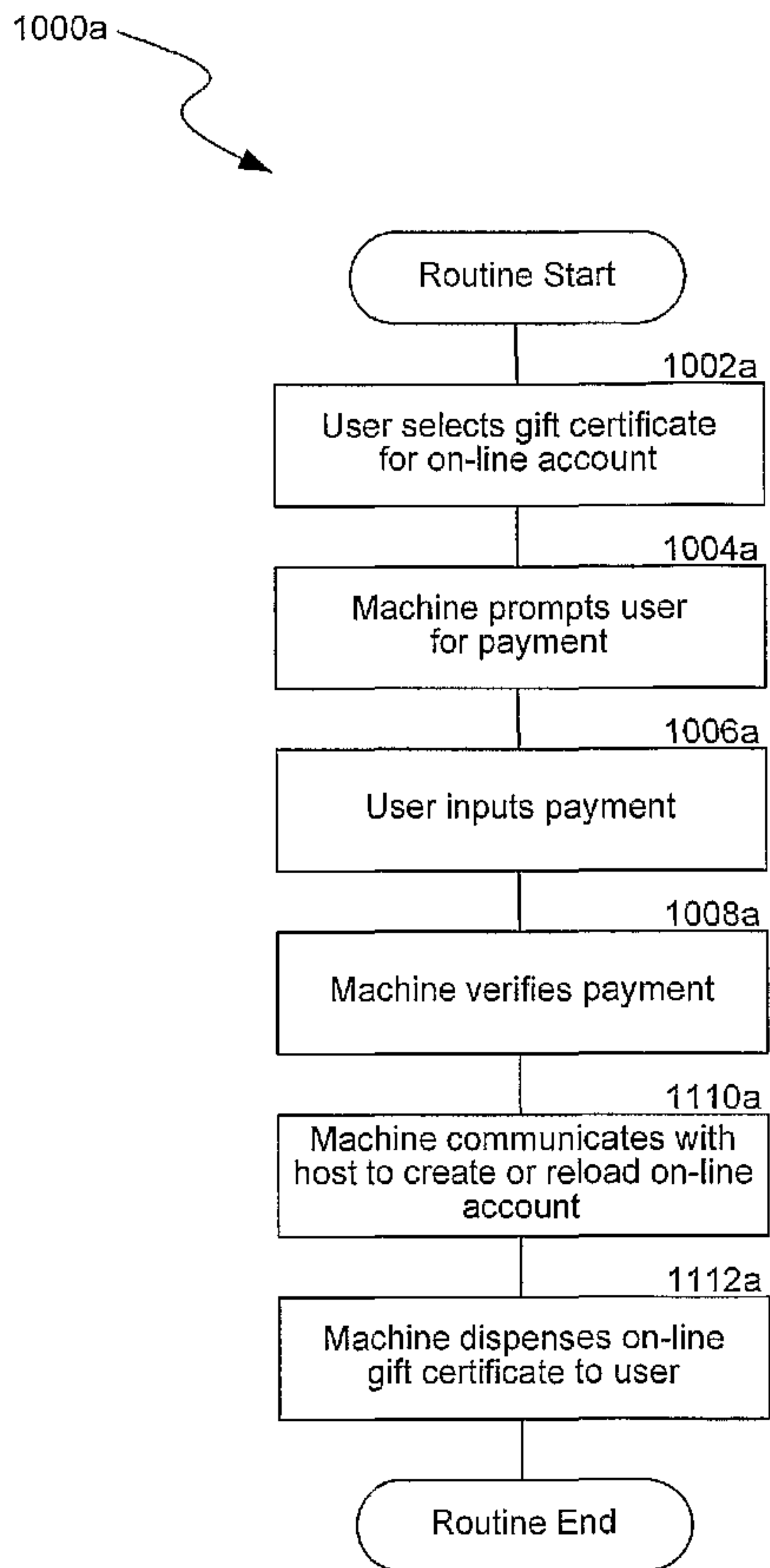




(86) Date de dépôt PCT/PCT Filing Date: 2006/11/13
 (87) Date publication PCT/PCT Publication Date: 2007/06/14
 (85) Entrée phase nationale/National Entry: 2008/05/16
 (86) N° demande PCT/PCT Application No.: US 2006/044111
 (87) N° publication PCT/PCT Publication No.: 2007/067308
 (30) Priorité/Priority: 2005/12/05 (US11/294,637)

(51) Cl.Int./Int.Cl. *G07D 7/00* (2006.01)
 (71) Demandeur/Applicant:
COINSTAR, INC., US
 (72) Inventeurs/Inventors:
DEAN, SCOTT A., US;
WAECHTER, MARK L., US;
HANSON, KIM P., US;
DORAN, MICHAEL, US;
SMITH, KERRY, US;
JEFFUS, SCOTT C., US;
ROWAN, PETER, US
 (74) Agent: OYEN WIGGS GREEN & MUTALA LLP

(54) Titre : PROCÉDES ET SYSTEMES POUR L'ECHANGE ET/OU LE TRANSFERT DE DIVERSES FORMES DE VALEUR
 (54) Title: METHODS AND SYSTEMS FOR EXCHANGING AND/OR TRANSFERRING VARIOUS FORMS OF VALUE



(57) **Abrégé/Abstract:**
 Methods and systems for exchanging various forms of value, including coins, currency, credit, debit, and/or bank account funds, for prepaid cash cards, credit cards, phone cards, gift cards, in-store gift certificates, e-certificates, and the like. In one

(57) **Abrégé(suite)/Abstract(continued):**

embodiment, a value exchange machine includes a coin input region, a coin sorting/counting apparatus, a card reader, and a communications facility configured to communicate with a remote computer network. In another embodiment, a value exchange system includes one or more of the value exchange machines connected to one or more remote computers via a communications link. A user wishing to purchase, for example, a gift certificate for use on-line can visit one of the value exchange machines, select the desired transaction, and pay for the certificate with coins, currency, a credit card, a debit card, and/or bank account funds. After confirming payment, the value exchange machine dispenses the certificate to the user, who can then go on-line to make purchases from an associated retailer with the certificate.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
14 June 2007 (14.06.2007)

PCT

(10) International Publication Number
WO 2007/067308 A2

(51) International Patent Classification:

G07D 7/00 (2006.01)

(21) International Application Number:

PCT/US2006/044111

(22) International Filing Date:

13 November 2006 (13.11.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11/294,637 5 December 2005 (05.12.2005) US

(71) Applicant (for all designated States except US): **COIN-STAR, INC.** [US/US]; 1800-114th Avenue S.E., Bellevue, WA 98004 (US).

(72) Inventors; and

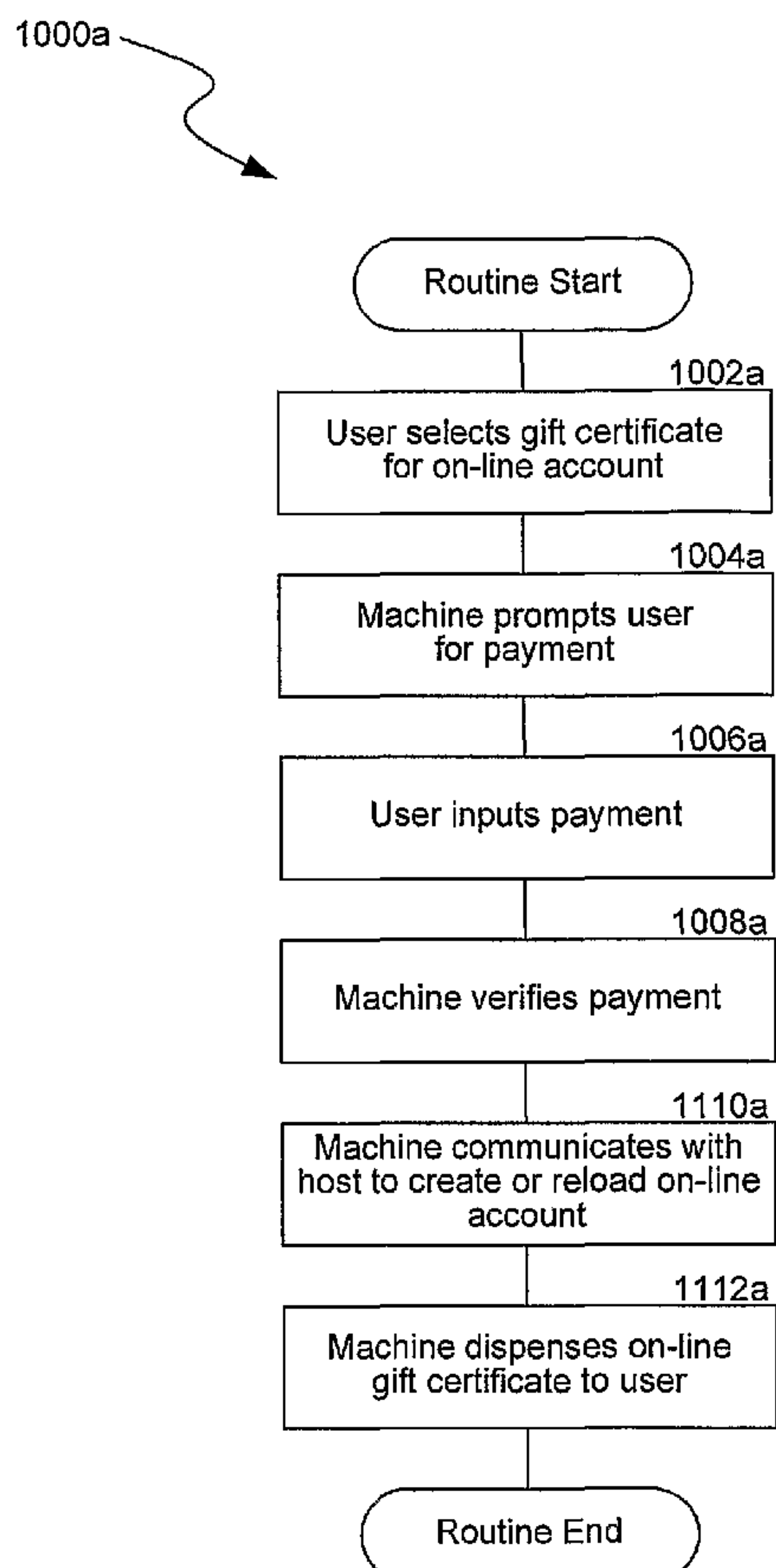
(75) Inventors/Applicants (for US only): **DEAN, Scott, A.** [US/US]; 5196- 235th Place S.E., Issaquah, WA 98029 (US). **WAECHTER, Mark, L.** [US/US]; P.O. Box 341, Winthrop, WA 98862 (US). **HANSON, Kim, P.** [US/US];20808 N.E. 141st Street, Woodinville, WA 98077 (US). **DORAN, Michael** [US/US]; 1925-237th Place S.E., Bothell, WA 98021 (US). **SMITH, Kerry** [US/US]; 14931 S.E. 60th Street, Bellevue, WA 98006 (US). **JEFFUS, Scott, C.** [US/US]; P.O.Box 2796, Redmond, WA 98073 (US). **ROWAN, Peter** [US/US]; 5523-29th Avenue N.E., Seattle, WA 98105 (US).(74) Agents: **ARNETT, Stephen, E.** et al.; Perkins Coie LLP, P.O. Box 1247, Seattle, WA 98111-1247 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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,

[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR EXCHANGING AND/OR TRANSFERRING VARIOUS FORMS OF VALUE



(57) Abstract: Methods and systems for exchanging various forms of value, including coins, currency, credit, debit, and/or bank account funds, for prepaid cash cards, credit cards, phone cards, gift cards, in-store gift certificates, e-certificates, and the like. In one embodiment, a value exchange machine includes a coin input region, a coin sorting/counting apparatus, a card reader, and a communications facility configured to communicate with a remote computer network. In another embodiment, a value exchange system includes one or more of the value exchange machines connected to one or more remote computers via a communications link. A user wishing to purchase, for example, a gift certificate for use on-line can visit one of the value exchange machines, select the desired transaction, and pay for the certificate with coins, currency, a credit card, a debit card, and/or bank account funds. After confirming payment, the value exchange machine dispenses the certificate to the user, who can then go on-line to make purchases from an associated retailer with the certificate.

WO 2007/067308 A2

WO 2007/067308 A2



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

METHODS AND SYSTEMS FOR EXCHANGING AND/OR
TRANSFERRING VARIOUS FORMS OF VALUE

RELATED APPLICATIONS

[0001] This application is a Continuation-In-Part of U.S. Patent Application No. 10/504,438, which is the U.S. national phase of International Patent Application No. PCT/US03/04600, which was filed February 14, 2003 and which claims priority to the following U.S. Provisional Patent Applications: U.S. Provisional Patent Application No. 60/357,331, filed February 15, 2002; U.S. Provisional Patent Application No. 60/357,555, filed February 15, 2002; U.S. Provisional Patent Application No. 60/419,735, filed October 18, 2002; and U.S. Provisional Patent Application No. 60/424,377, filed November 6, 2002. The present Continuation-In-Part application incorporates all of the applications listed above in their entireties by reference.

TECHNICAL FIELD

[0002] This application relates generally to methods and systems for exchanging one form of value for another form of value and, more particularly, to methods and systems for transferring value to an account, or for providing or reloading prepaid cash cards, credit cards, phone cards, on-line accounts, and the like.

BACKGROUND

[0003] Various vending machines are configured to dispense selected products to users in exchange for exact amounts of money. Such machines include, for example, food dispensing machines, stamp dispensing machines, ticket dispensing machines, and the like. Other machines are configured to count arbitrary numbers and denominations of coins received from users. One such coin-counting machine is disclosed in U.S. Patent No. 5,620,079 to Molbak ("the '079 Patent to Molbak"), which is incorporated herein in its entirety by reference. In one embodiment, the Molbak coin-counting machine can dispense a redeemable voucher to a user for an amount related to the value of coins received from the user. This redeemable

voucher can be redeemed for cash or merchandise at, for example, a point-of-sale (POS) location in the retail outlet where the machine is located.

