMoney accounts that are to be credited from the government, processes the welfare

payments, updates the subscriber's eMoney balance, logs the transactions, and sends

transaction details to the mFS platform bank.

details to the mFS platform bank.

Figure 12A illustrates an agent administrator distributing eMoney to various recipients. An agent administrator, as explained above, is a person who acts as an agent company's representative. 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. In order to provide the agent branches with eMoney, the agent administrator first moves the eMoney from the agent company's account (1201) to the branch accounts (1202). This is performed using the agent administrator's mobile wallet application or portal. In an agent administrator money transfer, the monetary transaction system 210 processes the administrator's eMoney transfer request, updates the agent company and agent branch eMoney balances, logs the transaction, and sends transaction

Figure 12B illustrates an agent company deposit. The agent company has an eMoney account in the monetary transaction system 210 that may also

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include a corresponding bank account (that may be created automatically upon creation of the agent company's eMoney 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), it is transferred to a mFS platform master account (1208) that includes all or a part of the mFS platform's funds. The agent company's bank account is decreased by the deposit amount (1207), while the agent company's eMoney account balance is correspondingly increased (1210). At this time, the agent company account is credited with eMoney. The agent company's bank facilitates a physical cash deposit into the agent company's bank account and performs an automated sweep (1209) of recent deposits from the agent company's bank account into the mFS platform's master bank account. The agent company's bank then sends transaction details to the monetary transaction system 210. The agent administrator physically delivers the cash (or form of money such as a check or money order) to a bank branch for deposit. The monetary transfer system receives transaction details from the agent company's bank about recent transactions (including deposits, as shown in Figure 12B.

Figure 13 illustrates an agent company withdrawal. To make a cash withdrawal for an agent company, the agent administrator requests a withdrawal using the agent administrator mobile wallet application. The monetary transaction system 210 then notifies the bank that a certain amount of eMoney is to be transferred from the master mFS account (1302) to the agent company bank account (1303). When the money is in the agent company bank account, the agent administrator can withdraw the cash by traditional withdrawal means. The mFS master bank receives transaction details from the monetary transaction system 210 about recent transactions (recent withdrawals in this case). The mFS

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master bank performs an automated sweep (1304) of the mFS platform's master bank account to reflect the recent withdrawal request from agent the agent company (1301). The agent company's eMoney account is reduced by the amount of the withdrawal. The agent company also sends transaction details to the monetary transaction system 210. The agent administrator can request withdrawal via the agent administrator mobile wallet application and physically withdrawal cash (1305) from the agent company's bank branch (1306). The mFS platform processes the agent company's withdrawal request, updates agent company and agent branch eMoney balances, logs the transaction, and sends transaction details to an mFS platform-specified bank.

Attention will now be turned to embodiments in which subscribers have bank accounts associated with their mobile wallets. The monetary transaction system 210 provides similar functionality to consumers that have bank or credit union accounts. Although many different transactions are presented herein, many more and varied types of transactions may be processed by the monetary transaction system. In the following figures, "\$C" refers to cash balance, "\$DC" refers to a debit card (prepaid) balance and "\$PIN" refers to a recharge PIN value.

Figure 14 describes a subscriber deposit at an agent branch. The subscriber has a registered and activated (prepaid) debit card at an agent branch location. The prepaid debit card is associated with the mobile wallet application in the subscriber's mobile device. As such, the debit card is linked to the subscriber's account in the monetary transaction system 210. To deposit cash onto the mobile wallet, the subscriber informs the agent that they want to deposit a specified amount of cash (1401). The agent takes the cash and notifies the monetary transaction system 210 of the deposit using their point of sale

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(POS) system or the agent mobile wallet application (1402), and the monetary transaction system 210 credits the subscriber's mobile wallet account (1403). The funds collected at the cash register typically do not reach a bank account until the reconciliation and

settlement of funds occurs between the agent and the mFS owner's bank.

The subscriber's bank then receives a settlement report from the card processor and receives funds from the agent's bank. The agent or agent manager physically deposits the cash into the subscriber's mobile wallet account via their POS system or agent manager/agent mobile wallet application. The monetary transaction system processes the deposit request, increments the subscriber's mobile wallet balance within the card processor and logs the transaction. An external card processor increments the subscriber's mobile wallet balance and sends reports to the bank for settlement on a regular (e.g. nightly) basis.

In one embodiment, the monetary transaction system 210 is implemented to deposit funds into a bank or credit union account using a mobile wallet. The communications module 215 of the monetary transaction system 210 receives communication from an agent branch over a communication channel (step 1410). The agent communication indicates that a subscriber 205 desires to deposit a specified amount of funds into a bank or credit union account. The transaction processor 216 validates the status of the bank or credit union account (step 1420), determines if the agent branch is authorized to deposit money (step 1430), and performs a limit check and/or a velocity check on the bank or credit union account (step 1440). The monetary transaction system then credits the bank or credit union account with the specified amount of funds (step 1450), returns a notification to the agent branch confirming the deposit (step 1460) and

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notifies the subscriber that the specified amount of funds was deposited in the bank or credit union account using at least one of the communication channels connected to the monetary transaction system (step 1470). Accordingly, cash may be deposited into a bank

or credit union account associated with a subscriber's mobile wallet.

Figure 15 illustrates a subscriber deposit that is performed with a non-agent. In some economies, subscribers may have the ability to leverage other channels outside of agents to deposit funds onto their card. One deposit method is a PIN-based recharge that allows a subscriber to purchase a PIN worth the deposit value. The PIN can then be redeemed via an interactive voice response (IVR) system or via the subscriber's mobile wallet application. The mobile wallet application will allow the monetary transaction system 210 to deposit the funds onto the subscriber's card. The retailer's bank settles with the PIN card provider's bank and the PIN card provider's bank settles with the mFS platform's bank for the deposit. The subscriber gives cash to the agent (1501) which increases the agent company's physical cash (1502). The subscriber uses IVR or their SIM Application to recharge mobile wallet account using a PIN card (1503). In some cases, an agent may provide the PIN card (i.e. the prepaid debit card) to the subscriber. The monetary transaction system 210 processes the subscriber deposit request, increments the subscriber's mobile wallet balance within the card processor and logs the transaction. An external card processor decreases the subscriber's PIN card balance (1504), increments the subscriber's mobile wallet balance (1505) and send reports to the mFS platform bank for settlement.

Figure 16 illustrates a subscriber withdrawal at an agent branch. To withdraw cash at an agent branch from a (prepaid) debit card, a subscriber submits a

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withdrawal request using the mobile wallet application on their mobile device. The subscriber may also need to enter details about the agent branch that allows the monetary transaction system 210 to determine if the subscriber has sufficient funds on their debit card. The mFS platform then notifies the agent branch that it can give cash to the subscriber. If the subscriber has sufficient funds, the monetary transaction system 210 will decrement the subscriber's funds from their card (1601) and transfer it to the mobile wallet owner's account within the same card processor or bank. The agent branch (1602) then provides the

withdrawn cash to the subscriber (1603).

Accordingly, the subscriber requests a cash withdrawal from their own mobile wallet account via the mobile wallet application. The agent or agent manager verifies the withdrawal request via POS authorization or SMS received on agent's phone and, once verified, gives cash to the subscriber. The monetary transaction system 210 processes the subscriber's withdrawal request, decrements the subscriber's mobile wallet balance within the card processor and logs the transaction. An external card processor decrements the subscriber's mobile wallet balance and sends reports to the bank for settlement on a periodic basis.

In one embodiment, the monetary transaction system 210 is implemented to withdraw funds from a bank or credit union account using a mobile wallet. The communication module 215 of the monetary transaction system 210 receives a communication from a subscriber 205 over a communication channel 111 (step 1610). The subscriber communication indicates that subscriber 205 desires to withdraw a specified amount of funds from a bank or credit union account. The transaction processor validates the status of the bank or credit union account (step 1620), determines if the balance of the

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bank or credit union account is sufficient to accommodate the requested withdrawal for the specified amount of funds (step 1630) and performs a limit check and/or a velocity check on the bank or credit union account (step 1640).

The monetary transaction system 210 then returns a secure, perishable withdrawal code to the subscriber 205 over at least one of the communication channels (step 1650) and receives a subsequent agent branch communication indicating that the withdrawal code has been presented to an agent (step 1660). The monetary transaction system 210 then debits the bank or credit union account by the specified amount of funds (step 1670), returns a notification to the agent branch confirming the withdrawal (1680) and notifies the subscriber that the specified amount of funds were withdrawn from the bank or credit union account using at least one of the communication channels connected to the monetary transaction system (step 1690). Accordingly, a subscriber can withdraw cash stored on their mobile wallet from an agent branch or a non-agent branch. Figure 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 noncustomers (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 extern 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).

