[0079] 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.

[0080] 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.

[0081] 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.

[0082] 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.

[0083] 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.

[0084] 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.

[0085] 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).

[0086] 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.

[0087] 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.

[0088] 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.

[0089] 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.

[0090] 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.

[0091] 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.

[0092] 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.

CLAIMS

What is claimed:

1. A computer 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 providing a reduced cost or free financial service in exchange for participation in opt-in advertising, the method comprising the following:

receiving an indication that a user is opting in to receive opt-in advertising from an electronic payment system in exchange for a reduced cost or free financial service or good, the user having a mobile wallet account with the electronic payment system;

receiving a list of one or more items that the user has purchased using the mobile wallet account;

analyzing the list of items to identify items or item categories in which the user may be interested;

selecting one or more advertisements based on the identified items or item categories;

sending the selected advertisements to a mobile wallet application for the user that is tied to the user's mobile wallet account;

determining that the user's interactions with the selected advertisements warrant conferring a benefit to the user, the benefit being selected from among a reduced cost or free financial service or good, a coupon, a voucher, and a buy one get one free offer; and

conferring the selected benefit upon the user by sending the benefit to the user's mobile wallet application.

2. The computer system of claim 1, further comprising:

recording an indication that the benefit was conferred to the user such that the benefit can be used for subsequently purchased items; and

indicating that the benefit is available to the user by sending a message to the mobile wallet application for the user.

3. The computer system of claim 2, wherein 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.

4. The computer system of claim 2, wherein 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.

5. The computer system of claim 1, wherein recording an indication that the benefit was conferred to the user comprises recording a benefit defined the electronic payment system.

6. The computer system of claim 1 wherein 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.

7. The computer system of claim 1, wherein the electronic payment system is wirelessly connected to a plurality of mobile telephones their corresponding mobile wallet users.

8. The computer system of claim 1, wherein the mobile wallet application is running on a digital device.

9. The computer system of claim 3, wherein the digital device is a mobile telephone.

10. The computer system of claim 1, wherein 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.

11. The computer system of claim 1, further comprising receiving an indication that the user has redeemed the conferred benefit.

12. The computer system of claim 11, wherein 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.

13. A computer 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 benefit received for participation in opt-in advertising, the method comprising the following:

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;

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;

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;

determining that the specified benefit applies to the indicated good or service; 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.

14. The computer system of claim 13, wherein the specified benefit is applied automatically as the user purchases the indicated good using the mobile wallet application.

15. The computer system of claim 13, further comprising sending a notification to the user indicating that the specified benefit was applied to the purchase of the indicated good.

16. The computer system of claim 13, further comprising sending a notification to the producer of the good indicating the benefit was applied to the purchase of producer's good.

17. The computer system of claim 16, wherein the producer of the good provides an additional benefit to the user for purchasing the producer's goods.

18. The computer system of claim 17, wherein the additional benefit is stored in a brand locker in the user's mobile wallet application.

19. A computer 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 coupon received for participation in opt-in advertising, the method comprising the following:

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;

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;

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;

determining that the coupon applies to the indicated good or service; 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.

20. The computer system of claim 19, wherein coupons stored in the user's brand locker are automatically applied when purchasing the coupon's corresponding product or service.

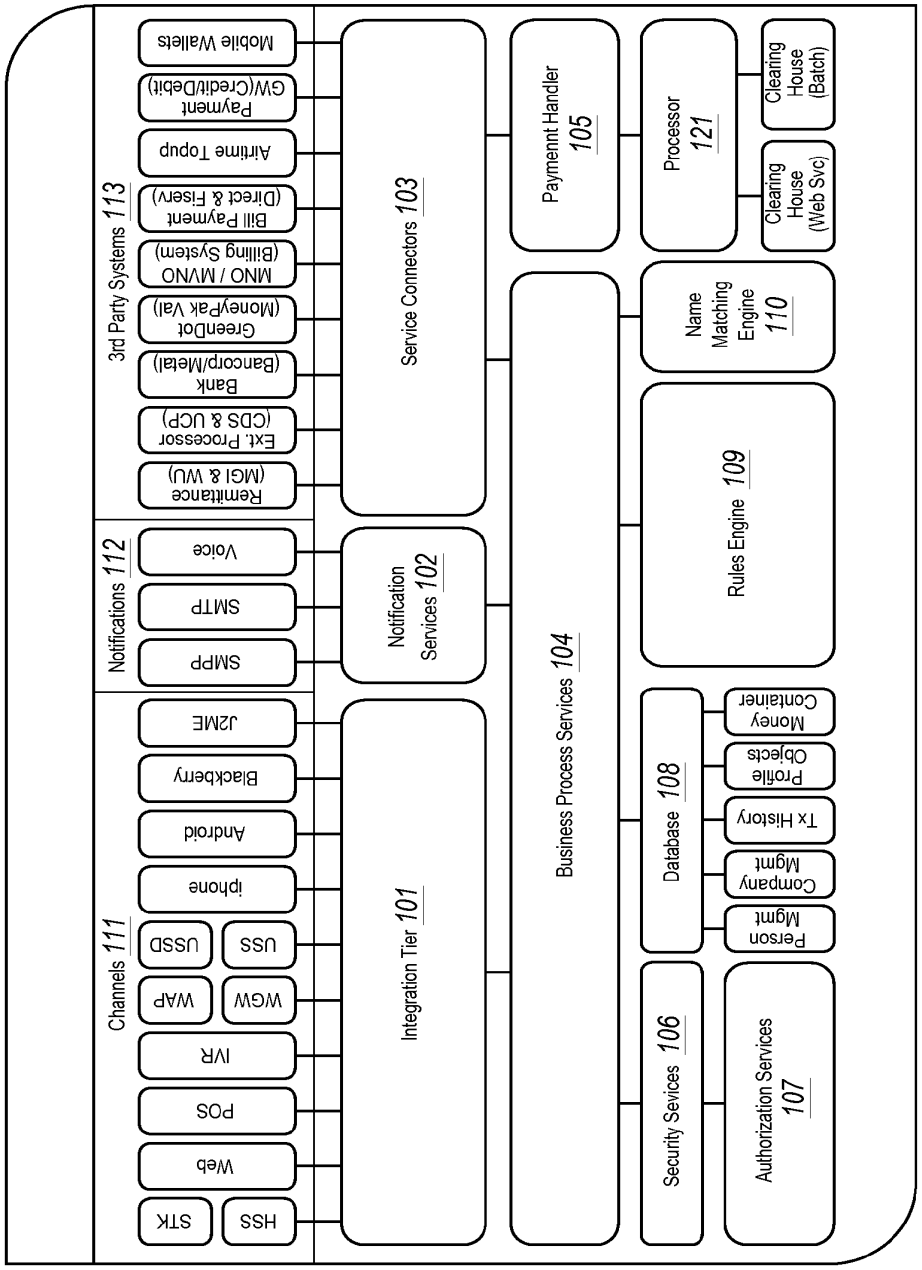

Platform Functional Architecture
Channels 111
HSS
STK
Web
POS
IVR
WGW
WAP
USS
USSD
iphone
Android
Blackberry
J2ME
Notifications 112
SMPP
SMTP
Voice
3rd Party Systems 113
Remittance (MGI & WU)
Ext. Processor (CDS & UCP)
Bank (Bancorp/Metal)
GreenDot (MoneyPak Val)
MNO / MVNO (Billing System)
Bill Payment (Direct & Fiserv)
Airtime Topup
Payment GW(Credit/Debit)
Mobile Wallets
Integration Tier 101
Notification Services 102
Service Connectors 103
Business Process Services 104
Paymennt Handler 105
Security Sevices 106
Authorization Services 107
Database 108
Person Mgmt
Company Mgmt
Tx History
Profile Objects
Money Container
Rules Engine 109
Name Matching Engine 110
Processor 121
Clearing House (Web Svc)
Clearing House (Batch)

FIG. 1

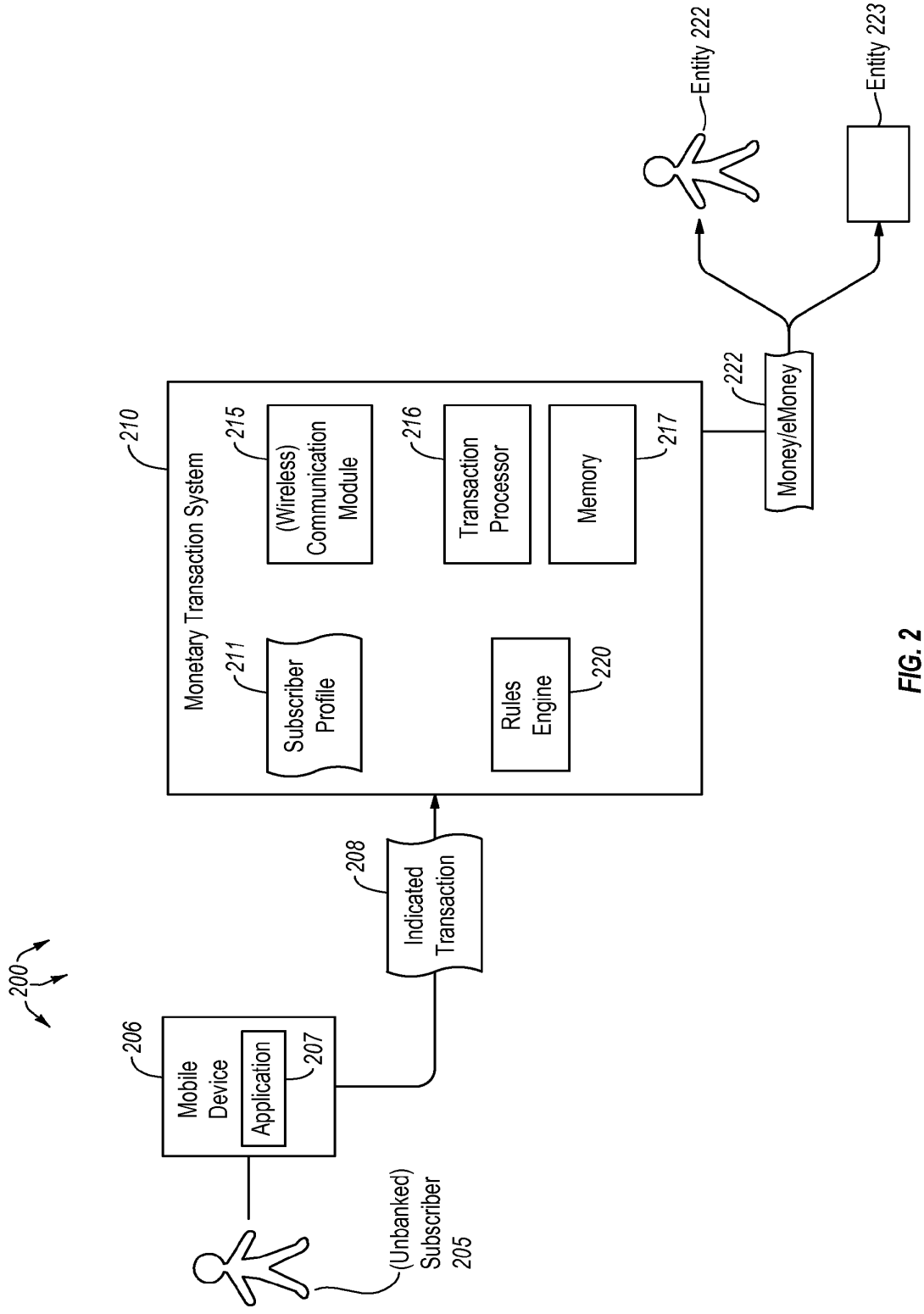
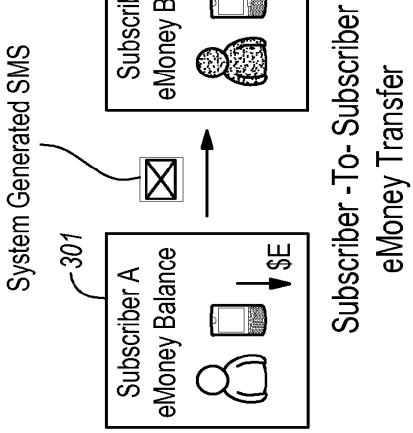
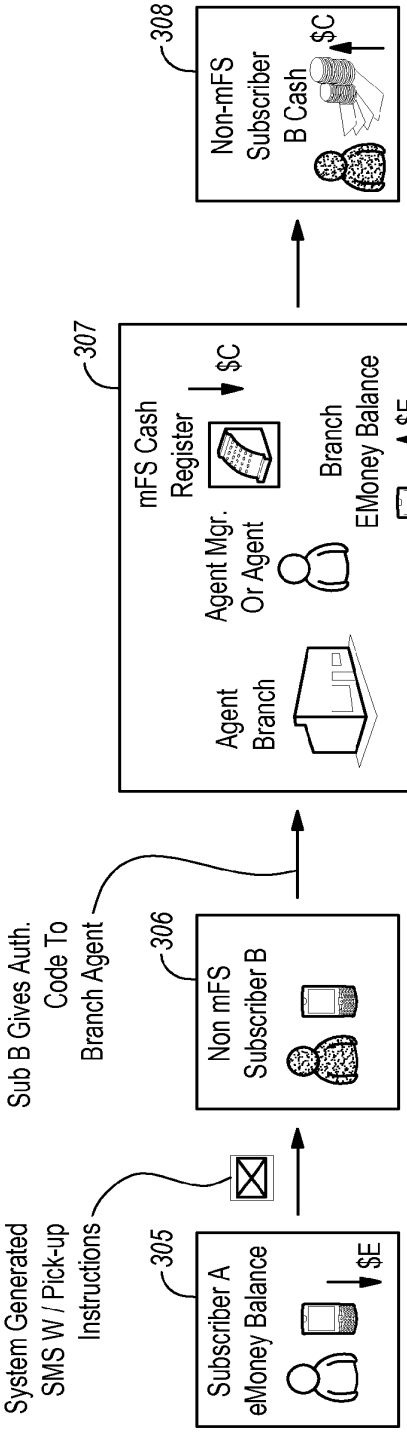

200
(Unbanked) Subscriber 205
Mobile Device
206
Application
207
Indicated Transaction
208
Monetary Transaction System
210
Subscriber Profile
211
(Wireless) Communication Module
215
Rules Engine
220
Transaction Processor
216
Memory
217
Money/eMoney
222
Entity 222
Entity 223

FIG. 2



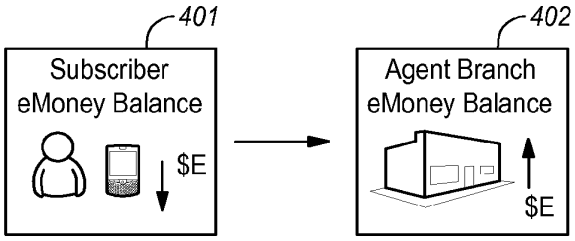
Subscriber -To- Subscriber
eMoney Transfer

FIG. 3A



Subscriber -To- Non Subscriber
eMoney Transfer

FIG. 3B



Subscriber Makes Retail Purchase

FIG. 4

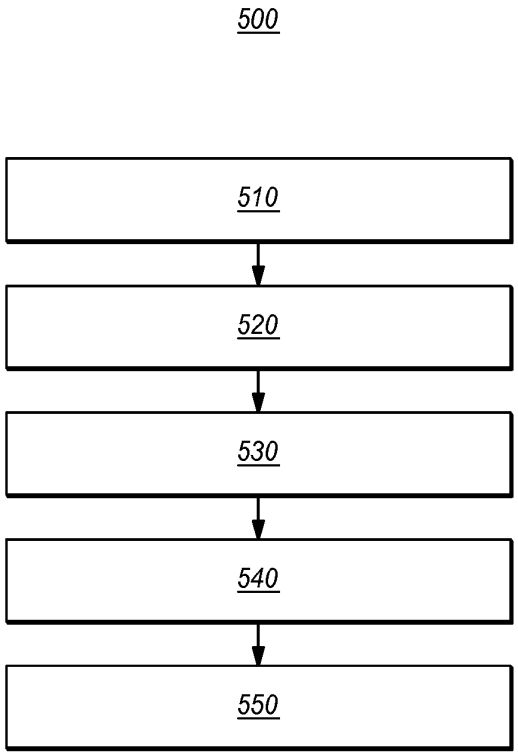


FIG. 5

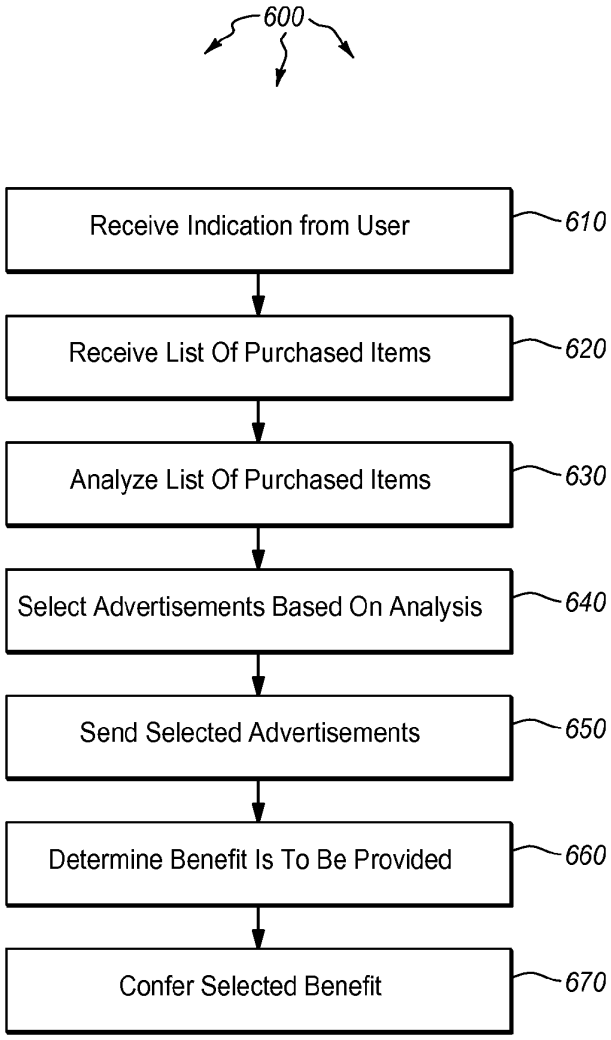

600
Receive Indication from User
610
Receive List Of Purchased Items
620
Analyze List Of Purchased Items
630
Select Advertisements Based On Analysis
640
Send Selected Advertisements
650
Determine Benefit Is To Be Provided
660
Confer Selected Benefit
670

FIG. 6

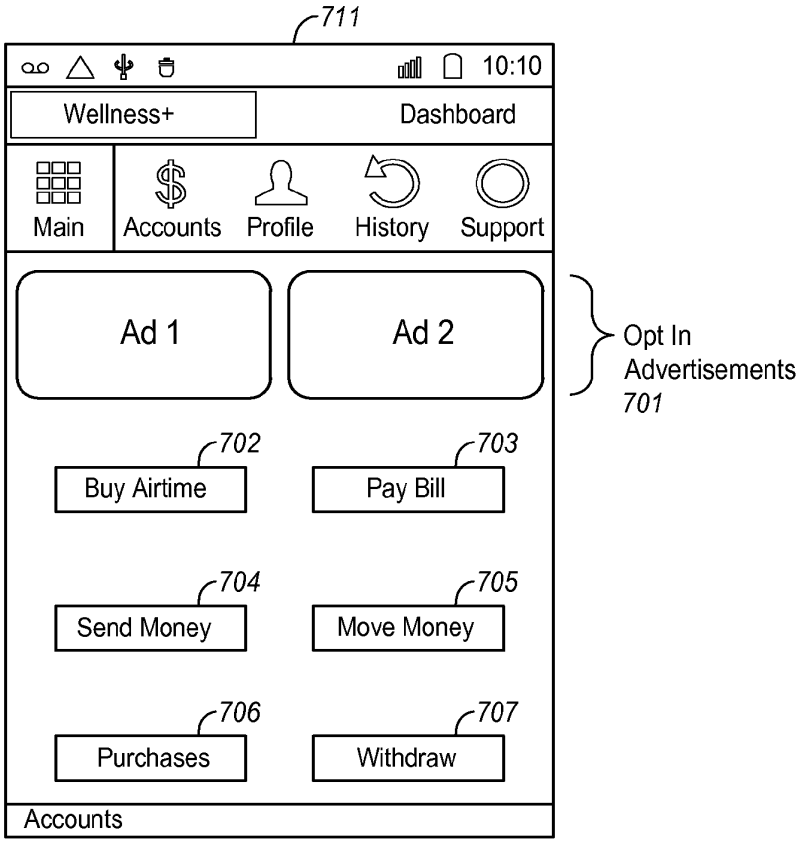

711
10:10
Wellness+
Dashboard
Main
Accounts
Profile
History
Support
Ad 1
Ad 2
Opt In
Advertisements
701
702
Buy Airtime
703
Pay Bill
704
Send Money
705
Move Money
706
Purchases
707
Withdraw
Accounts

FIG. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 12/43458

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06Q 30/00 (2012.01)
USPC - 705/14.13
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)
USPC: 705/14.13; IPC(8): G06Q 30/00 (2012.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 705/1.1, 14.1, 14.13, 30, 35, 40; 700/1, 90; IPC(8): G06Q 30/00 (2012.01)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DialogWeb: Google Scholar; Google Web; Google Patents; PubWest; Thomson Innovation
Search Terms: ADVERTISE, COMPUTER, PROCESSOR, MEMORY, STORE, SAVE, MEDIA, MEDIA, PROGRAM, SOFTWARE, CODE, REDUCED, COST, PRICE, FREE, DISCOUNT, SERVICE, PRODUCT, GOODS, EXCHANGE, TRADE, INTERCHANGE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2010/0250356 A1 (Gillenson et al.) 30 September 2010 (30.09.2010), entire document, especially para [0040], [0066], [0068], [0084], [0115]-[0117], [0120], [0123], [0130]-[0131], [0136]-[0137], [0139]-[0140], [0144], [0157], [0160], [0162], [0167]	1-20
Y	US 7,548,915 B2 (Ramer et al.) 16 June 2009 (16.06.2009), entire document, especially col. 3, ln 10-28; col. 9, ln 64 to col. 10, ln 28; col. 27, ln 12-46	1-20
A	US 7,689,506 B2 (Fei et al.) 30 March 2010 (30.03.2010), entire document	1-20
A	US 7,694,876 B2 (Barnes et al.) 13 April 2010 (13.04.2010), entire document	1-20
A	US 2011/0047016 A1 (Cook) 24 February 2011 (24.02.2011), entire document	1-20

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international 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 special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" 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
"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
"Y" 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 member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
27 July 2012 (27.07.2012)	17 AUG 2012
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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61/522,099	10 August 2011 (10.08.2011)	US
13/484,199	30 May 2012 (30.05.2012)	US

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(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **LIBERTY, Michael, A.** [US/US]; 5373 Isleworth Country Club Drive, Windermere, FL 34786 (US).

(74) Agents: **STRINGHAM, John, C.** et al.; Workman Nydegger, 60 East South Temple, Suite 1000, Salt Lake City, UT 84111 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, 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, 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.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(54) **Title**: MONETARY TRANSACTION SYSTEM

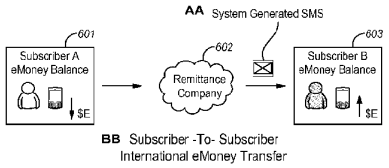


FIG. 6A

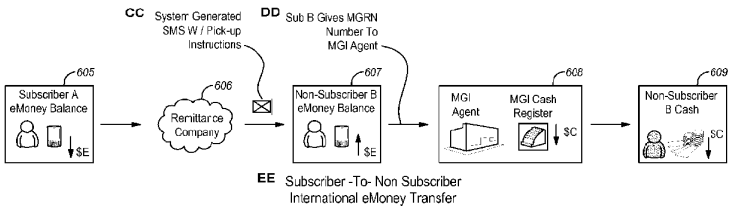


FIG. 6B

(57) **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.

WO 2013/025273 A1

MONETARY TRANSACTION SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to and the benefit of U.S. Utility Application Ser. No. 13/484,199, filed on May 30, 2012, entitled "Monetary Transaction System", and also 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 provisional applications are incorporated by reference in their entirety herein.

BACKGROUND

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.

BRIEF SUMMARY

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.

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 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.

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.

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

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:

Figure 1 illustrates a monetary transaction system architecture in which embodiments described herein may operate.

Figure 2 illustrates an alternate example embodiment of a monetary transaction system.

Figure 3 illustrates an example data flow for performing a subscriber deposit via a mobile wallet.

Figure 4 illustrates an example data flow for performing a subscriber withdrawal via a mobile wallet.

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.

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.

Figure 7 illustrates an example data flow for performing a subscriber airtime purchase via a mobile wallet.

Figure 8 illustrates an example data flow for performing a subscriber-initiated bill pay via a mobile wallet.

Figure 9 illustrates an example data flow for performing a subscriber-initiated retail purchase via a mobile wallet.

Figures 10A and 10B illustrate example data flows for requesting and repaying micro-loans via a mobile wallet, respectively.

Figure 11A illustrates an example data flow of a subscriber receiving a direct deposit via a mobile wallet.

Figure 11B illustrates an example data flow of a subscriber receiving a governmental welfare payment via a mobile wallet.

Figure 12A illustrates an example data flow of an agent administrator distributing eMoney via a mobile wallet.

Figure 12B illustrates an example data flow of an agent company making a deposit using a mobile wallet.

Figure 13 illustrates an example data flow of an agent company making a withdrawal using a mobile wallet.

Figure 14 illustrates an example data flow of a subscriber making a deposit at an agent branch using a mobile wallet.

Figure 15 illustrates an example data flow of a subscriber making a deposit with a non-agent using a mobile wallet.

Figure 16 illustrates an example data flow of a subscriber making a withdrawal with an agent using a mobile wallet.

Figure 17A illustrates an example data flow of a subscriber making a withdrawal from an ATM using a mobile wallet.

Figure 17B illustrates an example data flow of a subscriber-to-subscriber money transfer using a mobile wallet.

Figure 17C illustrates an example data flow of a subscriber-to-non-subscriber money transfer using a mobile wallet.

Figure 18A illustrates an example data flow of a subscriber-to-subscriber international money transfer using a mobile wallet.

Figure 18B illustrates an example data flow of a subscriber-to-non-subscriber international money transfer using a mobile wallet.

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.

DETAILED DESCRIPTION

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.

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 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), 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.

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.

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.

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 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.

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.

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.

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.

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.

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 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 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.

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.

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.

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 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. 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.

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.

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.

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. 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.

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 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.

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. MFIs 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.

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".

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.

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.

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).

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 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 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.

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.

Accorindlgy, 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 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.

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).

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.

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.

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.

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.

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, 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 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.

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 for the specified amount of funds (step 430).

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 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.

Figure 5B illustrates a subscriber-to-non-subscriber eMoney 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 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.

In Figure 6A, subscriber A initiates the international eMoney 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.

Figure 6B illustrates a subscriber-to-non-subscriber international 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 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 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.

In one embodiment, the monetary transaction system 210 is implemented to pay a bill from a mobile wallet. The communications module 215 of the monetary transaction system 215 receives a subscriber communication over a communication channel 111 connected to the monetary transaction system (step 810). The subscriber communication indicates that unbanked subscriber 205 desires to pay a bill for a specified amount using a specified payment method from the unbanked subscriber's mobile wallet (e.g. eMoney). The monetary transaction system 210 validates the status of the selected payment method (step 820) and performs a limit check and/or a

velocity check on the selected payment method to ensure the eMoney transfer is permissible (step 830). The monetary transaction system then debits the specified payment method by the specified amount of funds (step 840), 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. 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 (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 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.

Figure 10A illustrates a subscriber requesting a micro-loan. 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 while the term "micro-loan" is used herein, the loan may be for substantially any amount of money.

Following on the embodiment described in Figure 10A, Figure 10B 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 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 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.

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 details to the mFS platform bank.

Figure 12B illustrates an agent company deposit. The agent company has an eMoney account in the monetary transaction system 210 that may also 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 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 (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 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 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 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 non-customers (typically for a small charge). The subscriber requests a cash withdrawal from the subscriber's mobile wallet via the subscriber's debit card that is associated with the mobile wallet. The bank providing the debit card may receive settlement reports from the card processor and may transfer and/or settle funds from subscriber's account to the ATM network bank. An 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 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.

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. 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 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.

In one embodiment, the monetary transaction system 210 is 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 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.

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.

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.

CLAIMS

We claim:

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

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

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

a monetary transaction system processor that performs the one or more transactions specified by the unbanked subscriber, wherein performing the specified transactions includes communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the unbanked subscriber's profile; and

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.

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.

3. The monetary transaction system of claim 1, wherein the monetary transaction system application is provided on a prepaid or postpaid phone.