[0004] Machines also exist for dispensing prepaid telephone cards to users. Such machines typically dispense a selected phone card to a user after the user has deposited a requisite amount of money in the machine. In addition, prepaid long-distance accounts and wireless cell phone accounts also exist whereby a service carrier maintains an account of available minutes for each individual user. Such accounts are often rechargeable and are associated with individual personal identification numbers (PINs). To start an account, a user may initially purchase a phone card containing, for example, sixty minutes of long-distance telephone usage. The number of available minutes are depleted as the user makes phone calls via the account. Some accounts allow the user to add minutes to his/her account by paying for additional time with, for example, a credit card. In this way, the user is able to add minutes to his/her account as the need arises, or to fit their particular budget.

[0005] Other methods exist by which customers can purchase prepaid credit cards. In one such method, a customer gives a cashier at a POS sufficient funds to cover the value of a prepaid credit card and any additional service fees charged by the retail outlet. In return for the funds, the cashier provides the customer with a receipt that includes a unique identification number and the telephone number of a credit card issuer. The customer then calls the telephone number and provides the credit card issuer with the identification number from the receipt and certain other personal information. Such personal information can include the customer's mailing address and/or the customer's social security number. The credit card issuer then provides a credit card account number to the customer over the telephone. The customer can begin using this number for credit card purchases immediately by telephone, mail, or the Internet. The credit card issuer also mails an embossed credit card to the customer that the customer can begin using as soon as it arrives.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Figure 1 is a partially schematic isometric view of a value exchange machine configured in accordance with an embodiment.

[0007] Figure 2 is an enlarged front elevation view of a drawer assembly of the value exchange machine of Figure 1 configured in accordance with an embodiment.

[0008] Figure 3 is a flow diagram illustrating a routine for exchanging various forms of value using the value exchange machine of Figure 1.

[0009] Figure 4 is a diagram illustrating various forms of value exchangeable using the value exchange machine of Figure 1.

[0010] Figure 5 is a block diagram illustrating components of a value exchange system configured in accordance with an embodiment.

[0011] Figure 6 is a flow diagram illustrating a routine implemented by the value exchange system of Figure 5 in one embodiment.

[0012] Figure 7 is a flow diagram illustrating a routine for receiving a transaction selection from a user in one embodiment.

[0013] Figure 8 is a flow diagram illustrating a routine for inputting various forms of payment in one embodiment.

[0014] Figure 9 is a flow diagram illustrating a routine for completing a selected transaction in one embodiment.

[0015] Figures 10A and 10B are flow diagrams illustrating routines for implementing on-line commerce with the value exchange system of Figure 5 in one embodiment.

DETAILED DESCRIPTION

[0016] This application incorporates the following U.S. Patents in their entireties by reference: U.S. Patent No. 5,746,299; U.S. Patent No. 6,047,808; U.S. Patent No. 5,988,348; U.S. Patent No. 6,196,371; U.S. Patent No. 6,116,402; U.S. Patent No. 6,349,972; and U.S. Patent No. 5,909,793.

[0017] This application further incorporates the following co-pending U.S. Patent Applications in their entireties by reference: U.S. Patent Application No. 09/661,956, filed September 14, 2000; U.S. Patent Application No. 09/662,414, filed September 14, 2000; U.S. Patent Application No. 09/661,955, filed September 14, 2000; U.S. Patent Application No. 09/661,048, filed September 14, 2000; and U.S. Patent Application No. 10/020,587, filed October 30, 2001.

[0018] The following disclosure describes methods and systems for converting one form of value into another form of value. "Value," as used herein, means

anything of monetary worth, such as money, credit, time (e.g., long-distance or cell phone minutes), event and travel tickets, merchandise, and the like. Further, as used throughout this disclosure, the term "card" shall be understood to include both prepaid and non-prepaid cards, unless the particular context requires otherwise. The term "prepaid card" can refer to any instrument useable in commerce in place of money, or any instrument that entitles the bearer to acquire, utilize, or exhaust any commercially available product or service. Examples of prepaid cards in this context include prepaid credit cards, prepaid cash cards, stored-value cards, in-store credit cards, gift cards, prepaid phone cards, payroll cards, and the like. Throughout this disclosure, for ease of reference the term "prepaid cash card" will be understood to include at least prepaid cash card, prepaid credit card, and stored-value card. Examples of "non-prepaid" cards can include conventional credit cards and the like. Such prepaid and non-prepaid cards typically include at least one of a readable magnetic stripe, bar code, computer/memory chip, smart card chip, and the like.

[0019] In one embodiment, the system described herein can receive a random plurality of coins from a user, count the coins, and, if the user desires, dispense a prepaid card to the user having a value related to the total value of the coins received. This prepaid card may then be used by the user, or another person authorized by the user, to pay for goods and/or services at a variety of different retail locations. In another embodiment, the system disclosed herein can dispense a prepaid card to a user in return for loose coins, paper currency, and/or a valid credit card account number that is provided by the user. In a further embodiment, a user may apply value from an existing prepaid card to purchase another prepaid card. In yet another embodiment, the system disclosed herein can dispense a prepaid card to a user in return for funds debited from a financial institution account (e.g., a savings, checking account, or brokerage account) that is provided by the user. In yet another embodiment, a user may utilize any of the foregoing methods of payment to "top up" (i.e., to "reload," "recharge," or otherwise increase the value of) an existing prepaid card. Thus, in accordance with embodiments of the invention, a user can purchase or top up a prepaid card with 1) cash (loose coins and/or currency); 2) credit (e.g., credit cards, check cards, etc.); 3) debit (e.g., debit cards, ATM cards, etc.); 4) existing prepaid cards; 5) bank account funds; or 6) any combination of the above.

[0020] The present disclosure, however, is not limited to methods and systems for dispensing prepaid cash cards and phone cards to users. To the contrary, embodiments of the methods and systems disclosed herein can also include dispensing tickets (such as event and travel tickets), novelty items, and redeemable vouchers to users in return for the various forms of payment discussed above. In addition, embodiments of the methods and systems disclosed can also include providing account information to users, such as balance information regarding a particular credit card account, phone card account, on-line account, and the like.

[0021] Further, the methods and systems described herein can also be used to transfer funds to an account of a user, to an account of another person, from an account of the user, and/or from an account of another person. Such transactions may include, for example, transferring value to or from a bank account, a brokerage account, a credit card account, long distance phone card account, an on-line payment account, a virtual account, and/or a virtual "e-wallet." As used herein, the term "account" shall be taken to mean at least the foregoing types of accounts, unless the particular context contradicts such an interpretation. In such transactions, the user may receive a receipt documenting the transaction instead of a card. In one such transaction, the user can utilize any of the methods of payment described above to transfer money from one account to another account (e.g., for a person-to-person payment or for bill payment). Similarly, the user may also elect to transfer the proceeds from any such payment to a bank account for direct deposit, to a cell phone account to obtain additional minutes, or to an on-line account (e.g., an "e-wallet") for on-line purchases.

[0022] Certain embodiments of the methods and systems described herein for exchanging one form of value for another form of value are described in the context of computer-executable instructions performed by a general-purpose computer. For example, in one embodiment these computer-executable instructions are stored on a computer-readable medium, such as a floppy disk or CD-ROM. In other embodiments, instructions are stored on a server computer system and accessed via a communications link or a computer network, such as an intranet, the Internet, or another computer network. Because the basic structures and functions related to computer-readable routines and corresponding implementations are known, they

have not been shown or described in detail here in order to avoid unnecessarily obscuring the described embodiments.

[0023] Certain specific details are set forth in the following description and in Figures 1-9 to provide a thorough understanding of various embodiments of the invention. Those of ordinary skill in the relevant art will understand, however, that the invention may have additional embodiments which may be practiced without several of the details described below. In other instances, those of ordinary skill in the relevant art will appreciate that the methods and systems described can include additional details without departing from the spirit or scope of the disclosed embodiments. In addition, some well-known structures and systems often associated with card dispensing apparatuses and methods and associated computer networks have not been shown or described in detail below to avoid unnecessarily obscuring the description of the various embodiments of the invention.

[0024] In the figures that follow, identical reference numbers identify identical or at least generally similar elements. To facilitate the discussion of any particular element, the most significant digit or digits in any reference number refers to the figure in which that element is first introduced. For example, element 120 is first introduced and discussed with reference to Figure 1. In addition, any dimensions, angles and other specifications shown in the figures are merely illustrative of particular embodiments of the invention. Accordingly, other embodiments of the invention can have other dimensions, angles and specifications without departing from the spirit or scope of the present disclosure.

[0025] Figure 1 is a partially schematic isometric view of a value exchange machine 100 configured in accordance with an embodiment. In one aspect of this embodiment, the machine 100 includes a coin input region or tray 106, a voucher outlet 108, a coin return 110, a coin sorting/counting apparatus 112 (shown schematically), and a communications facility 113 (also shown schematically). The machine 100 can further include various user-interface devices, such as a first keypad 114, user-selection buttons 115, a speaker 116, a display screen 118, and a touch screen 117. In another aspect of this embodiment, the foregoing features of the value exchange machine 100 can be at least generally similar in structure and function to one or more of their counterparts as described in the '079 Patent to Molbak. Accordingly, these features can be utilized in various embodiments as

described in the '079 Patent to Molbak to provide a redeemable cash voucher to a user in return for coins deposited by the user in the coin tray 106. In other embodiments, the machine 100 can have other features in other arrangements without departing from the spirit or scope of the present invention. As described in greater detail below, the machine 100 can also include a drawer assembly 120 that has additional value exchange functionalities.

[0026] Figure 2 is an enlarged front elevation view of the drawer assembly 120 of Figure 1 configured in accordance with an embodiment. In an aspect of this embodiment, the drawer assembly 120 includes a card reader 202, a bill acceptor 204, and a second keypad 206 (which may be encrypted). The bill acceptor 204 can be configured to receive paper currency (referred to herein simply as "currency"). The card reader 202 can be configured to read all forms of data storage media typically found on wallet-sized cards, such as conventional credit cards, debit cards, smart cards, and the like. In addition, in some embodiments, the card reader 202 can also be configured to write data to suitable data storage media typically found on such cards. Such data storage media can include one or more of magnetic stripes, bar codes, smart chips, and the like. The second keypad 206 can be used to enter information often associated with such cards, including a PIN.

[0027] In addition to the foregoing user-interface devices, the drawer assembly 120 can also include a number of output devices. For example, the drawer assembly 120 can include a card outlet 208, a ticket outlet 210, and a receipt outlet 212. In the illustrated embodiment, the card outlet 208 is a horizontal slot for dispensing cards, such as prepaid cash or phone cards, and other similar items. In one embodiment described in greater detail below with reference to Figures 10A and 10B, the receipt outlet 212 can also dispense on-line retailer gift certificates, such as paper gift certificates, that contain unique codes and/or other indicia with which users can purchase items on-line or in-store. The ticket outlet 210 of the illustrated embodiment can be a similar horizontal slot for dispensing travel or event tickets, such as airline tickets or tickets for a basketball game or a concert. As described in greater detail below, in one embodiment these tickets may have been reserved, ordered, or prepurchased on-line by a user over the Internet.

[0028] While the aspects and features of the drawer assembly 120 discussed above are representative of those that may be included as components of the value

exchange machine 100 of Figure 1, those of ordinary skill in the relevant art will understand that additional features may be included without departing from the spirit or scope of the present disclosure. For example, although the drawer assembly 120 of the illustrated embodiment is shown with only one card outlet 208 and one ticket outlet 210, in other embodiments more card and ticket outlets may be included, depending on the particular application of the machine 100. Furthermore, in yet other embodiments one or more of the foregoing features may be omitted from the value exchange machine 100 in various applications without departing from the spirit or scope of the present disclosure.

[0029] Use of the value exchange machine 100 to exchange one form of value for another form of value will now be explained in accordance with a few examples. Referring to Figure 1, in one embodiment transaction options are displayed for a user on the display screen 118, and can include one or more of purchasing a prepaid cash card; purchasing a prepaid phone card; transferring money to an account; topping up an existing credit card account, cash card account, long distance phone card account, or wireless account; receiving a redeemable cash voucher; receiving a gift certificate for making on-line purchases and/or in-store purchases; and/or performing other transfers or purchasing other items. The user can select the desired transaction or transactions by using the first keypad 114, the touch screen 117, and/or one or more of the selection buttons 115 in response to prompts shown on the display screen 118. If the user selects, for example, to purchase a prepaid cash card, then the machine 100 prompts the user to input his/her preferred payment option. In one embodiment, the user can elect to pay with coins and can deposit a plurality of randomly oriented coins into the tray 106 and hingeably rotate the tray 106 upwardly to deliver the coins to the coin sorting/counting apparatus 112. The coin sorting/counting apparatus 112 then counts the coins and displays the total to the user on the display screen 118. If the user accepts this total and, if applicable, any related service fees, then the machine 100 prompts the user to indicate how much of the total the user wishes to put on the prepaid cash card. Once the user has input this value, the machine 100 dispenses the prepaid cash card to the user via the card outlet 208, assuming the user deposited enough money to cover the requested value. If any funds are left over from the transaction, the machine can issue a redeemable cash voucher to the user

for the difference. Alternatively, the user can apply the remaining funds toward another card or service, or transfer the remaining funds to an account, such as a checking or savings account.

[0030] In another embodiment, a user may desire to purchase a prepaid cash card with an existing credit card. In this embodiment, the user swipes the existing credit card through the card reader 202 (Figure 2). After reading the card, the machine 100 prompts the user to input a PIN or other security code via the second keypad 206. Next, the machine 100 prompts the user to enter the desired dollar amount of the new prepaid cash card via the first keypad 114. After authorizing the transaction (by communicating, for example, with a remote bank via the communications facility 113), the machine 100 dispenses the new prepaid cash card to the user via the card outlet 208. In a further embodiment, the user can pay for a prepaid cash card at least in part by depositing a sufficient number of bills into the bill acceptor 204.

