

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
17 March 2011 (17.03.2011)(10) International Publication Number
WO 2011/031450 A2(51) International Patent Classification:
G06Q 20/00 (2006.01) **G06Q 40/00** (2006.01)(21) International Application Number:
PCT/US2010/046467(22) International Filing Date:
24 August 2010 (24.08.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/236,777 25 August 2009 (25.08.2009) US
12/861,115 23 August 2010 (23.08.2010) US(71) Applicant (for all designated States except US): **VISA U.S.A. INC.** [US/US]; P.O. Box 8999, San Francisco, CA 94128-8999 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CARLSON, Mark** [US/US]; 153 Miramontes Avenue, Half Moon Bay, CA 94019 (US). **STAN, Pat** [US/US]; 10 Driftwood Court, Pacifica, CA 94044 (US). **FAITH, Patrick, L.** [US/US]; 2810 Jones Gate Court, Pleasanton, CA 94566 (US).**HAMMAD, Ayman, A.** [US/US]; 6981 Corte Mercado, Pleasanton, CA 94566 (US). **REWIS, Ben** [US/US]; 6475 Thorndale Drive, Oakland, CA 94611 (US).(74) Agent: **DESANDRO, Bradley, K.**; Quarles & Brady LLP, One Renaissance Square, Two North Central Ave, Phoenix, AZ 85004-2391 (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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

[Continued on next page]

(54) Title: ONLINE WARRANTY HISTORY STORAGE ACCESS

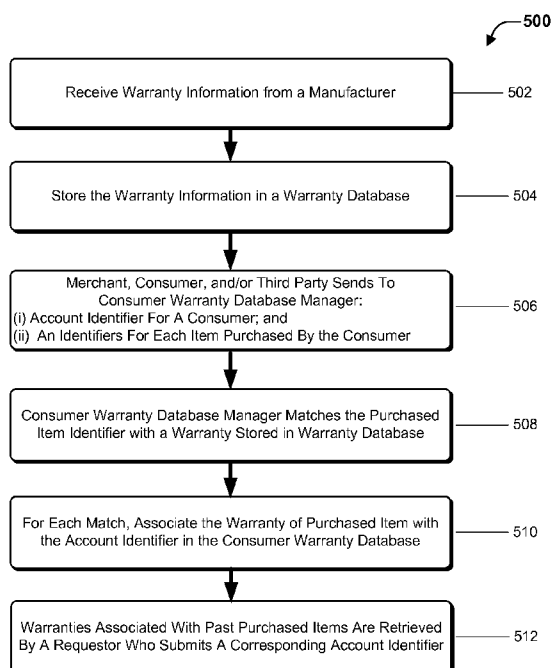


FIG. 5

(57) Abstract: A message confirming a transaction for the purchase of an item can include identifiers for the item and for a consumer as well as information pertaining to the transaction. The item identifier is used to locate an express warranty for the item. The consumer identifier (e.g.; a number of an account issued to the consumer) is used to locate the consumer's file in which the express warranty is stored along with at least a portion of the information pertaining to the transaction. Other data received in respective messages can be also be stored in the consumer's file. Thereafter, the consumer identifier can be use to retrieve all express warranties stored in the file for past respective purchased items. Information about each express warranty can be compared to the stored portion of the information pertaining to the transaction so as to retrieve only those express warranties that are valid (e.g.; unexpired).



EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, **Published:**

LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

— *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*

ONLINE WARRANTY HISTORY STORAGE ACCESS
CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to, and the benefit of, U.S. Provisional Application No. 61/236,777, filed on August 25, 2009, titled "Warranty and Benefits Incentive" and to U.S. Application Serial No. 12/861,115, filed on August 23, 2010, titled "Online Warranty History Storage Access," both of which are incorporated herein by reference.

FIELD

The present invention is related to an item purchased by a consumer from a merchant and is more particularly related to an express warranty for the item. The express warranty is made in association with the purchase of the item by the consumer, can be from the merchant from whom the consumer purchased the item, a manufacturer of the item, a wholesaler of the item, or other third party. The express warranty is a textually expressed promise, option, or other remedy expressed remedies for breach(es) thereof, concerning the character, nature, purpose, quality, state, or use of the item.