4. The monetary transaction system of claim 1, 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;

prompting for and receiving enrollment information for the unbanked subscriber over at least one of the plurality of channels;

sending activation instructions over a second channel to activate the unbanked subscriber and create a subscriber account for the unbanked subscriber;

generating a mobile wallet for the unbanked subscriber; and

presenting the unbanked subscriber's account data associated with the mobile wallet to the unbanked subscriber.

5. The monetary transaction system of claim 1, wherein the monetary transaction system is implemented to add a mobile 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;

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;

sending subscriber data to the at least one entity for identification of the unbanked subscriber, wherein the entity comprises a third party verification system;

receiving results from the third party verification system indicating that the subscriber data appropriately identifies the unbanked subscriber;

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;

adding the stored value account to the unbanked subscriber's mobile wallet; 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.

6. The monetary transaction system of claim 1, 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;

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;

sending subscriber data to the at least one entity for identification of the unbanked subscriber, wherein the entity comprises a third party verification system;

receiving results from the third party verification system indicating that the subscriber data appropriately identifies the unbanked subscriber;

submitting one or more of the unbanked subscriber's account details to a third party account processor;

receiving an indication from the third party account processor that third party account processor created a third party stored value account for the subscriber;

maintaining a link between the subscriber data and the third party stored value account;

adding the third party stored value account to the unbanked subscriber's mobile wallet; 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.

7. The monetary transaction system of claim 1, 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;

validating the status of the unbanked subscriber's mobile wallet 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 unbanked subscriber's mobile wallet account;

crediting the unbanked subscriber's mobile wallet account with the specified amount of funds;

returning a notification to the agent branch confirming the deposit; 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.

8. The monetary transaction system of claim 1, 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;

validating the status of the unbanked subscriber's mobile wallet account;

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;

performing one or more of a limit check and a velocity check on the unbanked subscriber's mobile wallet account;

returning a secure, perishable withdrawal 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 unbanked subscriber's mobile wallet 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 unbanked subscriber's mobile wallet account over at least one of the channels connected to the monetary transaction system.

9. The monetary transaction system of claim 1, 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;

validating the status of the selected payment method;

performing one or more of a limit check and a velocity check on the selected payment method;

debiting the specified payment method by the specified amount of funds;

processing the bill payment via at least one of a direct biller connection and a bill pay aggregator; 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.

10. The monetary transaction system of claim 1, 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;

validating the status of the selected payment method;

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

debiting the specified payment method by the specified amount of funds;

processing the mobile top-up via at least one of a billing system integrator and an aggregator; 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.

11. The monetary transaction system of claim 1, 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;

validating the status of the selected payment method;

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

validating the status of the specified recipient to ensure the specified recipient has a valid mobile wallet account;

debiting the specified payment method 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 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.

12. The monetary transaction system of claim 11, 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.

13. The monetary transaction system of claim 11, wherein the money is transferred internationally between the mobile wallets.

14. The monetary transaction system of claim 1, 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;

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;

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;

validating the status of the specified payment method;

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

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

debiting the specified payment method by the specified amount of funds;

returning a notification to the agent branch authorizing the purchase; and

sending a receipt to the unbanked subscriber over at least one of the plurality of channels connected to the monetary transaction system.

15. 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;

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;

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; and

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.

16. The monetary transaction system of claim 15, 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;

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;

sending subscriber data to a third party verification system for identification of the subscriber;

receiving results from the third party system indicating that the subscriber data appropriately identifies the subscriber;

submitting bank or credit union account details for validation by the transaction processor;

receiving an indication that the bank or credit union account details correspond to a valid bank or credit union account;

maintaining a link between the subscriber data and the bank or credit union account; 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.

17. The monetary transaction system of claim 1, 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;

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;

sending subscriber data to a third party verification system for identification of the subscriber;

receiving results from the third party system indicating that the subscriber data appropriately identifies the subscriber;

securely storing the debit or credit card account number for access by the mobile wallet;

adding the debit or credit card account number to the subscriber's mobile wallet; 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.

18. The monetary transaction system of claim 1, 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;

validating the status of the bank or credit union account;

determining if the agent branch is authorized to deposit money;

performing one or more of a limit check and a velocity check on the bank or credit union account;

crediting the bank or credit union account with the specified amount of funds;

returning a notification to the agent branch confirming the deposit; 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.

19. The monetary transaction system of claim 1, 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;

validating the status of the bank or credit union account;

determining if the balance of the bank or credit union account is sufficient to accommodate the requested withdrawal for the specified amount of funds;

performing at least one of a limit check and a velocity check on the bank or credit union account;

returning a secure, perishable withdrawal 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 an agent;

debiting the bank or credit union 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 were withdrawn from the bank or credit union account over at least one of the plurality of channels connected to the monetary transaction system.

20. 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;

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 credits, account debits, and transaction roll-backs;

a mobile wallet rules engine that 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;

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;

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 runtime data; 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.

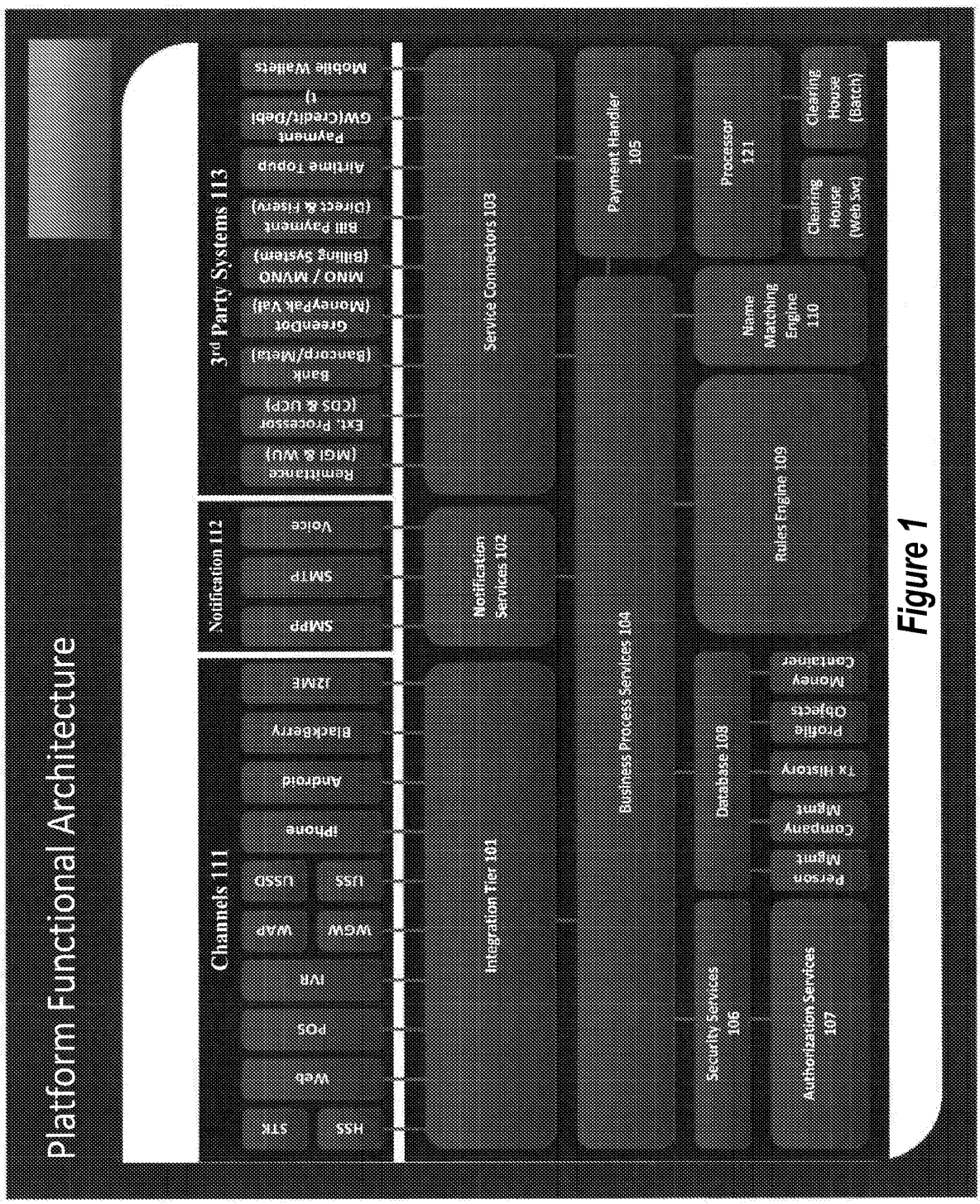

Platform Functional Architecture
Channels 111
HSS
STK
Web
POS
IVR
WGW
WAP
USSD
USS
iPhone
Android
BlackBerry
J2ME
Notification 112
SMPP
SMTP
Voice
3rd Party Systems 113
Remittance (MGI & WU)
Ext. Processor (CDS & UCP)
Bank (Bancorp/Meta)
GreenDot (MoneyPak Vat)
MNO / MVNO (Billing System)
Bill Payment (Direct & Fiserv)
Alltime Topup
Payment GW(Credit/Debit)
Mobile Wallets
Integration Tier 101
Notification Services 102
Service Connectors 103
Business Process Services 104
Payment Handler 105
Security Services 106
Database 108
Rules Engine 109
Name Matching Engine 110
Processor 121
Clearing House (Batch)
Clearing House (Web Svc)
Authentication Services 107
Person Mgmt
Company Mgmt
Tx History
Profile Objects
Money Container
Figure 1

FIG. 1

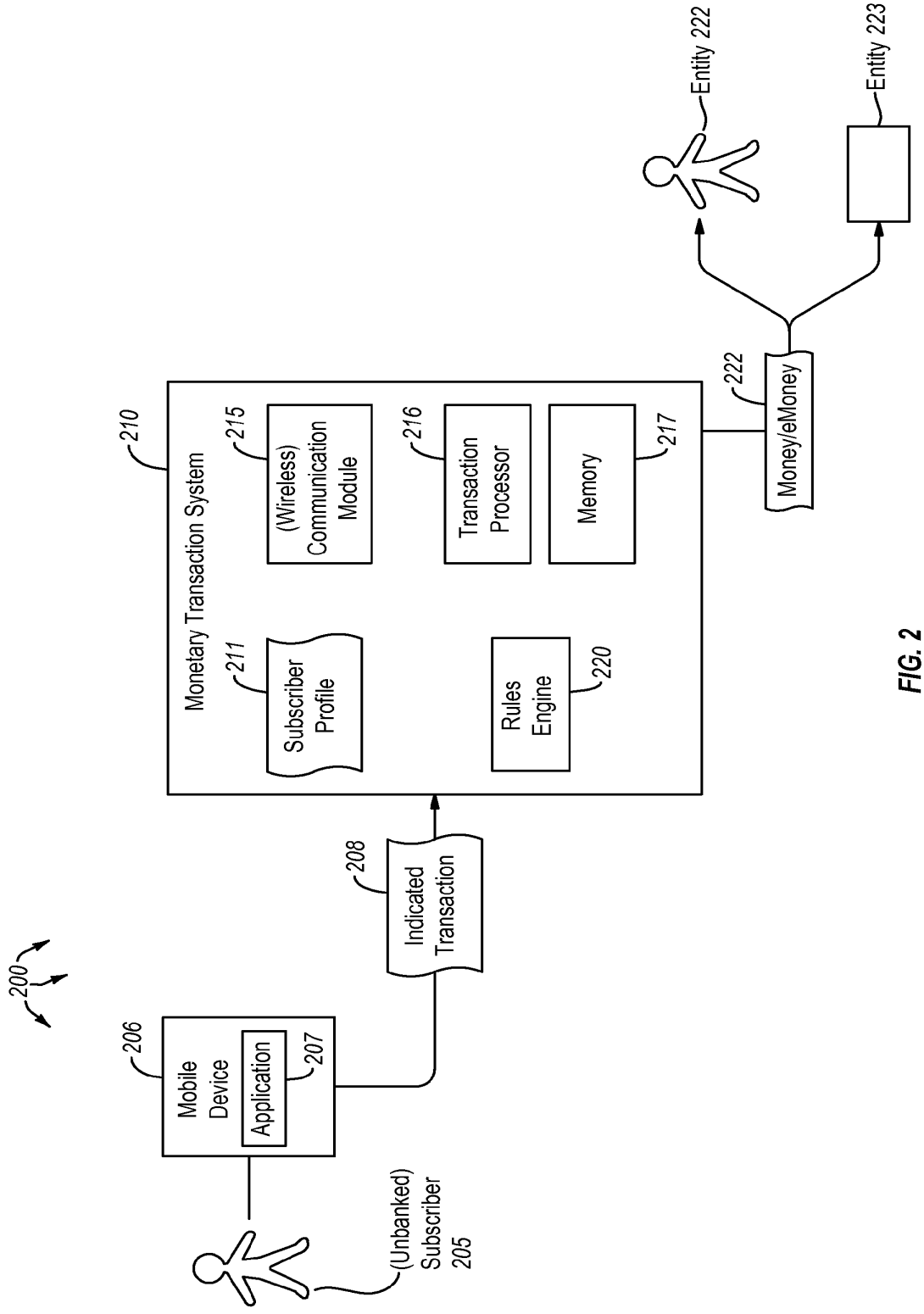
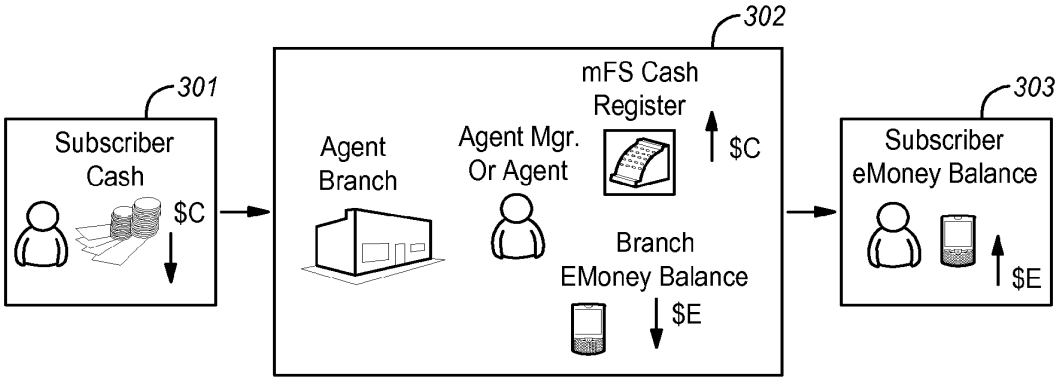

200
206
Mobile Device
Application
207
(Unbanked) Subscriber 205
208
Indicated Transaction
210
Monetary Transaction System
211
Subscriber Profile
215
(Wireless) Communication Module
216
Transaction Processor
217
Memory
220
Rules Engine
222
Money/eMoney
Entity 222
Entity 223

FIG. 2


301
Subscriber
Cash
$C
302
Agent
Branch
Agent Mgr.
Or Agent
mFS Cash
Register
$C
Branch
EMoney Balance
$E
303
Subscriber
eMoney Balance
$E

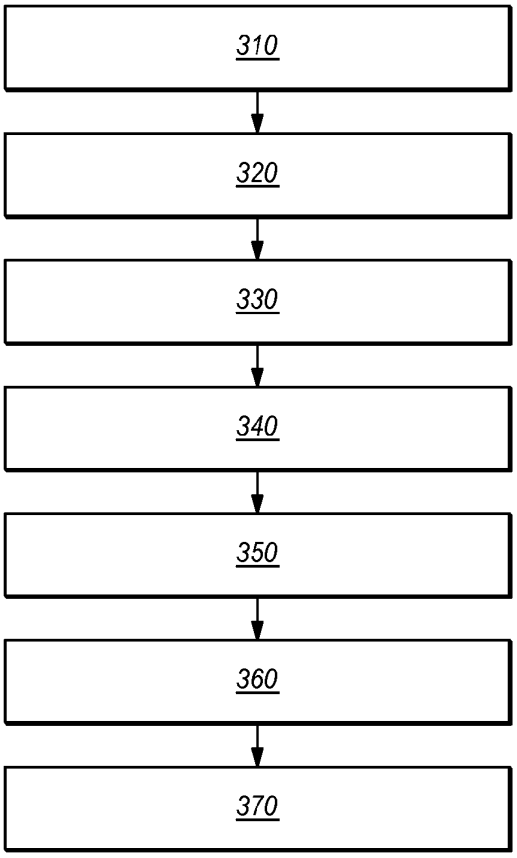
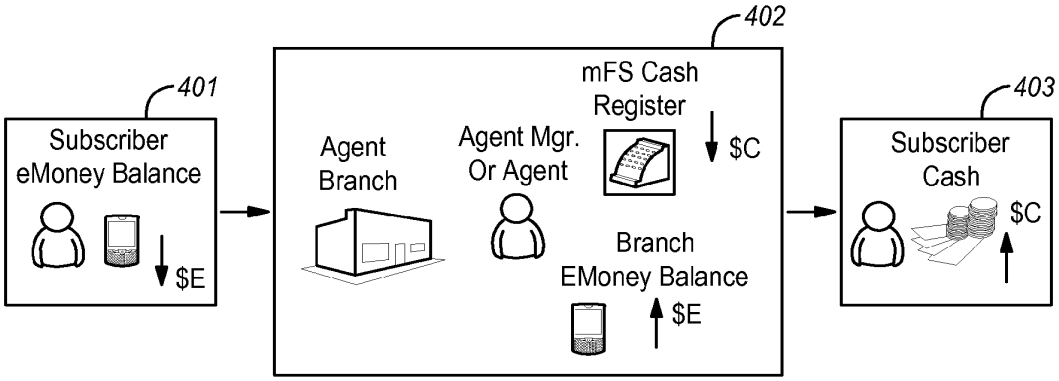

Subscriber Deposit
310
320
330
340
350
360
370

FIG. 3



Subscriber Withdrawal

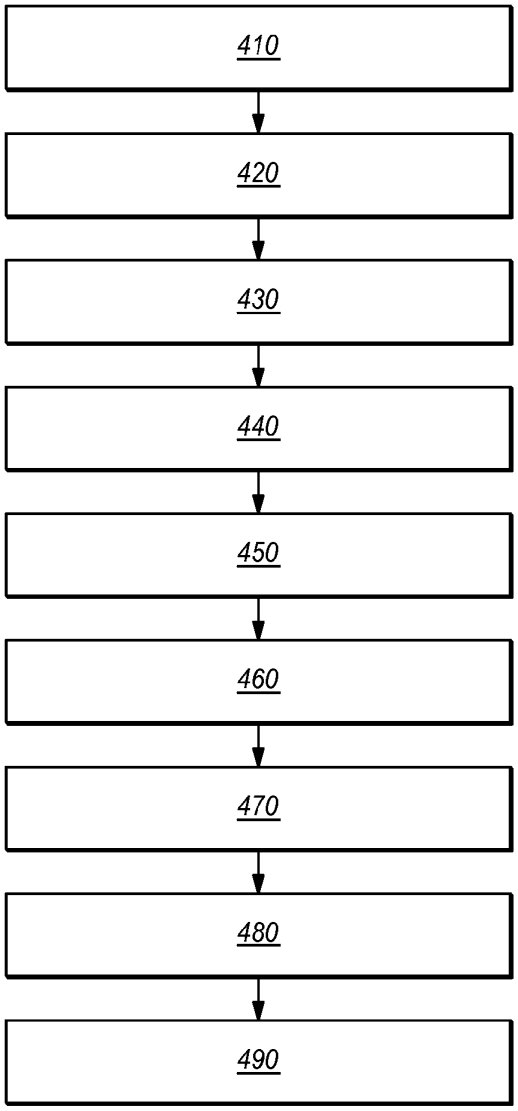
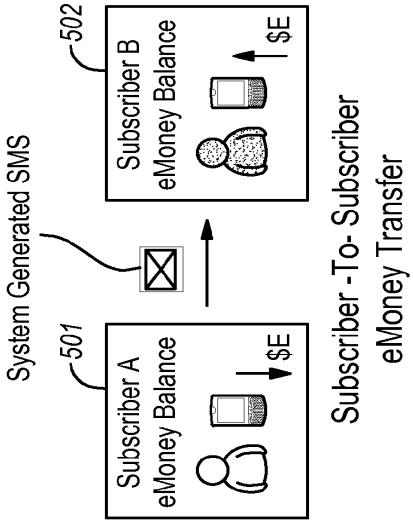
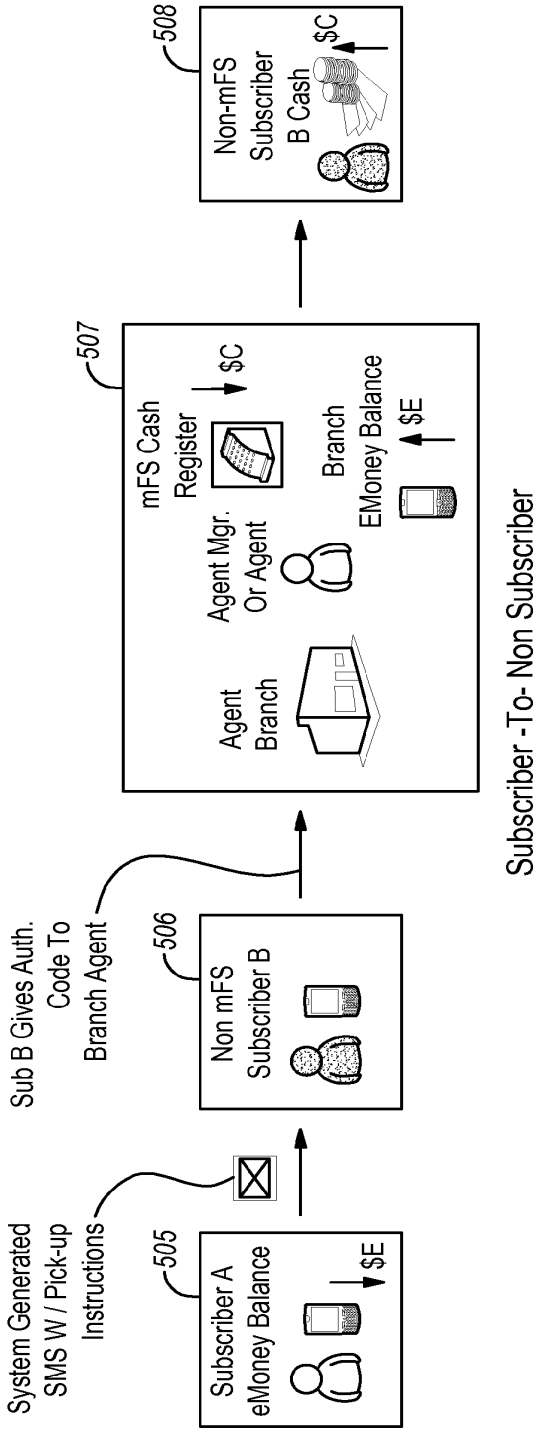


FIG. 4



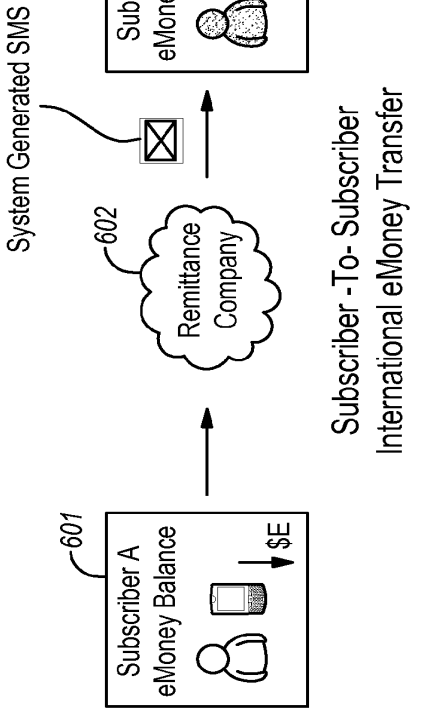
Subscriber -To- Subscriber
eMoney Transfer

FIG. 5A



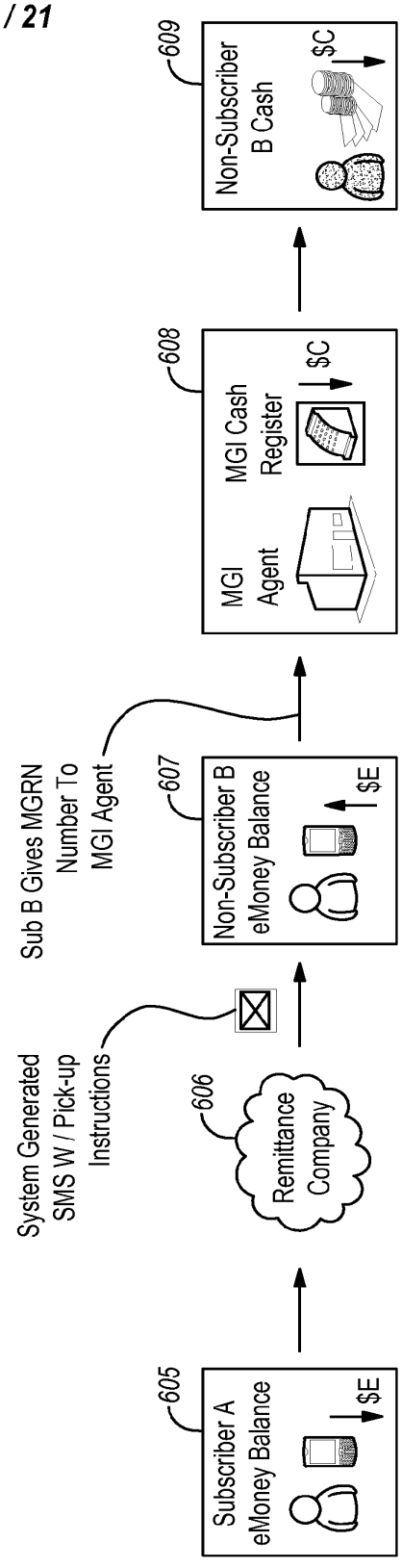
Subscriber -To- Non Subscriber
eMoney Transfer

FIG. 5B



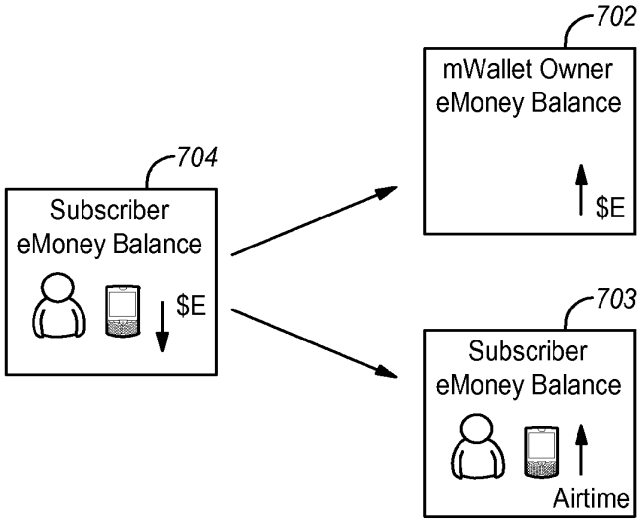
Subscriber -To- Subscriber
International eMoney Transfer

FIG. 6A



Subscriber -To- Non Subscriber
International eMoney Transfer

FIG. 6B



Subscriber Buys Airtime

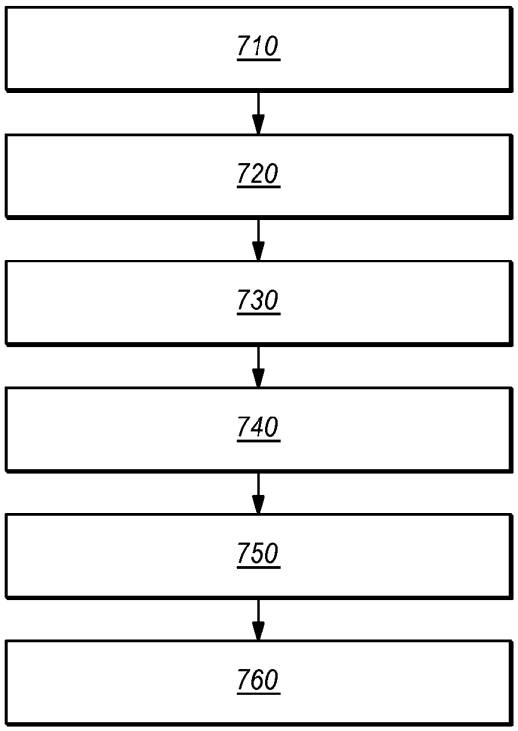
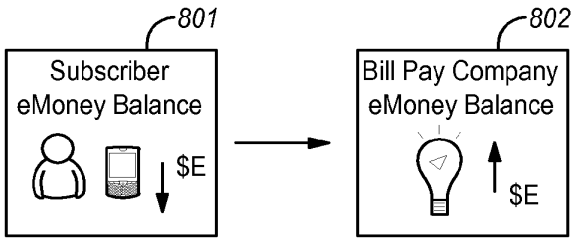