[0031] In yet another embodiment, a user can purchase a prepaid credit card with the machine 100 as follows. First, the user uses the touch screen 117, the first keypad 114, and/or the user-selection buttons 115 to select the prepaid credit card purchase option. In one aspect of this embodiment, the customer then deposits payment by inserting paper currency into the bill acceptor 204, depositing coins into the coin tray 106 and rotating the tray upwardly to deliver the coins, and/or by swiping a debit or credit card through the card reader 202. In other embodiments, the customer can deposit payment in other ways. For example, in other embodiments, the machine 100 may have a coin input feature that differs from the rotatable coin tray 106 without departing from the present disclosure. After confirming receipt of the funds, the machine 100 dispenses a receipt or other media (card facsimile, etc.) to the customer from the receipt outlet 212.

[0032] In one aspect of this embodiment, the receipt includes instructions directing the user to call a particular telephone number and activate their new prepaid credit card account. Per the instructions, the user calls the telephone number and activates his/her account by providing certain personal information, such as name and mailing address. The user then receives a unique number (such as a 16-digit number for their new prepaid credit card account) from the credit card account issuer over the telephone. The user can use this number immediately for

credit-based purchases either by telephone, mail, or the Internet. Further, within a few days, the user receives a personalized, embossed prepaid credit card via the mail that can be used anywhere the particular prepaid credit card is accepted. In addition, the user can also have the option of attaching a PIN to their new prepaid credit card account that will allow them to make cash withdrawals at ATMs.

[0033] In a slightly different embodiment, a user can purchase a prepaid credit card with the machine 100 as follows. First, the user uses the touch screen 117, the keypad 114, and/or the user-selection buttons 115 to select the purchase of a prepaid credit card. The user then deposits payment by, for example, inserting paper currency into the bill acceptor 204, depositing coins into the coin tray 106, and/or by swiping a debit or credit card through the card reader 202. After confirming receipt of payment, the machine 100 dispenses the prepaid credit card to the user from the card outlet 208. In this embodiment, the card can be used immediately anywhere the particular prepaid credit card is accepted.

[0034] In a further embodiment, a user can use the machine 100 to "reload" or add funds to a card (e.g., a cash, credit, or stored-value card). In this embodiment, the user utilizes the touch screen 117, the first keypad 114, and/or the user-selection buttons 115 to select the "reload" or "recharge" transaction, then swipes the card they would like to reload through the card reader 202. The user then deposits payment for the reload amount using coin, currency, and/or credit as described above. After confirming the receipt of funds, the machine 100 dispenses a receipt to the user via the receipt outlet 212. The funds received from the user are then credited to the desired card (or associated account), and are available for use immediately or within a relatively short time. In this embodiment and the previous embodiment, the user is not required to place a telephone call to a third-party service, such as a prepaid credit card account issuer, to activate the account.

[0035] As mentioned above, a prepaid cash card is only one form of "value" that can be output by the machine 100 in return for various forms of monetary exchange provided by a user. For example, in other embodiments the machine 100 can output tickets from the ticket outlet 210 or prepaid phone cards from the card outlet 208 after receiving sufficient funds via one or more of the card reader 202, the bill acceptor 204, or the coin input tray 106.

[0036] In yet another embodiment, a user may elect to use any of the fund input methods discussed above to electronically transfer money. In such transactions, the user may not receive a card having a value. Instead, the user may receive a receipt or other record documenting the transaction. For example, in one such transaction the user can utilize any of the methods of payment described above to transfer money to his or her account (e.g., a savings, checking, or credit card account) or to an account of another person (e.g., for a person-to-person payment or for a bill payment). Similarly, the user can also elect to transfer the proceeds from any such payment to a bank account for direct deposit, to a cell phone account (e.g., for long-distance telephone minutes), or to an on-line account (e.g., an "e-wallet") for on-line purchases.

[0037] In a further embodiment, a user can top up a phone account (e.g., a long distance calling card account or a wireless account) with the machine 100. In one aspect of this embodiment, the display screen 118 can present or display a prompt or menu to the user asking if he or she would like to top up their phone card account. If so, the user selects his or her carrier and/or enters the corresponding account number or phone number. (In another embodiment, the user can swipe his/her card through the card reader 202 to have the account number read from the card.) For a PIN-based transaction, the user selects a predefined dollar amount to add to his/her account and then deposits money or other funds into the machine 100 in one of the ways described above. For example, in one embodiment, the user can deposit currency via the bill acceptor 204. In another embodiment, the user can deposit coins via the coin tray 106. After depositing the funds, the user receives a printout or receipt with a PIN via the receipt outlet 212. The user then calls the carrier and enters the PIN to activate the additional minutes added to his/her account. In another embodiment, the user has the option of selecting either a predefined dollar amount of minutes or entering a specific dollar amount he/she wishes to add to his/her account. In this embodiment, once the user has inserted his or her payment, the user receives a receipt confirming the transaction and the funds are immediately credited to the user's phone card account. As will be appreciated by those of ordinary skill in the relevant art, in other embodiments the machine 100 can be used in other ways to purchase or top up cards or associated accounts without departing from the spirit or scope of the present disclosure.

[0038] Figure 3 is a flow diagram illustrating a routine 300 for exchanging various forms of value with the value exchange machine 100 of Figure 1. In block 301, the user selects one or more forms of value desired as output. For example, a user can select any combination of redeemable cash voucher, prepaid cash card, gift card, phone card, ticket or other merchandise, etc. In addition or alternatively, the user may elect to transfer funds to or from an existing account, for example, to pay off a credit card balance; to increase funds in a checking, savings, or brokerage account; to add time to a long distance account; for a person-to-person payment; or for an "e-wallet." Similarly, the user may elect to "top up" an existing prepaid cash card or cell phone account with additional value or minutes, respectively. Further, the user may elect to donate any portion of the deposited value to a nonprofit organization.

[0039] In block 302, the machine 100 accepts one or more types of funds from the user. As explained above, funds can include any combination of coins, currency, credit card, debit card, gift card, existing prepaid cash card or phone card, etc. If a credit card is used for payment, the machine 100 validates the credit card and obtains authorization to debit the funds from the credit card account or accounts. In one embodiment, this is accomplished by communication between the machine 100 and one or more remote computers via the communications facility 113. The remote computers can access one or more financial institutions that control the authorization and debiting/crediting of credit card accounts. In block 303, the machine 100 receives authorization for the desired transaction(s) from the remote computers and dispenses the new form of value (e.g., a prepaid cash card, phone card, redeemable cash voucher, cash, event tickets, and/or associated transaction confirmation numbers) to the user. If the transaction involved topping up an existing card, then the user receives confirmation that the value associated with the card has been increased. Similarly, if the transaction involved a transfer of money to an account, then the user receives confirmation that the transfer has occurred.

[0040] Figure 4 is a diagram illustrating the various forms of value that are exchangeable with the value exchange machine 100 in accordance with an embodiment. User-provided inputs are shown on the left side of Figure 4 and can include coins, currency, or credit from cash cards, credit cards, debit cards, gift cards, bank account transfers, brokerage account transfers, on-line transactions,

and the like. Outputs from the machine 100 are shown on the right side of Figure 4 and can include prepaid cards (e.g., cash and credit cards), redeemable vouchers, phone cards, tickets (e.g., event tickets or travel tickets), currency (e.g., leftover change from a transaction), gift cards (e.g., gift certificates), novelty cards (e.g., baseball cards or similar items), smart cards (e.g., stored-value cards that contain a record of monetary value on the card itself), and/or account transfers. Input to the machine 100 may include any combination of the inputs shown in Figure 4, and output may include any combination of the outputs shown in Figure 4. In other embodiments shown by the dotted line 402 in Figure 4, one or more of the listed outputs may also be used as inputs. For example, in one other embodiment a user can convert a prepaid card to cash by surrendering the card to the machine or by swiping the card and instructing the machine to dispense either cash or a redeemable voucher equivalent to the value remaining on the card. In a further embodiment, a user can transfer money from a bank account to a card.

[0041] In yet other embodiments, a user can access account information with the machine 100. For example, in one aspect of this embodiment, the user can swipe a card and determine the amount of funds (or phone minutes in the case of phone cards) remaining on the card or in an associated account. In all the foregoing embodiments, the operator of the value exchange machine may elect to charge the user a fee for performing the desired transaction.

[0042] Figures 5–9 and the associated discussion provide a brief, general description of a suitable computing environment in which aspects of the invention can be implemented. Although not required, embodiments of the invention are described in the general context of computer-executable instructions, such as routines executed by a general purpose computer (e.g., a server or personal computer). Those of ordinary skill in the relevant art will appreciate that aspects of the invention can be practiced with other computer system configurations, including Internet appliances, hand-held devices, wearable computers, cellular or mobile phones, multi-processor systems, microprocessor-based or programmable consumer electronics, set-top boxes, network PCs, mini-computers, mainframe computers, and the like. Further, aspects of the invention can be embodied in a special-purpose computer or data processor that is specifically programmed, configured, or constructed to perform one or more of the computer-executable

instructions described in detail below. Indeed, the term "computer," as used generally herein, refers to any of the above-mentioned devices, as well as any data processor. In addition, throughout the discussion that follows, the term "web site" or similar will be understood to include, where required by the context, the associated server computer, databases, and other known structures and functions required to implement a web site.

[0043] Figure 5 is a block diagram illustrating components of a value exchange system 500 configured in accordance with an embodiment. In one aspect of this embodiment, one or more value exchange machines 100 are connected to a server computer 502 via a first communications link 504. The value exchange machines 100 of this embodiment can be at least generally similar to the value exchange machine 100 discussed above with reference to Figures 1-4. The first communications link 504 may be a radio frequency (RF) communications link (e.g., wireless communications link), a modem, a computer network (such as a local area network (LAN)) an intranet, or the Internet. In another aspect of this embodiment, the first communications link 504 can also include or be associated with a "host" computer that receives communications from the value exchange machine(s) 100 and sends corresponding communications to appropriate recipient computers to carry out various aspects of the value exchange system 500.

[0044] In a further aspect of this embodiment, the server computer 502 is connected to a financial institution computer 506. The financial institution computer 506 can be configured to facilitate the electronic transfer of funds between various financial accounts and/or institutions. For example, the financial institution computer 506, in one embodiment, can communicate with a credit card institution to facilitate the debiting and crediting of a credit card account. In other embodiments, the financial institution computer 506 can communicate with a bank, credit union, or brokerage firm to facilitate the debiting and crediting of various types of accounts typically found in such institutions. Similarly, in another embodiment, the financial institution computer 506 can communicate with a prepaid card-issuing institution to facilitate management of prepaid card accounts. In another aspect of this embodiment, the server computer 502 can be connected to one or more POS computers 510. The POS computers 510 can be located at retail outlets where

users of the value exchange machine(s) 100 use their prepaid cash or credit cards to pay for goods and/or services.

[0045] In one embodiment, a user wishing to purchase, for example, a prepaid cash card, visits one of the value exchange machines 100 at, for example, a retail outlet, and selects the desired transaction. If the user wishes to purchase the prepaid card using an existing credit card, the user "swipes" the existing credit card through the card reader 202 (Figure 2) on the machine 100. After the user has entered any necessary codes or PINs, transaction information routes via the first communications link 504 to the server computer 502. The server computer 502 can then communicate with the financial institution computer 506 to authorize the transaction on the user's credit card account. If the financial institution computer 506 validates the transaction, it sends an authorization to the machine 100 to issue the user a prepaid cash card for the desired amount. In one aspect of this embodiment, in response to receiving the authorization, a card dispenser positioned within the machine 100 receives a card from an associated card hopper, reads an identification number off the card, and dispenses the card to the user. The machine 100 sends the card number to the server computer 502, and the server computer 502 updates a database with the card number and the associated value of the card, noting that that particular card is now active for usage. In this example, the server computer 502 can receive both card purchase transaction data and card "top up" transaction data originating from the machine 100.

[0046] In another aspect of this embodiment, a card value (e.g., dollar value or minutes) associated with a card number is stored in a database, and the database is updated to reflect the reduction in value that occurs each time the card is used to purchase goods and/or services. For example, when a user, or someone the user has authorized, presents the card at a POS to purchase goods and/or services, the POS computer 510 communicates with the server computer 502 to receive authorization for the transaction. The server computer 502 determines if the card number is active and if the card contains enough value to cover the desired purchase. If the transaction is authorized and concluded, then the server computer 502 updates the database with the present value of the card. Although the server computer 502 is illustrated as a single computer in Figure 5, in other embodiments the function of the server computer 502 can be provided by two or more computers

without departing from the spirit or scope of this disclosure. For example, in one such embodiment a first computer will provide the authorization function by communicating with various financial institutions, and a second computer will maintain and update the databases containing card usage information and status.

[0047] In another embodiment of the value exchange system 500, the value of a card (e.g., a "smart card") may be recorded (i.e., written) directly on the card itself (e.g., with a computer memory/processor on the card) and decremented each time the card is used. In this embodiment, the value exchange machine 100 can both read and write to cards and, accordingly, access to one or both of the server computer 502 and the financial institution computer 506 may not be required. For example, in one embodiment, the user selects the desired type of card (e.g., a prepaid cash card), and inputs funds (e.g., by depositing coins and/or cash). In this embodiment, after counting the funds received from the user to arrive at a value, the machine 100 can write that particular value to a new card and dispense the card to the user. In another embodiment, the user may desire to add value to an existing "smart card," "stored-value card," or the like. In this embodiment, after inputting his/her funds, the user can submit the existing smart card to the machine 100 to have the additional value written directly to the card (i.e., to "recharge" or "reload" the card). In either embodiment, when the card is subsequently used in commerce, a card writer at the POS can decrement the card for the amount of the particular purchase.