....Figure 17B illustrates a subscriber-to-subscriber money transfer. An mFS subscriber (1705) may send money to another mFS subscriber (1706). To do so, subscriber A enters information identifying subscriber B (e.g. a phone number, email address or other identifier). The monetary transaction system 210 determines if there are enough funds to complete the transaction, and if so, the monetary transaction system 210 decrements subscriber A's debit card and credits subscriber B's debit card. The subscriber, accordingly, may request to send money from their own mobile wallet (i.e. money stored on a (prepaid) debit card) account via the subscriber mobile wallet application. The other subscriber receives a notification that the balance of the debit card associated with their mobile wallet has increased. The bank receives a settlement report from the debit card processor and transfers or settles funds from subscriber A's account to subscriber B's account (if necessary). The monetary transaction system 210 processes the transfer request, updates subscriber A's and subscriber B's debit cards that are associated with their mobile wallets and logs the transaction. The external card processor decrements subscriber A's debit card balance, increments subscriber B's debit card balance and sends transaction reports to the mFS platform bank for settlement.

Figure 17C illustrates subscriber-to-non-subscriber money transfers. In this embodiment, subscriber A (an mFS subscriber) wishes to send money to another subscriber (a non-mFS subscriber). The transaction is initiated in the same fashion as described above in Figure 17B. However, since subscriber B does not have an mFS

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account, the monetary transaction system 210 cannot credit them with money. Instead, the monetary transaction system 210 sends a communication (e.g. a SMS) to subscriber B (1708) with an authorization code and instructions for how to pick up the cash. The monetary transaction system 210 puts a hold on subscriber A's debit card for the amount transferred (1707). Subscriber B has a specified time period in which to pick up the cash before the hold expires and the amount is credited back to the debit card associated with subscriber A's mobile wallet account. The agent branch verifies the authorization code via POS or their agent mobile wallet application (1709) and gives the cash to the non-subscriber (1710). (In some countries, an agent network needs to be capable of giving cash to a subscriber based on the money transfer reference number).

The mFS bank receives a settlement report from the card processor and transfer and settle funds from subscriber A's debit card to the agent's bank (if necessary). The monetary transaction system 210 processes the money transfer request, decrements subscriber A's mobile wallet balance within the card processor, generates a money transfer reference number, authorizes the reference number to be paid out by the agent and logs the transaction. An external card processor decrements subscriber A's mobile wallet balance and sends periodic transaction reports to the bank for settlement. Thus, as seen in Figures 17B and 17C, money may be transferred from subscriber to subscriber and from subscriber to non-subscriber.

Subscribers may similarly send money internationally to both subscribers and non-subscribers. Figure 18A illustrates a subscriber-to-subscriber international money transfer. In this embodiment, subscriber A wishes to send cash to subscriber B who resides in another country. As in the embodiments described above where

money was transferred internationally, the monetary transaction system 210 may use one or more international money transfer organizations or remittance companies such as MoneyGram® to transfer the money. Subscriber A initiates the international money transfer using his or her phone. Subscriber A's debit card account is decremented by the transfer amount (1801). The money is transferred between countries using an international money transfer organization (1802). In this case, subscriber B has an mFS eMoney account with a foreign mFS platform that is also affiliated with the selected international money transfer organization. That organization can then credit subscriber B's eMoney account directly (1803).

Thus, subscriber A requests to send money from their debit card account via the subscriber mobile wallet application. Subscriber B receives a notification (including a MoneyGram® Reference Number (MGRN) (or other reference number when other international money transfer organizations are used) and instructions on how to access the eMoney) that their eMoney balance has increased. The mFS bank receives settlement reports from the debit card processor and transfers and/or settles funds from subscriber's account to the international organization's bank. The monetary transfer system 210 processes the transfer request, update subscriber A's and subscriber B's eMoney balances and logs the transaction. An external card processor decrements subscriber A's mobile wallet balance and sends periodic transaction reports to the bank for settlement.

[604480][60453] Figure 18B illustrates a subscriber-to-non-subscriber international money transfer. In this embodiment, subscriber A wishes to send cash to subscriber B who resides in another country. As above, the monetary transaction system 210 uses an international money transfer organization (1806) to transfer the money between countries.

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Once the transfer has been initiated by subscriber A, the international money transfer

organization debits subscriber A's debit card account (1805) and transfers that money to

subscriber B. Subscriber B (1807) receives a notification (e.g. via SMS) with pick up

instructions and a transfer ID number. Subscriber B can then go to an agent company

(1808), show them the notification (including, perhaps an authorization code), and receive

the transferred money (1809).

Similar to the transaction described in Figure 18A, the embodiment

of 19A illustrates a transaction where a subscriber receives an international money transfer.

Subscriber B (1901) initiates a money transfer using their mobile wallet application. The

international money transfer organization (1902) debits subscriber B's eMoney account

balance. This money is then transferred by the international money transfer organization to

subscriber A. Subscriber A receives a notification along with a transfer ID number

indicating that their debit card account has been credited with the transferred money

(1903).

Figure 19B illustrates a non-subscriber-to-subscriber international

money transfer. This scenario is very similar to that described in Figure 19A from the mFS

subscriber's perspective, except that their eMoney account is credited here, and their debit

card account was credited in 19A. The initiator, subscriber B (1905), does not have an mFS

account and, as a result, takes their cash to an international money transfer organization

(e.g. MoneyGram®) or other remittance company's agent (1906) to send it to subscriber

A's mobile wallet eMoney account. The international money transfer organization (1907)

then transfers the specified amount to subscriber A (1908) and subscriber A's mobile wallet

eMoney account is credited with the amount of the transfer. Subscriber A may receive a

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transaction ID number, along with an indication that the transfer has occurred. The mFS bank may receive settlement reports from the card processor and settle funds from the international money transfer organization's bank to subscriber A's mobile wallet account. The monetary transaction system processes the money transfer request, updates subscriber A's mobile wallet balance within the card processor and logs the transaction. An external card processor increments subscriber A's mobile wallet balance and sends periodic transaction reports to the mFS bank for settlement.

Other functionality described above in relation to using an eMoney mobile wallet account may also apply to banked subscribers using a debit card associated with their mobile wallet. Such subscribers may buy airtime for their mobile device, pay bills, make retail purchases, receive direct deposits, and perform other functionality.

implemented to add a mobile wallet platform stored value account to a mobile wallet. The stored value account may include eMoney or other monetary credits. In the embodiment, communication module 215 of monetary transaction system 210 may receive subscriber data for an unbanked subscriber 205 over a communication channel. The transaction processor may perform validation checks on the unbanked subscriber to validate that the unbanked subscriber is not exceeding a specified allowable number of accounts per subscriber. The monetary transaction system 210 may then send subscriber data to another entity (such as a third party verification system) for identification of the unbanked subscriber. The monetary transaction system 210 receives results from the third party verification system indicating that the subscriber data appropriately identifies the unbanked subscriber, creates a stored value account for the unbanked subscriber that maintains a

recorded balance for the created stored value account, adds the stored value account to the unbanked subscriber's mobile wallet and notifies the unbanked subscriber of the addition of the stored value account over at least one communication channel connected to the

mobile wallet platform.

In another embodiment, the monetary transaction system 210 is implemented to add a third party stored value account to a mobile wallet. The monetary transaction system 210 receives unbanked subscriber data, including account details, over a communication channel. The transaction processor 216 performs a validation check on the unbanked subscriber to validate that the unbanked subscriber is not exceeding a specified allowable number of accounts per subscriber. If the validation check is ok, the monetary transaction system 210 sends subscriber data to a third party verification system for identification of the unbanked subscriber. In some cases, validating the status of the sender or the recipient includes performing a check on the specified sender or recipient to comply with the office of foreign assets control. The monetary transaction system 210 then receives results from the third party verification system indicating that the subscriber data appropriately identifies the unbanked subscriber, and submits the unbanked subscriber's account details to a third party account processor. The monetary transaction system 210 receives an indication from the third party account processor that third party account processor created a third party stored value account for the subscriber. The transaction processor maintains a link between the subscriber data and the third party stored value account and adds the third party stored value account to the unbanked subscriber's mobile wallet. The monetary transaction system 210 then notifies the unbanked subscriber of the

addition of the third party stored value account over a communication channels connected to the monetary transaction system.

In another embodiment, the monetary transaction system 210 is implemented to add a bank or credit union account to a mobile wallet. The communication module 215 receives subscriber data, including bank or credit union account details, over a communication channel 111. The transaction processor 216 performs validation checks on the subscriber to validate that the subscriber is not exceeding a specified allowable number of accounts per subscriber and sends subscriber data to a third party verification system for identification of the subscriber. The communication module then receives results from the third party verification system indicating that the subscriber data appropriately identifies the subscriber. Upon receiving these results, the monetary transaction system 210 submits bank or credit union account details for validation by the transaction processor, receives an indication that the bank or credit union account details correspond to a valid bank or credit union account, maintains a link between the subscriber data and the bank or credit union account and notifies the subscriber of the bank or credit union account validation over a communication channel.