FIG. 7



Subscriber Pays Bill

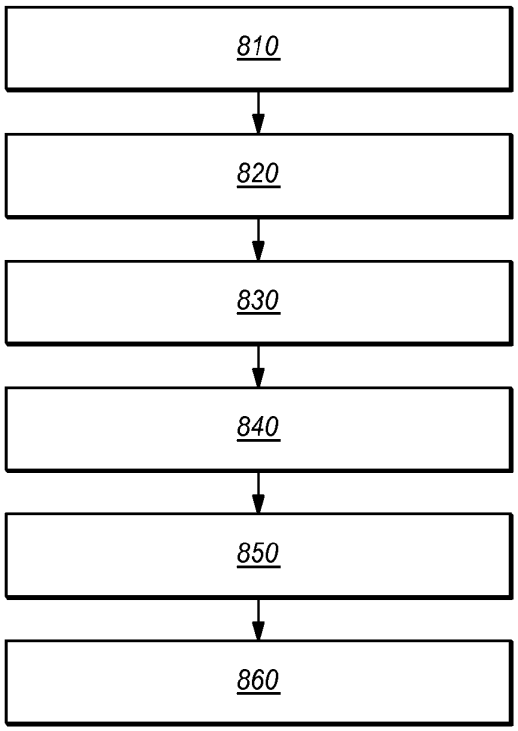
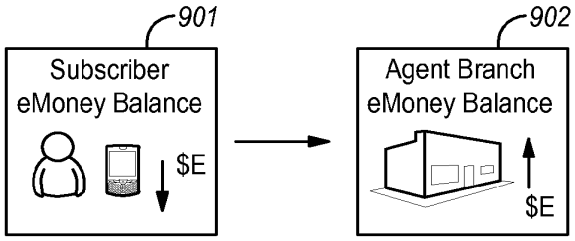


FIG. 8



Subscriber Makes Retail Purchase

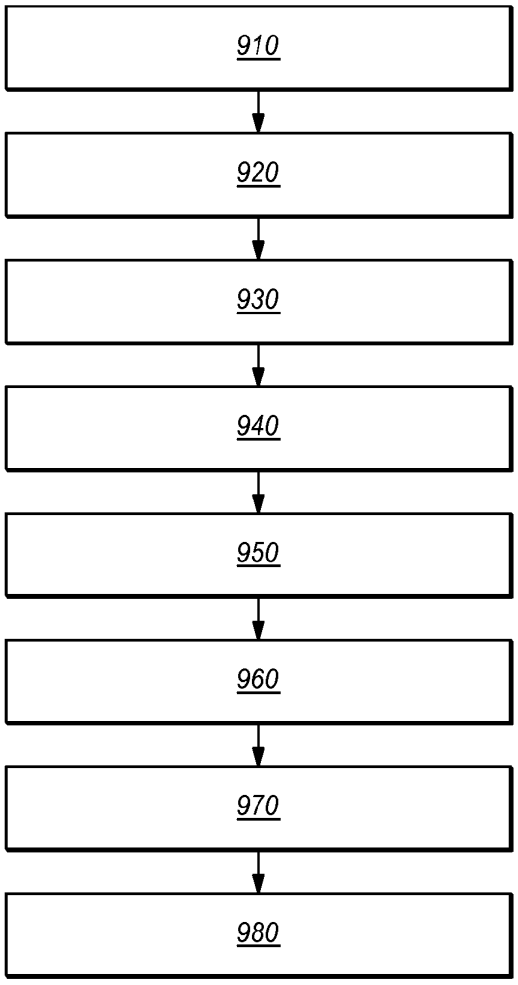
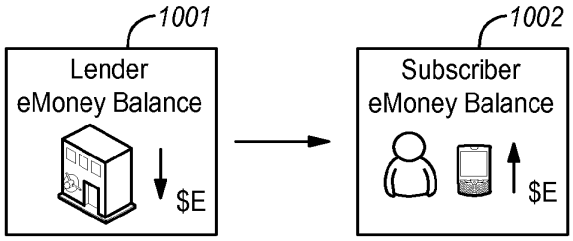
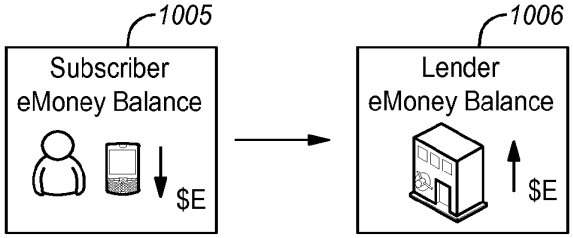


FIG. 9



Subscriber Requests Micro-Loan

FIG. 10A



Subscriber Repays Micro-Loan

FIG. 10B

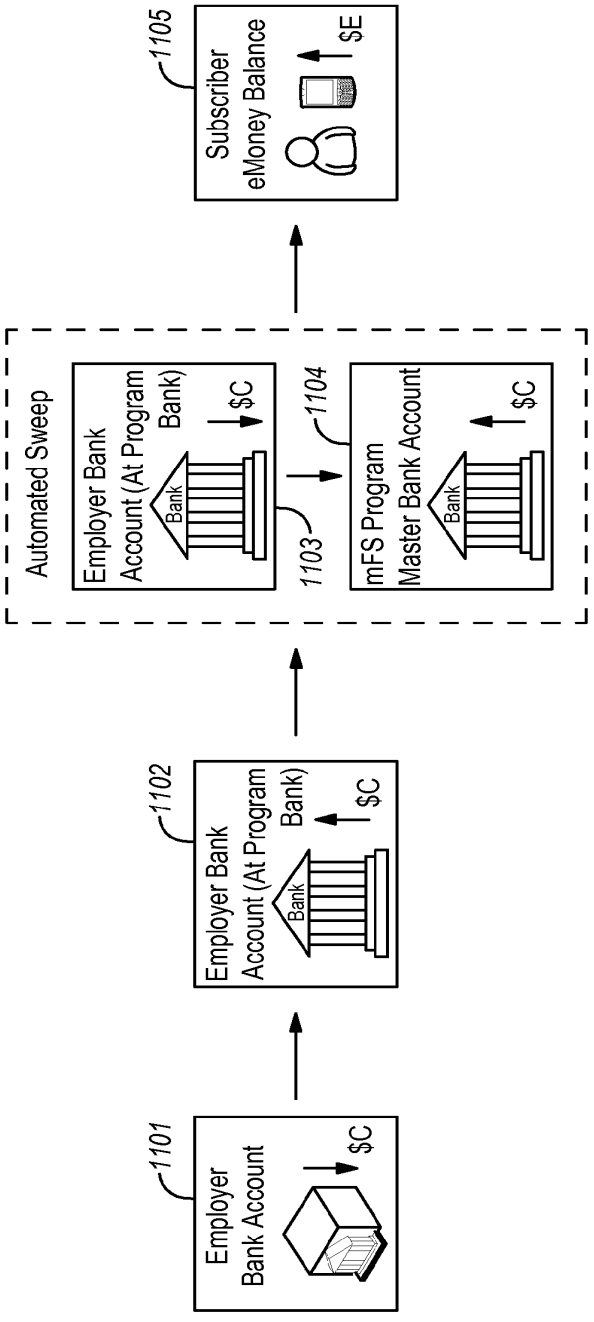
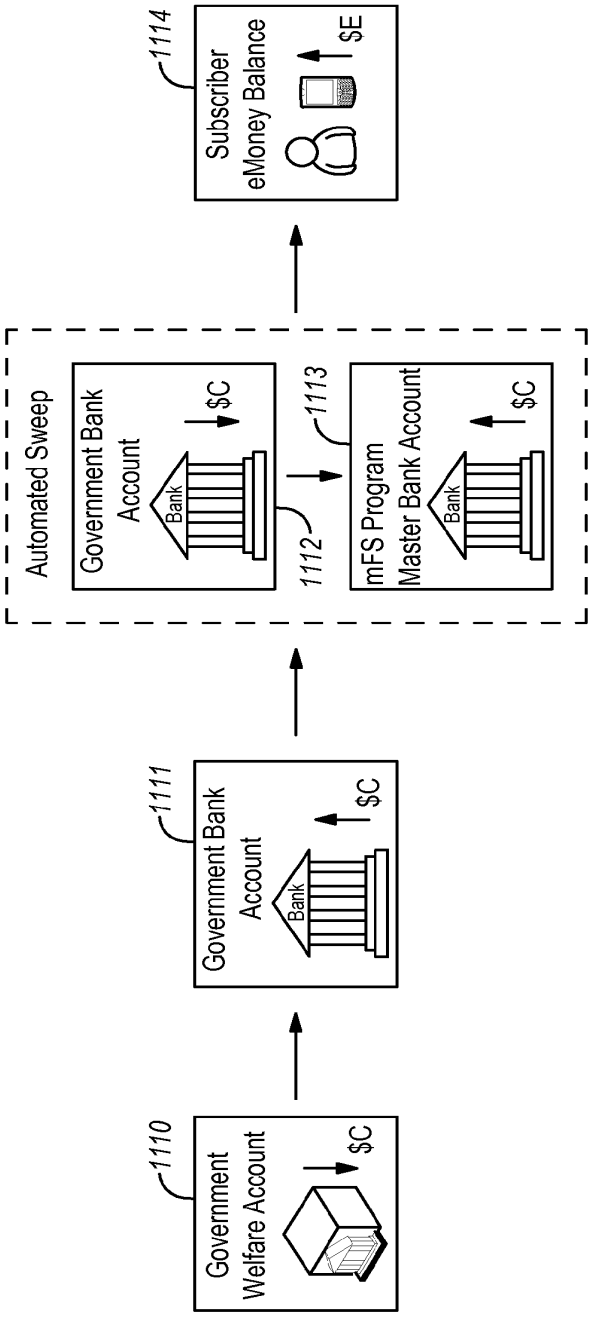

1101
Employer Bank Account
$C
1102
Employer Bank Account (At Program Bank)
Bank
$C
Automated Sweep
Employer Bank Account (At Program Bank)
Bank
$C
1103
1104
mFS Program Master Bank Account
Bank
$C
1105
Subscriber eMoney Balance
$E
Subscriber Receives Direct Deposit

FIG. 11A



Subscriber Receives Government Welfare Payment

FIG. 11B

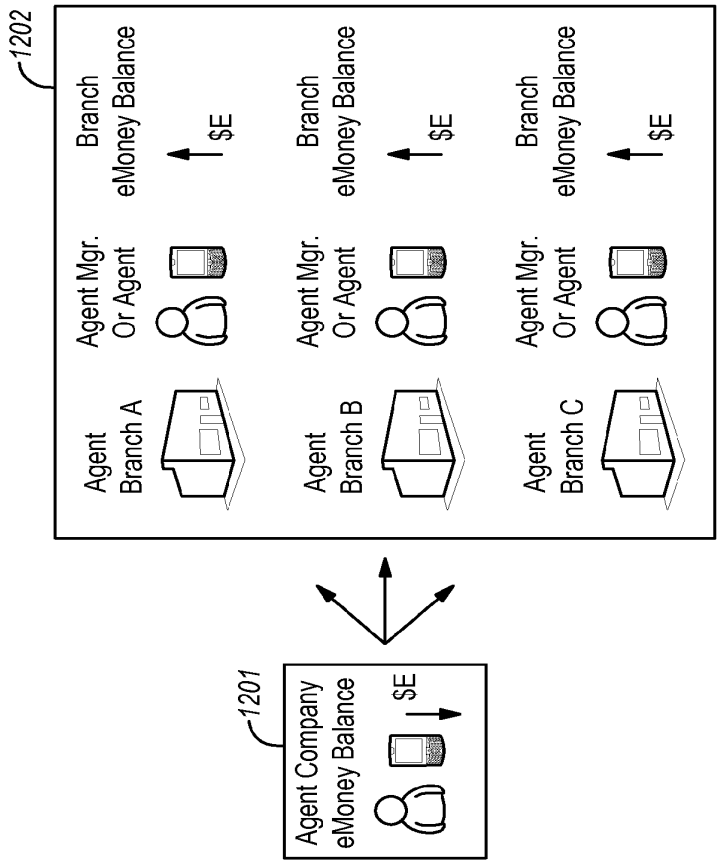

1202
Agent Branch A
Agent Mgr. Or Agent
Branch eMoney Balance
$E
Agent Branch B
Agent Mgr. Or Agent
Branch eMoney Balance
$E
Agent Branch C
Agent Mgr. Or Agent
Branch eMoney Balance
$E
1201
Agent Company eMoney Balance
$E
Agent Administrator Distributes eMoney

FIG. 12A

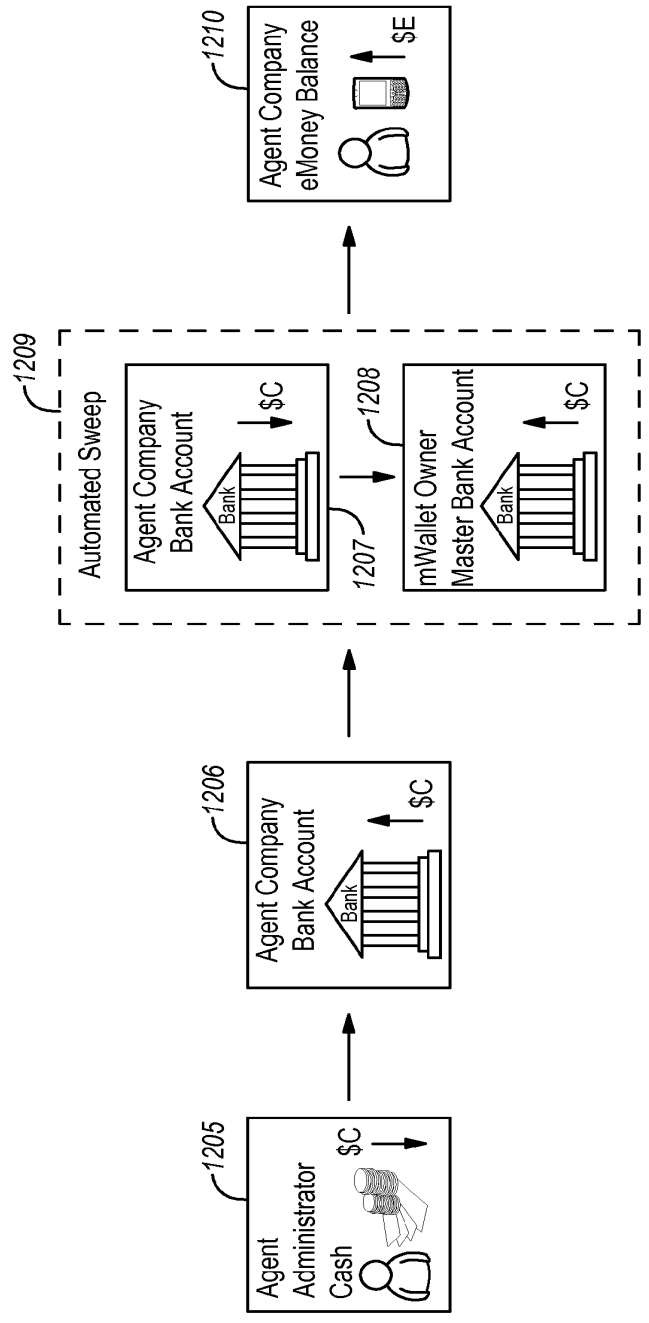

1205
Agent Administrator Cash
$C
1206
Agent Company Bank Account
Bank
$C
1209
Automated Sweep
Agent Company Bank Account
Bank
$C
1207
1208
mWallet Owner Master Bank Account
Bank
$C
1210
Agent Company eMoney Balance
$E
Agent Company Deposit

FIG. 12B

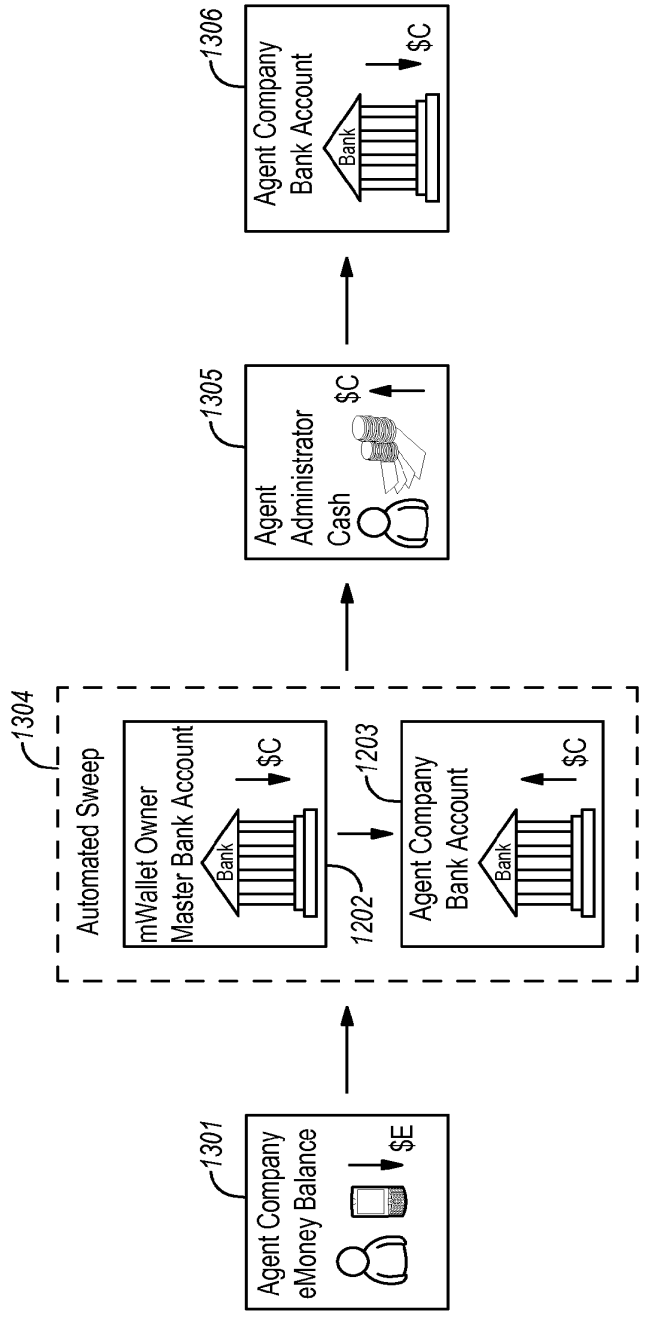
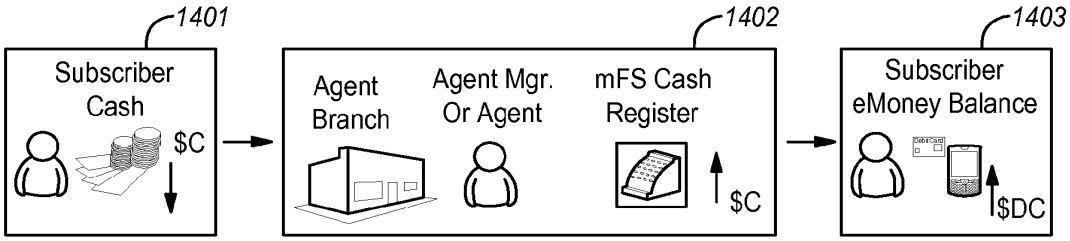

1306
Agent Company
Bank Account
Bank
$C
1305
Agent
Administrator
Cash
$C
1304
Automated Sweep
mWallet Owner
Master Bank Account
Bank
$C
1202
1203
Agent Company
Bank Account
Bank
$C
1301
Agent Company
eMoney Balance
$E
Agent Company Withdrawal

FIG. 13



Subscriber Deposit At Agent Branch

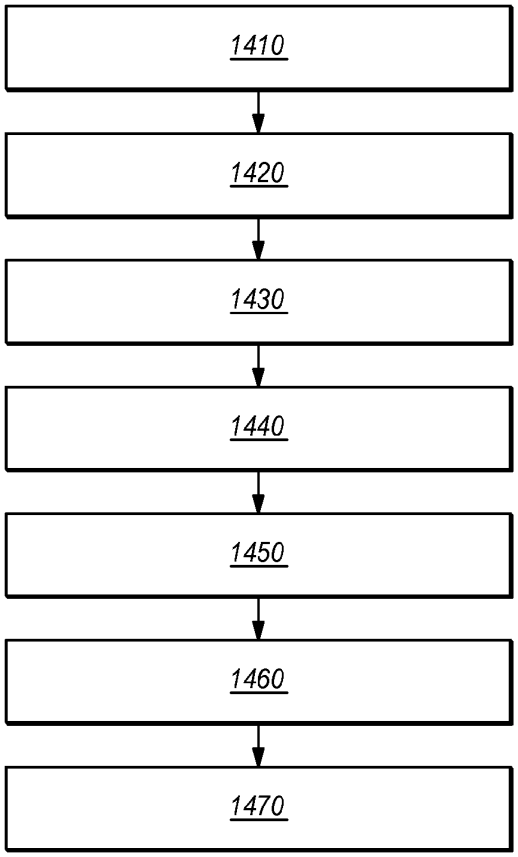
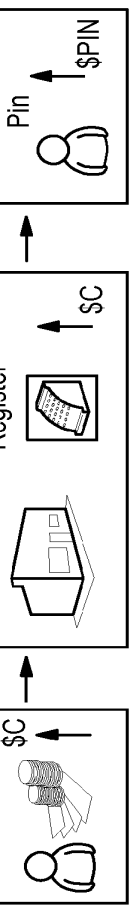
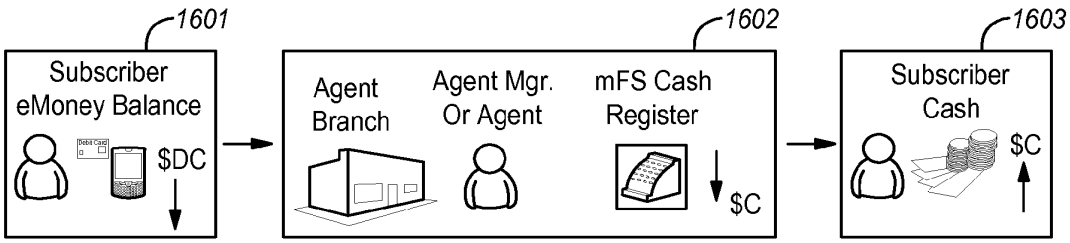


FIG. 14



Subscriber Deposit (Non-Agent)

FIG. 15



Subscriber Withdrawal (Agent)

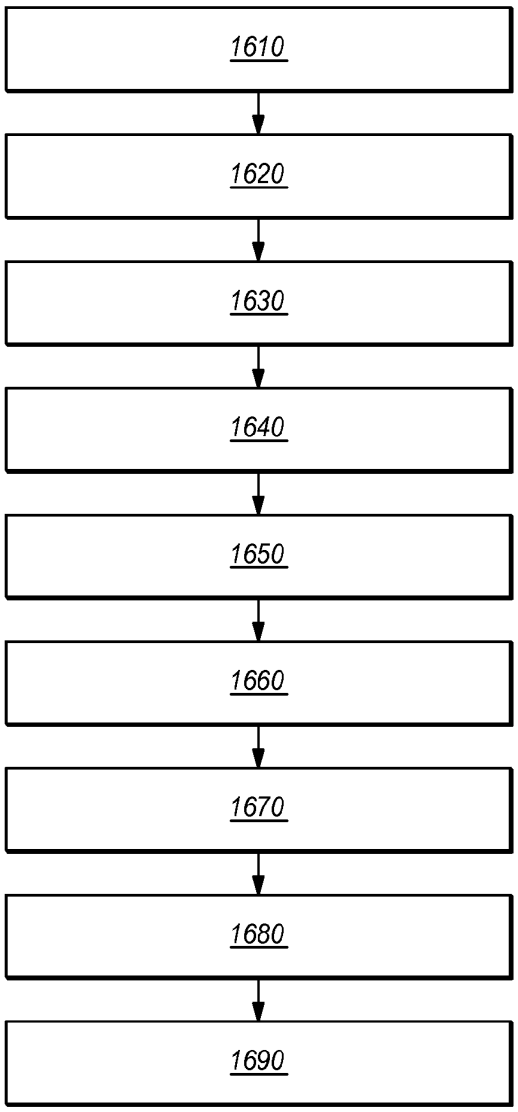
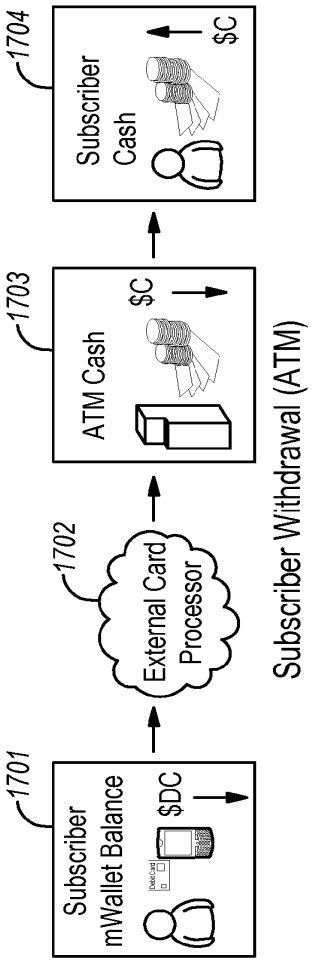
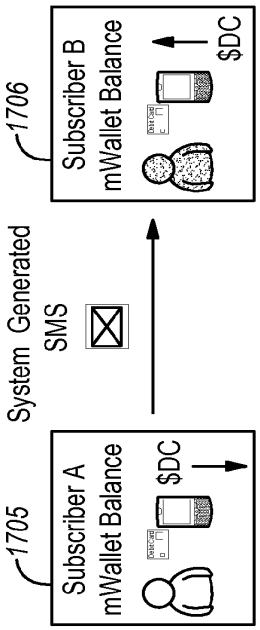


FIG. 16



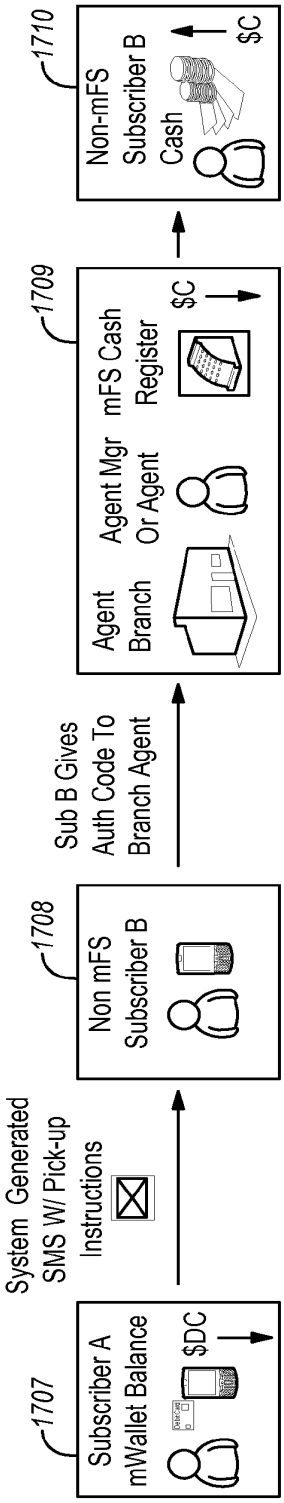
Subscriber Withdrawal (ATM)