[0048] The value exchange system 500 can include other functionalities in addition to those discussed above. For example, in one embodiment the value exchange system 500 allows a user to access an account web site 530 from a remote general-purpose user computer 520, such as a personal computer. In one aspect of this embodiment, the account web site 530 is hosted by the card server 502 and can be accessed over a second communications link 526. The second communications link 526 can be the Internet or another computer network. In another embodiment, the second communications link 526 and the first communications link 504 can be the same communications link. For example, in this embodiment, both the first and second communications links 504 and 526 can be the Internet. The account web site 530 can allow users to remotely conduct the

following transactions: register new cash cards, obtain balance inquiries, add value to existing cards, review recent transaction history, and/or purchase new cards.

[0049] In addition to the foregoing, a user can also utilize the value exchange system 500 to pick up tickets and other items reserved or purchased on-line. In this embodiment, the user first accesses a ticket seller web site 540 to reserve or purchase tickets and receive a ticket reservation number. The user can then visit a conveniently located machine 100 and enter the reservation number and/or a PIN. The machine 100 then communicates with the ticket seller web site 540 via the first communications link 504 to obtain authorization to dispense the tickets. After obtaining the authorization, the machine 100 dispenses the tickets to the user.

[0050] While selected aspects of the value exchange system 500 have been described above for purposes of illustration, those of ordinary skill in the relevant art will appreciate that various other functionalities can be combined with this system in accordance with this disclosure to further enhance the utility of the system. For example, other types of informational- or transactional-based web sites can be accessed via the value exchange machine 500 to obtain yet other forms of data and/or accomplish other forms of transaction. For example, the machine 100 can access a novelty card web site 542 to obtain authorization to dispense novelty items or cards, such as baseball cards. Further, a phone card web site 541 can also be included in the system 500 to provide the infrastructure necessary for the user to purchase or recharge prepaid phone cards from the machine 100 as described above. In addition, the system 500 can also include an on-line retailer 544 from which the user can make on-line purchases using certificates (e.g., "eCertificates") obtained from one of the value exchange machines 100.

[0051] Figure 6 is a flow diagram illustrating a routine 600 implemented by the value exchange system 500 of Figure 5 in one embodiment. In block 602, a user selects one or more desired transactions at the machine 100 (Figure 1). In one aspect of this embodiment, the user may elect to perform multiple transactions with multiple types of input and receive multiple types of output. In block 604, the machine 100 prompts the user for the method or methods of payment. As discussed in detail above, the user may elect to pay for the transaction with coins, currency, credit card, debit card, checking or savings account transfers, or value prepaid over the Internet. In block 606, in one embodiment, the machine displays a

fee associated with the selected transaction. In block 608, the user accepts or rejects the fee. If the user accepts the fee, in block 610, the user is prompted to enter his/her form of payment into the machine 100. In block 612, the machine 100 accepts the payment from the user, and in block 614, the machine 100 verifies the payment method.

[0052] In block 616, the machine 100 communicates with a host computer, e.g., the server computer 502 of Figure 5, to initiate the transaction. The server computer 502 authorizes the transaction via the financial institution computer 506 and one or more of a bank, a credit card institution, a debit card institution, or a prepaid phone card-issuing institution, as required. In block 618, the server computer 502 returns a unique code to the machine 100 that can be utilized to verify or reconcile the transaction.

[0053] In block 620, the machine 100 outputs the results of the transaction to the user. As explained above, the output can include a cash redeemable voucher, a prepaid credit card or cash card, a prepaid phone card, and/or an event or travel ticket. In block 622, the machine 100 prints a receipt and issues it to the user for his/her records. In the event the user is "topping up" an existing credit card or phone card, or transferring money to or from an account, the user will receive a receipt documenting the money transfer. It will be apparent to those of ordinary skill in the art that any combination of the foregoing transactional outputs is possible in accordance with this disclosure.

[0054] Figures 7-9 are flow diagrams that together illustrate a routine for conducting a transaction with the machine 100 of Figure 1 in accordance with an embodiment. Referring first to Figure 7, Figure 7 is a flow diagram illustrating a routine 700 for receiving a transaction selection from a user in one embodiment. In block 702, the user is prompted to select a transaction type or option. As illustrated in blocks 703, the user can select from numerous transaction options that include: obtaining a new prepaid card (block 704), reloading or "topping up" an existing prepaid card (block 706a), obtaining a redeemable cash voucher (block 708), obtaining a prepaid phone card (block 710), obtaining a ticket or other item previously reserved and/or paid for over the Internet (block 712a), adding minutes to an existing cell phone account (block 714a), adding time to an existing long distance account (block 715a), or transferring money to an account (block 716a). After the

user has selected the desired transaction, the machine may prompt the user for additional information. For example, if the user elects to reload a prepaid card (block 706a), then in block 706b the user is prompted to swipe the card through the card reader 202 (Figure 2). In so doing, the machine 100 reads the card and verifies its validity by communicating with one or more internal or remote databases, as explained above. Similarly, if the user elects to receive a ticket previously ordered over the Internet (block 712a), then in block 712b the user is prompted for an associated reservation number. Once the reservation number has been entered, in block 712c the user is prompted for a PIN. After receiving the PIN, in block 712d the machine 100 verifies the PIN and the availability of the ticket. If instead the user elects to transfer money from, for example, a first account to a second account (block 716a), then in block 716b user is prompted to enter an account number for the first account from which the money will be withdrawn. In addition, in block 716c the user may be prompted for a PIN associated with the first account. After this information has been entered, in block 716d the machine 100 prompts the user for an account number for the second account into which the money will be deposited. In block 716e, the user may be prompted for a PIN associated with second account. After this information has been entered, in block 716f the machine 100 verifies the respective account numbers and, if applicable, the respective PINs. If the user will be depositing the funds for transfer to the second account instead of withdrawing them from the first account, then the user selects this option and does not enter a first account number.

[0055] In block 718, the user is prompted to select another transaction type if there is more than one transaction the user wishes to perform. If the user does wish to perform a second transaction, the routine returns to block 702 and the user is prompted to select a second type of transaction. If the user does not wish to perform a second transaction, then in block 720 the user indicates that he/she is done selecting transaction types. In block 722, the machine determines whether it needs to collect any funds from the user for the selected transaction(s). If the machine determines that the user needs to deposit funds for the transaction, then the routine 700 proceeds to routine 800 shown in Figure 8. Otherwise, the routine 700 proceeds to routine 900 shown in Figure 9.

[0056] Figure 8 is a flow diagram illustrating the routine 800 for inputting various forms of payment in one embodiment. In block 802, a user is prompted for a payment method. As illustrated in blocks 803, the user can select from numerous forms of payment. For example, the user may elect to pay for the transaction with cash (e.g., dollar bills) (block 804a), coins (e.g., a plurality of randomly oriented coins) (block 806a), credit (block 808a), debit (block 810a), and/or funds from various types of payment accounts (block 812a). If the user elects to pay with cash as in block 804a, then in block 804b the user is prompted to begin inserting bills into the bill acceptor 204 (Figure 2). As the user is inserting bills, in block 804c a running total of the bills inserted and accepted is displayed, for example, on the screen 118 of the machine 100 shown in Figure 1. In block 804d, the user is prompted to indicate when he/she is done inserting bills.

[0057] If the user elects to pay for the transaction with coins as in block 806a, then in block 806b the user is instructed to deposit the coins, for example, by placing them in the coin tray 106 of the machine 100 shown in Figure 1 and rotating the tray 106 upwardly to deliver the coins to the coin sorting/counting apparatus 112. In block 806c, a running total of the coins that have been deposited and counted is displayed, for example, on the screen 118. The user is then prompted in block 806d to indicate when all of the coins have been deposited. If the user elects to pay for the transaction with credit as in block 808a, then in block 808b the user is instructed to swipe their credit card through the card reader 202. In block 808c, the user may be instructed to enter a number, such as his/her zip code, to verify the account. After swiping the credit card or otherwise entering the account information, in block 808d, the user is prompted to enter the amount that the user wishes to charge to the credit card account. Once the user has input this information, in block 808e, the machine 100 contacts the server computer 502 (Figure 5) to preauthorize use of the credit card for the amount requested, as explained above.

[0058] If the user elects to pay for the selected transaction with a debit card as in block 810a, then in block 810b the user is instructed to swipe the debit card through the card reader 202. The user is then instructed in block 810c to enter a debit card PIN to verify user authorization. After entering the PIN, in block 810d the user is prompted to enter the amount to debit the associated account for the selected transaction. After this information has been entered, in block 810e the

machine 100 communicates with the server computer 502 to authorize use of the account for the amount of the debit. If instead the user elects to pay for the selected transaction by transferring money from an account as shown in block 812a, then in block 812b the user is prompted to enter the number of the account. In block 812c, the user may also be prompted to enter a PIN associated with the account.

[0059] In decision block 814, after the user has entered the first form of payment and any other necessary information, the user is prompted as to whether they wish to include an additional form of payment. If the user wishes to use an additional form of payment for the selected transaction, then the routine 800 returns to block 802. If the user is finished entering payment, then the routine proceeds to the routine 900 shown in Figure 9.

[0060] Figure 9 is a flow diagram illustrating a routine 900 for completing a selected transaction in one embodiment. In block 902, the machine 100 displays the fees associated with the selected transaction for viewing by the user. In decision block 904, the user accepts or rejects the fees. If the user rejects the fees, then in block 905 the routine returns any funds received from the user back to the user and the routine is complete. If the user accepts the fees, then in decision block 906 the routine determines if the user elected to receive a redeemable cash voucher. If so, then in block 907 the machine prints the cash voucher and dispenses it to the user. If, instead, the user elected to receive a prepaid card (e.g., for cash, credit, or phone minutes), receive a preordered ticket, transfer money, etc., then in block 908 the machine contacts a host computer (e.g., the server computer 502 of Figure 5) to provide account information to authorize the transaction, create an account, or transfer account data. In block 910, the host computer performs the necessary transactions with, for example, a financial institution or a phone card-issuing institution, and returns the necessary authorization data to the machine 100.

[0061] Once the transaction has been authorized, the machine 100 issues the desired output to the user according to one of the blocks 911. For example, if the user selected a prepaid cash card or phone card, the machine 100 dispenses the selected type of card to the user via the card outlet 208 shown in Figure 2. Similarly, if the user selected a ticket, the machine 100 dispenses it to the user via the ticket outlet 210 shown in Figure 2. In decision block 912, the machine 100 verifies that it has performed all of the transactions requested by the user. If the machine 100 has

not completed the requested transactions, then the routine 900 returns to block 902 and repeats. If all the requested transactions have been performed, then in block 914 the machine 100 prints a receipt with a unique transaction number and issues it to the user. In block 916, if any currency is left over from the selected transaction, the machine 100 dispenses it to the user from the coin return slot 110 shown in Figure 1.

[0062] It will be appreciated from the foregoing that although specific embodiments of the value exchange system 500 (Figure 5) and the value exchange machine 100 (Figure 1) are described for purposes of illustration, other embodiments can be implemented without departing from the spirit or scope of this disclosure. For example, in one other embodiment, in addition to providing various services to users via the value exchange machine 100, the system can also provide various functionalities to a remote user operating a general-purpose computer, such as the user computer 520 (Figure 5). In this alternate embodiment, the user can access various on-line web sites to purchase or reserve various products. For example, a user may visit the ticket seller web site 540 to purchase tickets for an event and pay for the tickets with a credit card. In this embodiment, the ticket seller web site 540 then makes the purchase information available to the machine 100 so the user may then visit the machine 100 to receive the actual tickets. In another embodiment, the user can order the tickets on-line at the ticket seller web site 540 and pay for the tickets by depositing funds into the machine 100 at the time of receipt.

[0063] In a further embodiment, a user can access a telephone carrier web site 541 from the user computer 520 (Figure 5), and pre-purchase a long distance calling card or a wireless phone card on-line. The user can pay for the card on-line (with, e.g., a credit card account) and then receive a unique code or PIN once payment is authorized. In one aspect of this embodiment, the user may then visit the machine 100 and enter his/her code to receive the card. In a similar embodiment, the user can reserve the card on-line, but not pay for the card until visiting the machine 100.

[0064] In yet another embodiment, long distance minutes may be stored on a particular long distance calling card, much like a "stored value card." In this embodiment, a user can access the telephone carrier web site 541 and pre-purchase additional minutes to put on the card. The user can pay for the additional

minutes on line (with, e.g., a credit card account) and then receive a unique code or PIN once payment is confirmed. In one aspect of this embodiment, the user may then visit the machine 100 and enter his/her long distance account number (by, e.g., swiping his/her card) and/or the PIN. The carrier web site 541 can then communicate with the machine 100 and send the corresponding "top up" data to the machine 100. The machine 100 can then add the additional prepaid phone minutes to the user's phone card. In yet another embodiment, communication between the various web sites and the value exchange machines is facilitated by a "host" computer that first receives a communication from the web site and then sends the communication to the respective value exchange machine. These and other changes may be made to the invention in light of the above detailed description.

[0065] In still further embodiments, the methods and systems described herein can be used to obtain various types of information. Such information can include, for example, account balance information (e.g., for credit card accounts, checking and savings accounts, cell phone minutes, brokerage accounts, on-line accounts, and the like). Such information can also include salary or other employment information. For example, if a particular employer distributes employee pay in the form of prepaid cash cards, then the employees can utilize the machines 100 to obtain account balance information. Additionally, the employees could utilize the machine 100 in one or more ways as described above to transfer portions of their wages to other accounts for, e.g., bill payment or a person-to-person money transfer. In yet another embodiment, the employees could use the machine 100 to convert a portion of their cash card to a redeemable cash voucher that can be redeemed for cash or used to purchase goods and/or services at a POS.