BACKGROUND

A factor upon which a consumer may use as a basis for making a purchase of an item may be an express warranty that covers the item as against defects and damage for a certain period of time and/or replacement (e.g., provides a remedy for breach). A consumer who purchases an item, however, may misplace or lose documentation for the express warranty, or other terms and conditions of the express warranty such as an expiration date for the express warranty or may forget that there will be a time or place at which the express warranty is no longer valid. It would be an advantage in the art to solve one or more of the foregoing problems.

SUMMARY

In one implementation, one or more authorization messages are received, each associated with a transaction on an account between a merchant and a consumer (e.g., a credit card account, or other account type). Each authorization message can be an authorization request message, an authorization response message, or combination thereof. Each a

predetermined for the exchange of electronic transactions made by cardholders using cards (e.g.; the International Standards Organization (ISO) 8583 standard). The G UWIDs can be stored in the one or more private use fields of the authorization message.

Using the account identifier, an identification is made of a consumer file from the consumer database. For each GUID, an identification is made of the GUID, of the item and a corresponding Globally Unique Warranty Identifier (GUWID) in the warranty database. The warranty database includes a plurality of the GUWIDs each associated with a corresponding express warranty for a corresponding item. A storing step takes place where the GUWID is stored in the warranty database, where the GUWID is associated with the identified consumer file in the consumer database, where the GUWID corresponding said item is stored along with at least a portion of the information pertaining to the transaction is stored.

In the foregoing implementation, a consumer warranty request can be received from a consumer that includes the account identifier. Using the account identifier, the consumer file is retrieved from the consumer database. Each GUWID is retrieved that was stored in the consumer file. A retrieval is made, from the warranty database, of the express warranty that corresponds to each GUWID that is stored within the retrieved consumer file from the consumer database. In response to the consumer warranty request, the express warranties that were retrieved from the warranty database are transmitted. The express warranties that are transmitted can be limited to those express warranties that are associated with the item where the validity can be determined by a comparison of stored information pertaining to the transaction with warranty terms of the express warranty.

In alternatives to the foregoing implementations, a consumer can use a client device to communicate over a network (e.g.; the Internet) with a server, or system thereon, to retrieve warranty information in a consumer-specific file maintained by the server for the item purchased by the consumer that has an express warranty. The server can retrieve the warranty information for the item, as above, by using a globally unique identifier that is provided by the consumer via the client.

Figure 1 illustrates an exemplary payment processing network, depicting environment wherein an express warranty may be stored in a consumer warranty file purchased using a portable consumer payment device;

Figure 2 illustrates the general environment wherein a portable consumer device is used by a consumer to purchase an item from a merchant, wherein associated with an express warranty;

Figures 3-5 depicts flow charts of respective exemplary methods for association of a consumer's account, warranty information for items purchased by the consumer.

DETAILED DESCRIPTION

In the present context, a consumer warranty database is maintained by a handler or agent thereof. The consumer warranty database includes warranty information for items purchased by consumers using respective portable consumer payment devices which is associated with an account issued to a respective consumer. The database is accessed by a consumer, using their account, in order to obtain warranty information for a purchased item. While the present discussion focuses on warranties, one of ordinary skill in the art will appreciate that the method and system described is equally applicable to other benefits, and that the use of the method and system with insurance policies and other benefits is within the scope of the invention described.

Within the exemplary payment processing system depicted in FIG. 1, discussed below, FIG. 2 illustrates the general environment wherein a portable consumer payment device, such as portable consumer payment device 202, is used by consumer 214 to purchase an item from merchant 210, wherein item 212 is associated with a warranty, and wherein the portable consumer payment device is associated with an account issued by an issuer to consumer 214. While item 212 is depicted as a digital camera, a person of ordinary skill in the art will appreciate that item 212 may be any item sold with a warranty. By way of example, and without limitation, item 212 may be an electronic item, such as a computer, electronic household appliance, or audio stereo system, a household item, such as a refrigerator,

term insurance policy. In other implementations, the item purchased is a benefit. In other implementations, the benefit may be, for example, an extended warranty policy that is above a standard warranty on a purchased item.