FIG. 17A



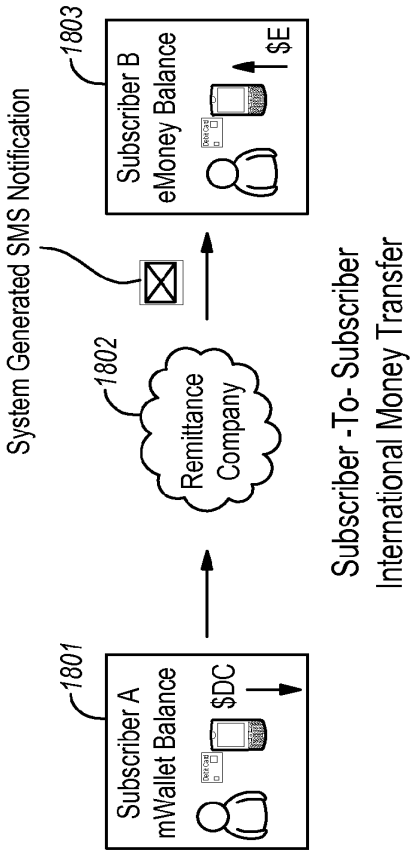
Subscriber To Subscriber Money Transfer

FIG. 17B



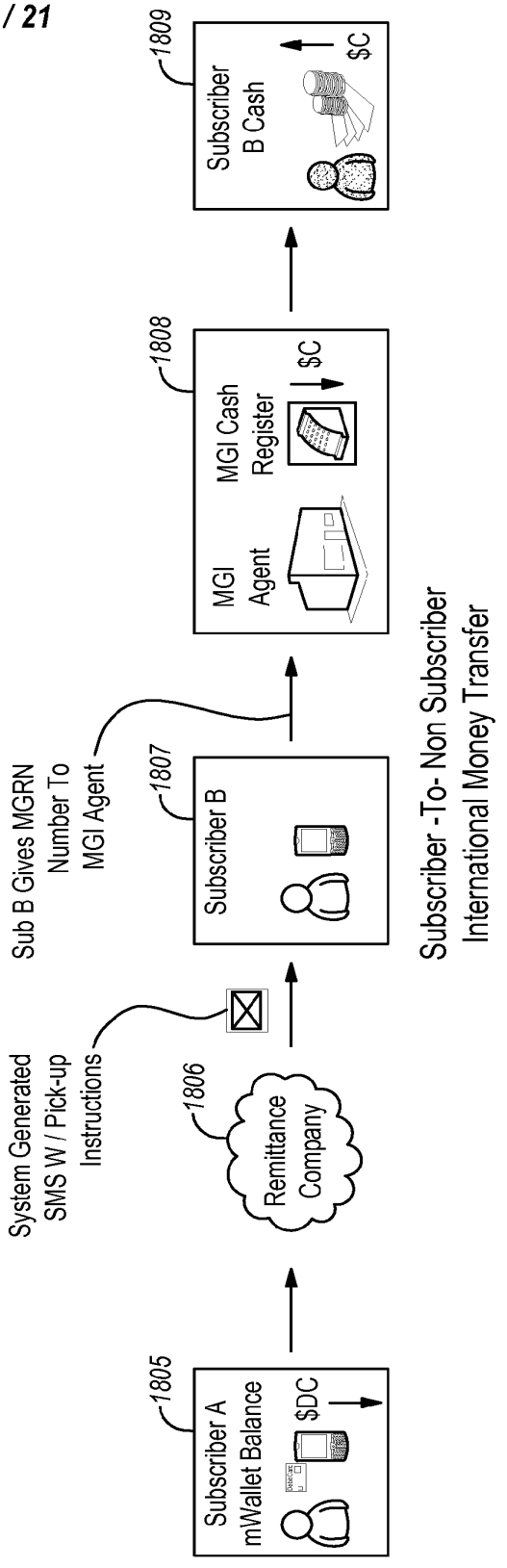
Subscriber To Non-Subscriber Money Transfer

FIG. 17C



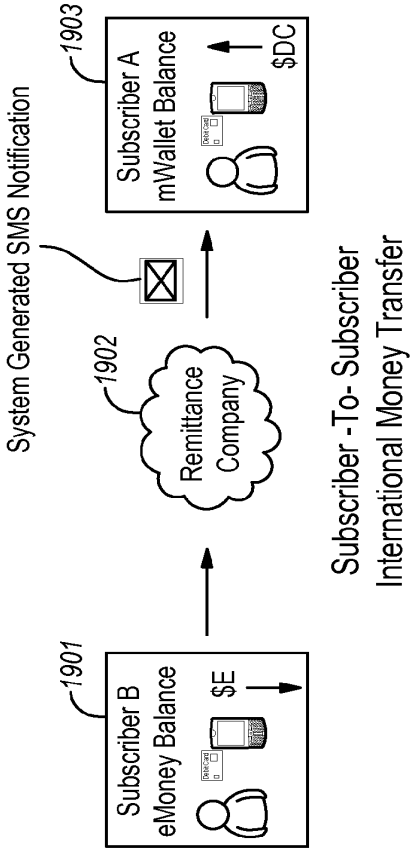
Subscriber -To- Subscriber
International Money Transfer

FIG. 18A



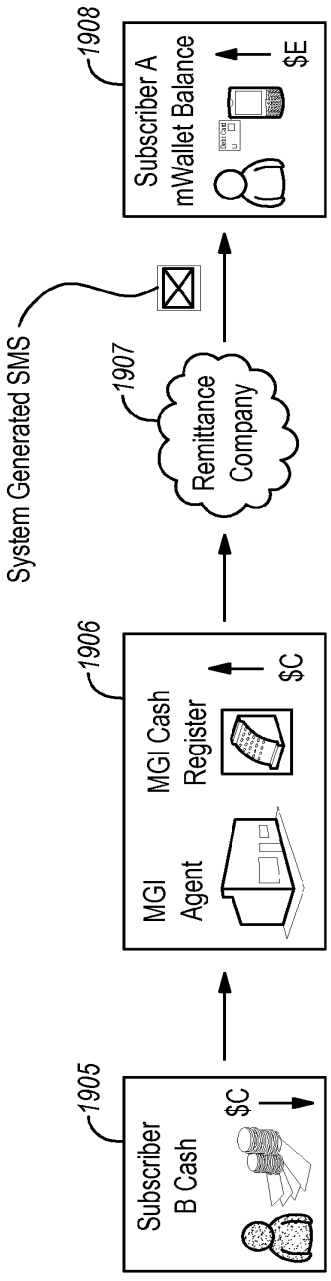
Subscriber -To- Non Subscriber
International Money Transfer

FIG. 18B



Subscriber -To- Subscriber
International Money Transfer

FIG. 19A



Non-Subscriber -To- Subscriber
International Money Transfer

FIG. 19B

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 12/40131

A. 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

B. 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...

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	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], [0206], [0253], [0254], [0260], [0264], [0267], [0270], [0273], [0328], [0336], [0344], [0351], [0370], [0392], [0393], [0423], [0427], [0440], [0521], [0524], [0529]-[0531], [0577], [0580], [0581], [0586], [0594], [0602], [0612], [0631], [0649], [0661], [0669], [0671], [0679], [0739], [0875], [0897], [0916], [0918], [1065], [1086], [1098], [1168]	20 ------ 1-19
Y	US 2006/0253335 A1 (KEENA et al.) 09 November 2006 (09.11.2006) entire document, especially Abstract; para [0012], [0038], [0042]	1-19
Y	US 2009/0265272 A1 (DILL et al.) 22 October 2009 (22.10.2009) entire document, especially Abstract; para [0005], [0067]	13
Y	US 2009/0081989 A1 (WUHRER) 26 March 2009 (26.03.2009) entire document, especially Abstract; para [0007], [0076], [0088], [0106]	16, 17
A	US 2007/0255652 A1 (TUMMINARO et al.) 01 November 2007 (01.11.2007) entire document	1 - 20
A	US 2007/0255620 A1 (TUMMINARO et al.) 01 November 2007 (01.11.2007) entire document	1 - 20
A	US 2006/0287004 A1 (FUQUA) 21 December 2006 (21.12.2006) entire document	1 - 20
A	US 2007/0265984 A1 (SANTHANA) 15 November 2007 (15.11.2007) entire document	1 - 20

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Date of the actual completion of the international search	Date of mailing of the international search report
09 January 2013 (09.01.2013)	29 JAN 2013
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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

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WIPO | PCT

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20 November 2012 (20.11.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
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13/680,824 19 November 2012 (19.11.2012) US

(71) Applicant: **MOZIDO, LLC** [US/US]; 1950 Stemmons Freeway, Suite 6040, Dallas, TX 75207 (US).

(72) Inventor: **LIBERTY, Michael, A.**; 5373 Isleworth Country Club Drive, Windermere, FL 34786 (US).

(74) Agents: **STRINGHAM, John, C.** et al.; 60 East South Temple, Suite 1000, Salt Lake City, UT 84111 (US).

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Published:

— *with international search report (Art. 21(3))*

(54) **Title**: USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

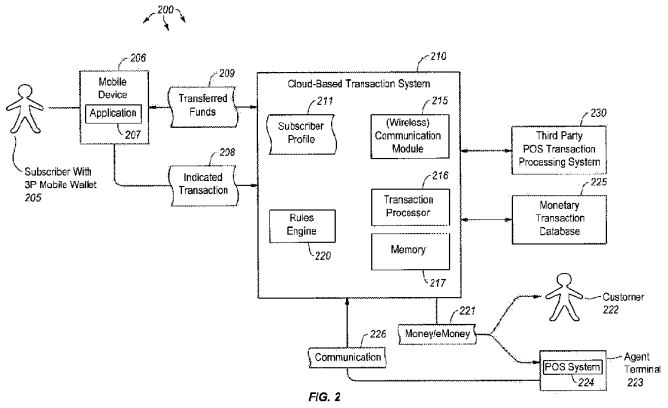


FIG. 2

(57) **Abstract**: Embodiments are directed to performing a transaction using a third party mobile wallet, performing a transaction using a third party point of sale (POS) system and to making a purchase from a third party mobile wallet provided by a third party mobile wallet provider. In one scenario, a cloud-based transaction platform is provided, which receives communication from an agent terminal over a communication channel connected to the cloud-based transaction platform. The agent communication indicates that a customer desires to perform a mobile wallet transaction using their third party mobile wallet. The cloud-based transaction platform sends the agent communication to a third party mobile wallet platform, receives communication from the third party mobile wallet platform confirming processing of the transaction, and sends communication to the agent terminal over a communication channel connected to the cloud-based transaction platform, where the communication indicates confirmation of the processing of the transaction.

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USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to and the benefit of U.S. Application Ser. No. 13/680,895, entitled "Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers", filed on November 19, 2012, and U.S. Provisional Application Ser. No. 61/562,301, entitled "Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers", filed on November 21, 2011, which are herein incorporated by reference 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.

BRIEF SUMMARY

[0003] Embodiments described herein extend to methods, systems, and computer program products for a cloud-based transaction platform. Embodiments include an infrastructure that can be used with third party mobile wallets provided by third party mobile wallet providers. Users with native or third party mobile wallets can use the cloud-based transaction platform to enroll a customer for a third party mobile wallet, add a stored value account (either hosted by the cloud-based transaction platform or a third party), add a bank/credit union account to a third party mobile wallet, add a debit/credit card account to a third party mobile wallet, deposit funds in a third party mobile wallet, withdraw funds from a third party mobile wallet, pay bills from a third party mobile wallet, top up a prepaid mobile account through a third party mobile wallet, transfer funds through a third party mobile wallet, and make in store purchases from a third party mobile wallet.

[0004] Embodiments described herein are directed to performing a transaction using a third party mobile wallet, performing a transaction using a third party point of sale (POS) system and to making a purchase from a third party mobile wallet provided by a third party mobile wallet provider. In one embodiment, a cloud-based transaction platform is provided, which receives communication from an agent terminal over a communication channel connected to the cloud-based transaction platform. The agent communication indicates that a customer desires to perform a mobile wallet transaction using their third party mobile wallet. The cloud-based transaction platform sends the agent communication to a third party mobile wallet platform, receives communication from the third party mobile wallet platform confirming processing of the transaction, and sends communication to the agent terminal over a communication channel connected to the cloud-based transaction platform, where the communication indicates confirmation of the processing of the transaction.

[0005] In another embodiment, a cloud-based transaction platform performs a transaction using a third party point of sale (POS) system. The cloud-based transaction platform receives communication from a specified POS system implemented at an agent terminal over a communication channel connected to the cloud-based transaction platform. The POS communication indicates that a customer has initiated a mobile wallet transaction using their third party mobile wallet. The cloud-based transaction platform sends 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, receives communication from the third party POS transaction processing system confirming processing of the transaction, and sends communication to the specified POS system implemented at the agent terminal over a communication channel connected to the cloud-based transaction platform, where the communication indicates confirmation of the processing of the transaction.

[0006] In yet another embodiment, a cloud-based transaction platform is provided which allows users to make purchases from a third party mobile wallet provided by a third party mobile wallet provider. The cloud-based transaction platform receives communication from a customer over a communication channel connected to the cloud-based transaction platform. The customer communication indicates 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. The cloud-based transaction platform returns a secure, perishable purchase code to the customer over at

least one the communication channels connected to the cloud-based transaction platform and receives communication from an agent terminal over a communication channel connected to the cloud-based transaction platform. The agent terminal communication indicates that the purchase code has been presented to an agent. The cloud-based transaction platform then debits the customer's third party mobile wallet by the specified amount of funds to complete the purchase.

[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.

[0011] Figure 2 illustrates an example embodiment of a cloud-based transaction platform.

[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.

[0013] Figure 4 illustrates an example data flow for making a retail purchase using a mobile wallet.

[0014] Figure 5 illustrates an example embodiment of a monetary transaction system architecture.

[0015] Figure 6 illustrates an alternate example embodiment of a cloud-based transaction platform.

[0016] Figure 7 illustrates an example embodiment data flow for performing a transaction using a third party mobile wallet.

[0017] Figure 8 illustrates an example embodiment data flow for performing a transaction using a third party point of sale (POS) system.

[0018] Figure 9 illustrates an example embodiment data flow for making a purchase from a third party mobile wallet provided by a third party mobile wallet provider.

DETAILED DESCRIPTION

[0019] Embodiments described herein extend to methods, systems, and computer program products for a cloud-based transaction platform. Embodiments include an infrastructure that can be used with third party mobile wallets provided by third party mobile wallet providers. Users with native or third party mobile wallets can use the cloud-based transaction platform to enroll a customer for a third party mobile wallet, add a stored value account (either hosted by the cloud-based transaction platform or a third party), add a bank/credit union account to a third party mobile wallet, add a debit/credit card account to a third party mobile wallet, deposit funds in a third party mobile wallet, withdraw funds from a third party mobile wallet, pay bills from a third party mobile wallet, top up a prepaid mobile account through a third party mobile wallet, transfer funds through a third party mobile wallet, and make in store purchases from a third party mobile wallet.

[0020] Embodiments described herein are directed to performing a transaction using a third party mobile wallet, performing a transaction using a third party point of sale (POS) system and to making a purchase from a third party mobile wallet provided by a third party mobile wallet provider. In one embodiment, a cloud-based transaction platform is provided, which receives communication from an agent terminal over a communication channel connected to the cloud-based transaction platform. The agent communication indicates that a customer desires to perform a mobile wallet transaction using their third party mobile wallet. The cloud-based transaction platform sends the agent communication to a third party mobile wallet platform, receives communication from the third party mobile wallet platform confirming processing of the transaction, and sends

communication to the agent terminal over a communication channel connected to the cloud-based transaction platform, where the communication indicates confirmation of the processing of the transaction.

[0021] In another embodiment, a cloud-based transaction platform performs a transaction using a third party point of sale (POS) system. The cloud-based transaction platform receives communication from a specified POS system implemented at an agent terminal over a communication channel connected to the cloud-based transaction platform. The POS communication indicates that a customer has initiated a mobile wallet transaction using their third party mobile wallet. The cloud-based transaction platform sends 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, receives communication from the third party POS transaction processing system confirming processing of the transaction, and sends communication to the specified POS system implemented at the agent terminal over a communication channel connected to the cloud-based transaction platform, where the communication indicates confirmation of the processing of the transaction.

[0022] In yet another embodiment, a cloud-based transaction platform is provided which allows users to make purchases from a third party mobile wallet provided by a third party mobile wallet provider. The cloud-based transaction platform receives communication from a customer over a communication channel connected to the cloud-based transaction platform. The customer communication indicates 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. The cloud-based transaction platform returns a secure, perishable purchase code to the customer over at least one the communication channels connected to the cloud-based transaction platform and receives communication from an agent terminal over a communication channel connected to the cloud-based transaction platform. The agent terminal communication indicates that the purchase code has been presented to an agent. The cloud-based transaction platform then debits the customer's third party mobile wallet by the specified amount of funds to complete the purchase. Such purchases may be for items that are provided by the cloud-based transaction platform, either directly or via a third-party provider. These items may include music, movies, games and other downloadable content, physical items that can be shipped to the user and other items such as health care services.

[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.

[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.

[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.

[0034] Various terminology will be used herein to describe the cloud-based transaction platform (also referred to as a "monetary transaction system", "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 cloud-based transaction platform includes an infrastructure that allows native mobile wallet application and third party mobile wallet applications to interact both with the transaction system and with each other. This allows the user of a native or a third party mobile wallet to make purchases, transfer money or perform any of the other transactions described herein. The cloud-based transaction platform may include a mobile wallet application and a web interface or some other type of functionality that allows the user to interact with the cloud-based transaction platform using their mobile device. The native and third party mobile wallet applications 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.

[0036] As used herein, a mobile wallet application is a mobile wallet application installed on a SIM card or elsewhere on a mobile device. The mobile wallet application may either be native (i.e. provided by the provider of the cloud-based transaction platform) or third party (i.e. provided by a provider other than the provider of the cloud-based transaction platform).

[0037] 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. 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. Indeed, the cloud-based transaction platform allows different POS systems to interact with each other and conduct transactions between themselves.

[0038] 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.

[0039] 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.

[0040] 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.

[0041] 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.

[0042] 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.

[0043] 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.

[0044] 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.

[0045] 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".

[0046] 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.

[0047] 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.

[0048] 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.

[0049] 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".

[0050] 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.

[0051] 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.

[0052] 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.

[0053] Figure 1 illustrates an example system architecture for a cloud-based transaction 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.

[0054] 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.

[0055] 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.

[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. 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.

[0057] Name matching engine 110 is configured to match different objects according to specified configuration rules. Matching engine 110 can be used 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.

[0058] 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. Accorindlgy, 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.

[0059] 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 third party mobile wallet, adding a debit or credit card account to a third party mobile wallet, depositing funds in a third party mobile wallet, withdrawing funds from a third party mobile wallet, paying bills from a third party mobile wallet, topping up a prepaid mobile account through a third party mobile wallet, transferring funds through a third party mobile wallet (nationally or internationally), making in-store purchases using a third party mobile wallet, selecting health care providers and paying for health care services, paying for music, games, movies or other downloadable provided by a third party provider and made available over the cloud-based transaction system, and various other tasks as described herein below.

[0060] Figure 2 depicts a monetary transaction architecture 200 similar to that described in Figure 1. The monetary transaction architecture 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 cloud-based 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 native or third party mobile wallet application 207.

[0061] The subscriber can indicate, using the mobile wallet application 207, which transaction or other action he or she would like to perform. The indicated transaction 208 is sent to the mobile wallet platform 210 to be carried out by the platform. 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 220 and/or a transaction database 225.

[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). 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. customer 222) to or from an establishment such as an agent terminal (i.e. a retail store or agent company) 223.

[0063] In some cases, the cloud-based transaction system 210 provides a web interface that allows subscribers of third party mobile wallet applications to perform the same functions provided for native subscribers. For instance, mobile wallet application 207 may provide a web interface that allows a user to enroll for a native or third party mobile wallet. The web interface (or the mobile wallet application itself) receives a subscriber-initiated transaction over one of a plurality of communication channels (111 from Figure 1) connected to the cloud-based 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 communication 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.

[0064] Once the subscriber has an account, the cloud-based transaction system generates (or allows the third party provider to generate) 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 third party or native mobile wallet functionality described herein.

[0065] 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.

[0066] 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 third party 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 third party mobile wallet, adding a debit/credit card account to a third party mobile wallet, depositing funds in a third party mobile wallet, withdrawing funds from a third party mobile wallet, paying bills from a third party mobile wallet, topping up a prepaid mobile account through a third party mobile wallet, transferring funds through a third party mobile wallet, making in store purchases from a third party 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).

[0067] 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 cloud-based platform subscribers, one or both of which may be unbanked. The cloud-based 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.

[0068] 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 cloud-based transaction 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 cloud-based transaction system 210 cannot credit them with eMoney. Instead, the cloud-based 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 cloud-based 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.

[0069] 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 cloud-based transaction 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 cloud-based transaction platform processes the transfer request, updates subscriber A's eMoney balance, logs the transaction, and sends transaction details to a platform-specified bank.

[0070] 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 cloud-based transaction platform and are able to accept native and third party 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 cloud-based transaction platform-specified bank.

[0071] In one embodiment, the cloud-based 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 native or third party mobile wallet.

[0072] 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 cloud-based transaction system 210 may thus be used in this manner to make a retail purchase using a native or third party mobile wallet.

[0073] Figure 5 depicts a physical environment and corresponding computer system architecture 500 for allowing a user to participate in various services using a native or third party mobile wallet (e.g. 511). Some of these services include allowing the user 507 to access 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 native or third party 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.

[0074] In some embodiments, a user has an account with a mobile payment system. The cloud-based transaction system (e.g. 210 of Figure 2 or electronic payment system 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), and others all from a third party wallet. Accordingly, the user can use a digital device to interact with the electronic payment system 521 to pay for goods and/or services.

[0075] 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.

[0076] 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.

[0077] 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).

[0078] 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.

[0079] 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).

[0080] 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.

[0081] In general, user 507 can use native or third party 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.

[0082] 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.

[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.

[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

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.

[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

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.

[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

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.

[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

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.

[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

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.

[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

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.

[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

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

[00111] 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.

[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 provided by the third party mobile 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

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.

[00113] 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.

[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

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).

[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

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.

CLAIMS

What is claimed:

1. A cloud-based transaction platform including:

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 performing a transaction using a third party mobile wallet, the method comprising the following:

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;

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

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

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.

4. 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.

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.

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.

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:

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.

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:

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;

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;

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.

13. A cloud-based transaction platform including:

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 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;

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;

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.

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 cloud-based 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.

19. A cloud-based transaction platform including:

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 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.

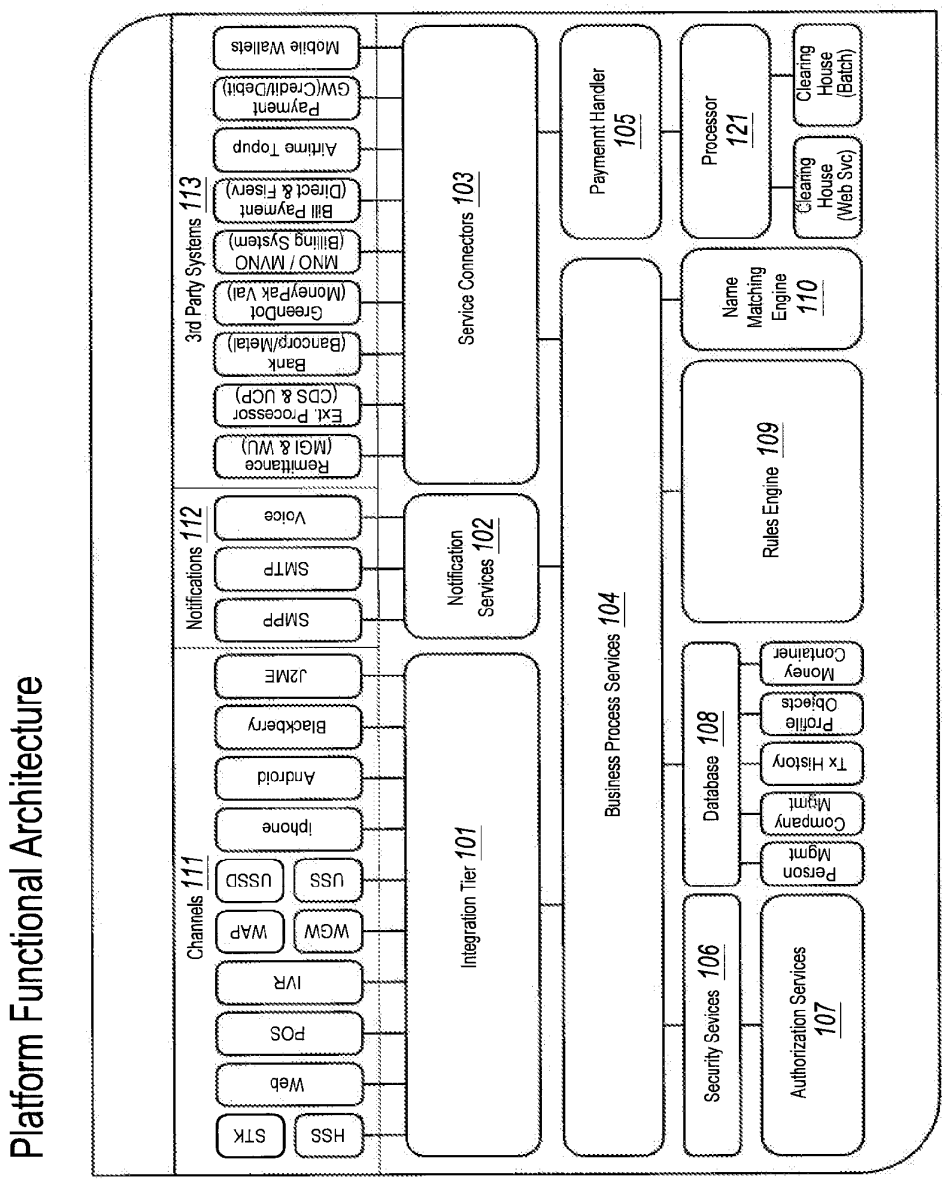

Platform Functional Architecture
Channels 111
HSS
STK
Web
POS
IVR
WGW
WAP
USS
USSD
iphone
Android
Blackberry
J2ME
Notifications 112
SMPP
SMTP
Voice
3rd Party Systems 113
Remittance (MGI & WU)
Ext. Processor (CDS & UCP)
Bank (Bancorp/Metal)
GreenDot (MoneyPak Val)
MNO / MVNO (Billing System)
Bill Payment (Direct & Fisery)
Airtime Topup
Payment GW(Credit/Debit)
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Notification Services 102
Service Connectors 103
Business Process Services 104
Paymennt Handler 105
Security Sevices 106
Authorization Services 107
Database 108
Person Mgmt
Company Mgmt
Tx History
Profile Objects
Money Container
Rules Engine 109
Name Matching Engine 110
Processor 121
Clearing House (Web Svc)
Clearing House (Batch)

FIG. 1

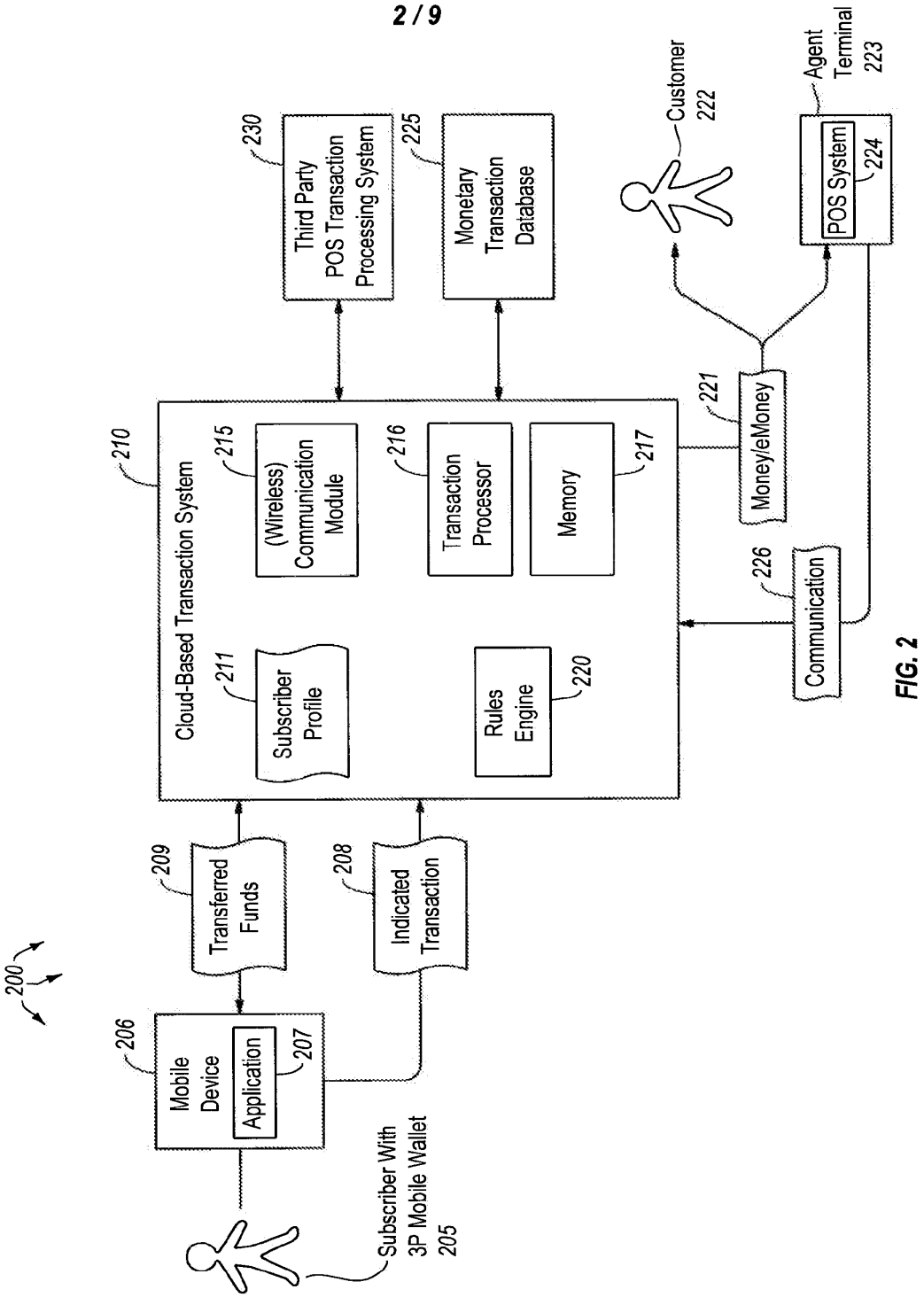

200
206
Mobile Device
Application
207
Subscriber With 3P Mobile Wallet
205
209
Transferred Funds
208
Indicated Transaction
210
Cloud-Based Transaction System
211
Subscriber Profile
215
(Wireless) Communication Module
216
Transaction Processor
217
Memory
220
Rules Engine
230
Third Party POS Transaction Processing System
225
Monetary Transaction Database
221
Money/eMoney
226
Communication
Customer
222
Agent Terminal
223
POS System
224