[0066] Figures 10A and 10B are flow diagrams illustrating routines 1000a and 1000b, respectively, for implementing on-line commerce with the value exchange system 500 of Figure 5 in another embodiment. Referring first to Figure 10A, in block 1002a, a user approaches one of the value exchange machines 100 (Figure 1) and selects a gift certificate option from a menu of displayed options. In this embodiment, the gift certificate can be used for making on-line purchases from an on-line retailer. In block 1004a, the machine 100 prompts the user for payment. As discussed above, the user can provide payment in a number of different forms including, for example, loose coins, bills, credit card, debit card, etc. In block 1006a,

the user inputs payment, and in block 1008a the machine verifies that payment was received. If the user elects to pay in the form of coins, the machine counts the coins to determine a value as described in detail above with reference to Figure 1. In block 1010a, after the machine has verified payment, the machine communicates (via, e.g., the communications facility 113 shown in Figure 1) with a remote host computer to create an on-line account (or reload an existing on-line account). In one embodiment, this step can involve associating at least a portion of the payment received from the user (e.g., 100% of the payment) with a unique code or account number in a database, such as a database operably connected to the financial institution computer 506 (Figure 5). The account number, unique code and/or other account-identifying information can then be transmitted back from the host computer to the machine 100 for printing on a substrate, such as a paper or plastic substrate, which forms the actual gift certificate. In block 1012a, the machine 100 dispenses the gift certificate to the user and the routine ends.

[0067] Figure 10B illustrates a routine 1000b whereby the user can use the gift certificate described above to make on-line purchases. In block 1002b, the user accesses a website of an on-line retailer (e.g., the on-line retailer 544 of Figure 5) associated with the gift certificate. Here, the on-line retailer could be a merchant that only sells goods on-line, or a retailer that sells goods both on-line and at one or more conventional store-front outlets. In block 1004b, the user views various items for sale on the website, and selects one or more items for purchase. In block 1006b, the user inputs the unique code or other specific account identifying information from the gift certificate into an appropriate field or fields on the website to perform the transaction. In one embodiment, the unique code can include multiple digits that the user enters manually via a keyboard or other user-input device associated with his or her computer (e.g., the user computer 520 illustrated in Figure 5). In block 1008b, the website receives the unique code from the user computer and sends it to a host computer (e.g., the server computer 502 in Figure 5) to obtain authorization for the desired transaction. After receiving authorization for the transaction, the website provides confirmation to the user that the purchase has been consummated. In block 1010b, the retailer that operates the website, or a related party, then ships the selected item or items to an address provided by the user, and the routine ends.

[0068] There are a number of advantages associated with the electronic gift certificate routines 1000a and 1000b described above. For example, heretofore, those who lacked a suitable credit or debit card have been precluded from making purchases on-line (i.e., making purchases via the Internet). Using the methods described above, however, these people can now go to a value exchange machine and purchase an electronic gift certificate which they can then use to make on-line purchases. Another feature of the embodiment described above is that provides a level of security for those persons who heretofore have been leery about providing credit card information to a website. These people can now use an electronic gift certificate as described above to make on-line purchases without fear of having their credit card number fall into the wrong hands.

[0069] In another embodiment, a user can obtain an in-store gift certificate from the value exchange machine 110 (Figure 1). In this embodiment, the user approaches the value exchange machine 100 and selects a gift certificate option from a menu of displayed options. The machine 100 then prompts the user for payment. As discussed above, the user can provide payment in a number of different forms including, for example, loose coins, bills, credit card, debit card, etc. The user inputs payment and the machine verifies that payment was received. After verifying payment, the machine communicates (via, e.g., the communications facility 113 shown in Figure 1) with a remote host computer to create an in-store account (or reload an existing in-store account). In one embodiment, this step can involve associating at least a portion of the payment received from the user (e.g., 100% of the payment) with a unique code or account number in a database, such as a database remotely accessible from plurality of POS terminals in one or more stores or one or more store chains. The account number, unique code and/or other account-identifying information can then be transmitted back from the host computer to the machine 100 for printing on a substrate, such as a paper or plastic substrate, which forms the in-store gift certificate. The machine 100 then dispenses the gift certificate to the user.

[0070] The user can then use the in-store gift certificate to make a purchase in a particular store, in a particular chain of stores, or in two or more different store chains. To use the certificate, the user simply submits the certificate when he or she makes a purchase. The POS terminal then scans or otherwise obtains the unique

code from the gift certificate, and sends it to a host computer (e.g., the server computer 502 in Figure 5) to obtain authorization for the desired transaction. After receiving authorization for the transaction, POS applies the funds to the purchase. In this embodiment, the store or store chain in which the user redeems the certificate can be different than the particular store (or other location) in which the user obtained the gift certificate. In a further embodiment, the cashier at the POS can redeem the face or full value of the certificate at the time of purchase, and the associated account can be accessed and decremented at a later time.

[0071] The above detailed descriptions of embodiments of the invention are not intended to be exhaustive or to limit the invention to the precise form disclosed above. While specific embodiments of, and examples for, the invention are described above for illustrative purposes, various equivalent modifications are possible within the scope of the invention, as those skilled in the relevant art will recognize. For example, while steps are presented in a given order, alternative embodiments may perform routines having steps in a different order. The teachings of the invention provided herein can be applied to other systems, not necessarily the value exchange system described herein. These and other changes can be made to the invention in light of the above detailed description.

[0072] Unless the context clearly requires otherwise, throughout the above description and the following claims, the words "comprise," "comprising," and the like are to be construed in an inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in the sense of "including, but not limited to." Words using the singular or plural number also include the plural or singular number respectively. Additionally, the words "herein," "above," "below" and words of similar import, when used in this application, shall refer to this application as a whole and not to any particular portions of this application. When the claims use the word "or" in reference to a list of two or more items, that word covers all of the following interpretations of the word: any of the items in the list, all of the items in the list, and any combination of the items in the list. All of the above U.S. patents and applications and other references described above are incorporated herein by reference.

[0073] These and other changes can be made to the invention in light of the above detailed description. In general, the terms used in the following claims should not be construed to limit the invention to the specific embodiments disclosed in the

specification, unless the above detailed description explicitly defines such terms. Accordingly, the actual scope of the invention encompasses the disclosed embodiments and all equivalent ways of practicing or implementing the invention under the claims.

[0074] While certain aspects of the invention are presented below in certain claim forms, the inventors contemplate the various aspects of the invention in any number of claim forms. For example, if only one aspect of the invention is recited below as embodied in a computer-readable medium, the inventors contemplate that other aspects may likewise be embodied in a computer-readable medium. Accordingly, the inventors reserve the right to add additional claims after filing the application to pursue such additional claim forms for other aspects of the invention. The invention is not limited, except as by the following claims.

CLAIMS

We claim:

1. A method for selling items on-line, the method comprising:
providing a coin-counting machine having a coin-input region, a coin discriminator, and a communication facility, wherein the communication facility is operatively connectable to at least one remote computer associated with an on-line retailer;
receiving a plurality of coins from a user in the coin-input region of the coin-counting machine;
discriminating at least a portion of the coins with the coin discriminator to determine a value; and
dispensing a gift certificate to the user for at least a portion of the value, wherein the gift certificate enables the user to make an on-line purchase from the on-line retailer.
2. The method of claim 1 wherein dispensing a gift certificate to the user includes dispensing a gift certificate that can only be used to make purchases from the on-line retailer.
3. The method of claim 1 wherein dispensing a gift certificate to the user includes dispensing a piece of paper that includes a unique code that enables the user to make on-line purchases from the on-line retailer.
4. The method of claim 1 wherein dispensing a gift certificate to the user includes dispensing a unique code associated with an electronic account that contains the funds for the on-line purchase.
5. The method of claim 1 wherein dispensing a gift certificate to the user includes dispensing a unique code associated with an electronic account that is managed by the on-line retailer.

6. The method of claim 1 wherein discriminating at least a portion of the coins includes determining a total value of the coins received from the user, and wherein dispensing a gift certificate to the user includes dispensing a gift certificate for 100% of the total value.

7. The method of claim 1 wherein dispensing a gift certificate to the user includes dispensing a unique code to the user, and wherein the method further comprises:

providing a website for the on-line retailer; and
receiving, via the website, the unique code in payment for the on-line purchases.

8. The method of claim 1 wherein dispensing a gift certificate to the user includes dispensing a unique code to the user, and wherein the method further comprises:

providing a website for the on-line retailer;
receiving, via the website, the unique code in payment for the on-line purchases; and
in response to receiving the unique code, shipping the on-line purchases to an address of the user.

9. A method of selling goods on-line, the method comprising:
providing a website;
providing a coin counting machine;
receiving, in the coin counting machine, a plurality of coins;
counting, in the coin counting machine, at least a portion of the coins to determine a value;
issuing, from the coin counting machine, a unique identifier associated with the value; and
receiving, via the website, the unique identifier in at least partial payment for a selected item.

10. The method of claim 9, further comprising:
transmitting the unique identifier to a host computer to verify payment for the selected item;
receiving verification of payment from the host computer; and
shipping the selected item at least partially in response to receiving verification of payment.

11. The method of claim 9 wherein providing a website includes providing graphical and textual information about a plurality of items offered for sale, and wherein receiving, via the website, the unique identifier includes receiving a manually-input multi-digit number from a remote user-computer.

12. The method of claim 9 wherein issuing, from the coin counting machine, a unique identifier includes issuing a paper substrate containing a multi-digit number, and wherein receiving, via the website, the unique identifier includes receiving the multi-digit number from a remote user-computer which is operably connected to the website.

13. The method of claim 12, further comprising receiving, via the website, user identification, wherein the user identification and the unique identifier are received in at least partial payment for the selected item.

14. A coin counting machine comprising:
a coin input region configured to receive a plurality of randomly oriented coins from a user;
a coin discriminator configured to receive at least a portion of the coins from the coin input region and count the coins to determine a value; and
a dispenser configured to dispense a gift certificate for an amount related to the value, wherein the gift certificate is associated with an on-line retailer, and wherein the gift certificate includes a unique code that enables the user to make computer-implemented purchases from the on-line retailer for the amount.

15. The coin counting machine of claim 14 wherein coin input region is configured to receive a plurality of randomly oriented coins of random denomination at least approximately simultaneously.

16. The coin counting machine of claim 14 wherein the gift certificate is a first gift certificate associated with a first on-line retailer, and wherein the dispenser is further configured to dispense a second gift certificate associated with a second on-line retailer.

17. The coin counting machine of claim 14, further comprising a communication facility, wherein the communication facility receives the unique code from a remote computer in response to transmitting the amount to the remote computer.

18. The coin counting machine of claim 14, further comprising a display that presents at least first and second transaction options to the user, wherein the first transaction option includes receiving the gift certificate in return for at least a portion of the coins, and wherein the second transaction includes receiving a redeemable voucher in return for at least a portion of the coins, the redeemable voucher being redeemable for at least one of goods and surfaces in a retail location in which the coin counting machine is placed.

19. The coin counting machine of claim 14, further comprising a display that presents at least first and second transaction options to the user, wherein the first transaction option includes receiving the gift certificate in return for at least a portion of the coins, and wherein the second transaction includes receiving a prepaid credit card in return for at least a portion of the coins.

20. The coin counting machine of claim 14, further comprising a display that presents at least first and second transaction options to the user, wherein the first transaction option includes receiving the gift certificate in return for at least a portion of the coins, and wherein the second transaction includes receiving a prepaid phone card in return for at least a portion of the coins.