In still another embodiment, the monetary transaction system is implemented to add a debit or credit card account to a mobile wallet. The communication module 215 receives subscriber data, including a debit or credit card account number, over a communication channel 111 connected to the monetary transaction system. The transaction processor performs validation checks on the subscriber to validate that the subscriber is not exceeding a specified allowable number of accounts per subscriber. The communication module sends subscriber data to a third party verification system for

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identification of the subscriber and receives results from the third party system indicating that the subscriber data appropriately identifies the subscriber. The monetary transaction system 210 securely stores the debit or credit card account number for access by the mobile wallet (e.g. in memory 217 or transaction database 225), adds the debit or credit card account number to the subscriber's mobile wallet, and notifies the subscriber of the addition of the debit or credit card account number. It should be noted that many other transactions can take place over the monetary transaction system, and that the embodiments

described herein should not be read as limiting.

Embodiments of the invention can adhere to Know Your Customer (KYC) rules in the US by performing Customer Identification Program (CIP) checks as required by the Bank Secrecy Act and US PATRIOT Act. A minimum amount of information can be gathered about a customer, such as, for example, first name, last name, date of birth, government ID Type, government ID number and address. The CIP processes are designed to validate customer identity against government blacklists and assists in the prevention of money laundering and terrorist financing. A combination of non-documentary and documentary verification can be used to ensure beyond a reasonable doubt the identity of the customer.

Non-documentary verification can occur through the presentment of the information that was collected from the user to an external third party, such as, for example, Lexis Nexis®. Documentary verification can occur if non-documentary verification fails, then the user is asked to present an unexpired government ID. Various differ forms of identification including driver's license, passport, alien identification (e.g., green card or work visa), and Mexican Consular identification card, can be accepted.

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Embodiments of the invention can perform Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT) checks. AML and CFT checks can be performed using transaction monitoring methods to flag names and suspicious transactions for further investigation. The mobile wallet platform can perform AML and CFT checks on all electronic financial transactions to ensure that electronic funds are not being used for money laundering or terrorism. 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. Velocity checks can also be performed. Velocity Checks ensure that subscribers are not

100164] Figures 20A through 20F depicts relationships between embodiments of various components within the monetary transaction system depicted in Figure 1. In particular, Figures 20A through 20F depict communications between the specific components within the monetary transaction system during an operation to deposit of funds within a financial account. The depicted interactions are representative of computer executed functions that enable the deposit of money through a mobile transaction system that is capable of functioning without an associated bank account.

abusing the mobile wallet platform within the allowable limits.

components within the monetary transaction system depicted in Figure 1. In particular, Figures 21A through 21I depict communications between the specific components within the monetary transaction system during an operation to withdraw of funds from a financial account. The depicted interactions are representative of computer executed functions that

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WORKMAN NYDEGGER
APPOFESSIONAL CORPORATION
ATTORNEYS ATLAW
60 EAST SOUTH TEMPLE
SUITF 1000

SALT LAKE CITY, UTAH 84111

enable the withdrawal of money through a mobile transaction system that is capable of

functioning without an associated bank account.

[00161] Figures 22A through 22J depicts relationships between

embodiments of various components within the monetary transaction system depicted in

Figure 1. In particular, Figures 22A through 22I depict communications between the

specific components within the monetary transaction system during an operation to transfer

funds between financial accounts. The depicted interactions are representative of computer

executed functions that enable the transfer of money through a mobile transaction system.

that is capable of functioning without an associated bank account.

The present invention may be embodied in other specific forms

without departing from its spirit or essential characteristics. The described embodiments

are to be considered in all respects only as illustrative and not restrictive. The scope of the

invention is, therefore, indicated by the appended claims rather than by the foregoing

description. All changes which come within the meaning and range of equivalency of the

claims are to be embraced within their scope.

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**CLAIMS** 

I claim:

1. A monetary transaction system for conducting monetary transactions between

subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain

the integrity of financial transactions, the integration tier also including a

communication application programming interface (API) and other communication

mechanisms to accept messages from channels;

notification services operable to send notifications through different

notification channels including one or more of short message peer-to-peer, short-

message services and simple mail transfer protocol emails;

a service connector layer comprised of a plurality of service connector

modules operable to connect to third party systems, wherein each service connector

module is deployed as a separate module intended to integrate an external service

to at least a portion of system architecture;

business process services operable to implement business workflows,

including at least one of executing financial transactions, auditing financial

transactions, invoking third-party services, handling errors, and logging platform

objects;

a payment handler service operable to use the APIs of different payment

processors including one or more APIs of banks, credit and debit cards processors,

bill payment processors; the payment handler service using a common API wrapper

to facilitate interactions with many different kinds of payment processors;

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a security service operable to perform subscriber authentication;

an authorization service operable to perform client authorization using a database-based access control list table;

a database operable to store financial transaction details, store customer profiles, and manage money containers; and

a rules engine operable to gather financial transaction statistics and use the gathered statistics to enforce business constraints including transaction constraints; a mobile device configured to run a monetary transaction system application;

<u>a</u> monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system, wherein the 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 subscriber, wherein performing the specified transactions includes communicating with the monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile determination made by the rules engine of the monetary transaction system;

at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system; and

wherein the monetary transaction system is implemented to deposit funds at an agent branch, funds deposited by subscriber at the agent branch using the

WORKMAN NYDEGGEI A PROFESSIONAL CORPORATION ATTORNEYS ATLAW 60 EAST'S GUTH TEMPLE SUITE 1000 mobile device configured to run a monetary transaction system application,

including performing the following steps:

receiving communication from an agent branch over one of a plurality of

channels connected to the monetary transaction system message received by an

integration tier of the monetary transaction system, the agent communication

indicating that the subscriber desires to deposit a specified amount of funds into

the -subscriber's account;

validating the status of the subscriber's account; determining if the agent

branch is authorized to receive deposited money; performing one or more of a limit

check and a velocity check on the subscriber's account, the limit check determining

whether sufficient funds are available to make the deposit amount, the velocity

check determining whether the subscriber has exceeded a specified number of

transactions within a specified time period;

crediting the subscriber's account with the specified amount of funds from

the agent branch that is authorized to receive the deposited money;

returning a notification to the agent branch confirming the deposit; and

notifying the subscriber that the specified amount of funds was deposited in the

subscriber's account over at least one of the plurality of channels connected to the

monetary transaction system.

2. The monetary transaction system of claim 1, wherein the monetary transaction system

application provides a web interface that allows subscribers to perform the same

functions provided by the monetary transaction system application.

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3. The monetary transaction system of claim 1, wherein the monetary transaction system

application is provided on a prepaid or postpaid phone.

4. A monetary transaction system for conducting monetary transactions between

subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain

the integrity of financial transactions, the integration tier also including a

communication application programming interface (API) and other communication

mechanisms to accept messages from channels;

notification services operable to send notifications through different

notification channels including one or more of short message peer-to-peer, short-

message services and simple mail transfer protocol emails;

a service connector layer comprised of a plurality of service connector

modules operable to connect to third party systems, wherein each service connector

module is deployed as a separate module intended to integrate an external service

to at least a portion of system architecture;

business process services operable to implement business workflows,

including at least one of executing financial transactions, auditing financial

transactions, invoking third-party services, handling errors, and logging platform

objects;

a payment handler service operable to use the APIs of different payment

processors including one or more APIs of banks, credit and debit cards processors,

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bill payment processors; the payment handler service using a common API wrapper

to facilitate interactions with many different kinds of payment processors;

a security service operable to perform subscriber authentication;

an authorization service operable to perform client authorization using a

database-based access control list table;

a database operable to store financial transaction details, store customer

profiles, and manage money containers; and

a rules engine operable to gather financial transaction statistics and use the

gathered statistics to enforce business constraints including transaction constraints;

a mobile device configured to run a monetary transaction system application;

a monetary transaction system subscriber that has a profile with the

monetary transaction system the subscriber profile stored in the database of the

monetary transaction system, wherein the 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 subscriber, wherein performing the specified

transactions includes communicating with the monetary transaction database to

determine whether the transaction is permissible based on data indicated in the

subscriber's profile determination made by the rules engine of the monetary

transaction system;

at least one entity that is to be involved in the specified transaction, the at

least one entity having a profile with the monetary transaction system; and

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wherein the monetary transaction system is implemented to withdraw funds

at an agent branch using the mobile device configured to run a monetary transaction

system application, including performing the following steps:

receiving a communication from the subscriber from the mobile device configured to run

the monetary transaction system, the communication indicating that the -subscriber

desires to withdraw a specified amount of funds from the subscriber's account at the

agent branch;

validating the status of the subscriber's account;

determining if the balance of the subscriber's account is sufficient to accommodate the

requested withdrawal for the specified amount of funds;

performing one or more of a limit check and a velocity check on the

subscriber's account, the limit check determining whether sufficient funds are

available to make the deposit amount, the velocity check determining whether the

subscriber has exceeded a specified number of transactions within a specified time

period;

returning a secure, perishable code to the subscriber over at least one of the

plurality of channels connected to the monetary transaction system;

receiving subsequent agent branch communication over at least one of the

plurality of channels connected to the monetary transaction system, the agent

branch communication indicating that the withdrawal code has been presented to

the agent branch;

debiting the subscriber's account by the specified amount of funds;

returning a notification to the agent branch confirming the withdrawal; and

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notifying the subscriber that the specified amount of funds was withdrawn

from the subscriber's account over at least one of the channels connected to the

monetary transaction system.