FIG. 2

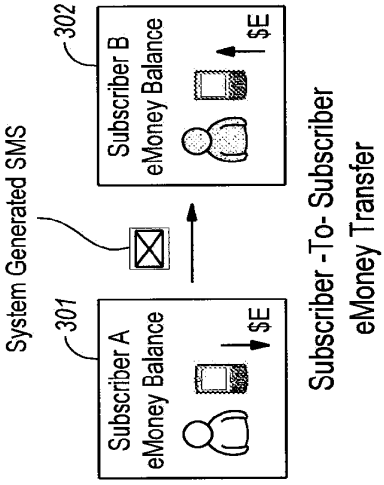

System Generated SMS
301
Subscriber A
eMoney Balance
$E
302
Subscriber B
eMoney Balance
$E
Subscriber -To- Subscriber
eMoney Transfer

FIG. 3A

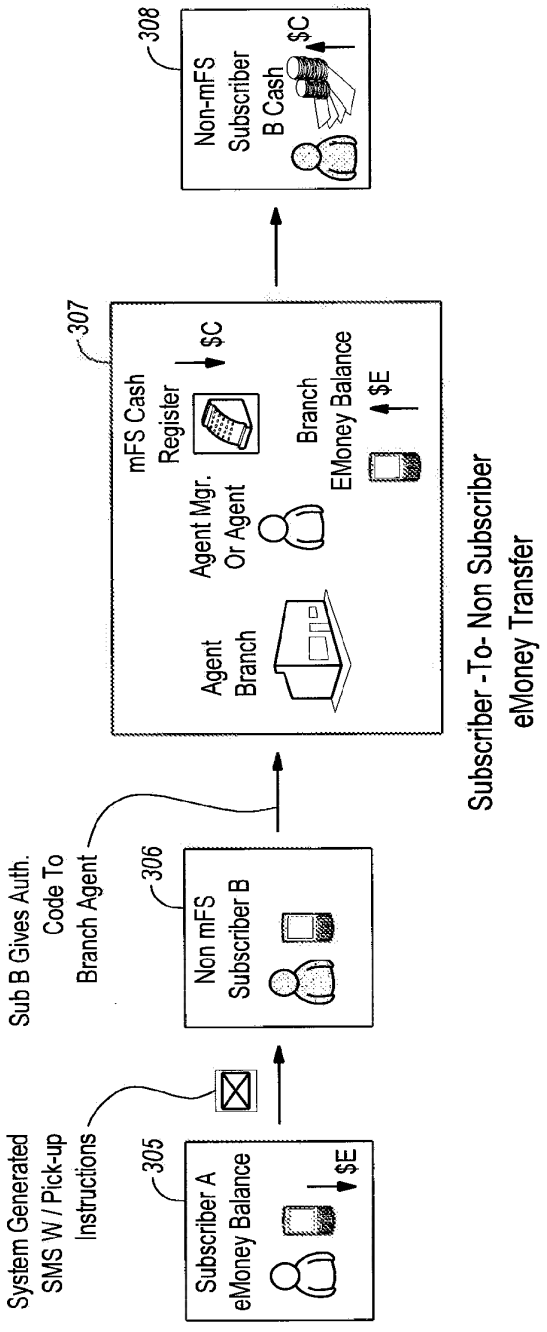
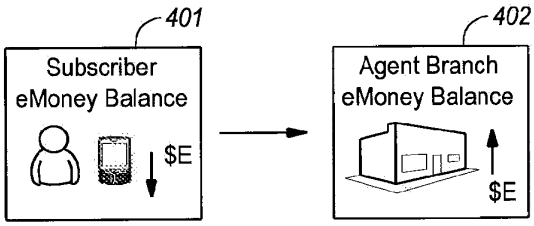

System Generated
SMS W / Pick-up
Instructions
305
Subscriber A
eMoney Balance
$E
Sub B Gives Auth.
Code To
Branch Agent
306
Non mFS
Subscriber B
307
Agent
Branch
Agent Mgr.
Or Agent
mFS Cash
Register
$C
Branch
EMoney Balance
$E
308
Non-mFS
Subscriber
B Cash
$C
Subscriber -To- Non Subscriber
eMoney Transfer

FIG. 3B



Subscriber Makes Retail Purchase

FIG. 4

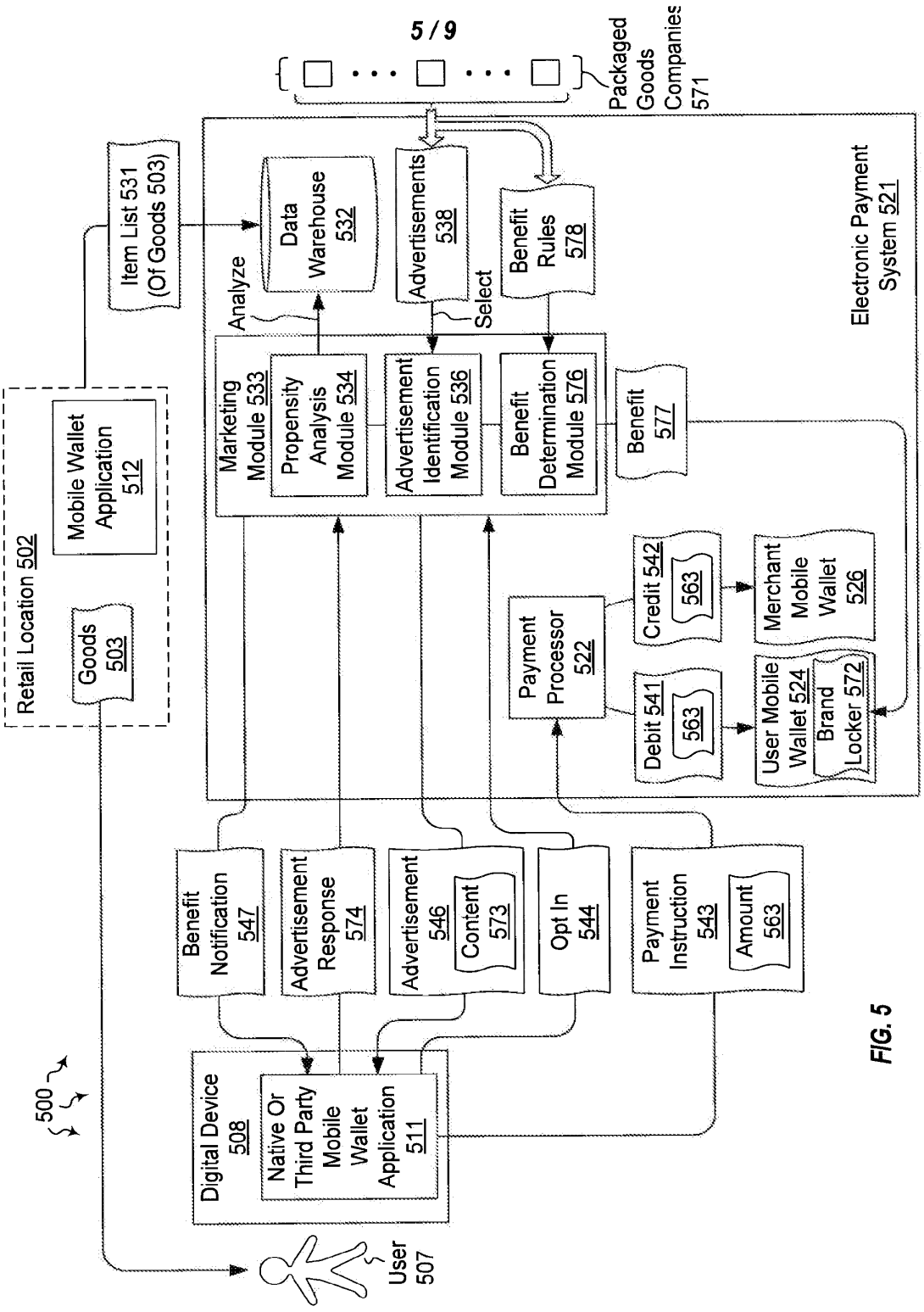

Packaged Goods Companies 571
Item List 531 (Of Goods 503)
Data Warehouse 532
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Benefit Rules 578
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Analyze
Select
Retail Location 502
Mobile Wallet Application 512
Goods 503
Marketing Module 533
Propensity Analysis Module 534
Advertisement Identification Module 536
Benefit Determination Module 576
Benefit 577
Payment Processor 522
Credit 542
563
Merchant Mobile Wallet 526
Debit 541
563
User Mobile Wallet 524
Brand Locker 572
Benefit Notification 547
Advertisement Response 574
Advertisement 546
Content 573
Opt In 544
Payment Instruction 543
Amount 563
500
Digital Device 508
Native Or Third Party Mobile Wallet Application 511
User 507

FIG. 5

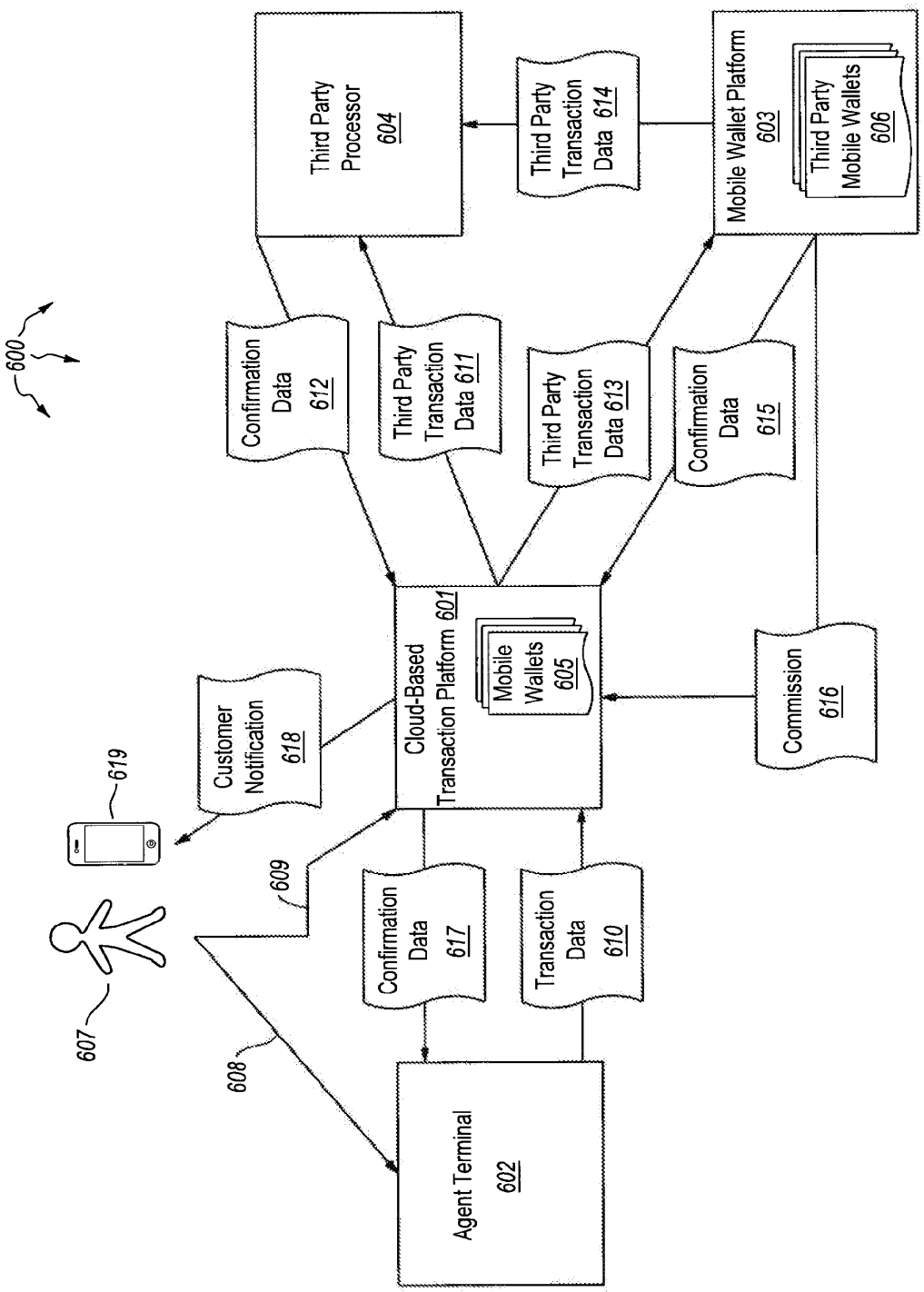

600
Third Party Processor 604
Third Party Transaction Data 614
Mobile Wallet Platform 603
Third Party Mobile Wallets 606
Confirmation Data 612
Third Party Transaction Data 611
Third Party Transaction Data 613
Confirmation Data 615
Cloud-Based Transaction Platform 601
Mobile Wallets 605
Customer Notification 618
Commission 616
619
609
607
608
Confirmation Data 617
Transaction Data 610
Agent Terminal 602

FIG. 6

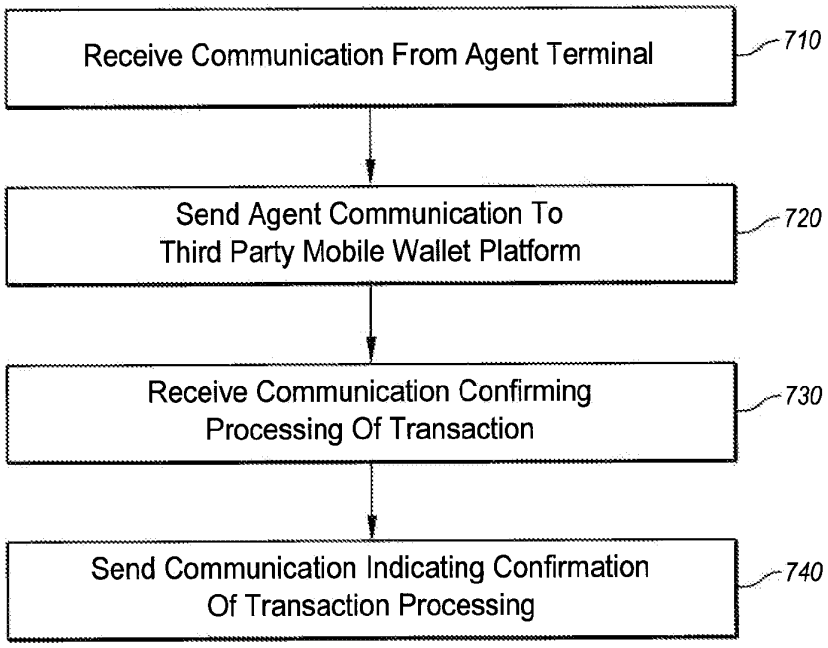

Receive Communication From Agent Terminal
710
Send Agent Communication To Third Party Mobile Wallet Platform
720
Receive Communication Confirming Processing Of Transaction
730
Send Communication Indicating Confirmation Of Transaction Processing
740

FIG. 7

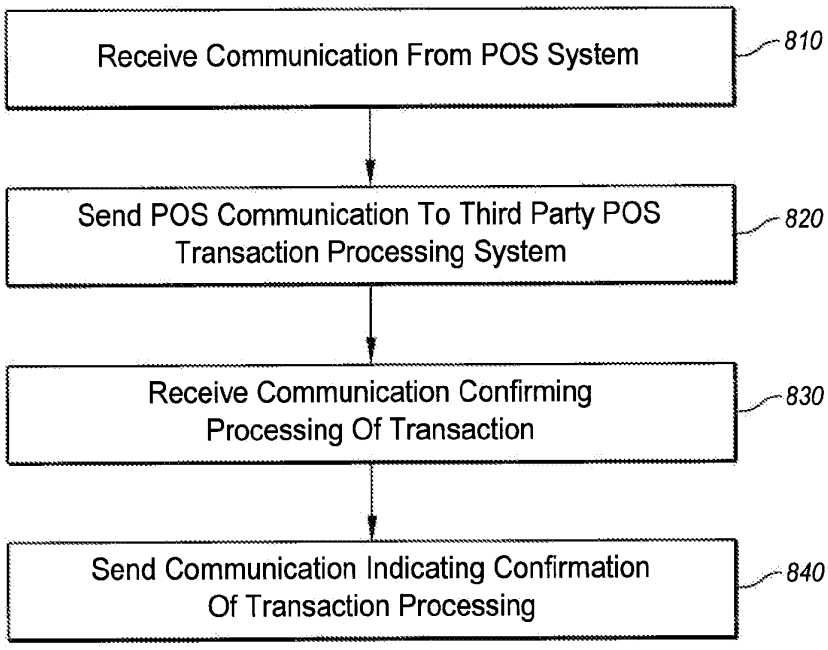

Receive Communication From POS System
810
Send POS Communication To Third Party POS Transaction Processing System
820
Receive Communication Confirming Processing Of Transaction
830
Send Communication Indicating Confirmation Of Transaction Processing
840

FIG. 8

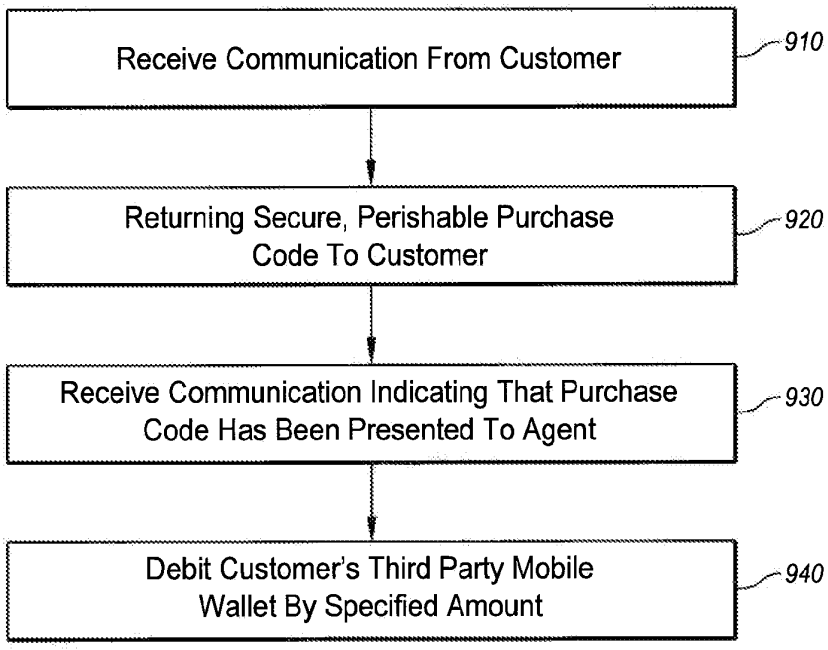

Receive Communication From Customer
910
Returning Secure, Perishable Purchase Code To Customer
920
Receive Communication Indicating That Purchase Code Has Been Presented To Agent
930
Debit Customer's Third Party Mobile Wallet By Specified Amount
940

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 appropriate, of the relevant passages	Relevant to claim No.
Y	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], [0119], [0140]	1-20
Y	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
Y	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
A	US 2009/0234751 A1 (CHAN et al), 17 September 2009 (17.09.2009), entire document	1-20
A	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:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international 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 special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" 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
"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
"Y" 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 member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
15 January 2013 (15.01.2013)	29 JAN 2013
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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13/528,720	20 June 2012 (20.06.2012)	US
13/874,192	30 April 2013 (30.04.2013)	US

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(74) Agents: **STRINGHAM, John, C.** et al.; 60 East South Temple, Suite 1000, Salt Lake City, UT 84111 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, 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.

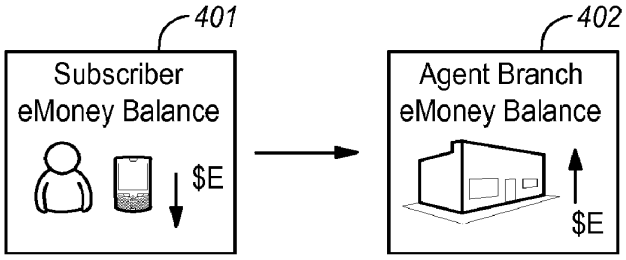
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(54) Title: DISRUPTIVELY PRICED OR FREE FINANCIAL SERVICES OR ITEMS IN EXCHANGE FOR PARTICIPATION IN OPT IN ADVERTISING



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.

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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.

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

communicate with other computer systems and perform a wide variety of network-connected 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.

[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.

[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.

[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.

[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.

[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.

[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.

[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.

[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.

[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.

[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.

[0036] 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.

[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.

[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.

[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.

[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.

[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 (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.

[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. Accorindlgy, 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.

[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.

[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.

[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.

[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 platform-specified bank.

[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.

[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.

[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.

[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.

[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.

[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.

[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).

[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.

[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.

[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.

[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

electronic 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).

[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.

[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.

CLAIMS

What is claimed:

1. 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 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.

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;

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

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.

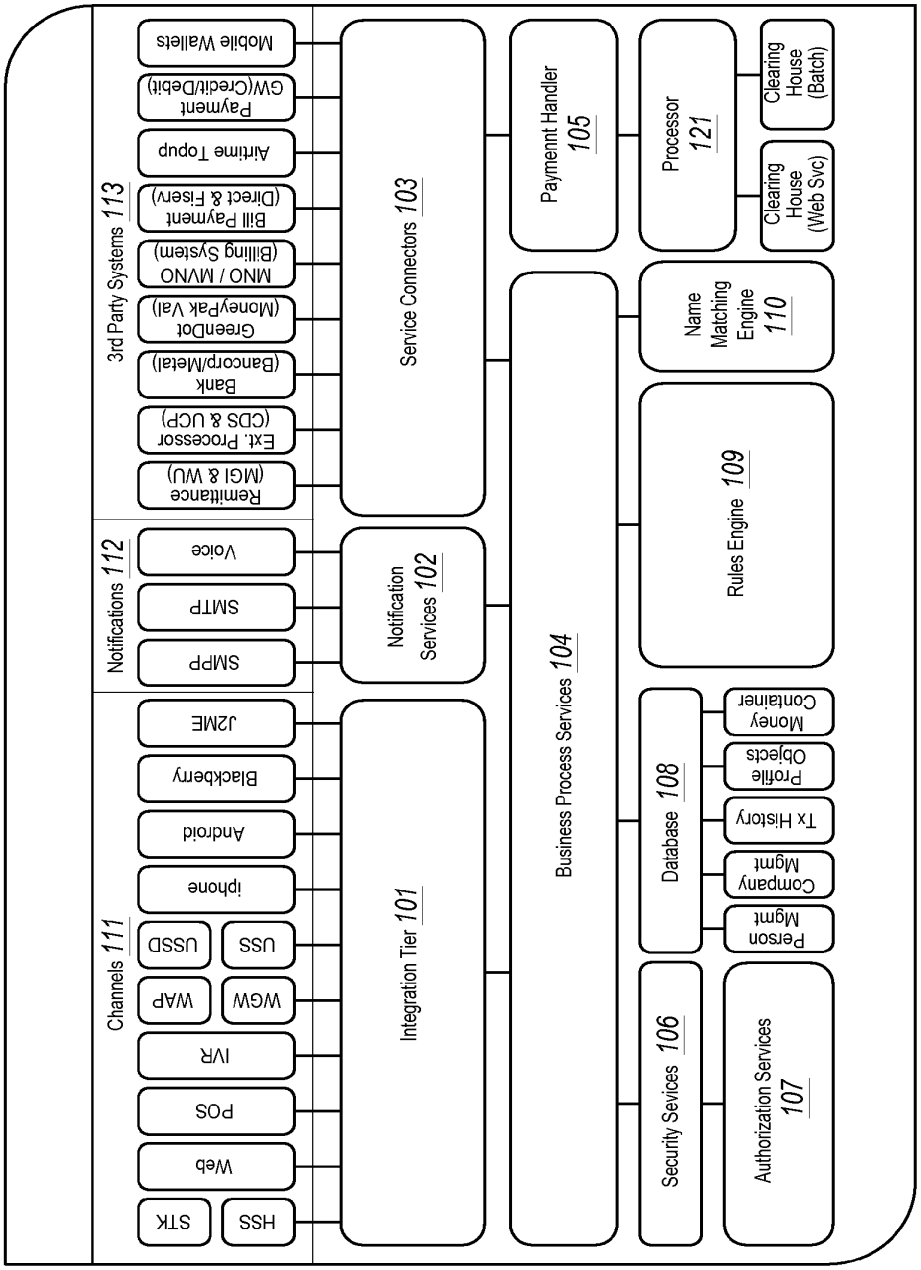

Platform Functional Architecture
Channels 111
HSS
STK
Web
POS
IVR
WGW
WAP
USS
USSD
iphone
Android
Blackberry
J2ME
Notifications 112
SMPP
SMTP
Voice
3rd Party Systems 113
Remittance (MGI & WU)
Ext. Processor (CDS & UCP)
Bank (Bancorp/Metail)
GreenDot (MoneyPak Val)
MNO / MVNO (Billing System)
Bill Payment (Direct & Fiserv)
Airtime Topup
Payment GW(Credit/Debit)
Mobile Wallets
Integration Tier 101
Notification Services 102
Service Connectors 103
Business Process Services 104
Paymennt Handler 105
Security Sevices 106
Authorization Services 107
Database 108
Person Mgmt
Company Mgmt
Tx History
Profile Objects
Money Container
Rules Engine 109
Name Matching Engine 110
Processor 121
Clearing House (Web Svc)
Clearing House (Batch)