Turning to FIG. 2, in certain implementations, consumer 214 presents item 212 to merchant 210's point of sale terminal (POS) for purchase along with portable consumer payment device 202. In other implementations, consumer 214 may be purchasing item 212 over the Internet, by telephone, by fax, or by any other method available for purchasing services.

Retail merchant 210 uses a card reader associated with the POS terminal to read payment information stored on portable consumer payment device 202, including the account identifier associated with an account issued by issuer 204. In certain implementations, portable consumer payment device 202 is read by swiping portable consumer payment device 202 through the POS terminal to read data magnetically encoded in a magnetic stripe. In other implementations, the POS terminal reads portable consumer payment device 202 using a contactless technology such as Near Field Communications (NFC), Radio Frequency Identification (RFID) communications, etc., when consumer 214 is near the POS terminal. In yet other implementations, portable consumer payment device 202 is inserted into the POS terminal such that electrical contacts on portable consumer payment device 202 establish connectivity with the POS terminal.

Upon receipt of portable consumer payment device 202, the transaction is processed similarly to a method described below in connection with FIG. 1. Merchant 210 generates an authorization request message to acquirer 106, which includes the account identifier associated with the account issued by issuer 204 and read from portable consumer payment device 202. Merchant 210 also submits a warranty identifier for a warranty offered on item 212. In certain implementations, the warranty identifier must be manually entered into merchant 210's POS terminal. In other implementations, the warranty identifier is determined by merchant 210's POS terminal based on item 212. In certain implementations, an identifier of item 212 is the warranty identifier.

In certain implementations, more than one warranty identifier can be included in the authorization request message.

In implementations where item 212 is an insurance policy or other benefit, it may actually be, for example, an identifier for the insurance policy or an extended warranty. Where acquirer 208 is not the same entity as the issuer of the account associated with the identifier read from portable consumer payment device 202, acquirer 208 forwards the transaction information to a transaction handler 206, who in turn forwards it to issuer 204 to verify that the account associated with consumer 214 contains sufficient funds and/or is able to reimburse merchant 210 for the purchase price of item 212.

Upon receipt of an authorization response message as a reply from issuer 204, transaction handler 206 forwards the authorization response message to acquirer 208, who forwards it to merchant 210. Where the authorization response message contains an approval for the transaction, transaction handler 206 additionally matches the warranty identifier with the warranty identifier stored in database 218.

In certain implementations, the warranties stored in database 218 are provided by merchant 210. In other implementations, information pertaining to warranties stored in database 218 is provided by manufacturer 220 of item 212. In other implementations, the warranties stored in database 218 are provided by any other entity having an interest in providing a warranty that covers a purchase of item 212, for instance by a Consumer Warranty Database Manager 226.

In certain implementations, insurance policies and extended warranties are stored in database 218. In such implementations, each such insurance policy and extended warranty is supplied by the provider of the policy or warranty. Furthermore, in such implementations, the warranty identifier included in the authorization request message can be an identifier for an insurance policy or an extended warranty stored in database 218. The transaction handler or its agent, in such implementations, matches the identifier with an insurance policy or extended warranty stored in database 218. In other implementations, the Consumer Warranty Database Manager 226 or its agent, matches the identifier with an insurance policy or extended warranty stored in database 218.

database 218, the consumer warranty database manager 226 sends a diagnostic to merchant 210, or the provider of the warranty (i.e.; the manufacturer 220), or agent(s) the notification that no warranty information for the item 212 is stored in the warranty database 218, and requesting that the information be submitted, if needed. In certain implementations, if transaction handler 206 is unable to match the warranty identifier to a warranty stored in database 218, transaction handler 206 includes in the authorization response message information that indicates that the warranty identifier is invalid. In such an implementation, merchant 210 may then provide the warranty information to transaction handler 206 through communications through a network 232. In other implementations, when transaction handler 206 is unable to match the warranty identifier to a warranty stored in database 218, transaction handler 206 provides a notification to the manufacturer 220 (or to a distributor or other third party offering a warranty on item 212) so as to notify the third party that the warranty is not stored in database 218. In such implementations, the authorization message may include an identifier of the provider of the warranty for item 212.