5. A monetary transaction system for conducting monetary transactions between

subscribers and other entities, the system comprising one or more of:

an integration tier operable to manage mobile wallet sessions and maintain

the integrity of financial transactions, the integration tier also including a

communication application programming interface (API) and other communication

mechanisms to accept messages from channels;

notification services operable to send notifications through different

notification channels including one or more of short message peer-to-peer, short-

message services and simple mail transfer protocol emails;

a service connector layer comprised of a plurality of service connector

modules operable to connect to third party systems, wherein each service connector

module is deployed as a separate module intended to integrate an external service

to at least a portion of system architecture;

business process services operable to implement business workflows,

including at least one of executing financial transactions, auditing financial

transactions, invoking third-party services, handling errors, and logging platform

objects;

a payment handler service operable to use the APIs of different payment

processors including one or more APIs of banks, credit and debit cards processors,

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bill payment processors; the payment handler service using a common API wrapper

to facilitate interactions with many different kinds of payment processors;

a security service operable to perform subscriber authentication;

an authorization service operable to perform client authorization using a

database-based access control list table;

a database operable to store financial transaction details, store customer

profiles, and manage money containers; and

a rules engine operable to gather financial transaction statistics and use the

gathered statistics to enforce business constraints including transaction constraints;

a mobile device configured to run a monetary transaction system application;

a monetary transaction system subscriber that has a profile with the

monetary transaction system the subscriber profile stored in the database of the

monetary transaction system, wherein the 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 subscriber, wherein performing the specified

transactions includes communicating with the monetary transaction database to

determine whether the transaction is permissible based on data indicated in the

subscriber's profile determination made by the rules engine of the monetary

transaction system;

at least one entity that is to be involved in the specified transaction, the at

least one entity having a profile with the monetary transaction system; and

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wherein the monetary transaction system is implemented to transfer funds

using the mobile device configured to run a monetary transaction system

application, including performing the following steps:

receiving subscriber communication from the mobile device configured to

run the monetary transaction system, the subscriber communication indicating that

the subscriber desires to transfer a specified amount of funds to specified recipient

using a specified payment method from the subscriber's account;

validating the status of the subscriber's account;

performing at least one of a limit check and a velocity check on the

selected payment method, the limit check determining whether sufficient

funds are available to make the deposit amount, the velocity check

determining whether the subscriber has exceeded a specified number of

transactions within a specified time period;

validating the status of the specified recipient to ensure the specified

recipient has a valid account;

debiting the subscriber's account by the specified amount of funds;

transferring the specified amount of funds to the specified recipient

over at least one of the plurality of channels connected to the monetary

transaction system;

notifying the subscriber that the specified amount of funds was

transferred to the specified recipient over at least one of the plurality of

channels connected to the monetary transaction system.

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Docket No. 18756,8,1,1,1,1,1

WORKMAN NYDEGGEI Aprofessional corporation Attorneys at Law 60 East south temple Slitte 1000 6. The monetary transaction system of claim 5, wherein validating the status of the

specified recipient comprises performing a check on the specified recipient to comply with

the office of foreign assets control.

7. The monetary transaction system of claim 5, wherein the money is transferred

internationally between the mobile wallets.

8. The monetary transaction system of claim 1, wherein a secure, perishable code

is sent to the subscriber over at least one of the plurality of channels connected to the

monetary transaction system.

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Docket No. 18756,8.1,1,1,1,1.1

## **ABSTRACT**

Embodiments are directed to monetary transaction system for conducting monetary transactions between transaction system subscribers and other entities. In one scenario, the monetary transaction system includes a mobile device that runs a monetary transaction system application. The monetary transaction system also includes a subscriber that has a profile with the system. The subscriber indicates a transaction that is to be performed with the monetary transaction system. The system further includes a monetary transaction system processor that performs the transactions specified by the subscriber including communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile. The monetary transaction system also includes at least one entity that is to be involved in the specified transaction, where the entity has a profile with the monetary transaction system. This entity may be a person, a retail store, an agent or other entity.

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# FILED VIA E-FILING

PATENT APPLICATION Docket No.: 18756.8.1.1.1.1.1

# UNITED STATES PATENT APPLICATION

Of

Michael A. Liberty

For

MONETARY TRANSACTION SYSTEM

#### MONETARY TRANSACTION SYSTEM

# **CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] This application is a continuation of U.S. Patent Application Serial No. 14/213,543, entitled "Monetary Transaction System", filed March 14, 2014, which is a continuation of U.S. Patent Application Serial No. 13/964,707, entitled "Monetary Transaction system", filed August 12, 2013, which application is a continuation of U.S. Patent Application Serial No. 13/484,199, filed May 30, 2012, entitled "Monetary Transaction System", which application claims priority to and the benefit of U.S. Provisional Application Ser. No. 61/522,099, filed on August 10, 2011, entitled "Mobile Wallet Platform", and also claims priority to and the benefit of U.S. Provisional Application Ser. No. 61/493,064, filed on June 3, 2011, entitled "Mobile Wallet Platform". All of the aforementioned applications are incorporated by reference herein in their entirety.

## **BACKGROUND**

[0002] Mobile phones and other digital devices have become increasingly popular in recent years. Many mobile device users use their devices to perform countless different daily tasks. For instance, mobile devices allow users to check email, send and receive instant messages, check calendar items, take notes, set up reminders, browse the internet, play games or perform any number of different things using specialized applications or "apps". These applications allow mobile devices to communicate with other computer systems and perform a wide variety of network-connected tasks previously not possible with a mobile device.

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Docket No. 18756,8,1,1,1,1,1,1

## **BRIEF SUMMARY**

[0003] Embodiments described herein are directed to monetary transaction system for conducting monetary transactions between transaction system subscribers and other entities. In one embodiment, the monetary transaction system includes a mobile device configured to run a monetary transaction system application. The monetary transaction system also includes a monetary transaction system subscriber that has a profile with the system. The subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system. The system further includes a monetary transaction system processor that performs the transactions specified by the subscriber. Performing these transactions includes communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile.

[0004] The monetary transaction system also includes at least one entity that is to be involved in the specified transaction, where the entity has a profile with the monetary transaction system. This entity may be a person, a retail store, an agent or other entity. The subscriber may have access to a bank account, or may be an "unbanked user" that does not have access to a bank account. Each of the terms included above will be described in greater detail below in conjunction with the drawings.

[0005] The monetary transaction system may be used for many different tasks including enrolling a customer for a mobile wallet, adding a stored value account (either hosted by a mobile wallet platform or a third party), adding a bank or credit union account to a mobile wallet, adding a debit or credit card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds from a mobile wallet, paying bills from a

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Docket No. 18756,8,1,1,1,1,1

WORKIMAN NYDEGGEI Appoessional corporation Attorneys atlaw 60 East South temple mobile wallet, topping up a prepaid mobile account through a mobile wallet, transferring

funds through a mobile wallet (nationally or internationally), making in-store purchases

using a mobile wallet, and various other tasks as described herein below.

[0006] This Summary is provided to introduce a selection of concepts in a simplified

form that are further described below in the Detailed Description. This Summary is not

intended to identify key features or essential features of the claimed subject matter, nor is

it intended to be used as an aid in determining the scope of the claimed subject matter.

[0007] Additional features and advantages will be set forth in the description which

follows, and in part will be apparent to one of ordinary skill in the art from the description,

or may be learned by the practice of the teachings herein. Features and advantages of

embodiments described herein may be realized and obtained by means of the instruments

and combinations particularly pointed out in the appended claims. Features of the

embodiments described herein will become more fully apparent from the following

description and appended claims.

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## **BRIEF DESCRIPTION OF THE DRAWINGS**

[0008] To further clarify the above and other features of the embodiments described herein, a more particular description will be rendered by reference to the appended drawings. It is appreciated that these drawings depict only examples of the embodiments described herein and are therefore not to be considered limiting of its scope. The embodiments will be described and explained with additional specificity and detail through the use of the accompanying drawings in which:

[0009] Figure 1 illustrates a monetary transaction system architecture in which embodiments described herein may operate.

[0010] Figure 2 illustrates an alternate example embodiment of a monetary transaction system.

[0011] Figure 3 illustrates an example data flow for performing a subscriber deposit via a mobile wallet.

[0012] Figure 4 illustrates an example data flow for performing a subscriber withdrawal via a mobile wallet.

[0013] Figures 5A and 5B illustrate example data flows for performing subscriber-to-subscriber and subscriber-to-non-subscriber eMoney transfers via a mobile wallet, respectively.

[0014] Figures 6A and 6B illustrate example data flows for performing subscriber-to-subscriber and subscriber-to-non-subscriber international eMoney transfers via a mobile wallet, respectively.