FIG. 1

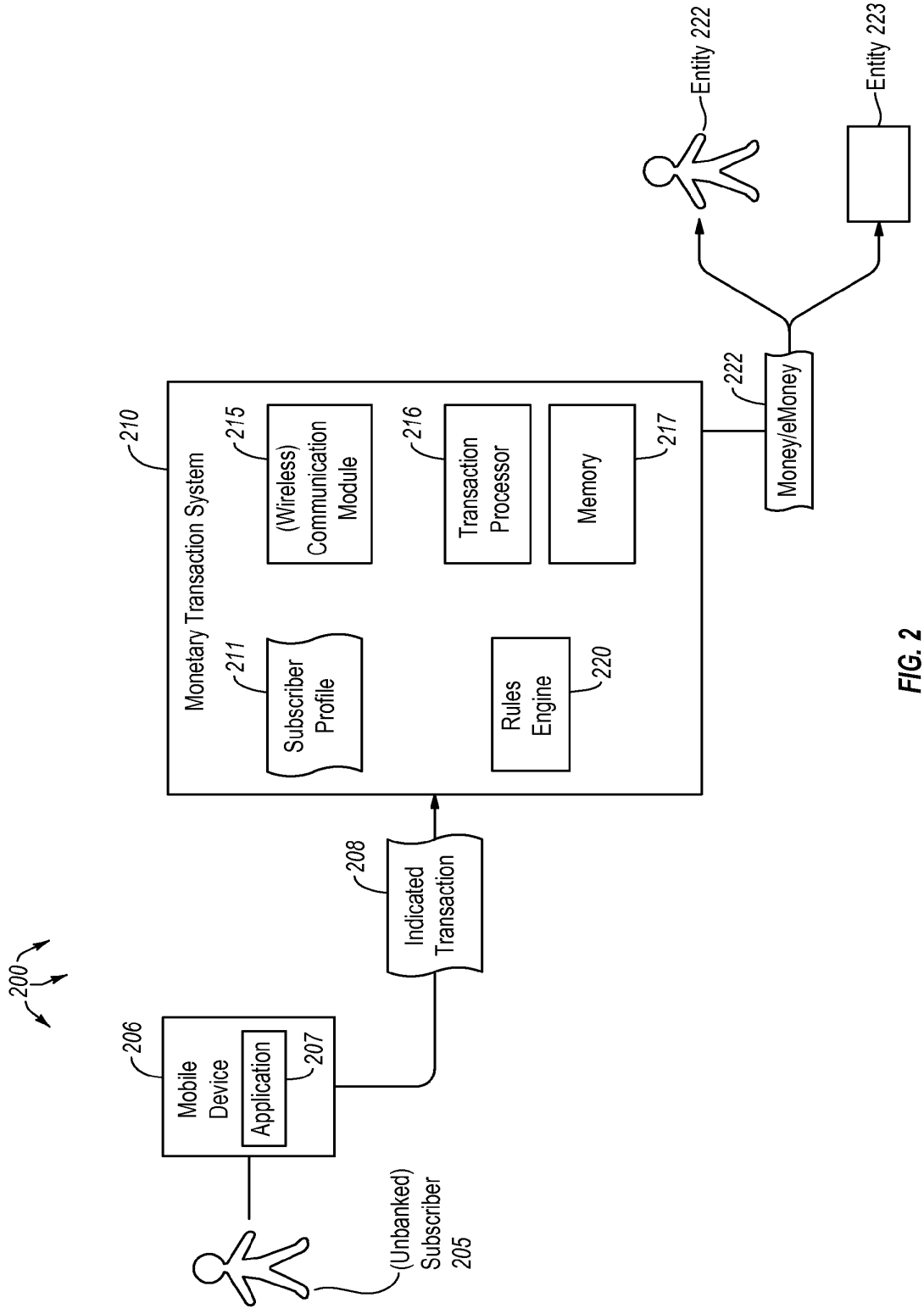
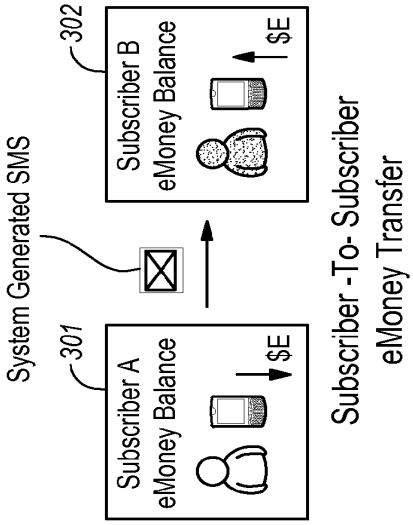
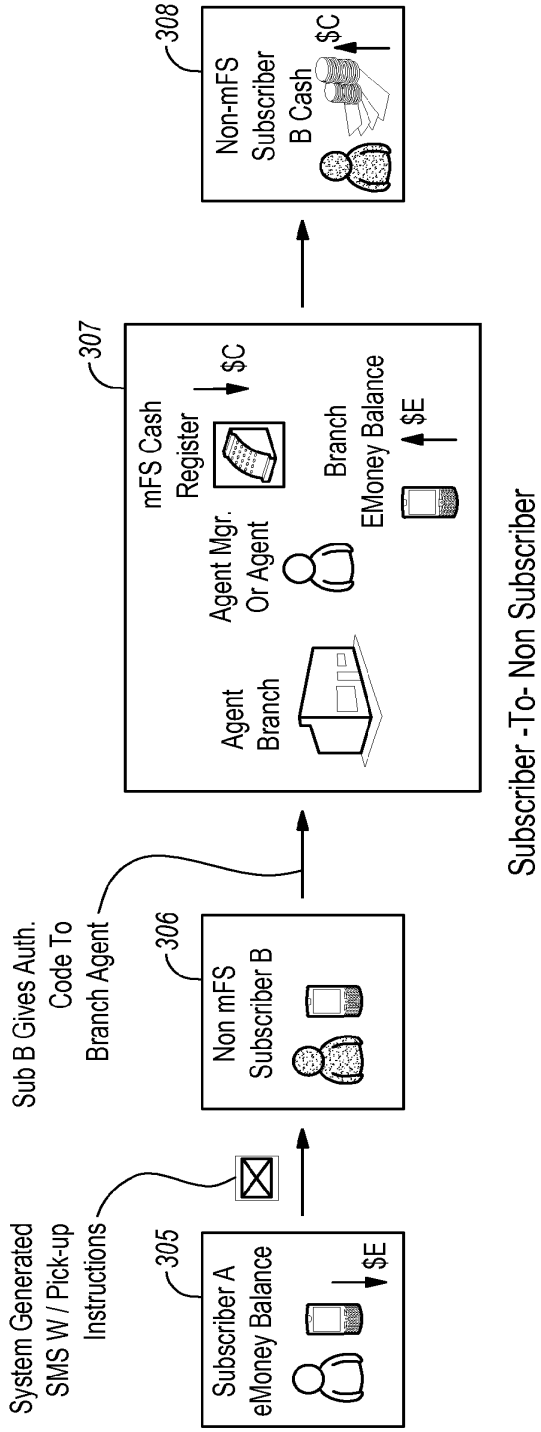

200
206
Mobile Device
Application
207
(Unbanked) Subscriber 205
208
Indicated Transaction
210
Monetary Transaction System
211
Subscriber Profile
215
(Wireless) Communication Module
216
Transaction Processor
217
Memory
220
Rules Engine
222
Money/eMoney
Entity 222
Entity 223

FIG. 2



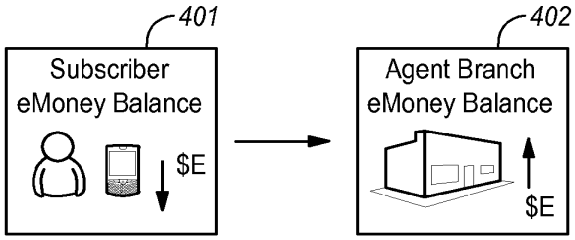
Subscriber -To- Subscriber
eMoney Transfer

FIG. 3A



Subscriber -To- Non Subscriber
eMoney Transfer

FIG. 3B



Subscriber Makes Retail Purchase

FIG. 4

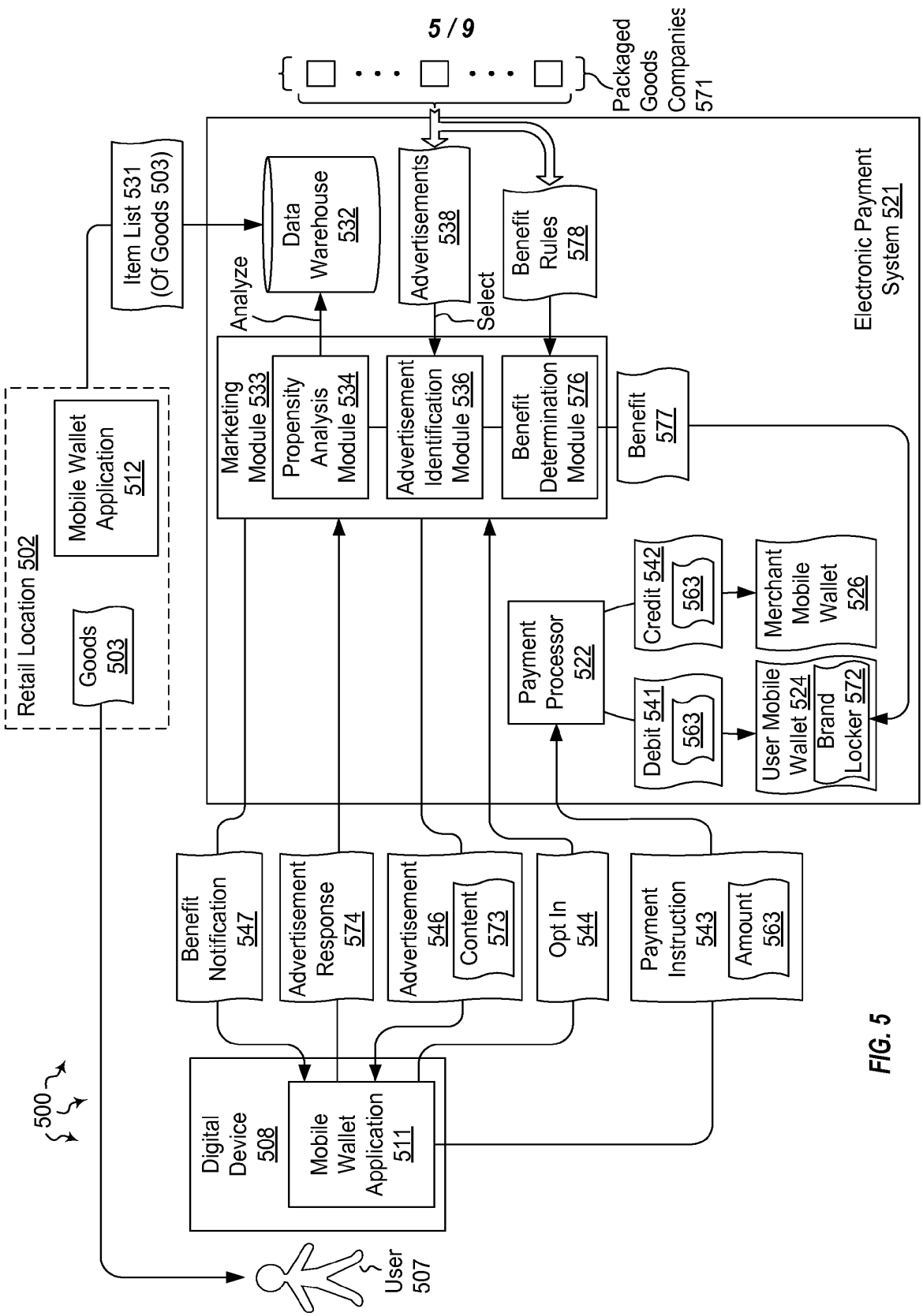

Packaged Goods Companies 571
Item List 531 (Of Goods 503)
Data Warehouse 532
Advertisements 538
Benefit Rules 578
Analyze
Select
Electronic Payment System 521
Marketing Module 533
Propensity Analysis Module 534
Advertisement Identification Module 536
Benefit Determination Module 576
Benefit 577
Retail Location 502
Mobile Wallet Application 512
Goods 503
Payment Processor 522
Credit 542
563
Merchant Mobile Wallet 526
Debit 541
563
User Mobile Wallet 524
Brand Locker 572
Benefit Notification 547
Advertisement Response 574
Advertisement 546
Content 573
Opt In 544
Payment Instruction 543
Amount 563
500
Digital Device 508
Mobile Wallet Application 511
User 507

FIG. 5

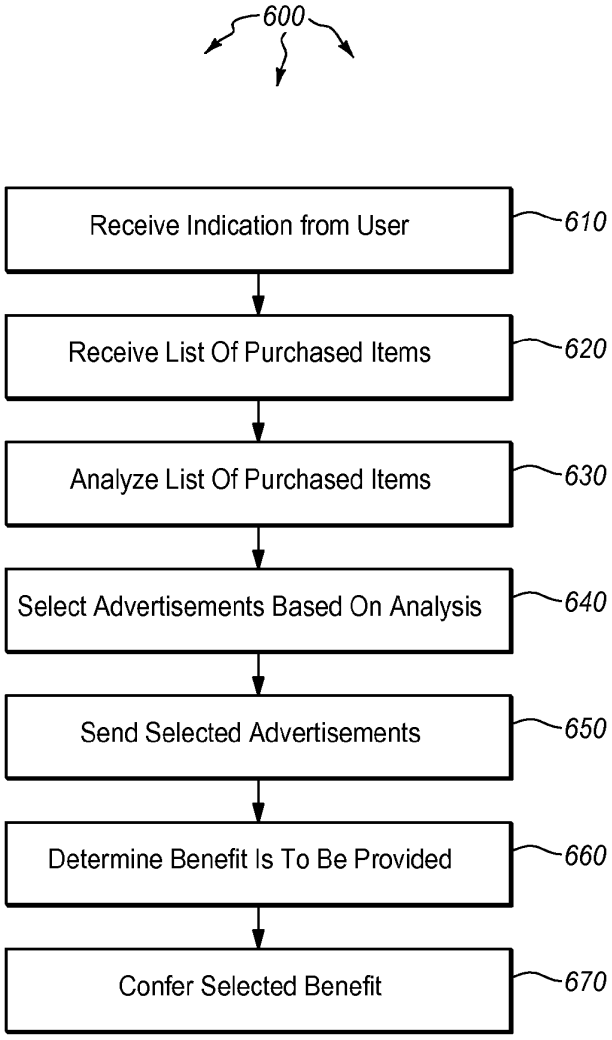

600
Receive Indication from User
610
Receive List Of Purchased Items
620
Analyze List Of Purchased Items
630
Select Advertisements Based On Analysis
640
Send Selected Advertisements
650
Determine Benefit Is To Be Provided
660
Confer Selected Benefit
670

FIG. 6

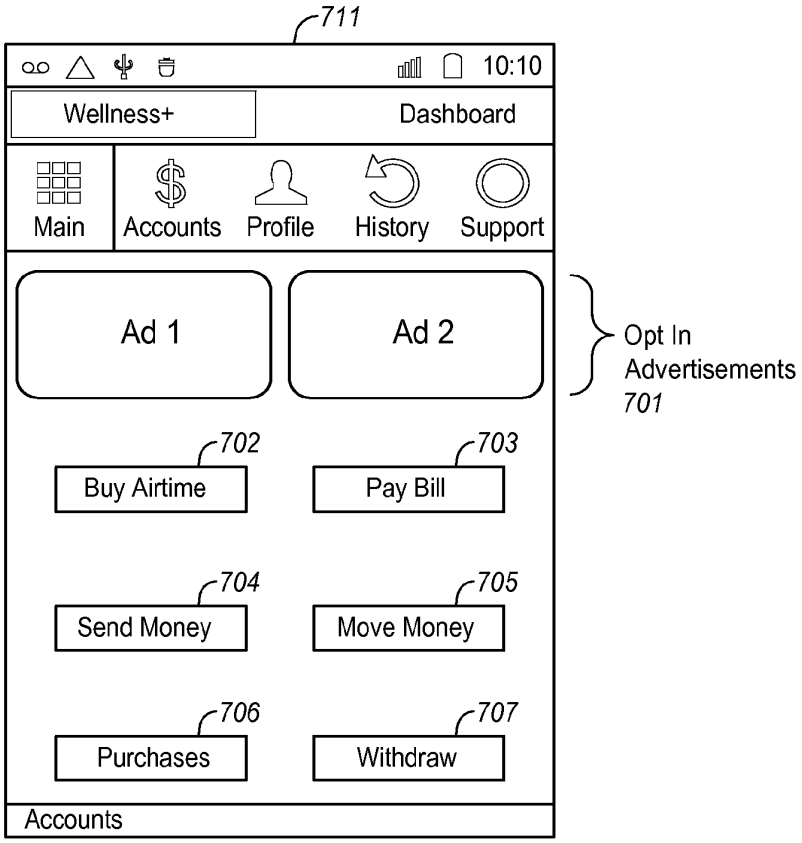

711
10:10
Wellness+
Dashboard
Main
Accounts
Profile
History
Support
Ad 1
Ad 2
Opt In
Advertisements
701
702
Buy Airtime
703
Pay Bill
704
Send Money
705
Move Money
706
Purchases
707
Withdraw
Accounts

FIG. 7

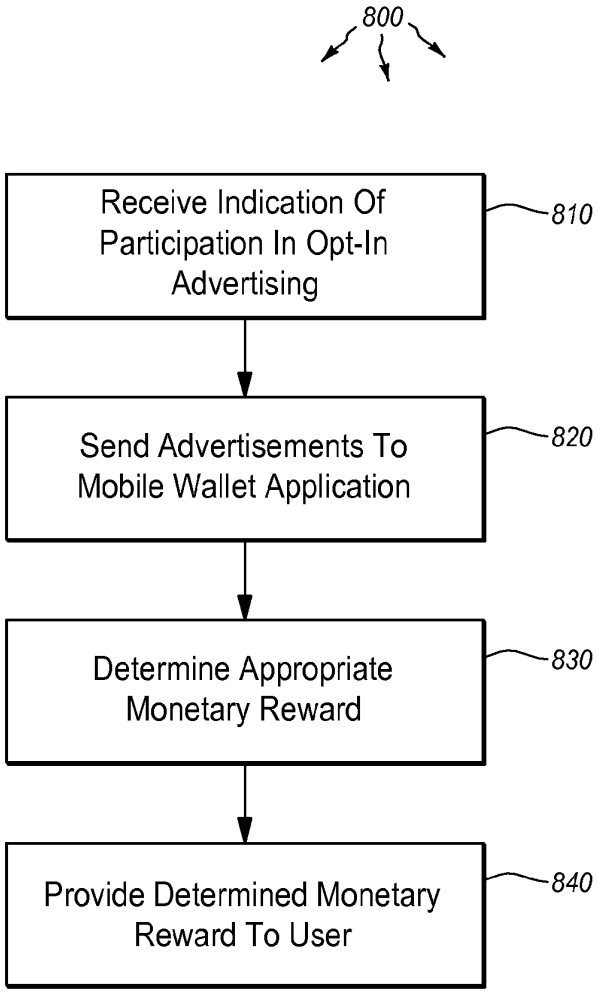

800
Receive Indication Of Participation In Opt-In Advertising
810
Send Advertisements To Mobile Wallet Application
820
Determine Appropriate Monetary Reward
830
Provide Determined Monetary Reward To User
840

FIG. 8

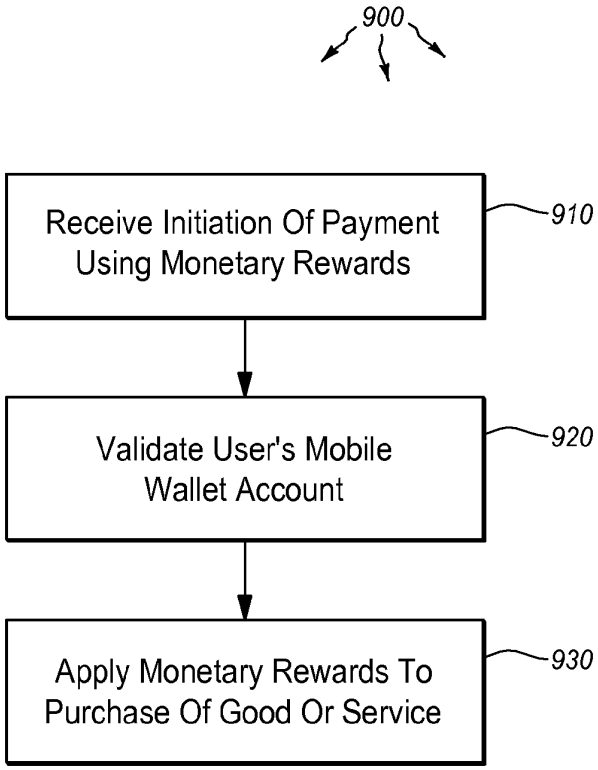

900
Receive Initiation Of Payment Using Monetary Rewards
910
Validate User's Mobile Wallet Account
920
Apply Monetary Rewards To Purchase Of Good Or Service
930

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

B. FIELDS SEARCHED

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011/0258024 A1 (PRINCE) 20 October 2011 (20.10.2011) entire document	1-20
Y	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 2009 (03.12.2009) entire document	10
Y	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:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international 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 special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" 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
"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
"Y" 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 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
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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

Electronic Patent Application Fee Transmittal

Application Number:	13680824
Filing Date:	19-Nov-2012
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Filer:	Jens C. Jenkins/Ashlee Emig
Attorney Docket Number:	18756.37.1

Filed as Large 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($)
Extension - 3 months with $0 paid	1253	1	1400	1400
Miscellaneous:				
Request for Continued Examination	1801	1	1200	1200
		Total in USD ($)		**2600**

Electronic Acknowledgement Receipt

EFS ID:	23139855
Application Number:	13680824
International Application Number:	
Confirmation Number:	7971
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Customer Number:	22913
Filer:	Jens C. Jenkins/Ashlee Emig
Filer Authorized By:	Jens C. Jenkins
Attorney Docket Number:	18756.37.1
Receipt Date:	06-AUG-2015
Filing Date:	19-NOV-2012
Time Stamp:	17:08:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$2600
RAM confirmation Number	3835
Deposit Account	233178
Authorized User	JENKINS, JENS C.
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment Submitted/Entered with Filing of CPA/RCE	18756-37-1_Amendment_B.pdf	152344 c9050a00498b0b661cd71d605508851c6a1846ae	no	18
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	18756-37-1_RCE.pdf	1376779 cc6ba68e1fb14ba21c8ee80ac02e57abad8042aa	no	3
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
3	Transmittal Letter	18756-37-1_Transmittal.pdf	102109 edb9fb4b1037884ceddb025bb6105a329d080a44	no	2
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	18756-37-1_IDS.pdf	754017 b6f377905cf04b969177b5b98f0a53fb0ae7c781	no	2
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
5	Foreign Reference	WO2013009444.PDF	2052488 3827fd27994849ef9d7c5806c61a38634fb3e9bd	no	35
Warnings:					
Information:					
6	Foreign Reference	WO2013009446.PDF	2076083 7d49f35b4be34621c3f86e45b6047098e3762959	no	37
Warnings:					
Information:					
7	Foreign Reference	WO2013025273.PDF	4212254 4665e99934afb33f4ce7e71c3a633fac011a298f	no	77

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Information:					
8	Foreign Reference	WO2013078176.PDF	3035555 de82ae2c420a615b1a8aefe947c9845bb431503a	no	51
Warnings:					
Information:					
9	Foreign Reference	WO2013166174.PDF	2504483 070073c9e152896618d311bde18174e0e0fe298e	no	46
Warnings:					
Information:					
10	Other Reference-Patent/App/Search documents	13964707FinalOA.PDF	384562 d4569d90acbb83b8632dc927a25dcf93f1031708	no	7
Warnings:					
Information:					
11	Other Reference-Patent/App/Search documents	14213543OA.PDF	423909 b5ecd19fb916ba184d1556786a52adcca1d28a19	no	7
Warnings:					
Information:					
12	Other Reference-Patent/App/Search documents	13874192-OA-Jul2015.PDF	629763 53adfc6269fcd94b84a1698c3b1816a99d5d5ab4	no	13
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Information:					
13	Other Reference-Patent/App/Search documents	13527466-OA-Jul2015.PDF	942688 a0a76c1a652d6d60d56b590793f31c4814ebf53b	no	20
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Information:					
14	Other Reference-Patent/App/Search documents	13528720OA.pdf	338881 b43c2b1b061b221cf98159278c0c5402176868b4	no	10
Warnings:					
Information:					
15	Fee Worksheet (SB06)	fee-info.pdf	33157 88710b4193ffa6e0c92f0b0e6672ac5b12545d60	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	19019072		

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.

VIA eFILE

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
	Michael A. Liberty	)
Serial No.:	13/680,824	) Art Unit) 3627
Filed:	November 19, 2012	)
Conf. No.:	7971	)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
Examiner:	PAUL DANNEMAN	)
Customer No.:	22913	)

AMENDMENT "B" AND RESPONSE
AFTER FINAL W/RCE AND THREE MONTH EXTENSION OF TIME

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

Dear Sir:

In response to the Final Office action mailed February 6, 2015 (paper no. 20150203), please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 15 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as reflected by the following marked-up paragraph(s):

[0082] 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~~ 536 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.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A ~~cloud-based transaction platform~~computing system for facilitating management of a mobile wallet, including:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device and including web services communication mechanisms for interfacing with a mobile wallet application installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL);

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application, the mobile wallet application being associated with a mobile wallet account; and

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 for a customer using

~~a third party~~the mobile wallet which is owned by another entity than the customer, the method comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using ~~the~~ a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from [[a]]the mobile wallet of the customer to ~~the~~ a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit; and

the computing system 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. (Original) 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. (Cancelled).

4. (Cancelled).

5. (Previously Presented) The cloud-based transaction platform of claim 1, further comprising 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.

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

7. (Original) 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. (Original) 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. (Previous Presented) The cloud-based transaction platform of claim 1, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

10. (Currently Amended) The cloud-based transaction platform of claim 1, wherein the transaction comprises a mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

returning the perishable code, comprising 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;

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

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

11. (Previous Presented) The cloud-based transaction platform of claim 1, wherein the transaction comprises a mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

12. (Previous Presented) The cloud-based transaction platform of claim 1, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

13-20. (Cancelled)

21. (Currently Amended) At a computer system including at least one processor and a memory, a computer-implemented a method for performing a transaction for a customer using a third party mobile wallet owned by another entity than the customer, the method comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using ~~the~~ a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from [[a]]the mobile wallet of the customer to ~~the~~ a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

22. (Previously Presented) The computer-implemented method of claim 21, wherein a transaction is performed by a second, different customer using a second, different third party mobile wallet.

23. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet platform comprises a third party processor.

24. (Cancelled).

25. (Previously Presented) The computer-implemented method of claim 21, further comprising 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.

26. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

27. (Previously Presented) The computer-implemented method of claim 21, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

28. (Previously Presented) The computer-implemented method of claim 27, wherein the third party mobile wallet providers' POS processing systems communicate with each other using the cloud-based transaction platform to process the transaction.

29. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

30. (Currently Amended) The computer-implemented method of claim 21, wherein the transaction comprises a mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

returning the perishable code, comprising 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;

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;

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

crediting the agents account by the specified amount of funds.

31. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises a mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

32. (Previous Presented) The computer-implemented method of claim 21, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

33-35. (Cancelled).

36. (Currently Amended) One or more computer-readable hardware storage devices having stored thereon computer-executable instructions that, when executed by the one or more processors of a computing system, cause the computing system to perform a method for performing a transaction for a customer using a third party mobile wallet owned by another entity than the customer, the method comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using ~~the~~ a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from [[a]]the mobile wallet of the customer to ~~the~~ a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

REMARKS

The Final Office Action, mailed February 6, 2015, considered and rejected claims 1-3, 5-12, 21-23, 25-32 and 36.

By this paper, claims 1, 10, 21, 30 and 36 have been amended. Claim 3 has been cancelled. Accordingly, claims 1-2, 5-12, 21-23, 25-32 and 36 remain pending, of which claims 1, 21 and 36 are the only independent claims at issue. Support for the claim amendments is found throughout the originally filed application and claims, including the disclosure presented in at least paragraphs [0007], [0022], [0036], [0052]-[0059], [0072], [01017], [0112], [0114] and [0115] and Figures 1, 2 and 6.

35 U.S.C. §102 Rejections

Claims 1-3, 5-12, 21-23, 25-32 and 36 were rejected under 35 U.S.C. §102(e) as being anticipated by Crofts, et al. (U.S. 2012/0290478). Applicant respectfully traverses this rejection. Initially, it is noted that there are several limitations that are recited in the claims that are not taught by Crofts. By way of example, claims 10, 12, 30 and 32 include limitations regarding a secure perishable code. These codes (including purchase codes and withdrawal codes) which are sent to the consumer and which are presented at an agent terminal, are clearly not disclosed nor suggested by Crofts. Accordingly, a prima facie case of anticipation has not been met for at least these claims.

Applicant also respectfully submits that the independent claims include limitations that are not taught by Crofts. For instance, by way of example, each of the claims requires the claimed computing system to "send[] the agent communication to the third party mobile wallet platform," wherein this communication includes an indication that a customer desires to perform a transaction. The Office asserts that Crofts teaches this in Figure 1 and paragraphs [0027] and [0064], by "enabling [a] payment cloud transaction based on mobile device wallet applications." However, this assertion (even if true) fails to satisfy the specific claim limitation for "sending the agent communication to the third party mobile wallet platform." In particular, an enablement of payment cloud transactions does not, by itself, teach the claimed "sending the agent communication to the third party mobile wallet platform." Accordingly, a prima facie case for rejecting the independent claims has not been met.

Notwithstanding the foregoing, Applicant has nonetheless amended the pending claims to expedite examination and allowance of the pending claims.

By this paper, the claims have all been amended to clarify some of the system structure for facilitating the management of mobile wallet transactions. In particular, the claims have all been amended to clarify that the claimed systems and embodiments are limited to embodiments in which the operating system is configured with:

> one or more processors;
> system memory;
> an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;
> a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;
> a payment handler that exposes a common API for interacting with different payment processors;
> a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and
> a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

Clearly Crofts fails to disclose or suggest any such system configuration, particularly such a system that implements the claimed methods of the pending application.

Crofts also fails to teach or suggest any embodiment in which the claimed system which, when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, provides a perishable code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal, as now also required by each of the pending claims.

For at least these reasons, Applicant respectfully submits that all of the pending claims are distinguished from and are patentable over Crofts.

Since this resolves all of the rejections of record, Applicant respectfully submits that all of the pending claims are now in immediate condition for allowance.

The foregoing remarks herein have primarily focused on some of the differences between the independent claims and the references of record. This does not mean, however, that by so doing these are necessarily the only differences between the claimed invention and the references of record.[1] By way of example, claims 10, 12, 30 and 32 recite embodiments in which the perishable code is utilized to perform the claimed transaction, which is not taught nor suggested by Crofts. In fact, when rejecting these claims, the Office has failed to even mention the limitation regarding the perishable code.

As mentioned above, Crofts fails to disclose the use of any perishable code that is used in the manner that is claimed by the present application. Crofts does utilize a transaction identifier (or "the transaction itself to provide the link between payer and payee rather than transaction account information"). ([0063]-[0065]). However, this transaction identifier does not appear to be a perishable code that is sent to the customer and presented to the agent, as claimed.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

[1] Applicant, thus, does not acquiesce to any asserted rejections that have not been specifically traversed at this time, particularly with regard to the dependent claims and reserves 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.