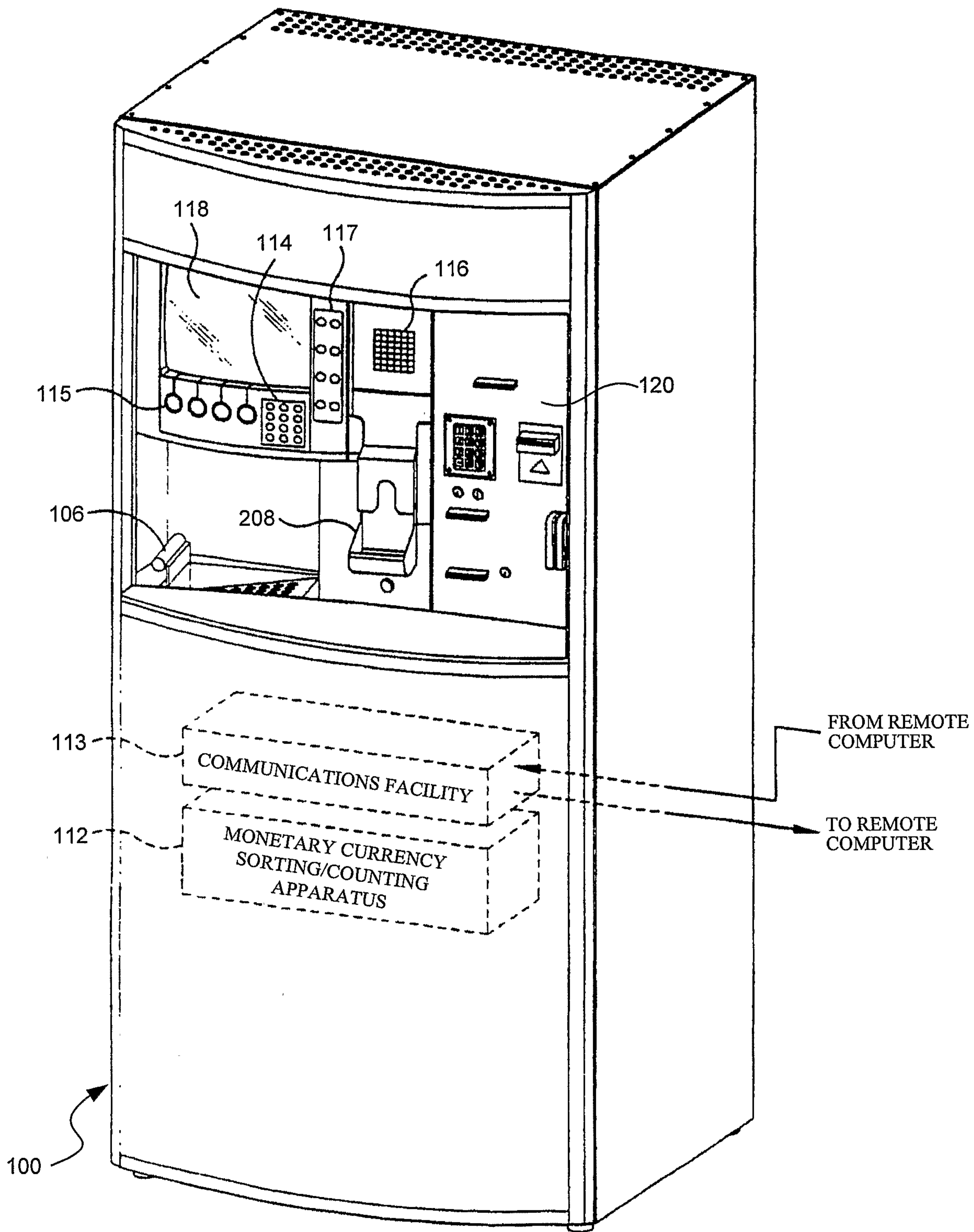


FIG. 1

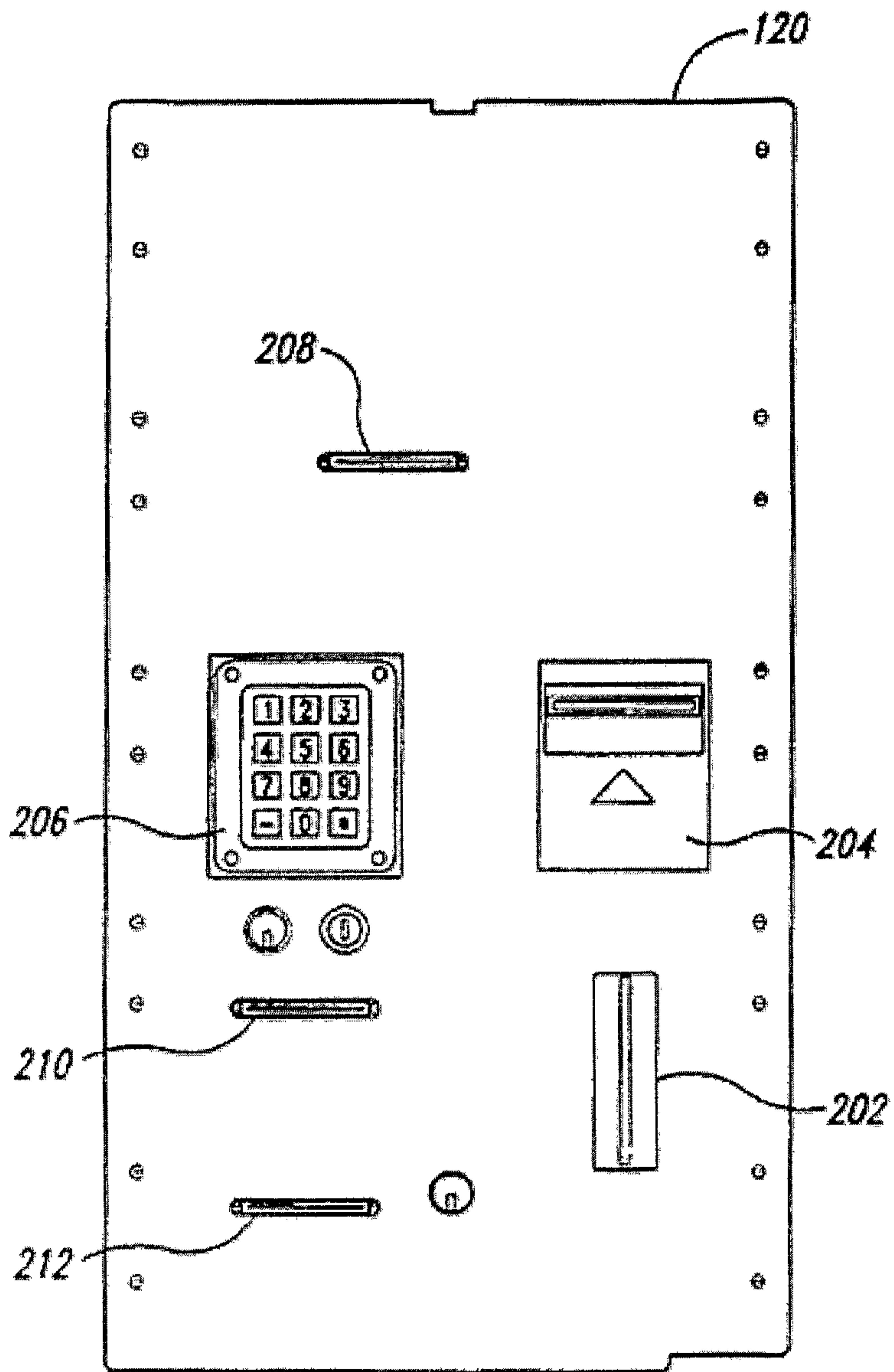


FIG. 2

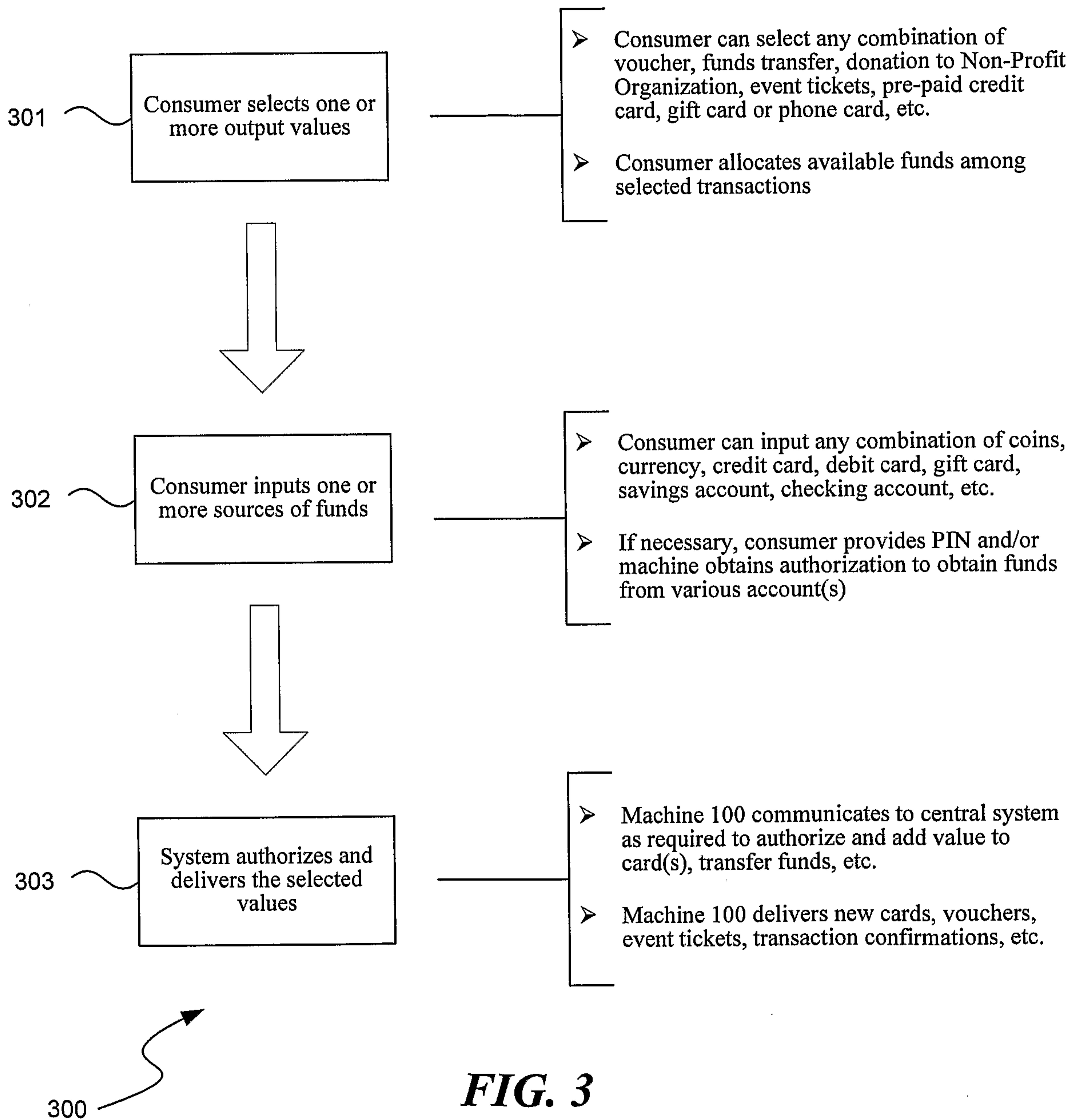
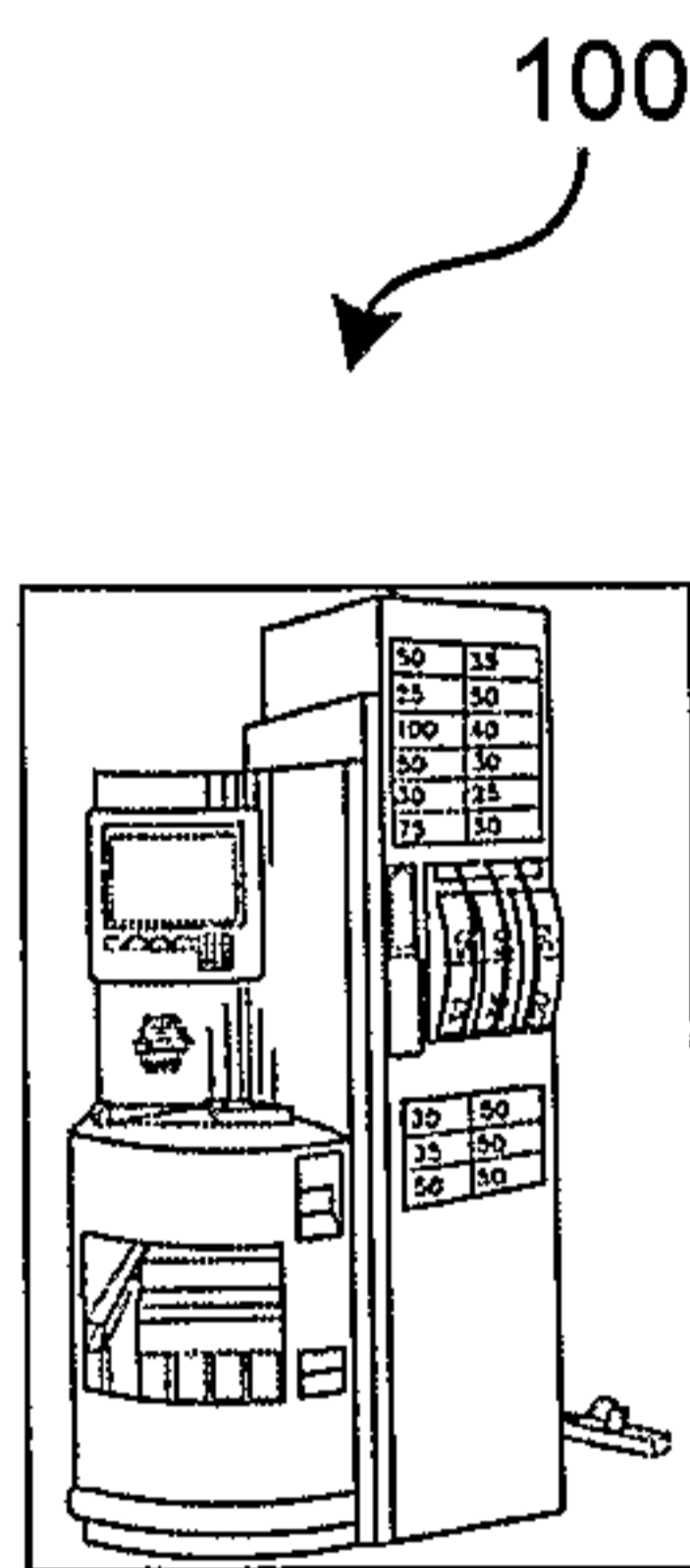


FIG. 3

4/11

USER-PROVIDED INPUT:

- Coins
- Currency (Bills)
- Credit Card
- Debit Card
- Gift Card
- Checks
- Bank Account
- Internet On-line Transaction
- Etc.



TYPES OF OUTPUT:

- Prepaid Card
- Voucher
- Phone Card
- Tickets
- Currency
- Gift Card
- Novelty Card
- Smart Card
- Transfer to Account
- Merchandise
- Etc.