[0015] Figure 7 illustrates an example data flow for performing a subscriber airtime purchase via a mobile wallet.

[0016] Figure 8 illustrates an example data flow for performing a subscriber-initiated bill pay via a mobile wallet.

[0017] Figure 9 illustrates an example data flow for performing a subscriber-initiated retail purchase via a mobile wallet.

[0018] Figures 10A and 10B illustrate example data flows for requesting and repaying micro-loans via a mobile wallet, respectively.

[0019] Figure 11A illustrates an example data flow of a subscriber receiving a direct deposit via a mobile wallet.

[0020] Figure 11B illustrates an example data flow of a subscriber receiving a governmental welfare payment via a mobile wallet.

[0021] Figure 12A illustrates an example data flow of an agent administrator distributing eMoney via a mobile wallet.

[0022] Figure 12B illustrates an example data flow of an agent company making a deposit using a mobile wallet.

[0023] Figure 13 illustrates an example data flow of an agent company making a withdrawal using a mobile wallet.

[0024] Figure 14 illustrates an example data flow of a subscriber making a deposit at an agent branch using a mobile wallet.

[0025] Figure 15 illustrates an example data flow of a subscriber making a deposit with a non-agent using a mobile wallet.

[0026] Figure 16 illustrates an example data flow of a subscriber making a withdrawal with an agent using a mobile wallet.

[0027] Figure 17A illustrates an example data flow of a subscriber making a withdrawal from an ATM using a mobile wallet.

[0028] Figure 17B illustrates an example data flow of a subscriber-to-subscriber money transfer using a mobile wallet.

[0029] Figure 17C illustrates an example data flow of a subscriber-to-non-subscriber money transfer using a mobile wallet.

[0030] Figure 18A illustrates an example data flow of a subscriber-to-subscriber international money transfer using a mobile wallet.

[0031] Figure 18B illustrates an example data flow of a subscriber-to-non-subscriber international money transfer using a mobile wallet.

[0032] Figure 19A illustrates an example data flow of a subscriber-to-subscriber international money transfer using a mobile wallet.

[0033] Figure 19B illustrates an example data flow of a non-subscriber-to-subscriber international money transfer using a mobile wallet.

[0034] Figures 20A-20F illustrate embodiments of communications between specific components within a monetary transaction system during an operation to deposit of funds within a financial account.

[0035] Figures 21A-21I illustrate embodiments of communications between specific components within a monetary transaction system during an operation to withdraw of funds from a financial account.

[0036] Figures 22A-22J illustrate embodiments of communications between specific components within a monetary transaction system during an operation to transfer funds between financial accounts.

## DETAILED DESCRIPTION

[0037] Embodiments described herein are directed to monetary transaction system for conducting monetary transactions between transaction system subscribers and other entities. In one embodiment, the monetary transaction system includes a mobile device configured to run a monetary transaction system application. The monetary transaction system also includes a monetary transaction system subscriber that has a profile with the system. The subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system. The system further includes a monetary transaction system processor that performs the transactions specified by the subscriber. Performing these transactions includes communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the subscriber's profile.

[0038] The monetary transaction system also includes at least one entity that is to be involved in the specified transaction, where the entity has a profile with the monetary transaction system. This entity may be a person, a retail store, an agent or other entity. The subscriber may have access to a bank account, or may be an "unbanked user" that does not have access to a bank account. Each of the terms included above will be described in greater detail below in conjunction with the drawings.

[0039] The monetary transaction system may be used for many different tasks including enrolling a customer for a mobile wallet, adding a stored value account (either hosted by a mobile wallet platform or a third party), adding a bank or credit union account to a mobile wallet, adding a debit or credit card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds from a mobile wallet, paying bills from a

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mobile wallet, topping up a prepaid mobile account through a mobile wallet, transferring

funds through a mobile wallet (nationally or internationally), making in-store purchases

using a mobile wallet, and various other tasks as described herein below.

[0040] The following discussion now refers to a number of methods and method steps

or acts that may be performed. It should be noted, that although the method steps may be

discussed in a certain order or illustrated in a flow chart as occurring in a particular order,

no particular ordering is necessarily required unless specifically stated, or required because

a step is dependent on another step being completed prior to the step being performed.

[0041] Embodiments of the mobile transaction system or "mobile wallet platform"

described herein may comprise or utilize a special purpose or general-purpose computer

including computer hardware, such as, for example, one or more processors and system

memory, as discussed in greater detail below. Embodiments described herein also include

physical and other computer-readable media for carrying or storing computer-executable

instructions and/or data structures. Such computer-readable media can be any available

media that can be accessed by a general purpose or special purpose computer system.

Computer-readable media that store computer-executable instructions in the form of data

are computer storage media. Computer-readable media that carry computer-executable

instructions are transmission media. Thus, by way of example, and not limitation,

embodiments described herein can comprise at least two distinctly different kinds of

computer-readable media: computer storage media and transmission media.

[0042] Computer storage media includes RAM, ROM, EEPROM, CD-ROM, solid

state drives (SSDs) that are based on RAM, Flash memory, phase-change memory (PCM),

or other types of memory, or other optical disk storage, magnetic disk storage or other

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magnetic storage devices, or any other medium which can be used to store desired program

code means in the form of computer-executable instructions, data or data structures and

which can be accessed by a general purpose or special purpose computer.

[0043] A "network" is defined as one or more data links and/or data switches that

enable the transport of electronic data between computer systems and/or modules and/or

other electronic devices. When information is transferred or provided over a network

(either hardwired, wireless, or a combination of hardwired or wireless) to a computer, the

computer properly views the connection as a transmission medium. Transmission media

can include a network which can be used to carry data or desired program code means in

the form of computer-executable instructions or in the form of data structures and which

can be accessed by a general purpose or special purpose computer. Combinations of the

above should also be included within the scope of computer-readable media.

[0044] Further, upon reaching various computer system components, program code

means in the form of computer-executable instructions or data structures can be transferred

automatically from transmission media to computer storage media (or vice versa). For

example, computer-executable instructions or data structures received over a network or

data link can be buffered in RAM within a network interface module (e.g., a network

interface card or "NIC"), and then eventually transferred to computer system RAM and/or

to less volatile computer storage media at a computer system. Thus, it should be

understood that computer storage media can be included in computer system components

that also (or even primarily) utilize transmission media.

[0045] Computer-executable (or computer-interpretable) instructions comprise, for

example, instructions which cause a general purpose computer, special purpose computer,

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or special purpose processing device to perform a certain function or group of functions.

The computer executable instructions may be, for example, binaries, intermediate format

instructions such as assembly language, or even source code. Although the subject matter

has been described in language specific to structural features and/or methodological acts,

it is to be understood that the subject matter defined in the appended claims is not

necessarily limited to the described features or acts described above. Rather, the described

features and acts are disclosed as example forms of implementing the claims.

[0046] Those skilled in the art will appreciate that various embodiments may be practiced in network computing environments with many types of computer system configurations, including personal computers, desktop computers, laptop computers, message processors, hand-held devices, multi-processor systems, microprocessor-based or programmable consumer electronics, network PCs, minicomputers, mainframe computers, mobile telephones, PDAs, tablets, pagers, routers, switches, and the like. Embodiments described herein may also be practiced in distributed system environments where local and remote computer systems that are linked (either by hardwired data links, wireless data links, or by a combination of hardwired and wireless data links) through a network, each perform tasks (e.g. cloud computing, cloud services and the like). In a distributed system environment, program modules may be located in both local and remote memory storage devices.

[0047] In this description and the following claims, "cloud computing" is defined as a model for enabling on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). The definition of

"cloud computing" is not limited to any of the other numerous advantages that can be

obtained from such a model when properly deployed.

[0048] For instance, cloud computing is currently employed in the marketplace so as

to offer ubiquitous and convenient on-demand access to the shared pool of configurable

computing resources. Furthermore, the shared pool of configurable computing resources

can be rapidly provisioned via virtualization and released with low management effort or

service provider interaction, and then scaled accordingly.

[0049] A cloud computing model can be composed of various characteristics such as

on-demand self-service, broad network access, resource pooling, rapid elasticity, measured

service, and so forth. A cloud computing model may also come in the form of various

service models such as, for example, Software as a Service ("SaaS"), Platform as a Service

("PaaS"), and Infrastructure as a Service ("IaaS"). The cloud computing model may also

be deployed using different deployment models such as private cloud, community cloud,

public cloud, hybrid cloud, and so forth. In this description and in the claims, a "cloud

computing environment" is an environment in which cloud computing is employed.

[0050] Additionally or alternatively, the functionally described herein can be

performed, at least in part, by one or more hardware logic components. For example, and

without limitation, illustrative types of hardware logic components that can be used include

Field-programmable Gate Arrays (FPGAs), Program-specific Integrated Circuits (ASICs),

Program-specific Standard Products (ASSPs), System-on-a-chip systems (SOCs),

Complex Programmable Logic Devices (CPLDs), and other types of programmable

hardware.