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 6th day of August, 2015.

Respectfully submitted,

/Jens C. Jenkins/

JOHN C. STRINGHAM
Registration No. 40,831
JENS C. JENKINS
Registration No. 44,803
WORKMAN | NYDEGGER
Attorneys for Applicant
Customer No. 22913

JCS:JCJ:ae
5274785_1

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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 displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/680,824	Filing Date 11/19/2012	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	08/06/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 37	Minus	** 37	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* 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.

LIE
/ERIC V. BURNS/

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.

VIA eFILE

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
		)
	Michael A. Liberty	)
		)
Serial No.:	13/680,824	) Art Unit
		) 3627
Filed:	November 19, 2012	)
		)
Conf. No.:	7971	)
		)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
		)
Examiner:	PAUL DANNEMAN	)
		)
Customer No.:	22913	)

REQUEST FOR REFUND UNDER 37 CFR § 1.26

Refund Section
Accounting Division, Office of Finance
Commissioner for Patents
PO Box 1450
Arlington, Virginia 22313-1450

Dear Sir:

We hereby request a refund of $1,300.00 that was charged to our firm by the United States Patent and Trademark Office ("PTO") on August 6, 2015.

A Response after Final Office Action with RCE and Three (3) Month Extension of Time was filed on August 6, 2015. Applicant's counsel authorized a one-time payment of the large-entity RCE ($1,200.00) and three (3) Month Extension of Time ($1,400.00). Because the Applicant is entitled to small-entity status, Applicant respectfully requests a refund of the difference between the large and small entity fees ($1,300.00).

Accordingly, Applicant respectfully requests $1,300.00 be refunded to **Deposit Account No. 23-3178**, since small-entity status should have been applied.

In the event of any questions, or additional documentation is required in this matter, please contact the attorney below.

Dated this 11th day of August, 2015.

Respectfully submitted,

/Jens C. Jenkins/

JOHN C. STRINGHAM
Registration No. 40,831
JENS C. JENKINS
Registration No. 44,803
WORKMAN | NYDEGGER
Attorneys for Applicant
Customer No. 22913

JCS:JCJ:ae
5280812_1

Electronic Acknowledgement Receipt

EFS ID:	23178016
Application Number:	13680824
International Application Number:	
Confirmation Number:	7971
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Customer Number:	22913
Filer:	Jens C. Jenkins/Ashlee Emig
Filer Authorized By:	Jens C. Jenkins
Attorney Docket Number:	18756.37.1
Receipt Date:	11-AUG-2015
Filing Date:	19-NOV-2012
Time Stamp:	15:44:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Refund Request	18756-37-1_Request-for-Refund.pdf	99327 00306a884267d2103baa2dda624173d29652e432	no	2

Warnings:	
Information:	

Total Files Size (in bytes):	99327

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.

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VIA eFILE

2015 AUG 11 AM 10: 35

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	Michael A. Liberty	)
Serial No.:	13/680,824	) Art Unit 3627
Filed:	November 19, 2012	)
Conf. No.:	7971	)
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Examiner:	PAUL DANNEMAN	)
Customer No.:	22913	)

REQUEST FOR REFUND UNDER 37 CFR § 1.26

Refund Section
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Best Available Copy

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Respectfully submitted,

/Jens C. Jenkins/

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JENS C. JENKINS
Registration No. 44,803
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Attorneys for Applicant
Customer No. 22913

JCS:JCJ:ae
5280812_1

Electronic Patent Application Fee Transmittal

Application Number:	13680824
Filing Date:	19-Nov-2012
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Filer:	Jens C. Jenkins/Ashlee Emig
Attorney Docket Number:	18756.37.1

Filed as Large 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:				

08/18/2015 SDIRETA1 00000015 13680824
01 FC:2253 700.00 OP
02 FC:2801 600.00 OP

Adjustment date: 08/18/2015 SDIRETA1
08/07/2015 INTEFSW 00003835 13680824
01 FC:1253 -1400.00 OP
02 FC:1801 -1200.00 OP

Refund Fee 0030165396
08/18/2015

Credit Card Refund Total: $1300.00

Am Exp..: XXXXXXXXXX1006

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 3 months with $0 paid	1253	1	1400	1400
Miscellaneous:				
Request for Continued Examination	1801	1	1200	1200
		Total in USD ($)		**2600**

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UNITED STATES DEPARTMENT OF COMMERCE
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NOTICE OF ALLOWANCE AND FEE(S) DUE

22913 7590 09/18/2015

Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

EXAMINER
DANNEMAN, PAUL

ART UNIT	PAPER NUMBER
3627	

DATE MAILED: 09/18/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1	7971

TITLE OF INVENTION: USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	12/18/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 02/11)

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22913 7590 09/18/2015
Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1	7971

TITLE OF INVENTION: USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	12/18/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DANNEMAN, PAUL	3627	705-021000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
❑ Issue Fee
❑ Publication Fee (No small entity discount permitted)
❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)
❑ A check is enclosed.
❑ Payment by credit card. Form PTO-2038 is attached.
❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
❑ Applicant certifying micro entity status. See 37 CFR 1.29
NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
❑ Applicant asserting small entity status. See 37 CFR 1.27
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
❑ Applicant changing to regular undiscounted fee status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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.
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1	7971

22913 7590 09/18/2015

Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

EXAMINER	
DANNEMAN, PAUL	
ART UNIT	**PAPER NUMBER**
3627	

DATE MAILED: 09/18/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 02/11)

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. 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, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. 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.

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 disclosure of these records is required by the Freedom of Information Act.
2. 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).
5. 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 inspection 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.

Notice of Allowability	Application No. 13/680,824	Applicant(s) LIBERTY, MICHAEL A.	
	Examiner PAUL DANNEMAN	Art Unit 3627	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Request for Continued Examination filed on 06 August 2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1,2,5-12,21-23,25-32 and 36*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   Certified copies:
   a) ☐ All b) ☐ Some *c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/PAUL DANNEMAN/
Primary Examiner, Art Unit 3627

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06 August 2015 has been entered.

Status of the Claims

1. Claims 1-2, 5, 7, 10, 21-22, 27, 30 and 36 have been amended.

2. Claims 3-4, 13-20, 24 and 33-35 were previously cancelled.

3. Claims 1-2, 5-12, 21-23, 25-32 and 36 are pending and have been examined in this Office Action.

4. The present application is being examined under the pre-AIA first to invent provisions.

EXAMINER'S AMENDMENT

5. An Examiner's to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

6. Authorization for this Examiner's Amendment was given in an email and telephone conversation on 21 August 2015 with Jens C. Jenkins, Registration Number 44,803.

The Application has been amended as follows:

7. In the Claims:

1. (Currently Amended) A computing system for facilitating management of a mobile wallet, including:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device and including web services communication mechanisms for interfacing with a mobile wallet application installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL);

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application, the mobile wallet application being associated with a mobile wallet account; and

one or more computer-readable storage media having stored thereon computer-executable instructions that are executable ~~, when executed~~ by the one or more processors to [[,]] cause the computing system to perform ~~a method for performing~~ a transaction for a customer using the mobile wallet which is owned by another entity than the customer, ~~the method~~ comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit; and

the computing system 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. (Currently Amended) The cloud-based transaction platform of claim 1, wherein a new transaction is performed by the computing system for a second, different customer using a second, different third party mobile wallet.

3. (Cancelled).

4. (Cancelled).

5. (Currently Amended) The cloud-based transaction platform of claim 1, wherein the transaction further comprises ~~comprising 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.

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

7. (Currently Amended) The cloud-based transaction platform of claim ~~1~~6, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

8. (Original) 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. (Previously Presented) The cloud-based transaction platform of claim 1, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

10. (Currently Amended) The cloud-based transaction platform of claim 1, wherein the transaction comprises ~~a~~ the mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

returning providing the perishable withdrawal code ~~, comprising 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;

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 perishable withdrawal code has been presented to an agent; and

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

11. (Currently Amended) The cloud-based transaction platform of claim 1, wherein the transaction comprises ~~a~~ the mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

12. (Previous Presented) The cloud-based transaction platform of claim 1, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

13-20. (Cancelled)

21. (Currently Amended) At a computer system including at least one processor and a memory, a computer-implemented a method for performing a transaction for a customer using a third party mobile wallet owned by another entity than the customer, the method comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

22. (Currently Amended) The computer-implemented method of claim 21, wherein a new transaction is performed by the computing system for a second, different customer using a second, different third party mobile wallet.

23. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet platform comprises a third party processor.

24. (Cancelled).

25. (Previously Presented) The computer-implemented method of claim 21, further comprising 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.

26. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

27. (Currently Amended) The computer-implemented method of claim ~~21~~26, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

28. (Previously Presented) The computer-implemented method of claim 27, wherein the third party mobile wallet providers' POS processing systems communicate with each other using the cloud-based transaction platform to process the transaction.

29. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

30. (Currently Amended) The computer-implemented method of claim 21, wherein the transaction comprises ~~a~~ the mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

returning providing the perishable withdrawal code~~, comprising 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;

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 perishable withdrawal code has been presented to an agent;

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

crediting the agents account by the specified amount of funds.

31. (Currently Amended) The computer-implemented method of claim 21, wherein the transaction comprises ~~a~~ the mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

32. (Previous Presented) The computer-implemented method of claim 21, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

33-35. (Cancelled).

36. (Currently Amended) One or more computer-readable hardware storage devices having stored thereon computer-executable instructions that are executable~~, when executed~~ by the one or more processors of a computing system[[,]] to cause the computing system to perform ~~a method for performing~~ a transaction for a customer using a third party mobile wallet owned by another entity than the customer, ~~the method~~ comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

8. **Best U.S. Reference: Crofts et al., US Patent Publication 2012/0290478 A1 ("Crofts")** teaches a cloud enabled payment processing system and method wherein a computer receives a payer request including a payer account identifier and based on that request, the computer generates a cloud transaction identifier which is sent to the payer device. The

computer receives from a payee device, a payee payment request comprising the cloud transaction identifier and forms a transaction authorization request which is submitted to a payment processing network.

9. **The following is an Examiner's Statement of Reasons for Allowance:** No prior art cited here or in any previous Office Action fully anticipates nor renders the claims obvious either alone or in combination. Independent Claims 1, 21 and 36 teach a system and method that manages a payment request associated with a mobile wallet, a mobile wallet account and the constraints of the financial transaction performed by the mobile wallet application. A computer system receives a communication from an agent terminal and determines that the mobile wallet transaction comprises a mobile wallet withdraw, a perishable withdrawal code is provided to the consumer which the consumer presents to the agent terminal to facilitate processing of the mobile wallet withdrawal. Therefore, the combinations of limitations, clearly presented in the claims of this application are novel, unobvious and allowable.

Conclusion

10. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled **"Comments on Statement of Reasons for Allowance."**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAUL DANNEMAN/
Primary Examiner, Art Unit 3627

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	13/680,824	LIBERTY, MICHAEL A.	
	Examiner	Art Unit	
	PAUL DANNEMAN	3627	

All participants (applicant, applicant's representative, PTO personnel):

(1) *PAUL DANNEMAN*. (3)_____.

(2) *JENS C. JENKINS, Reg. No.44,803* . (4)_____.

Date of Interview: *21 August 2015*.

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 ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1 and 21*.

Identification of prior art discussed: *Crofts*.

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...)

We discussed amending the independent Claims to recite a "perishable withdrawal code". No other agreements were made..

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of 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.

☐ Attachment

/PAUL DANNEMAN/ Primary Examiner, Art Unit 3627	

Notice of References Cited	Application/Control No. 13/680,824	Applicant(s)/Patent Under Reexamination LIBERTY, MICHAEL A.	
	Examiner PAUL DANNEMAN	Art Unit 3627	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2012/0290478 A1	11-2012	Crofts; Paul M.	G06Q20/322	705/44
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13/680,824
	Filing Date	11/19/2012
	First Named Inventor	Michael A. Liberty
	Art Unit	3627
	Confirmation Number	7971
	Examiner Name	Paul Danneman
	Attorney Docket Number	18756.37.1

U.S. PATENT APPLICATION PUBLICATIONS					
Examiner Initials*	Cite No.	Publication Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	20100151790	17-Jun-2010	Hoeksel et al.	
	2	20100333129	30-Dec-2010	Alhadeff et al.	
	3	20120079521	29-Mar-2012	Garg et al.	
	4	20120203610	9-Aug-2012	Grigg et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document	Country Code	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T [1]
	5	2013009444	WO	17-Jan-2013	Liberty		
	6	2013009446	WO	17-Jan-2013	Liberty		
	7	2013025273	WO	21-Feb-2013	Liberty		
	8	2013078176	WO	30-May-2013	Liberty		
	9	2013166174	WO	7-Nov-2013	Liberty		

OFFICE ACTION / NOTICE OF ALLOWANCE DOCUMENTS				
Examiner Initials*	Cite No.	Application Number	Mail Date	Document
	10	13/964707	16-Mar-2015	Final Office Action
	11	14/213543	8-Apr-2015	Office Action
	12	13/874192	14-Jul-2015	Office Action
	13	13/527466	16-Jul-2015	Office Action
	14	13/528720	22-Jul-2015	Office Action

EXAMINER SIGNATURE			
Examiner Signature	/Paul Danneman/	Date Considered	08/17/2015

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13/680,824
	Filing Date	11/19/2012
	First Named Inventor	Michael A. Liberty
	Art Unit	3627
	Confirmation Number	7971
	Examiner Name	Paul Danneman
	Attorney Docket Number	18756.37.1

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

☒ 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; and/or (2) any patent application and reexamination processing fees under 37 CFR § 1.17.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/John C. Stringham/	Date	8/6/15
Name/Print	John C. Stringham	Registration Number	40831

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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.**

5083257_1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	**Art Unit**
	PAUL DANNEMAN	3627

CPC							
Symbol						**Type**	**Version**
G06Q		20	/	36		F	2013-01-01
G06Q		20	/	202		I	2013-01-01
G06Q		20	/	065		I	2013-01-01
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CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
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			/					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	22	
/PAUL DANNEMAN/ Primary Examiner.Art Unit 3627	08 Sep2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	**Art Unit**
	PAUL DANNEMAN	3627

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
705	21	G	0	6	Q	20 / 00 (2012.01.01)						
CROSS REFERENCE(S)		G	0	6	G	1 / 12 (2006.01.01)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	22	
/PAUL DANNEMAN/ Primary Examiner.Art Unit 3627	08 Sep2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	**Art Unit**
	PAUL DANNEMAN	3627

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1		17		33										
2	2		18		34										
3	3		19		35										
	4		20	22	36										
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8	10	15	26												
9	11	16	27												
10	12	17	28												
	13	18	29												
	14	19	30												
	15	20	31												
	16	21	32												

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 22	
/PAUL DANNEMAN/ Primary Examiner.Art Unit 3627 (Primary Examiner)	08 Sep2015 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 2

U.S. Patent and Trademark Office Part of Paper No. 20150908

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	("20130132219").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2015/09/08 12:45
S1	53	("20050090233" | "20060266827" | "20070036470" | "5592561" | "5768384" | "5913170" | "5974150" | "5986550" | "6005960" | "6069955" | "6226619" | "6409082" | "6442276" | "6456729" | "6591252" | "6788800" | "6796504" | "6806478" | "6859672" | "6996543" | "7089420" | "7170391" | "7182257" | "7222791" | "7283630" | "7372262" | "7472274" | "7497379" | "7580895" | "7705735" | "7810726" | "7874489" | "7878398" | "7909239" | "7941376" | "7995196" | "7996319" | "8019662" | "8028891" | "8078875" | "8087585" | "8103046" | "8108309" | "8155313" | "8171567" | "8174369" | "8196827" | "8210430" | "8220716" | "8240564" | "8243930" | "8245927" | "8249350").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/04/09 16:04
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S22	44	hoffman.in. and Restaurant adj Services.as. and cost and stock and sales and staff and shipment and (Radio near frequency) and internet and beverage	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	OFF	2014/04/10 10:47
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		beverage and cleanl	JPO; IBM_TDB			
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		near frequency) and internet and beverage and clean and customer and refrigeration and ordering and dine	EPO; JPO; IBM_TDB			
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S42	44	hoffman.in. and Restaurant adj Services.as. and cost and stock and sales and staff and shipment and (Radio near frequency) and internet and beverage and clean and customer and refrigeration and ordering and obser$5	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	OFF	2014/04/10 10:54
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	Art Unit
	PAUL DANNEMAN	3627

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
705/21 Class Text Search	11 Jun 2014	PD
G06Q 20/00 International Class Text Search	11 Jun 2014	PD
Search_Goog_Patents - cloud based transaction processing systems	10 Jun 2014	PD
EAST	11 Jun 2014	PD
EAST	03 Feb 2015	PD
705 Class Text Search	08 Sep 2015	PD
G06Q International Class Text Search	08 Sep 2015	PD
EAST	08 Sep 2015	PD

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
705	21	11 Jun 2014	PD
G06Q	20/00	11 Jun 2014	PD
705	ALL	08 Sep 2015	PD
G06Q	ALL	08 Sep 2015	PD

VIA eFILE

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
		)
	Michael A. Liberty	)
		)
Serial No.:	13/680,824	) Art Unit
		) 3627
Filed:	November 19, 2012	)
		)
Conf. No.:	7971	)
		)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
		)
Examiner:	PAUL DANNEMAN	)
		)
Customer No.:	22913	)

Amendment Under 37 CFR 1.312 and Request for Corrected Filing Receipt

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the Notice of Allowance mailed September 18, 2015, Applicant respectfully requests entry of the following amendment:

Amendment to the Claims begin on page 2 of this paper; and

Remarks/Arguments begin on page 14 of this paper.

AMENDMENT TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A computing system for facilitating management of a mobile wallet, including:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device and including web services communication mechanisms for interfacing with a mobile wallet application installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL);

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application, the mobile wallet application being associated with a mobile wallet account; and

one or more computer-readable storage media having stored thereon computer-executable instructions that are executable by the one or more processors to cause the computing system to perform a transaction for a customer using the mobile wallet which is owned by another entity than the customer, comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit; and

the computing system 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. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein a new transaction is performed by the computing system for a second, different customer using a second, different third party mobile wallet.

3. (Cancelled).

4. (Cancelled).

5. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction further comprises 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.

6. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

7. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 6, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

8. (Currently Amended) The computing system ~~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. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

10. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction comprises the mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

providing the perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform;

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 perishable withdrawal code has been presented to an agent; and

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

11. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction comprises the mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

12. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

13-20. (Cancelled)

21. (Previous Presented) At a computer system including at least one processor and a memory, a computer-implemented a method for performing a transaction for a customer using a third party mobile wallet owned by another entity than the customer, the method comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application**.**

22. (Previous Presented) The computer-implemented method of claim 21, wherein a new transaction is performed by the computing system for a second, different customer using a second, different third party mobile wallet.

23. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet platform comprises a third party processor.

24. (Cancelled).

25. (Previously Presented) The computer-implemented method of claim 21, further comprising 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.

26. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

27. (Previous Presented) The computer-implemented method of claim 26, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

28. (Previously Presented) The computer-implemented method of claim 27, wherein the third party mobile wallet providers' POS processing systems communicate with each other using the cloud-based transaction platform to process the transaction.

29. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

30. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

providing the perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform;

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 perishable withdrawal code has been presented to an agent;

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

crediting the agents account by the specified amount of funds.

31. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

32. (Previous Presented) The computer-implemented method of claim 21, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

33-35. (Cancelled).

36. (Previous Presented) One or more computer-readable hardware storage devices having stored thereon computer-executable instructions that are executable by the one or more processors of a computing system to cause the computing system to perform a transaction for a customer using a third party mobile wallet owned by another entity than the customer, comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

REMARKS

By this paper, Claims 2 and 5-12 have been amended and Claims 1, 21-23, 25-32 and 36 remain unchanged. No new matter is introduced by this amendment. Accordingly, entry of this Amendment is respectfully requested.

An updated Application Data Sheet updating the named applicant, assignee and inventors address is submitted along with this amendment.

A request for a corrected filing receipt reflecting the named applicant, assignee and inventors address is submitted along with this amendment.

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; or (2) any patent application and reexamination processing fees under 37 CFR § 1.17.

Dated October 2, 2015.

Respectfully submitted,

/John C. Stringham, 40831/

JOHN C. STRINGHAM
Registration No. 40,831

Workman Nydegger
Attorneys for Applicant
Customer No. 22913

JCS:rt
5373683_1.DOC

CORRECTED FILING RECEIPT

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 NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE RECD	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/680,824	11/19/2012	3685	1390	18756.37.1	20	3

CONFIRMATION NO. 7971

22913
Workman Nydegger
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, UT 84111

FILING RECEIPT



Date Mailed: 12/20/2012

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s) Orlando
Michael A. Liberty, ~~Windermere~~, FL;

Applicant(s)
~~Mozido, LLC, Dallas, TX~~ Mozido, Inc., Austin, TX

Assignment For Published Patent Application
~~MOZIDO, LLC, Dallas, TX~~ MOZIDO, INC., Austin, TX

Power of Attorney: None

Domestic Priority data as claimed by applicant
This appln claims benefit of 61/562,301 11/21/2011

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 12/12/2012
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/680,824**
Projected Publication Date: 05/23/2013
Non-Publication Request: No
Early Publication Request: No

CORRECTED FILING RECEIPT

Title

USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

Preliminary Class

705

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where

the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage, facilitate, and accelerate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

Electronic Acknowledgement Receipt

EFS ID:	23680031
Application Number:	13680824
International Application Number:	
Confirmation Number:	7971
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Customer Number:	22913
Filer:	John C. Stringham/Rachelle Turner
Filer Authorized By:	John C. Stringham
Attorney Docket Number:	18756.37.1
Receipt Date:	02-OCT-2015
Filing Date:	19-NOV-2012
Time Stamp:	16:08:47
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	18756_37_1_trans_312.pdf	85491 d4b2b06ef01873798fa5d78b54d66b6b0376433e	no	2
Warnings:					
Information:					

2	Amendment after Notice of Allowance (Rule 312)	18756_37_1_312_amend.pdf	127946 93081c7db582f407a269d90922eca1763c88e032	no	14
Warnings:					
Information:					
3	Request for Corrected Filing Receipt	18756_37_1_req_cfr.pdf	89962 b28319573a08833469aeed2e8a8a614246f91c9a	no	2
Warnings:					
Information:					
4	Application Data Sheet	18756_37_1_supp_ads.pdf	1873312 4396c33c254f36b40c1f91ebcfc61690d5d3c52f4	no	5
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
5	Request for Corrected Filing Receipt	18756_37_1_CorFR.pdf	578578 08f98a19d02132e91d71ebcbcd77bcacd8279182	no	3
Warnings:					
Information:					
		Total Files Size (in bytes):	2755289		

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.

ELECTRONICALLY FILED

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
		)
	Michael A. Liberty	)
		)
Serial No.:	13/680,824	) Art Unit
		) 3627
Filed:	November 19, 2012	)
		)
Conf. No.:	7971	)
		)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
		)
Examiner:	PAUL DANNEMAN	)
		)
Customer No.:	22913	)

Transmittal For Amendment under 37 CFR 1.312
And Request for Corrected Filing Receipt

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

Dear Sir:

Transmitted herewith is an Amendment under 37 CFR 1.312 for entry in the above-identified application.

_X_ To render the transmitted Amendment timely filed enclosed are the following:

_X_ Supplemental Application Data Sheet.

_X_ Request for Corrected Filing Receipt.

__X__ No additional fees are required.

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 2nd day of October, 2015.

Respectfully submitted,

/John C. Stringham, 40831/

JOHN C. STRINGHAM
Registration No. 40,831

Workman Nydegger
Attorneys for Applicant
Customer No. 22913
Telephone No. 801.533.9800

JCS: rt
5373778_1.DOC

ELECTRONICALLY FILED

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
		)
	Michael A. Liberty	)
		)
Serial No.:	13/680,824	) Art Unit
		) 3627
Filed:	November 19, 2012	)
		)
Conf. No.:	7971	)
		)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
		)
Examiner:	PAUL DANNEMAN	)
		)
Customer No.:	22913	)

REQUEST FOR CORRECTED FILING RECEIPT

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

Dear Commissioner:

Attached is a copy of the Official Filing Receipt received from the United States Patent and Trademark Office in connection with the above-identified patent application. A Corrected Filing Receipt is respectfully requested.

The Corrected Filing Receipt should read, in pertinent part, as follows in the Inventor(s), Applicant(s) and Assignment for Published Patent Application sections:

Inventor(s)

Michael A. Liberty, Orlando, FL;

Applicant(s)
MOZIDO, INC., Austin, TX

Assignment For Published Patent Application
MOZIDO, INC., Austin, TX

An updated Application Data Sheet updating the named applicant and assignee is submitted along with this request.

No fee is believed to be due in connection with this request. 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; or (2) any patent application and reexamination processing fees under 37 CFR § 1.17.

Dated 2nd day of October, 2015.

Respectfully submitted,

/John C. Stringham, 40831/

JOHN C. STRINGHAM
Registration No. 40,831
Workman Nydegger
Attorneys for Applicant
Customer No. 22913

JCS:rt
5373783_1.DOC

PTO/AIA/14 (08-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	18756.37.1
	Application Number	
Title of Invention	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Michael	A.	Liberty	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	~~Windermere~~ Orlando	State/Province	FL	Country of Residence	US

Mailing Address of Inventor:

Address 1	~~5373 Isleworth Country Club Drive~~ 5036 Dr. Phillips Blvd., #314		
Address 2			
City	~~Windermere~~ Orlando	State/Province	FL
Postal Code	~~34786~~ 32819	Country	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	22913		
Email Address		Add Email	Remove Email

Application Information:

Title of the Invention	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS		
Attorney Docket Number	18756.37.1	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	1	Suggested Figure for Publication (if any)	9

PTO/AIA/14 (08-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	18756.37.1
	Application Number	
Title of Invention	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	22913		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	non provisional of	61562301	2011-11-21

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).

Remove

Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Priority Claimed
			◉ Yes ○ No

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

PTO/AIA/14 (08-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	18756.37.1
	Application Number	
Title of Invention	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	

Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the Participating Offices

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows suf icient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

◉ Assignee	○ Legal Representative under 35 U.S.C. 117
○ Person to whom the inventor is obligated to assign.	○ Person who shows sufficient proprietary interest

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor :	

If the Assignee is an Organization check here. ☒

Organization Name	~~Mozido, LLC~~ MOZIDO, INC.

PTO/AIA/14 (08-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	18756.37.1
	Application Number	
Title of Invention	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	

Mailing Address Information:			
Address 1	~~1950 Stemmons Freeway~~ Two Barton Skyway, 1601 South Mopac Expressway		
Address 2	~~Suite 6040~~ Suite 200		
City	~~Dallas~~ Austin	State/Province	TX
Country	US	Postal Code	~~75207~~ 78746
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button.

Signature:

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications

Signature	/John C. Stringham, 40831/			Date (YYYY-MM-DD)	2015-10-01
First Name	John C.	Last Name	Stringham	Registration Number	40,831

Additional Signature may be generated within this form by selecting the Add button.

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet 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.**

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.

2. 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).

5. 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.

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1

CONFIRMATION NO. 7971

22913
Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

IMPROPER CFR REQUEST

OC000000077919470

Date Mailed: 10/08/2015

RESPONSE TO REQUEST FOR CORRECTED FILING RECEIPT

Power of Attorney, Claims, Fees, System Limitations, and Miscellaneous

In response to your request for a corrected Filing Receipt, the Office is unable to comply with your request because:

- An Application Data is needed to make this change.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/ttran/

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/680,824	11/19/2012	3627	1670	18756.37.1	20	3

CONFIRMATION NO. 7971

CORRECTED FILING RECEIPT

22913
Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

OC000000077919358

Date Mailed: 10/08/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Michael A. Liberty, Orlando, FL;

Applicant(s)

MOZIDO, INC., Austin, TX;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This appln claims benefit of 61/562,301 11/21/2011

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 12/12/2012

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/680,824**

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

Title

USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

Preliminary Class

705

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications:

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

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Title 35, United States Code, Section 184

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1	7971

22913 7590 10/16/2015

Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

EXAMINER	
DANNEMAN, PAUL	

ART UNIT	PAPER NUMBER
3627	

NOTIFICATION DATE	DELIVERY MODE
10/16/2015	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

Response to Rule 312 Communication	Application No.	Applicant(s)
	13/680,824	LIBERTY, MICHAEL A.
	Examiner	Art Unit
	PAUL DANNEMAN	3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

1. ☒ The amendment filed on *02 October 2015* under 37 CFR 1.312 has been considered, and has been:

   a) ☒ entered.

   b) ☐ entered as directed to matters of form not affecting the scope of the invention.

   c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
   Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

   d) ☐ disapproved. See explanation below.

   e) ☐ entered in part. See explanation below.