In certain implementations, matching the warranty identifier (e.g.; a Globally Unique Warranty Identifier (GUWID)) with a warranty stored in warranty database 218 may require additional processing. In such implementations, the authorization request message may include additional information, by way of example and not limitation, an identifier for item 212, a Globally Unique Item Identifier (GUIID), such as the stock keeping unit (SKU), a serial number, a universal product code (UPC), or other Globally Unique Identifier (GUID), the provider of the warranty, the merchant, and/or a method of purchase. In one implementation, transaction handler 206 may, for example, only store warranty information for a product in a warranty file when the product is purchased online at a specific store, using a payment method associated with an account issued by a specific issuer. In such an implementation, the authorization request message may include such requirements. Once transaction handler 206 has identified a warranty for item 212 stored in database 218, transaction handler 206 may transmit the authorization request message with additional information to ensure that the requirements have been met before storing the warranty information in database 218.

identifier stored on portable consumer payment device 202, acquirer 208 forwards the transaction to transaction handler 206. Transaction handler 206 in turn requests payment for the transaction 212 from issuer 204, where issuer 204 is the issuer of the account associated with the portable consumer payment device 202. Issuer 204 debits the account and forwards the payment to transaction handler 206 who forwards the payment to acquirer 208. Finally, acquirer 208 debits the account of merchant 210 for the cost of item 212.

After the warranty information for item 212 has been stored in consumer warranty database 216 for consumer 214, consumer 214 can access that warranty information in real time. In certain implementations, consumer 214 uses a client 222 to connect, through network 224, to the consumer warranty database manager 226. The services provided by the consumer warranty database manager 226 allow consumer 214 to see warranties for items purchased on the account associated with the consumer's portable consumer payment device 202. The warranted purchases on the account are thus available for viewing and/or downloading. In some respective implementations, computer system 222 is web-enabled and can be a desktop computer, a laptop computer, a Personal Digital Assistant (PDA), a tablet computer, a mobile telephone, a kiosk, a hand held computing device that is enabled for Internet and/or Web communication via cellular telephony or other wireless communications capabilities.

In yet another implementation, after warranty information about a product is received from a manufacturer or other supplier and stored in warranty database 218, the transaction handler 206 or the consumer warranty database manager 226 can initiate a transaction. Merchant 210 completes a transaction on an account with the consumer 214 for the purchase of item 212. Thereafter, in real time or in a batch mode, the merchant 210 sends information about the transaction to the consumer warranty database manager 226. The consumer warranty database manager 226 can be an agent of the merchant 210, the merchant's acquirer 208, the transaction handler 206, or another party. The consumer warranty database manager 226 can match the consumer 212's account with the item 212 purchased on the account, after matching the transaction with the consumer warranty database 216, the purchased item 212 with a previously stored

214 who wishes to keep track of the warranties for items they have purchased, sends for an account corresponding to portable payment device 202, where the account has to the consumer 212 by an issuer 204. Also sent by the consumer 214 is an identifier for item 212 purchased by the consumer 214 for which there is a warranty, whether or not on the consumer's account 202. A consumer warranty database manager 226 attempts to match or associate each item 212 identifier received from the consumer 214 with a warranty in the warranty database 216. For each match, identifiers for the account 202, the item 212 and the corresponding warranty are stored in consumer warranty database 216. Thereafter, the consumer 214 may retrieve warranty information about a prior purchased item 212 by use of a network access, via network 224, consumer warranty database manager 226 and/or consumer warranty database 216 and warranty database 218.

In the illustrated implementation of FIG. 2, computer system 222 displays communications that have been received from Consumer Warranty Database Service 226 on a display (e.g., 228a, 228b) that is in communication with client 222. For instance, the display device can display the warranties for items purchased on the consumer 214's account. Consumer Warranty Database Service 226 is in communication with Consumer Warranty Database 216, matching consumer 214's account to items purchased on the account and is functioning to perform searches in consumer warranty database 216 having respective consumer warranty identifiers to the consumer's account(s), for items purchased by the consumer 214. More than one account of consumer 214 can be searched so as to locate all purchases of items that have are covered by a warranty by way of association with one or more of the consumer 214's accounts.