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[0051] Still further, system architectures described herein can include a plurality of

independent components that each contribute to the functionality of the system as a whole.

This modularity allows for increased flexibility when approaching issues of platform

scalability and, to this end, provides a variety of advantages. System complexity and

growth can be managed more easily through the use of smaller-scale parts with limited

functional scope. Platform fault tolerance is enhanced through the use of these loosely

coupled modules. Individual components can be grown incrementally as business needs

dictate. Modular development also translates to decreased time to market for new

functionality. New functionality can be added or subtracted without impacting the core

system.

[0052] Various terminology will be used herein to describe the monetary transaction

system (also referred to as a "mobile wallet platform", "mobile wallet program" or "mobile

wallet transaction system"). The term "agent" is used to refer to an individual with mobile

financial services (mFS) transaction system tools and training to support specific mFS

functions. These mFS functions include subscriber registration and activation, and the

deposit and withdrawal of funds from the mFS transaction system. Agents are

representatives of the mFS transaction system or "program". Agents can be employees or

contractors of the program provider, or other companies and organizations that partner with

the program provider to provide these services themselves. Agents may be found in every

facet of a typical economy, and may include large retailers, mobile network operators

(MNO) airtime sales agents, gas stations, kiosks, or other places of business.

[0053] The mobile wallet platform includes a mobile wallet application, web interface

or some other type of functionality that allows the user to interact with the mFS platform

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subscriber.

using their mobile device. The mobile wallet application may include a subscriber identity module (SIM) application, an Unstructured Supplementary Service Data (USSD) application, a smartphone application, a web application, a mobile web application, a Wireless Application Protocol (WAP) application, a Java 2 Platform, Micro Edition (J2ME) application, a tablet application or any other type of application or interface that provides tools for the agent to register, activate, and offer other services to the mFS

[0054] As used herein, a mobile wallet application is a mobile wallet application installed on a SIM card. A USSD application is an application that implements USSD for various functionality including prepaid callback service, location-based content services, menu-based information services and other mobile wallet platform services. A web application is one that implements or uses the internet to provide mobile wallet platform functionality. A mobile web application is similar to a web application, but is tailored for mobile devices. A WAP application is one that uses the wireless application protocol to communicate with the mobile wallet platform to provide the platform's functionality. A J2ME application is an application developed in Java and is designed to provide mobile wallet functionality on a variety of different hardware. A tablet application is an application specifically designed for a touchscreen-based tablet that provides mobile wallet platform functionality for tablet devices., and as part of configuring the phone on the network. Any of these applications (or any combination thereof) may be provided on the user's mobile device. This functionality can also be made available on a retail point of sale (POS) system or web site.

[0055] The term "agent administrator" refers to an individual with mFS program tools and training to administrate the allocation of funds to agent branches (e.g. retail locations). As agents perform mFS transactions with subscribers, such as depositing and withdrawing money, the agents are adding and removing money from their own accounts. If there are insufficient funds in the agent's account to complete a transaction, additional money will need to be transferred from the agent company's master account to that agent branch account to cover that transaction. An agent administrator is responsible for these funds transfers. Any of the applications referred to above may be configured to provide tools used by the agent administrator to view the agent company balance, view the agent branch balances, and transfer funds into and out of agent branch mobile wallets. This functionality

can also be made available on a website for easier access.

The term "agent administrator mobile wallet application" refers to a software program or application installed on the agent administrator's terminal in the agent administrator's mobile device (such as a mobile phone or tablet). This software application provides the agent administrator the ability to securely perform agent administrator functions such as querying the agent company account balance or transferring funds into and out of agent branch accounts. The agent administrator's mobile wallet application may be installed on a global system for mobile communications (GSM) SIM card (or on any other type of SIM card), and may be accessed using a GSM mobile phone. The agent administrator's application may also be installed on a code division multiple access (CDMA) mobile phone, a 3G, 4G, 4G LTE (Long Term Evolution) or other wireless carrier standard. The application may, additionally or alternatively, be installed directly on the agent administrator's mobile device. The application communicates with the mFS

transaction system using binary and/or text short message service (SMS) messages. A

wireless service provider or MNO provides the GSM SMS network infrastructure on which

the mFS platform operates.

[0057] In some embodiments, the mFS platform application may utilize triple data

encryption standard (3DES) encryption (or some other type of encryption), encrypted

message signing, and password security on some or all of its communications with the mFS

transaction system in order to ensure that the transactions are properly secured and

authenticated.

[0058] The term "agent branch" refers to any location where an agent provides support

for subscriber services of the mFS platform. Funds are allocated by the agent administrator

from the agent company's main account to each agent branch to fund the subscriber mFS

functions such as depositing or withdrawing cash, in-store purchases, bill payments,

prepaid airtime top-ups and money transfers. In some cases, multiple agents may work in

a single branch. However, at least in some cases, monetary funds are allocated to from the

agent company's main account on a per branch basis.

[0059] The term "agent branch account balance" refers to the amount of money

residing in a particular agent branch account at a given time. Funds can be deposited into

the branch account by the agent administrator, or the funds can come from participating in

subscriber mFS transactions such as depositing or withdrawing cash from the subscriber's

mobile wallet accounts, or making retail purchases with the mobile wallet.

[0060] Each agent branch is to maintain a balance in their branch account. This applies

more strongly in countries where mFS program and financial services infrastructure is still

developing. In cases where real-time processing of financial transactions including card

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processing is not practical, subscribers leverage the applications on their mobile phones to

submit transactions and conduct business with retailers, businesses, and other subscribers.

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 mobile wallet in payment for goods or services). This value is referred

to herein as "eMoney".

[0061] 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.

[0062] In some embodiments, in countries with more developed economies, it may be

beneficial to use program-issued pre-paid debit cards, pre-paid access accounts, stored

value accounts or gift cards to conduct business along with the added convenience of card

processing networks such as Cirrus, STAR, or Visa for POS and automated teller machine

(ATM) functionality. Agents, particularly those in retail outlets and kiosks, can still support

subscribers with deposits, withdrawals, and other transfers, but in this case bank external

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card processors manage the mobile wallet and branch account balances and provide the

real-time transfer of funds.

[0063] The term "agent branch ledger" refers to a written (or electronic) ledger

maintained by the mFS platform. Agent branch transactions are performed on the agent's

and subscriber's mobile phones where an electronic record of the transaction is generated

and stored on the mFS platform. These electronic transactions are then reconciled with

agent branch ledgers to ensure the security and integrity of the transaction. Agent branch

ledgers are printed or electronic transaction logs that are distributed to the agent branch

locations in hard copy form to serve as a backup record to the electronic transactions.

[0064] The term "agent company" refers to a business that registers to participate in

the mFS program as a partner of the mFS program provider or owner. The agent company

has one or more agent branches which conduct mFS business with mFS program

subscribers. In some cases, the agent company may be referred to as a distributor or retailer.

[0065] The term "agent company account balance" refers to the sum of the funds

deposited at a "partner bank" (defined below) by the agent company to fund the agent

company's daily transactions. The funds in the agent company account are then distributed

to agent branches by the agent company's agent administrator to conduct everyday business

such as accepting cash deposits and cash withdrawals from mFS subscribers. This balance

is sometimes referred to as the "agent company float".

[0066] An "agent manager" is a supervisor of company agents for a given company.

The agent manager has the training and tools to create, delete or modify agent accounts for

a company, as well as monitor the transactions performed by agents. The agent manager

may have a special application or an increased level of rights to access applications features

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not available to other users. The special application is a program installed on the agent

manager's terminal. This application provides the agent manager the ability to securely

perform agent manager functions such as registering and activating new agent accounts.

[0067] The mFS agent manager application may be installed on any terminal or device.

It communicates with the mFS platform using binary and/or text SMS messages. A wireless

service provider or MNO provides the GSM SMS network infrastructure on which the mFS

platform operates. The mFS platform mobile wallet applications may utilize 3DES

encryption (or any other type of encryption), encrypted message signing, and password

security on some or all of its communications with the mFS platform in order to ensure that

the transactions are properly secured and authenticated.

[0068] The term "agent application" refers to an application that provides all the tools

necessary for an agent to register, activate, and offer other services to the mFS subscriber.

The agent application is a program installed on the agent's SIM card or otherwise installed

in the agent's mobile device's memory. This application provides the agent the ability to

securely perform agent functions such as registering and activating new subscribers and

depositing and withdrawing funds from mobile wallet accounts. The mFS agent application

may be installed on a GSM SIM card or mobile phone and may be accessed using a GSM

or CDMA mobile phone. A wireless service provider or MNO provides the data and SMS

network infrastructure on which the mFS platform operates.

[0069] The terms "mFS platform", "mobile wallet platform" and "monetary transaction

system" refer to an overall platform or ecosystem of different components that work

together to provide the various functions described herein on a global scale. At least some

of the various logic components include the following: the application. The "mobile wallet

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application" or "mFS application" manages the processing of incoming transactions

regardless of their source. The application handles end-user authentication, transaction

processing, subscriber profile management, and further manages interactions between the

various platform components.