/PAUL DANNEMAN/
Primary Examiner, Art Unit 3627

Please Enter /P.D./

VIA eFILE

PATENT APPLICATION
Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)
		)
	Michael A. Liberty	)
		)
Serial No.:	13/680,824	) Art Unit
		) 3627
Filed:	November 19, 2012	)
		)
Conf. No.:	7971	)
		)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
		)
Examiner:	PAUL DANNEMAN	)
		)
Customer No.:	22913	)

Amendment Under 37 CFR 1.312 and Request for Corrected Filing Receipt

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the Notice of Allowance mailed September 18, 2015, Applicant respectfully requests entry of the following amendment:

Amendment to the Claims begin on page 2 of this paper; and

Remarks/Arguments begin on page 14 of this paper.

AMENDMENT TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A computing system for facilitating management of a mobile wallet, including:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device and including web services communication mechanisms for interfacing with a mobile wallet application installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL);

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application, the mobile wallet application being associated with a mobile wallet account; and

one or more computer-readable storage media having stored thereon computer-executable instructions that are executable by the one or more processors to cause the computing system to perform a transaction for a customer using the mobile wallet which is owned by another entity than the customer, comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit; and

the computing system 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. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein a new transaction is performed by the computing system for a second, different customer using a second, different third party mobile wallet.

3. (Cancelled).

4. (Cancelled).

5. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction further comprises 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.

6. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

7. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 6, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

8. (Currently Amended) The computing system ~~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. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

10. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction comprises the mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

providing the perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform;

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 perishable withdrawal code has been presented to an agent; and

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

11. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the transaction comprises the mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

12. (Currently Amended) The computing system ~~cloud-based transaction platform~~ of claim 1, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

13-20. (Cancelled)

21. (Previous Presented) At a computer system including at least one processor and a memory, a computer-implemented a method for performing a transaction for a customer using a third party mobile wallet owned by another entity than the customer, the method comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

22. (Previous Presented) The computer-implemented method of claim 21, wherein a new transaction is performed by the computing system for a second, different customer using a second, different third party mobile wallet.

23. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet platform comprises a third party processor.

24. (Cancelled).

25. (Previously Presented) The computer-implemented method of claim 21, further comprising 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.

26. (Previously Presented) The computer-implemented method of claim 21, wherein the third party mobile wallet is provided by a third party mobile wallet provider.

27. (Previous Presented) The computer-implemented method of claim 26, wherein each third party mobile wallet provider has their own point of sale (POS) processing system.

28. (Previously Presented) The computer-implemented method of claim 27, wherein the third party mobile wallet providers' POS processing systems communicate with each other using the cloud-based transaction platform to process the transaction.

29. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet deposit for depositing funds into the third party mobile wallet which is owned by the entity different than the customer, including:

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 the third party mobile wallet; and

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

30. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet withdrawal for withdrawing funds from the third party mobile wallet owned which is owned by the entity different than the customer, including:

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;

providing the perishable withdrawal code to the customer over at least one of the plurality of communication channels connected to the cloud-based transaction platform;

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 perishable withdrawal code has been presented to an agent;

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

crediting the agents account by the specified amount of funds.

31. (Previous Presented) The computer-implemented method of claim 21, wherein the transaction comprises the mobile wallet transfer for transferring money from a mobile wallet account of the customer provided by a first mobile wallet provider to a third party mobile wallet of a recipient provided by a second mobile wallet provider, the method comprising:

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 the recipient using a specified payment method from the mobile wallet account of the customer;

debiting the mobile wallet account by the specified amount of funds; and

transferring the specified amount of funds from the cloud-based transaction platform to the second 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 third party mobile wallet platform.

32. (Previous Presented) The computer-implemented method of claim 21, wherein the claimed method also includes performing a new transaction comprising a mobile wallet purchase at an agent terminal using a third party mobile wallet managed by a third party mobile wallet platform, including:

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 a third party mobile wallet;

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;

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;

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

crediting an agent account by the specified amount of funds.

33-35. (Cancelled).

36. (Previous Presented) One or more computer-readable hardware storage devices having stored thereon computer-executable instructions that are executable by the one or more processors of a computing system to cause the computing system to perform a transaction for a customer using a third party mobile wallet owned by another entity than the customer, comprising the following:

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, the mobile wallet transaction comprising at least one of a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet, a mobile wallet withdrawal in which funds are withdrawn from the third party mobile wallet and provided to the customer, or a mobile wallet deposit in which funds are deposited into the third party mobile wallet;

the computing system sending the agent communication to the third party mobile wallet platform;

the computing system receiving communication from the third party mobile wallet platform confirming processing of the transaction, the transaction comprising at least one of the mobile wallet transfer, the mobile wallet withdrawal or the mobile wallet deposit;

the computing system determining whether the mobile wallet transaction comprises the mobile wallet withdrawal and when the mobile wallet transaction is determined to comprise the mobile wallet withdrawal, generating and providing a perishable withdrawal code to the consumer, which is presented to the agent terminal to facilitate processing of the mobile wallet withdrawal; and

the computing system 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, wherein the computing system includes:

one or more processors;

system memory;

an integration tier configured to manage mobile wallet sessions with a mobile device on which a mobile wallet application is installed and including web services communication mechanisms for interfacing with the mobile wallet application which is installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

a notification services engine configured to interface with the integration tier and to send Short Message Peer-to-Peer (SSMP) messages, Short Messaging Service (SMS) messages and Simple Mail Transfer Protocol (SMTP) messages over the different communication channels to different devices, including the mobile device, to interface with the mobile wallet application installed on the hardware SIM card;

service connectors that are each configured to connect the computing system to a different third party system, each of the service connectors being configured as a separate module for integrating a corresponding external service to the computing system;

a payment handler that exposes a common API for interacting with different payment processors;

a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL); and

a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application.

REMARKS

By this paper, Claims 2 and 5-12 have been amended and Claims 1, 21-23, 25-32 and 36 remain unchanged. No new matter is introduced by this amendment. Accordingly, entry of this Amendment is respectfully requested.

An updated Application Data Sheet updating the named applicant, assignee and inventors address is submitted along with this amendment.

A request for a corrected filing receipt reflecting the named applicant, assignee and inventors address is submitted along with this amendment.

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; or (2) any patent application and reexamination processing fees under 37 CFR § 1.17.

Dated October 2, 2015.

Respectfully submitted,

/John C. Stringham, 40831/

JOHN C. STRINGHAM
Registration No. 40,831

Workman Nydegger
Attorneys for Applicant
Customer No. 22913

JCS:rt
5373683_1.DOC

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	**Art Unit**
	PAUL DANNEMAN	3627

CPC							
Symbol						**Type**	**Version**
G06Q		20	/	36		F	2013-01-01
G06Q		20	/	202		I	2013-01-01
G06Q		20	/	065		I	2013-01-01
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CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
			/					
			/					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	22	
/PAUL DANNEMAN/ Primary Examiner.Art Unit 3627	05 Oct2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	**Art Unit**
	PAUL DANNEMAN	3627

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
705	21	G	0	6	Q	20 / 00 (2012.01.01)						
CROSS REFERENCE(S)		G	0	6	G	1 / 12 (2006.01.01)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	22	
/PAUL DANNEMAN/ Primary Examiner.Art Unit 3627	05 Oct2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13680824	LIBERTY, MICHAEL A.
	Examiner	**Art Unit**
	PAUL DANNEMAN	3627

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1		17		33										
2	2		18		34										
	3		19		35										
	4		20	22	36										
3	5	11	21												
4	6	12	22												
5	7	13	23												
6	8		24												
7	9	14	25												
8	10	15	26												
9	11	16	27												
10	12	17	28												
	13	18	29												
	14	19	30												
	15	20	31												
	16	21	32												

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 22	
/PAUL DANNEMAN/ Primary Examiner.Art Unit 3627 (Primary Examiner)	05 Oct2015 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 2

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22913 7590 09/18/2015
Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1	7971

TITLE OF INVENTION: USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	12/18/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DANNEMAN, PAUL	3627	705-021000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 Workman Nydegger
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: MOZIDO, INC.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Austin, Texas 78746

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
- ☐ A check is enclosed.
- ☒ Payment by credit card. Form PTO-2038 is attached.
- ☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 23-3178 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☒ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /John C. Stringham/ Date October 30, 2015

Typed or printed name John C. Stringham Registration No. 40,831

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Electronic Patent Application Fee Transmittal

Application Number:	13680824
Filing Date:	19-Nov-2012
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Filer:	John C. Stringham/Sue Held
Attorney Docket Number:	18756.37.1

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:				
Utility Appl Issue Fee	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**480**

Electronic Acknowledgement Receipt

EFS ID:	23947837
Application Number:	13680824
International Application Number:	
Confirmation Number:	7971
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Customer Number:	22913
Filer:	John C. Stringham/Sue Held
Filer Authorized By:	John C. Stringham
Attorney Docket Number:	18756.37.1
Receipt Date:	30-OCT-2015
Filing Date:	19-NOV-2012
Time Stamp:	16:20:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$480
RAM confirmation Number	3262
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	18756_37_1_Transmittal_For_Issue_Fee.pdf	424592 f04a149f9a00274b6497a854f2db5aecf46b1430	no	2
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
2	Issue Fee Payment (PTO-85B)	18756_37_1_Fee_Transmittal.pdf	663178 0a98b33697dd3cda92a70721d00dd93057b7705d	no	1
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	31021 11c0370bdea2131da7812c723cdd2a76aaa7799f	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1118791		

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.

<u>New Applications Under 35 U.S.C. 111</u>
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.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
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.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
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.

Via E-File

PATENT APPLICATON
Docket No: 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:		)
	Michael A. Liberty	)
Serial No:	13/680,824	) Art Unit 3627
Filed:	November 19, 2012	)
Confirmation No.:	7971	)
For:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS	)
Examiner:	Paul Danneman	)
Customer No.:	22913	)

TRANSMITTAL OF ISSUE FEE PAYMENT

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Notice of Allowance and Fee(s) Due dated September 18, 2015, please find enclosed herewith the following items for filing in the United States Patent and Trademark Office in connection with the above identified patent application:

X Fee(s) Transmittal (PTOL-85) submitted pursuant to 37 C.F.R. § 1.311.

___ A Supplemental Declaration executed by the inventor(s) is submitted pursuant to 37 C.F.R. § 1.67.

___ Pursuant to the request for submission of formal drawings, enclosed are the following:

___ A Letter to the Official Draftsperson;

___ A set of _____ (__) sheets of formal drawings to replace the corresponding drawings originally filed with the subject application.

___ A duplicate set of the _____ (___) sheets of formal drawings with the changes therein highlighted in red.

___ Petition to Excuse Error in Small Entity Status is enclosed.

___ Form PTO-2038 submitting Credit Card Payment in the amount of $_____ is enclosed to cover the fee deficiency for the Petition to Excuse Error.

X Payment by credit card using the payment option in E-Filer with RAM will be used to cover the payment of the fees as follows:

X The $480.00 government issue fee pursuant to 37 C.F.R. § 1.18.

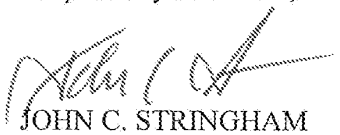
___ The $_____ government publication fee pursuant to 37 C.F.R. § 1.18.(d)

X The Commission is hereby authorized to charge payment of any additional fees or credit any overpayment to Deposit Account No. 23-3178.

Please address all future correspondence in connection with the above-identified patent application to the attention of the undersigned.

Dated this 30 day of October, 2015.

Respectfully submitted,



JOHN C. STRINGHAM
Registration No. 40,831
WORKMAN NYDEGGER
Attorneys for Applicant
Customer No. 022913
Telephone No. 801.533.9800

JCS/sch

5398363_1.doc

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)				Application Number	13/680,824
				Filing Date	11/19/2012
				First Named Inventor	Michael A. Liberty
				Art Unit	3627
				Confirmation Number	7971
				Examiner Name	Danneman, Paul
Sheet	1	Of	3	Attorney Docket Number	18756.37.1

U.S. PATENT APPLICATIONS

Examiner Initials*	Cite No.	Document Number	Filing Date	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

U.S. PATENTS

Examiner Initials*	Cite No.	Patent Number	Issue Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	7548915	16-Jun-2009	Ramer	
	2	6175823	16-Jan-2001	Van Dusen	

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initials*	Cite No.	Publication Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	20130246141	19-Sep ~~30-Apr~~-2013	Liberty, Michael A.	
	2	20080097851	24-Apr-2008	Bemmel	
	3	20070198432	23-Aug-2007	Pitroda	
	4	20100250356	30-Sep-2010	Gillenson	
	5	20110258024	20-Oct-2011	Prince	
	6	20090299844	3-Dec-2009	Reilly	
	7	20120232983	13-Sep-2012	Bertha	

Change(s) applied to document, /B.HH./ 10/21/2015

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Country Code	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T [1]
	1	2012025824	WO	1-Mar-2012	Yang		☒

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)				Application Number	13/680,824
				Filing Date	11/19/2012
				First Named Inventor	Michael A. Liberty
				Art Unit	3627
				Confirmation Number	7971
				Examiner Name	Paul Danneman
Sheet	1	Of	3	Attorney Docket Number	18756.37.1

U.S. PATENT APPLICATIONS					
Examiner Initials*	Cite No.	Document Number	Filing Date	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

U.S. PATENTS					
Examiner Initials*	Cite No.	Patent Number	Issue Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	7016532	21-Mar-2006	Boncyk	
	2	7477780	13-Jan-2009	Boncyk	
	3	7680324	16-Mar-2010	Boncyk	
	4	7403652	22-Jul-2008	Boncyk	
	5	7565008	21-Jul-2009	Boncyk	
	6	7899243	1-Mar-2011	Boncyk	
	7	7881529	1-Feb-2011	Boncyk	
	8	7899252	1-Mar-2011	Boncyk	
Change(s) applied to document, /B.H.H./ 10/21/2015	9	7564469	21-Jul-2009	Cohen ~~Boncyk~~	
	10	8130242	6-Mar-2012	Cohen ~~Boncyk~~	
	11	7775437	17-Aug-2010	Cohen ~~Boncyk~~	
	12	8218873	10-Jul-2012	Boncyk	
	13	8632000	21-Jan-2014	Laracey	
	14	8380177	19-Feb-2013	Laracey	
	15	8612325	26-Nov-2013	Laracey	

U.S. PATENT APPLICATION PUBLICATIONS					
Examiner Initials*	Cite No.	Publication Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	16	20130332347	12-Dec-2013	Liberty, Michael A.	
	17	20140006048	2-Jan-2014	Liberty, Michael A.	
	18	20130246203	19-Sep-2013	Laracey	
	19	20130238455	12-Sep-2013	Laracey	
	20	20130317928	28-Nov-2013	Laracey	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13/680824
	Filing Date	11/19/2012
	First Named Inventor	Liberty, Michael A.
	Art Unit	3627
	Confirmation Number	7971
	Examiner Name	Danneman, Paul
	Attorney Docket Number	18756.37.1

	81	20130041700	14-Feb-2013	Fisher	
	82	20130041699	14-Feb-2013	Fisher	
	83	20130040569	14-Feb-2013	Fisher	
	84	20130040568	14-Feb-2013	Fisher	
	85	20130035970	7-Feb-2013	Fisher	
	86	20130035969	7-Feb-2013	Fisher	
	87	20130035968	7-Feb-2013	Fisher	
	88	20130035967	7-Feb-2013	Fisher	
	89	20130035087	7-Feb-2013	Fisher	
	90	20130035072	7-Feb-2013	Fisher	
	91	20130035071	7-Feb-2013	Fisher	
	92	20130035070	7-Feb-2013	Fisher	
	93	20130035069	7-Feb-2013	Fisher	
	94	20130035068	7-Feb-2013	Fisher	
	95	20130035037	7-Feb-2013	Fisher	
	96	20130035036	7-Feb-2013	Fisher	
	97	20130035035	7-Feb-2013	Fisher	
	98	20130030997	31-Jan-2013	Spodak	
	99	20130030960	31-Jan-2013	Kashanian	
	100	20130030828	31-Jan-2013	Pourfallah	
	101	20130029646	31-Jan-2013	Chowdhury	
	102	20130024372	1/214/13	Spodak	
	103	20130024371	24-Jan-2013	Hariramani	
	104	20130024364	24-Jan-2013	Shrivastava et al. ~~Fisher~~	
	105	20130024280	24-Jan-2013	Fisher	
	106	20130024223	24-Jan-2013	Thomas	
	107	20130024221	24-Jan-2013	Fisher	
	108	20130024220	24-Jan-2013	Fisher	
	109	20130023294	24-Jan-2013	Singh	
	110	20130023209	24-Jan-2013	Fisher	

Change(s) applied to document, /B.H.H./ 10/2 /2015

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.D./

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.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/680,824	12/08/2015	9208488	18756.37.1	7971

22913 7590 11/18/2015

Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Michael A. Liberty, Orlando, FL;
MOZIDO, INC., Austin, TX;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

VIA *e*FILE

Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	Michael A. Liberty	)
Serial No.:	13/680824	)
Filed:	November 19, 2012	)
		) Art Unit
Patent No.:	9208488	) 3627
Issued:	December 8, 2015	)
		) Confirmation
No.:	7971	)
FOR:	Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers	)
Examiner:	Paul Danneman	)
Customer No.:	22913	)

REQUEST TO CORRECT INVENTORSHIP UNDER 37 C.F.R. § 1.324

Via *e*File
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Assignee desires to correct inventorship of the above-identified United States patent under 37 C.F.R. §1.324.

As set forth in 37 C.F.R. § 1.324, Assignee requests to **add** the following named person as an inventor in the above-identified patent application:

Inventor: Mike Love
Residence: US
Citizenship: US

Enclosed:

X Statement from inventor Mike Love that he approves of the change in inventorship.

X Statement from inventor Michael A. Liberty that he approves of the change in inventorship.

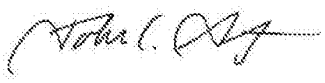
X Consent of Assignee to Correct Inventorship.

X The $150.00 fee for correction of inventorship of this patent under 37 C.F.R. § 1.20(b).

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: any post issuance fees under 37 CFR § 1.20. In addition, please consider this a petition therefor and charge any additional fees that may be required to Deposit Account No. 23-3178.

Dated this 20th day of February 2020.

Respectfully submitted,



John C. Stringham
Registration No. 40831
Attorney for Applicant
Customer No. 022913

JCS:re
43381774.1

COMBINED DECLARATION AND ASSIGNMENT

DECLARATION

TITLE OF APPLICATION: **Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers**

As a below named inventor, I hereby declare that:

This declaration and assignment are directed to:

☐ The attached application;

☐ United States Application No. _____ filed on _____; or

☒ The application which was filed on November 19, 2012 as U.S. Application No. 13/680,824 now US Patent 9208488 issued on December 8, 2015.

I hereby authorize the patent attorneys and/or patent agents of Workman Nydegger to insert the above Application No. and filing date when known.

The above-identified application was made or authorized to be made by me.

I hereby state that I have reviewed and understand the contents of the above-identified application, including the claim(s). I believe that I am the original inventor or an original joint inventor of one or more claimed inventions in the above-identified application.

I hereby state that I am aware of the duty to disclose all information which is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

I, as Assignor, am the original inventor or an original joint inventor of the subject matter disclosed and/or claims in the above-identified application and am desirous to sell, assign and transfer the entire right, title and interest in and to one or more inventions disclosed in the above-identified application, the above-identified application and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries.

The Assignee, FINTIV, INC., a corporation of the State of Delaware, having a principal place of business at 1717 West 6th Street, #380, Austin, Texas 78703, is desirous of acquiring the entire right, title and interest in and to the one or more inventions, the above-identified application, and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries.

In exchange for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign and transfer and agree to assign unto the Assignee, the entire right, title and interest in and to the one or more inventions, the above-identified application, any earlier filed provisional applications to which the above-identified application claims priority including any inventions disclosed therein and the right to claim priority thereto, and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries, and any and all divisions, reissues, continuations, continuation-in-parts, and substitutes thereof, including the right to file foreign applications directly in the name of Assignee and to claim priority rights deriving from the above-identified application to which the foreign applications are entitled by virtue of international convention, treaty or otherwise, the one or more inventions, the above-identified application and all letters patent on the one or more inventions to be held and enjoyed by Assignee and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by myself had this assignment, transfer and sale not been made.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue all letters patent on the inventions to Assignee.

I hereby covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this Assignment.

I further hereby sell, assign and transfer and agree to assign unto Assignee all claims for damages and all of the remedies arising out of any infringement of the invention or the above-identified United States patent application which may have accrued prior to the date of this assignment or may accrue, including, but not limited to, the right to sue for and collect and retain damages for past infringements of the invention or the above-identified United States patent applications.

I agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on the one or more inventions, for litigation regarding the letters patent, or for the purpose of protecting title to the one or more inventions or letters patent therefor.

Dated this 4 day of February 2020.

Mike Love

STATE OF Texas)
: ss.
COUNTY OF Burnet)

On February 4, 2020, before me personally appeared Mike Love known to me to be the person described and who signed the foregoing Assignment in my presence and acknowledged under oath before me that he has read the same and knows the contents thereof and that he executed the same as his free act and deed and for the purposes set forth therein.

NOTARY PUBLIC
Residing at 1107 FM 1431, Marble Falls - Tx

My Commission Expires:
04/11/2022

ANDRA SCHULZ
My Notary ID # 131525633
Expires April 11, 2022

VIA *e*FILE

Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	Michael A. Liberty	)
Serial No.:	13/680824	)
Filed:	November 19, 2012	)
Patent No.:	9208488	) Art Unit 3627
Issued:	December 8, 2015	)
Confirmation No.:	7971	)
FOR:	Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers	)
Examiner:	Paul Danneman	)
Customer No.:	22913	)

STATEMENT AND WRITTEN CONSENT OF
ASSIGNEE PURSUANT TO 37 C.F.R. § 1.324(b)(2) and 3.73(c)

VIA *e*FILE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The undersigned, Mike Love, declares that he is the President of FINTIV, INC. and that he is authorized to execute this statement on behalf of FINTIV, INC. organized and existing under laws of Delaware and that FINTIV, INC. is the Assignee of the right, title and interest of the above-identified application, as shown in the chain of title from Michael A. Liberty to MOZIDO, LLC. as recorded in the United States Patent and Trademark Office at Reel 030032, Frame 0869; from MOZIDO, LLC to MOZIDO, INC. recorded at Reel 037169, Frame 0677; from MOZIDO, INC. to FINTIV, INC. as by virtue of a name change recorded in the United States Patent and Trademark Office at Reel 051290, Frame 0363.

FINTIV, INC. hereby consents to the change of inventorship set forth in the accompanying request that adds Mike Love as a joint inventor of the above-identified patent application.

Signed this 1 day of February, 2020.

FINTIV, INC.

Mike Love
Title: President

VIA E-File Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	Michael A. Liberty	)
Serial No.:	13/680824	)
Filed:	November 19, 2012	)
Patent No.:	9208488	) Art Unit 3627
Issued:	December 8, 2015	)
Confirmation No.:	7971	)
FOR:	Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers	)
Examiner:	Paul Danneman	)
Customer No.:	22913	)

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

STATEMENT OF CURRENT INVENTOR– Michael A. Liberty
Under 37 CFR 1.324(b)(1)

Sir:

I, Michael A. Liberty, current inventor for the above-identified application, hereby agree to the addition of Mike Love as an inventor.

Dated this 28 day of Jan, 2020.

Michael A. Liberty

Via E-File

Docket No. 18756.37.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	Michael A. Liberty	)
Serial No.:	13/680824	)
Filed:	November 19, 2012	)
Patent No.:	9208488	) Art Unit 3627
Issued:	December 8, 2015	)
Confirmation No.:	7971	)
FOR:	Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers	)
Examiner:	Paul Danneman	)
Customer No.:	22913	)

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

STATEMENT OF ADDED INVENTOR Mike Love
under 37 CFR 1.324(b)(1)

Sir:

I, Mike Love, joint inventor for the above-identified application, hereby request that I be added as a joint inventor on the above-referenced application and I have no disagreement in regard to the requested change.

Dated this 1 day of February, 2020.

MRLove

Mike Love

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82B (07-13)
Approved for use through 03/31/2021. OMB 0651-0035
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 displays a valid OMB control number

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date
13/680824	November 19, 2012

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☑ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above: 22913

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☑ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

FINTIV, INC.

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☑ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature	/M L Love/	Date (Optional)	
Name	Mike Love		
Title	President		

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 3 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.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. 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 displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: FINTIV, INC.

Application No./Patent No.: 13680824 Filed/Issue Date: November 19, 2012

Titled: Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers

FINTIV, INC., a Corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Michael A. Liberty To: MOZIDO, LLC

The document was recorded in the United States Patent and Trademark Office at
Reel 034985, Frame 0972, or for which a copy thereof is attached.

2. From: MOZIDO, LLC To: MOZIDO, INC.

The document was recorded in the United States Patent and Trademark Office at
Reel 031769, Frame 0677, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). 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. 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.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. 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 displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: MOZIDO, INC. To: FINTIV, INC.

The document was recorded in the United States Patent and Trademark Office at
Reel 051290, Frame 0363, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/John C. Stringham/	February 20, 2020
Signature	Date
John C. Stringham	40831
Printed or Typed Name	Title or Registration Number

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 disclosure of these records is required by the Freedom of Information Act.
2. 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).
5. 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 inspection 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.

Electronic Patent Application Fee Transmittal

Application Number:	13680824
Filing Date:	19-Nov-2012
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Filer:	John C. Stringham/Ralene Eller
Attorney Docket Number:	18756.37.1

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:				
PROCESSING FEE CORRECTING INVENTORSHIP	2816	1	150	150

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**150**

Electronic Acknowledgement Receipt

EFS ID:	38649618
Application Number:	13680824
International Application Number:	
Confirmation Number:	7971
Title of Invention:	USING A MOBILE WALLET INFRASTRUCTURE TO SUPPORT MULTIPLE MOBILE WALLET PROVIDERS
First Named Inventor/Applicant Name:	Michael A. Liberty
Customer Number:	22913
Filer:	John C. Stringham/Ralene Eller
Filer Authorized By:	John C. Stringham
Attorney Docket Number:	18756.37.1
Receipt Date:	20-FEB-2020
Filing Date:	19-NOV-2012
Time Stamp:	20:40:54
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$150
RAM confirmation Number	E20202JK41223316
Deposit Account	233178
Authorized User	Ralene Eller
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.17 (Patent application and reexamination processing fees) 37 CFR 1.20 (Post Issuance fees)	

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request under Rule 48 correcting inventorship	18756-37-1_2020-02-20_Request-to-Correct-Inventorship.pdf	123150 6d5a2d2b48e02561b506a513d0334709c3e06104	no	2
Warnings:					
Information:					
2	Oath or Declaration filed	18756-37-1_2020-02-20_Love-Asgmt-Dec.pdf	222594 09bab29efe4ae16cb0245d5c7d7216dc6d43d3a9	no	2
Warnings:					
Information:					
3	Request under Rule 48 correcting inventorship	18756-37-1_2020-02-20_Consent-of-Assignee.pdf	102972 8966b5c48882cf84fdf23066b1dd69356058d99c	no	2
Warnings:					
Information:					
4	Request under Rule 48 correcting inventorship	18756-37-1_2020-02-20_Liberty-Stmt.pdf	83967 f76d843937000edef87adb6a0697e9cacbf926ac	no	1
Warnings:					
Information:					
5	Request under Rule 48 correcting inventorship	18756-37-1_2020-02-20_Love-Stmt.pdf	66376 eb827399b4f73a0d44897cbf4cc2c0451983673b	no	1
Warnings:					
Information:					
6	Power of Attorney	18756-37-1_2020-02-20_POA.pdf	369681 9791d112c81d78c4ac4b570d5b2db3c95dca416c	no	1
Warnings:					
Information:					

7	Assignee showing of ownership per 37 CFR 3.73	18756-37-1_2020-02-20_373c-stmt.pdf	55477 745106f16baa4fbf70cfe27a3beaae64178a5f94	no	3
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	30671 387767dbd9b5df44ff8d7aea5da94b0f7babad57	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1054888		

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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/680,824	11/19/2012	Michael A. Liberty	18756.37.1

CONFIRMATION NO. 7971

22913
Workman Nydegger
60 East South Temple
Suite 1000
Salt Lake City, UT 84111

POA ACCEPTANCE LETTER

OC000000114938064

Date Mailed: 02/25/2020

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 02/20/2020.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/byemane/

AO 120 (Rev. 08/10)

TO:	**Mail Stop 8** **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	**REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK**

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas - Waco Division on the following

☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00288	March 17, 2022	Western District of Texas - Waco Division

PLAINTIFF	DEFENDANT
Fintiv, Inc.	PayPal Holdings, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8,538,845	September 17, 2013	Fintiv, Inc.
2	9,892,386	February 13, 2018	Fintiv, Inc.
3	11,120,413	September 14, 2021	Fintiv, Inc.
4	9,208,488	December 8, 2015	Fintiv, Inc.
5	10,438,196	October 8, 2019	Fintiv, Inc.

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**