FIG. 4

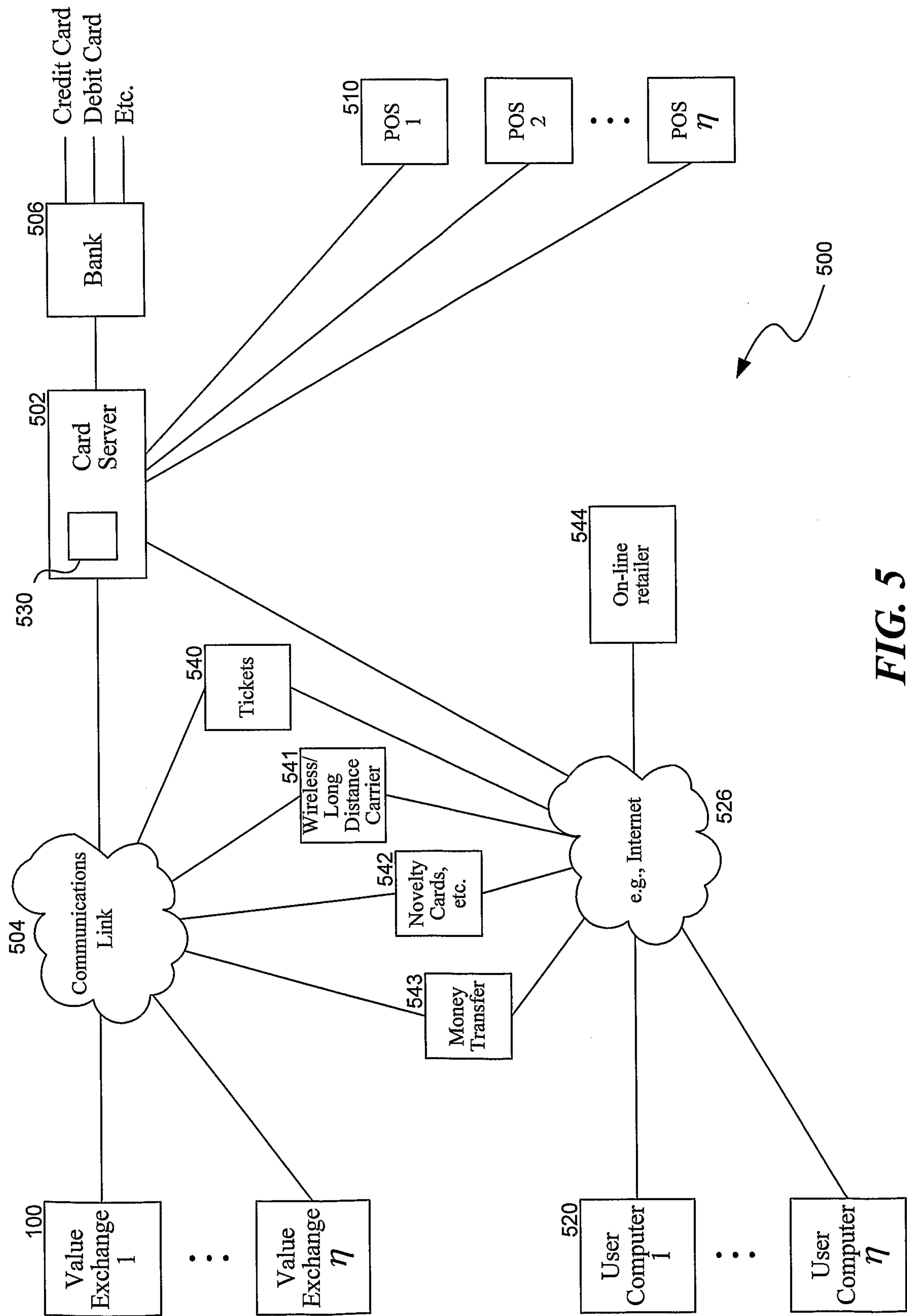


FIG. 5

6/11

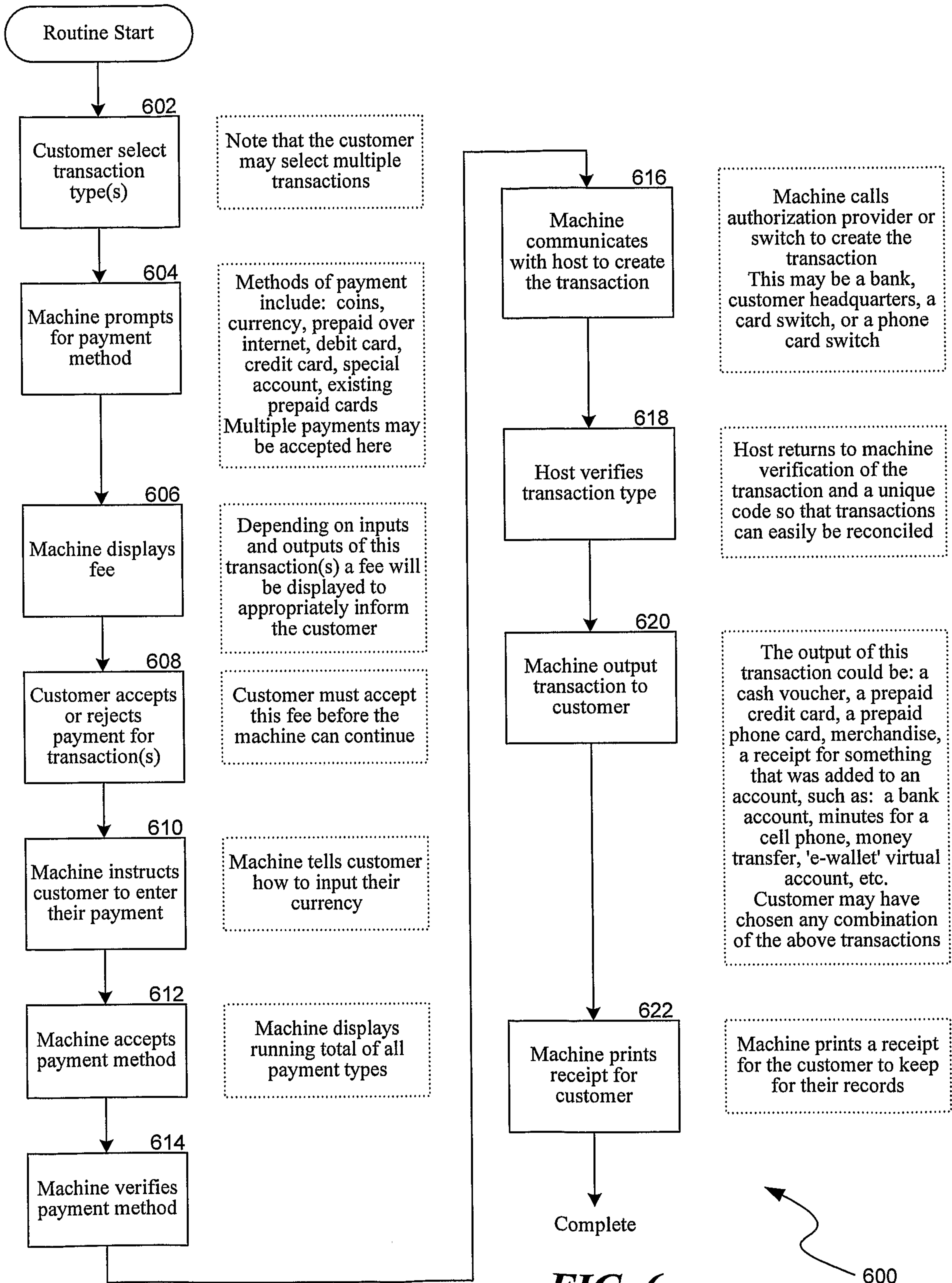


FIG. 6

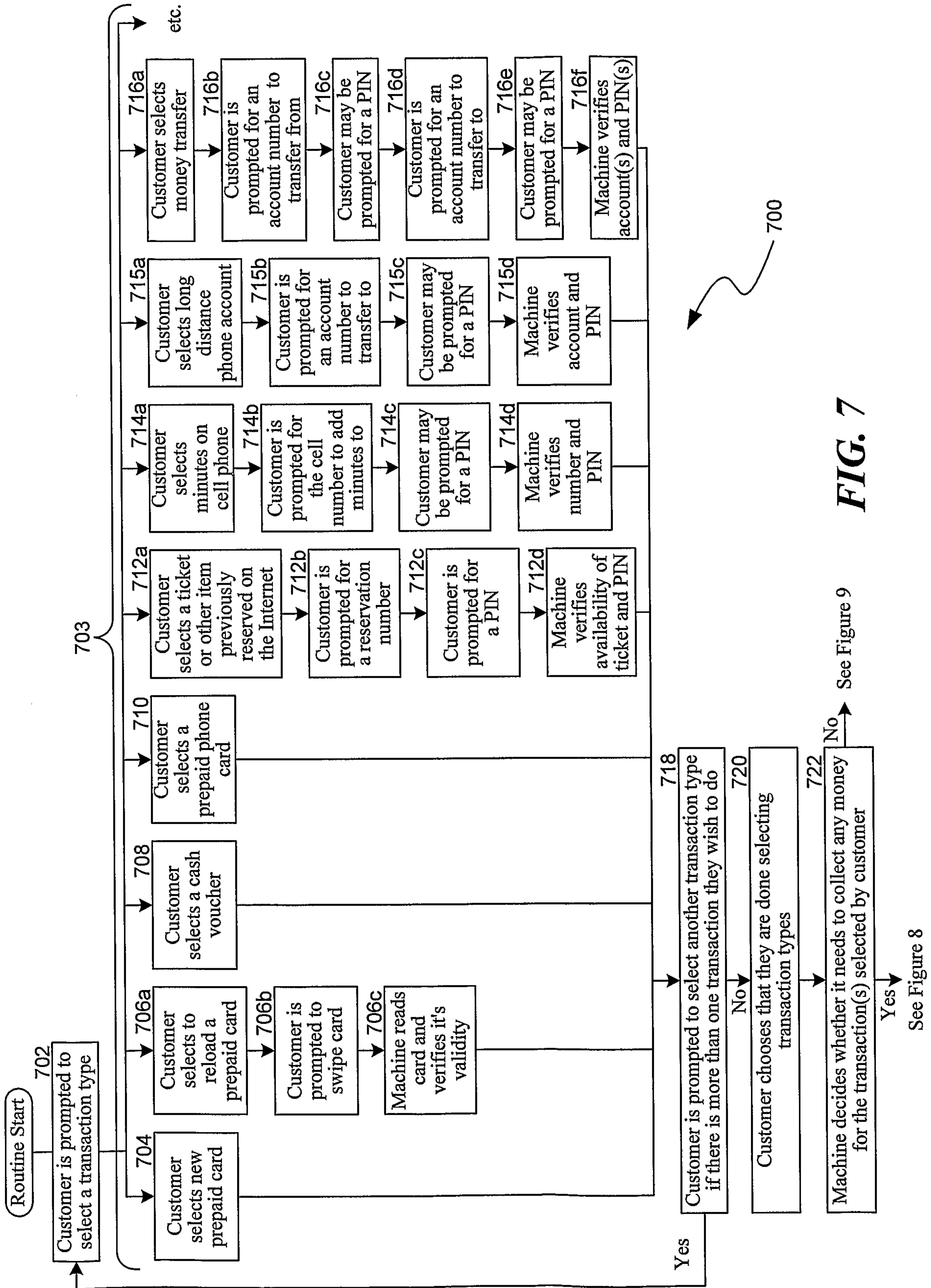


FIG. 7

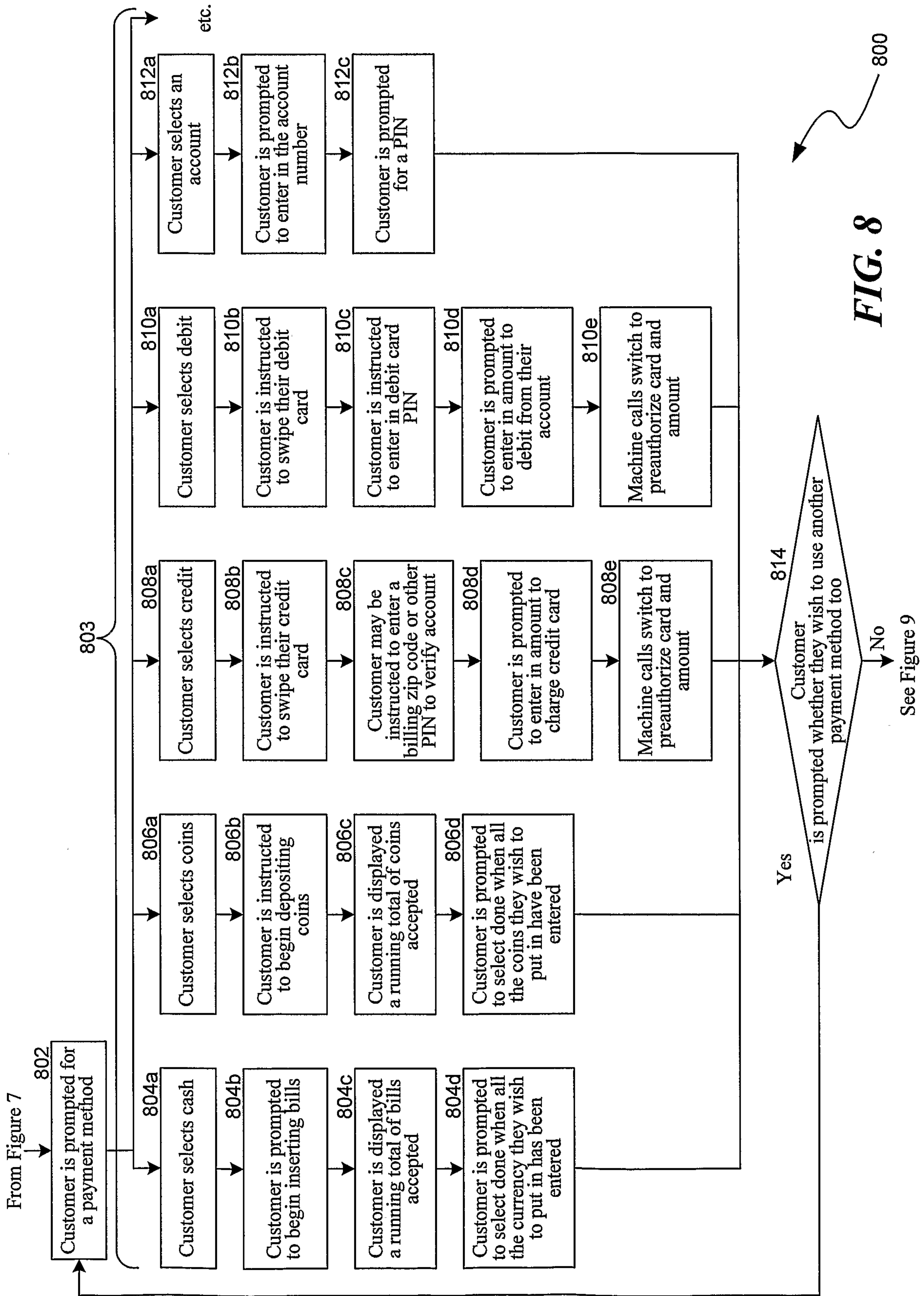


FIG. 8

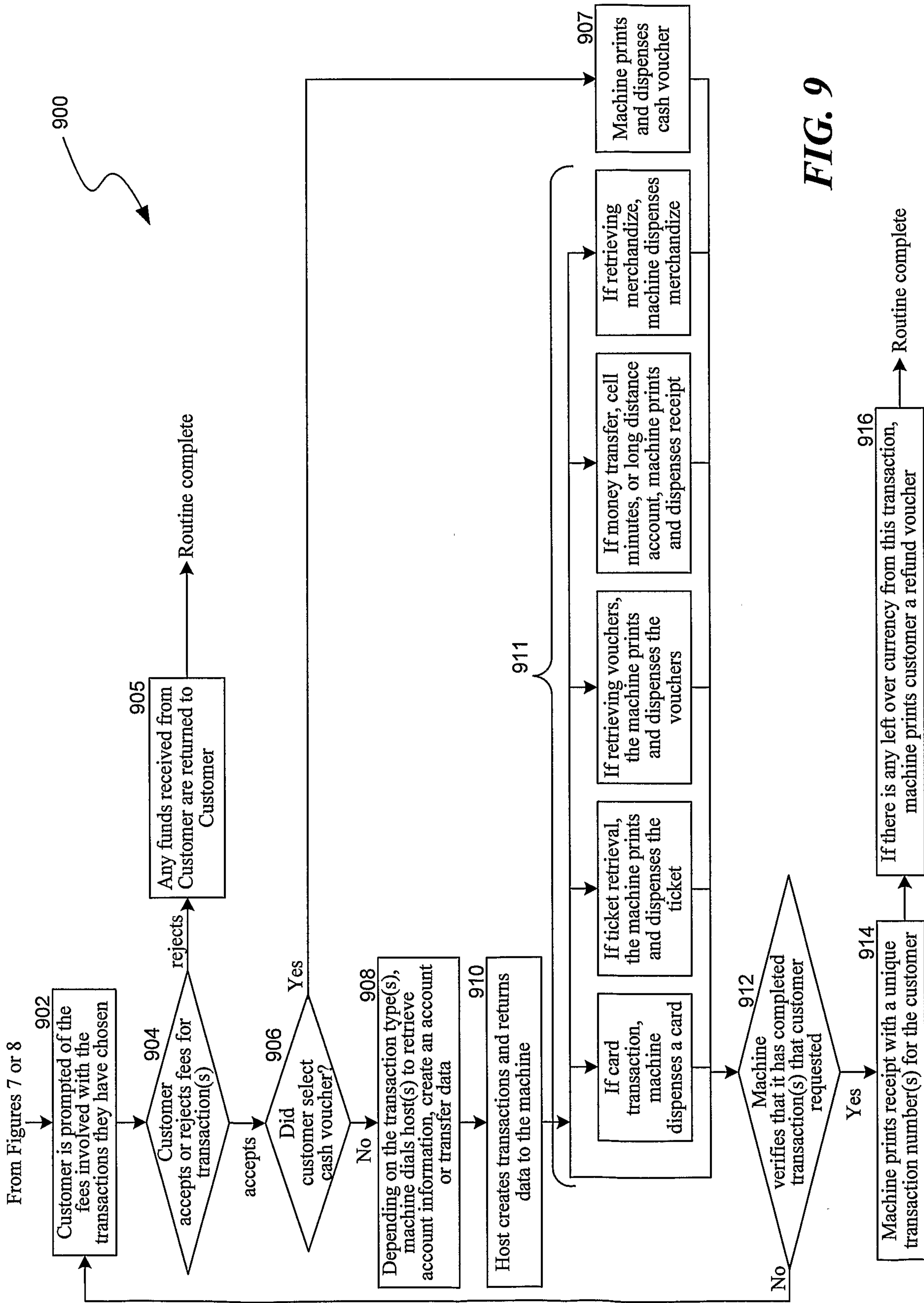