[0070] The mFS platform further includes a transaction processor. This component is

used when the mFS application is implemented in a country where real-time processing of

financial transactions is not practical (or not possible). The transaction processor manages

the balance of mobile wallet accounts, agent accounts, and the accounts of any other

program participant. The transaction processor handles balance inquiries, credits, debits,

and transaction roll-backs.

[0071] The mFS platform further includes a rules engine that manages and applies the

rules and policy that are defined for transactions as they are processed on the mFS platform.

Rules impact transaction fees, limits, velocity limits, and commissions as well as program

actor roles and permissions. Rules can be customized for each implementation. The mFS

platform also includes an integration interface that manages the integration and interaction

between external systems (i.e. external to the mFS platform) and the mFS platform.

Connectivity to the wireless service provider's pre-paid airtime billing platform and the

program partner bank, for example, are managed by the integration interface.

[0072] The mFS platform further includes a transaction database that stores the data

that supports the mFS platform. This includes subscriber profiles and subscription data,

transaction data and logs, and application configuration and run-time data, among other

types of data. Another component of the mFS platform is a handset support service that

interfaces with the wireless service provider's SMS network to allow communication

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between the mobile wallet applications and the back-office systems via SMS messaging or

some other form of data transfer. Still further, another component of the mFS platform is a

web component that provides a web interface to the mFS program participants that allows

the subscriber to perform the same functions in the web interface that they would have

available through their applications.

[0073] The term "bill pay company" refers to a business that signs-up to participate in

the mFS transaction system. As a participant in the mFS transaction system, the company

accepts payment from mFS mobile wallet accounts, either in the form of eMoney or

through periodic settlements.

[0074] At least in some embodiments, financial transactions that take place in the mFS

mobile wallet platform are funded through pre-paid mobile wallet accounts. Mobile wallet

platform subscribers can deposit cash into their mobile wallet account through a process

referred to herein as 'cash-in'. The cash-in process is supported by mFS agents at agent

branch locations. The agent accepts the cash from the subscriber and transfers the

equivalent amount of eMoney to the subscriber's mobile wallet account. This process is

similar to withdrawing cash from a bank account.

[0075] As mentioned above, in some embodiments, financial transactions that take

place in the mobile wallet platform are funded through pre-paid mobile wallet accounts.

Mobile wallet platform subscribers can withdraw cash from their mobile wallet account

through a process known as "cash-out". The cash-out process is supported by mFS agents

at agent branch locations. The subscriber transfers eMoney from their mobile wallet

account to the agent's eMoney account. Upon receiving the eMoney, the agent gives the

subscriber cash from their branch cash register.

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[0076] Accounts managed on the mFS platform by the mFS eMoney transaction

processor maintain the mobile wallet balance of mFS program participants including

subscribers, agent branches, agent companies, and non-agent companies. eMoney is moved

between Mobile Wallet accounts by the transaction processor based on mFS transaction

processing. Only when transactions involving cash (i.e. depositing or withdrawing funds

from the mFS program) or the movement of money from mFS participants to non-mFS

program participants are funds moved from the master bank accounts.

[0077] As subscribers, agents, and other mFS program participants conduct business

in the mFS program, value is transferred from one account to the next as payment for

services rendered or goods purchased. This value can be in the form of real currency or the

electronic representation referred to herein as eMoney.

[0078] Among other situations, eMoney is used in mFS implementations where the

real-time processing of financial transactions including card processing is not practical.

The mFS platform utilizes an internal transaction processor for managing the real-time

balance of mobile wallet and agent accounts as value (eMoney) is transferred from one

mobile wallet to another in payment for services.

[0079] 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 mobile wallet accounts and the agent branch accounts 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 example, if an mFS subscriber gives an mFS agent

\$10 to deposit into the subscriber's mobile wallet account, the agent would place the cash

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into his or her register, and transfer \$10 from the agent branch eMoney account into the

subscriber's mobile wallet account. While the agent acquired \$10 in his or her register, the

agent transferred-out \$10 of eMoney credits from his or her branch eMoney account. This

will be explained in greater detail below.

[0080] In some embodiments, employers may wish to participate in the mFS program

by allowing the direct deposit of paychecks into subscribers' mobile wallet accounts.

Accordingly, each payday, the user's pay is directly transferred to the subscribers' mobile

wallet.

[0081] The term "know your customer" or "KYC" refers to information collected about

an individual that identifies that individual. Such information is used to establish a mobile

wallet account with the mobile wallet platform. Regulatory requirements in some countries

require that new bank account creation must be preceded by a display of a valid government

ID. These KYC regulations may vary from country to country. Accordingly, different KYC

information may be requested from subscribers in different countries in order to establish

a mobile wallet account.

[0082] The term micro-finance institution (MFI) refers to a lender that issues small

loans. MFls participating in the mFS program lend to mFS program subscribers and accept

loan repayment either in the form of eMoney or settlements with the mFS platform

provider.

[0083] The term "mFS program", like the term "mFS platform" refers to the ecosystem

of companies, service providers, and subscribers that participate in providing mobile

financial services to their customers. In some embodiments, there may be one mFS

program implementation per country. Each program includes a program owner and

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operator, a program platform, a partner wireless services provider or MNO, and a partner

bank.

[0084] The term "mFS program master account" refers to a bank account maintained

by the mFS program partner bank to provide funds and float for the operation of the mFS

platform. Depending on the type of mFS implementation, the master account can include

sub-accounts for each of the agent branches and subscriber mobile wallets, giving the bank

visibility into all transactions on a per-user basis. The mFS platform can also manage the

balance of sub-accounts and interact with the bank's master account when funds need to be

deposited or withdrawn from the account.

[0085] The term mobile network operator (MNO) refers to a provider of mobile phone

service including basic voice, SMS, unstructured supplementary service data (USSD) and

data service, and may also be referred to as a "wireless service provider".

[0086] 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 mFS

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.

[0087] The term "non-agent company" refers to a mFS program participant who

accepts payments from mFS subscribers but does not provide the same services as mFS

agent companies. Payment is accepted either in the form of eMoney or through periodic

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settlements with the mFS platform provider. Examples of non-agent companies include bill

pay providers and micro-finance lenders.

[0088] The term "non-mFS subscribers" refers to unregistered users that participates in

various use cases in the mFS program. Non-mFS subscribers can send money to or receive

money from mFS subscribers through interaction with the mFS program agents or with

international remittance providers.

[0089] The term "partner bank" refers to the primary bank participating in the mFS

program. The partner bank is responsible for holding the mFS program master accounts

that hold the funds for all mFS services and transactions. A "PIN" refers to a numeric

password that may be required to perform a transaction via the mobile wallet application.

A "transaction processor" refers to an application or service that manages the mFS program

account balances. The transaction processor determines the amount of funds or eMoney is

in a particular account at any given time, and manages account balances. Mobile

transaction system requests to credit, debit, or view the balance of a particular mobile

wallet or program account are handled by the transaction processor (in conjunction with

other components of the mobile wallet platform).

[0090] The term "sub-accounts" refers to accounts that are maintained within the mFS

platform or by an external card processor. A partner bank may elect to maintain a separate

bank account for each subscriber and/or agent branch, or a single master account may be

established that contains the funds for all of the subscriber mobile wallet and agent branch

accounts (at least within a country or other geographical region). The balance of each

individual user may be managed by the mFS transaction processor.

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[0091] When using a master account, the bank is involved only in transactions that

require the movement of funds external to the mFS program. For example, subscriber cash-

in and cash-out transactions involve the addition and removal of cash from the mFS

program and would consequently include a deposit or withdrawal from the master account.

Retail purchases from participating mFS program retailers or the exchange of funds

between mFS subscribers results in no net change in the mFS program balance and thus do

not require involvement by the partner bank.

[0092] The term "subscriber" refers to a participant of the mFS mobile wallet platform.

The subscriber maintains a mobile wallet balance and performs transactions using the mFS

application. An "unbanked subscriber" is a subscriber that does not have (or does not have

access to) a bank account or credit union account. The application or "mobile wallet

application" provides mobile wallet functionality to the (unbanked) subscriber. The mobile

wallet application is installed on a mobile device in the device's memory, on a SIM card

(such as a GSM SIM card) or is otherwise accessible to the mobile device. The mobile

wallet application provides the subscriber the ability to securely perform subscriber

functions such as making retail purchases, paying bills, or transferring money to other mFS

subscribers and non-subscribers. The mobile wallet application communicates with the

mFS platform using binary and text SMS messages, among other forms of wireless

communication. A wireless service provider or MNO provides the GSM network

infrastructure on which the mFS platform operates.

[0093] Figure 1 illustrates an example system architecture for a mobile wallet platform.