FIG. 9

10/11

1000a

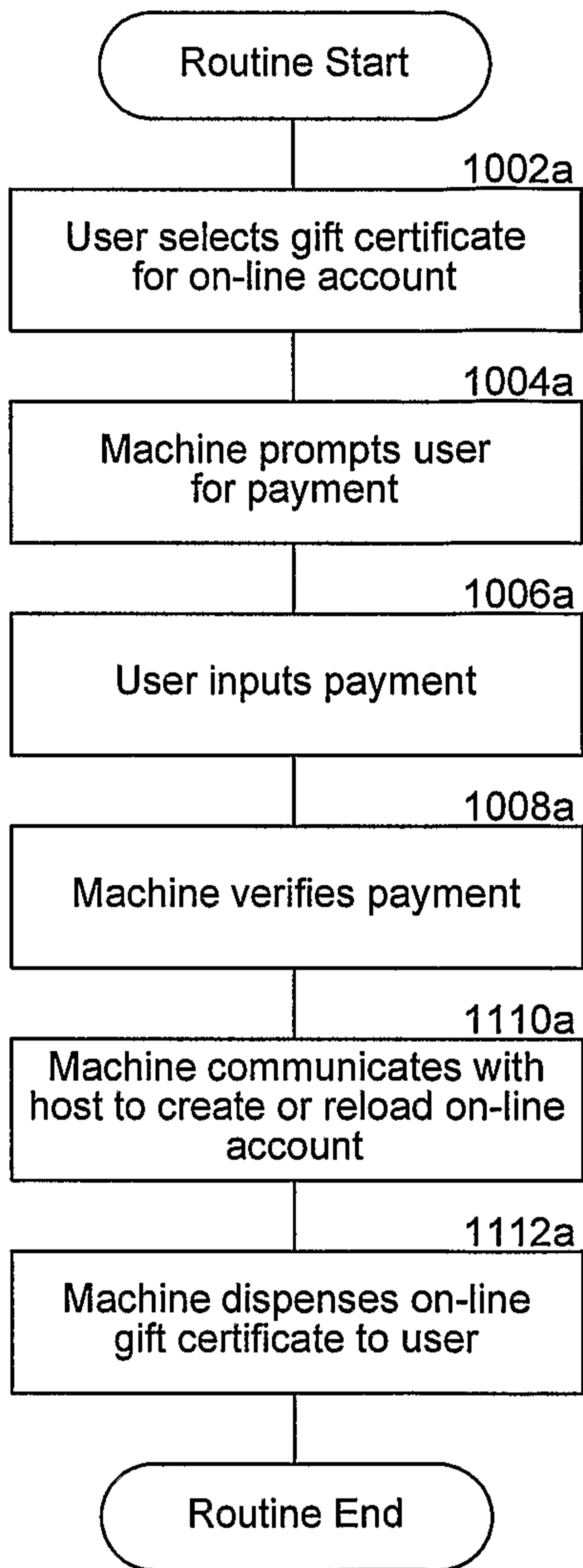
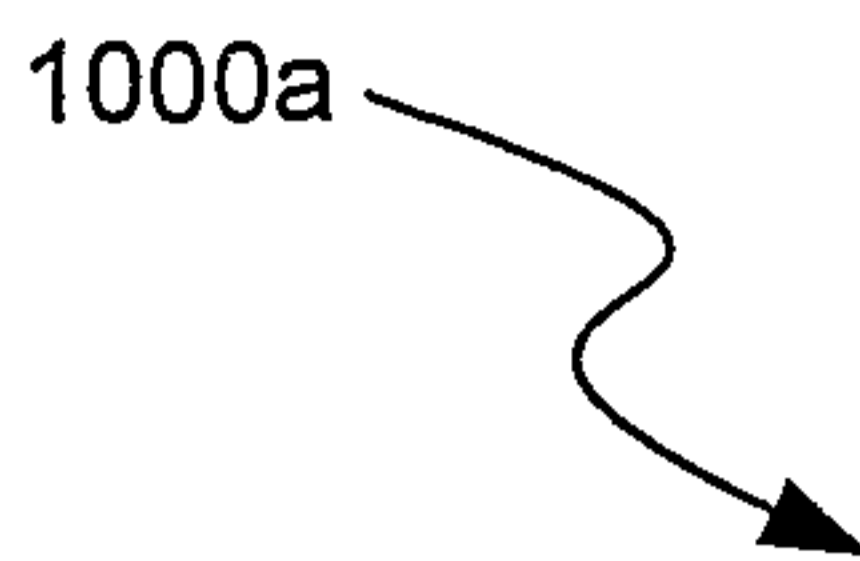


FIG. 10A

11/11

1000b

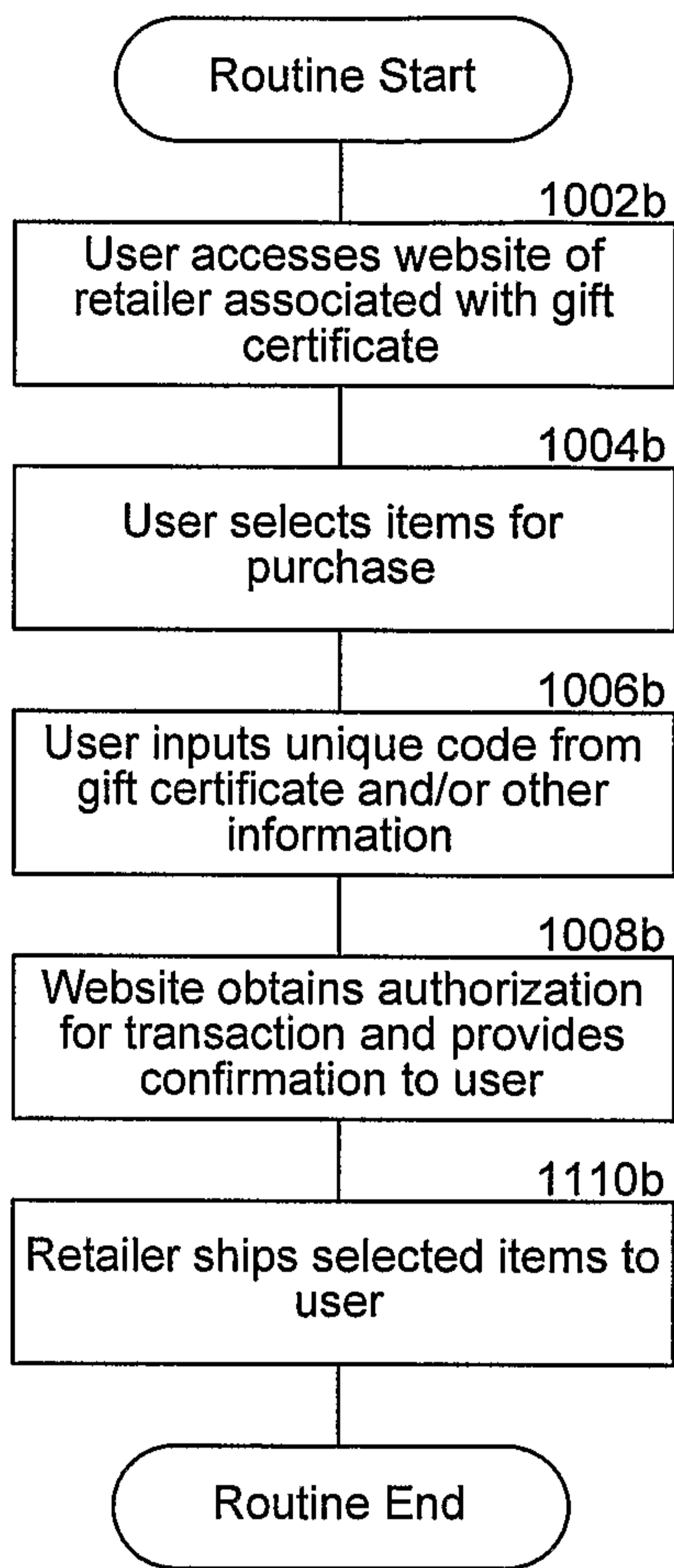
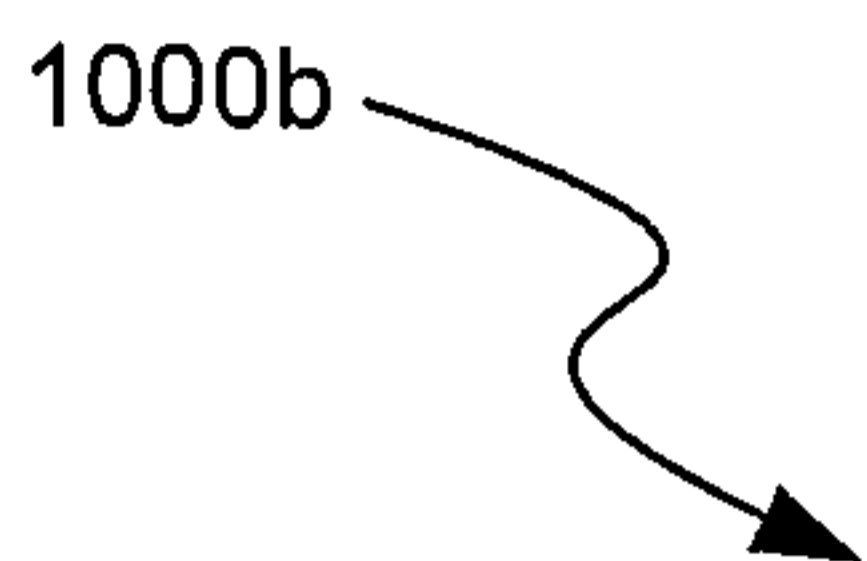


FIG. 10B

1000a