Integration tier 101 is configured to manage mobile wallet sessions and maintain integrity

of financial transactions. Integration tier 101 can also include a communication (e.g., Web

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services) API and/or other communication mechanisms to accept messages from channels

111. Other mechanisms include, but are not limited to: International Standards

Organization ("ISO") 8583 for Point of Sale ("POS") and Automated Teller Machines

("ATM") devices and Advanced Message Queuing Protocol ("AMQP") for queue based

interfaces. Each of channels 111 can be integrated to one or more mechanisms for sending

messages to integration tier 101. Notification services 102 is configured to send various

notifications through different notification channels 112, such as, for example, Short

Message Peer-to-Peer ("SSMP") for Short Messaging Service ("SMS") and Simple Mail

Transfer Protocol ("SMTP") for emails. Notification services 102 can be configured

through a web services API.

[0094] Service connectors 103 are a set of connectors configure to connect to 3rd party

systems 113. Each connector can be a separate module intended to integrate an external

service to the system architecture. Business process services 104 are configured to

implement business workflows, including executing financial transactions, auditing

financial transactions, invoking third-party services, handling errors, and logging platform

objects. Payment handler 105 is configured to wrap APIs of different payment processors,

such as, for example, banking accounts, credit/debit cards or processor 121. Payment

handler 105 exposes a common API to facilitate interactions with many different kinds of

payment processors.

[0095] Security services 106 are configured to perform subscriber authentication.

Authorization services 107 are configured to perform client authorization, such as, for

example, using a database-based Access Control List ("ACL") table.

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[0096] Database 108 is configured to manage customer accounts (e.g., storing customer accounts and properties), manage company accounts (e.g., storing company accounts and properties), manage transaction histories (e.g., storing financial transaction details), store customer profiles, storing dictionaries used by the mobile wallet platform, such as, for example, countries, currencies, etc., and managing money containers. Rules engine 109 is configured to gather financial transaction statistics and uses the statistics to provide transaction properties, such as, for example, fees and bonuses. Rules engine 109 is also configured to enforce business constraints, such as, for example, transactions and

platform license constraints.

[0097] Name matching engine 110 is configured to match different objects according to specified configuration rules. Matching engine 110 can be use to find similarities between names, addresses, etc. Transaction processor 121 is configured to manage financial accounts and transactions. The transaction processor 121 can be used to hold, load, withdraw and deposit funds to mobile wallet accounts. Transaction processor 121 can also be used as a common interface to a third party processor system. When used as a common interface, financial operations may be delegated to the external processor. A Clearing House subsystem of transaction processor 121 can be used to exchange the financial information with a bank.

[0098] Components of a mobile wallet platform can be connected to one another over (or be part of) a system bus and/or a network. Networks can include a Local Area Network ("LAN"), a Wide Area Network ("WAN"), and even the Internet. Accordingly, components of the mobile wallet platform can be "in the cloud". As such, mobile wallet platform components as well as any other connected computer systems and their

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components, can create message related data and exchange message related data (e.g., Internet Protocol ("IP") datagrams and other higher layer protocols that utilize IP

datagrams, such as, Transmission Control Protocol ("TCP"), Hypertext Transfer Protocol

("HTTP"), Simple Mail Transfer Protocol ("SMTP"), etc.) over the system bus and/or

network.

[0099] The components depicted in Figure 1 can interoperate to provide a number of

financial and other services including but not limited to enrolling a customer for a mobile

wallet, adding a stored value account (either hosted by a mobile wallet platform or a third

party), adding a bank or credit union account to a mobile wallet, adding a debit or credit

card account to a mobile wallet, depositing funds in a mobile wallet, withdrawing funds

from a mobile wallet, paying bills from a mobile wallet, topping up a prepaid mobile

account through a mobile wallet, transferring funds through a mobile wallet (nationally or

internationally), making in-store purchases using a mobile wallet, and various other tasks

as described herein below. These services will be described in greater detail below with

regard to system Figures 1 and 2, as well as Figures 3-19B.

[00100] Figure 2 depicts a monetary transaction system 200 similar to that described in

Figure 1. The monetary transaction system 200 may provide a more simplified system

structure in which each of the above services may be provided. The system includes a

subscriber 205. The subscriber may have access to a bank account, or may be an unbanked

subscriber. The subscriber has a profile 211 with the monetary transaction system 210. The

profile includes the subscriber's KYC information, as well as any associated bank accounts,

credit union accounts, bill pay accounts or other accounts. The subscriber has (or has access

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to) a mobile device 206 such as a phone or tablet. The mobile device runs the mobile wallet

application (or mobile wallet application) 207.

[00101] The subscriber can indicate, using the mobile application 207 which transaction

or other action he or she would like to perform. The indicated transaction 208 is sent to the

mobile wallet platform 210 to be carried out by the platform. The transaction processor

216 (which may be similar to or the same as transaction processor 121 of Figure 1)

performs the transaction(s) specified by the (unbanked) subscriber 205. The transaction

processor may implement various other components to perform the transaction including

memory 217, (wireless) communication module 215, rules engine 210 and/or transaction

database 225.

[00102] 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). Rules engine 220 may also be consulted to determine whether the

subscriber has exceeded a specified number of allowed transactions. Then, if funds are

available, and the transaction is otherwise permissible, the monetary transaction system

can transfer money or eMoney 221 to or from an entity such as a user or agent (e.g. entity

222) to or from an establishment such as a retail store or agent company (e.g. entity 223).

[00103] In some cases, the monetary transaction system 210 application provides a web

interface that allows subscribers to perform the same functions provided by the monetary

transaction system application. For instance, mobile wallet application 207 may provide a

web interface that allows a user to enroll for a mobile wallet. The web interface (or the

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mobile wallet application itself) receives a subscriber-initiated transaction over one of a

plurality of channels (111 from Figure 1) connected to the monetary transaction system

210. The web interface or mobile wallet application may prompt for and receive enrollment

information (e.g. KYC information) for the (unbanked) subscriber 205 over at least one of

the plurality of channels (e.g. web, point-of-sale (POS), interactive voice response (IVR,

etc.). The web interface or mobile wallet application may then send activation instructions

over the same or a different channel to activate the (unbanked) subscriber 205 and create a

subscriber account for the (unbanked) subscriber.

[00104] Once the subscriber has an account, the monetary transaction system generates

a corresponding mobile wallet for the unbanked subscriber (available via the web interface

and/or the mobile wallet application. The system then presents the (unbanked) subscriber's

account data associated with the mobile wallet and/or a notification indicating that

enrollment was successful to the subscriber. Accordingly, the mobile wallet application or

the web interface may be used to provide user enrollment functionality. It should also be

understood that either the mobile wallet application or the web interface may be used to

provide substantially all of the mobile wallet functionality described herein.

[00105] It should also be noted that the mobile device 206 may be any type of plan-

based phone or tablet, or prepaid phone or tablet. Many subscribers, such as unbanked

subscribers, may primarily use prepaid phones. The mobile wallet application 207 may be

installed on both plan-based phones and prepaid phones. The mobile wallet application

may be installed on the device's SIM card, or on the device's main memory. Accordingly,

the monetary transaction system 200 may be accessed and used via substantially any type

of plan-based or prepaid mobile device.

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**[00106]** Figure 3 shows three different graphics (301-303) and corresponding method steps (310-370) that illustrate an unbanked subscriber making a deposit using a mobile wallet (and, by extension, using the mobile wallet transaction system 210). In at least some of the embodiments described below, the actions of each participant are shown and

described. This will also, at least in some embodiments, include an illustration of money

flow throughout the mobile wallet transaction system. In the graphics, various terms are

used as follows: \$C = Cash Balance and \$E = Electronic Money (eMoney) Balance.

[00107] At graphic 301, it is assumed that the unbanked subscriber (e.g. 205) has already registered and activated an eMoney account at an agent branch location (e.g. a retail store, gas station, or other location that has registered to be an agent branch). 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.

[00108] 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, logs the transaction, and sends details (such as

eMoney account balances, transaction logs, etc.) to bank specified by the mobile wallet

platform. These details may be sent instantaneously as transactions occur, or in batches at

pre-determined intervals.

00109] In one embodiment, the monetary transaction system 210 of Figure 2 is

implemented to deposit funds at an agent branch using a mobile wallet. The monetary

transaction system 210 receives communication from an agent branch over one of a

plurality of channels (e.g. 111) connected to the monetary transaction system (step 310).

The agent communication indicates that the unbanked subscriber 205 desires to deposit a

specified amount of funds into the unbanked subscriber's mobile wallet account. The

transaction processor 216 then validates the status of the unbanked subscriber's mobile

wallet account (step 320) and determines if the agent branch is authorized to receive

deposited money (i.e. determine if it has pre-registered as an official agent branch) (step

330).

[00110] The monetary transaction system may then use rules engine 220 to perform a

limit check (to determine whether sufficient funds are available) and/or a velocity check

(to determine whether the user has exceeded a specified number of (hourly, daily, or

weekly) transactions) on the unbanked subscriber's mobile wallet account (step 340). The

transaction system then credits the unbanked subscriber's mobile wallet account with the

specified amount of funds (step 350) and returns a notification to the agent branch

confirming the deposit (step 360) and returns another notification to the subscriber

notifying the subscriber that the specified amount of funds was deposited in the their

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