Consumer 214, via client 222, network 224 and Consumer Warranty Database Manager 226, selects the warranty for item 212 from among the warranties for the various items that consumer 214 has purchased using portable consumer payment device 202. Upon such selection, warranty information related to the warranty for item 212 is retrieved and downloaded to client 222 for rendering on the associated display (e.g., 228a, 228b). In certain implementations, the warranty information is retrieved from a database, such as the consumer warranty database 216.

way of example and not limitation, an advertisement for a product that can be used with the product or an advertisement for a purchase of an extended warranty.

In certain implementations, a receipt and/or proof of purchase for item 212 can be downloaded from consumer warranty database 216. In such an implementation, consumer 214 may make a print-out 230 of the receipt and/or proof of purchase. In certain implementations, the print-out 230 additionally includes advertisements. In certain implementations, the print-out 230 additionally includes important information about the warranty for item 212, such as the terms and conditions provided by the warranty.

Consumer 214 uses the information provided by the consumer warranty manager 226 and, in certain implementations print-out 230, to make a claim under the warranty for item 212.

In alternatives to the forgoing implementations, information that can be used to verify warranty data pertaining to an item purchased from a merchant by a consumer in a transaction can be derived from one or more authorization messages. The account associated with each such authorization message can be a credit or debit card account, or other type of account. Each authorization message can be an authorization request message, an authorization response message, or combination thereof, that is sent and/or received by an issuer of the merchant's acquirer, and/or a transaction handler that is in communication with both the merchant's acquirer. Each authorization message can include an account identifier corresponding to the account issued by the issuer to the consumer as well as a Globally Unique Item Identifier (GUIID) each identifying an item purchased from the merchant in the transaction with the consumer. The authorization message can be a transaction card originated message having one or more private use fields for storing the Globally Unique Warranty Identifier (GUWID) and the GUIID. The authorization message can have corresponding interchange message specifications that are predefined for the exchange of electronic transactions made by cardholders using payment cards conforming to the International Standards Organization (ISO) 8583 standard).

the warranty information may be used to identify a product or service that the consumer is to purchase and to provide a discount coupon for the product or service to the consumer. In an implementation, the discount coupon may be for a routine service required under the warranty and may be sponsored by a local service provider.

Within the exemplary payment processing system depicted in FIG. 1, discussed below, FIG. 3 depicts a flow chart of an exemplary method 300 used by a transaction agent(s) thereof to associate warranty information with a consumer warranty file. As indicated by blocks 302 and 304, the transaction handler receives warranty information about a product or service from a manufacturer or other supplier of the warranty and stores that information in a warranty database. In certain implementations, the transaction handler receives and stores additional information such as, by way of example and not limitation, requirements that must be met by a consumer at the time of purchase of an item for the warranty information to be associated with the consumer's warranty file. As indicated by block 306, the transaction handler then receives an authorization request message from a merchant, requesting authorization for a consumer to purchase the item using a portable consumer payment device and a warranty identifier. Upon receipt of the request, the transaction handler sends a request to the issuer of the account associated with the portable consumer payment device to verify that the account contains sufficient funds to reimburse the merchant for the cost of the item, as indicated by block 308.

Upon receipt from the issuer of an authorization response message containing approval, the transaction handler matches the warranty identifier included in the request with the warranty information stored in the warranty database, as indicated by block 310. In certain implementations, the transaction handler will also verify that the conditions for the warranty information in the consumer's warranty file have also been met.

In certain implementations, if the warranty identifier included in an authorization request message does not match a warranty stored in the warranty database, the consumer database manager sends a request to the merchant, or the provider of the warranty

account of the consumer for the purchase amount and an acquirer for the merchant's account for the cost of the item purchased.

Within the exemplary payment processing system depicted in FIG. 1, discussed below, FIG. 4, depicts a flow chart of an exemplary method 400 used by a merchant to store warranty information with a consumer warranty file. As indicated by blocks 402-404, a merchant receives warranty information about a product from a manufacturer or other supplier of the product, receives the product, and stores the product in a warranty database. In certain implementations, the merchant or agent(s) thereof, receives and stores additional information such as, by way of example, not limitation, requirements that must be met by an account holder at the time of purchase of the item for the warranty information pertaining to the item to be stored in the account holder's warranty file. As indicated by block 406, a merchant completes a transaction on an account of the account holder. Thereafter, in real time or in a batch mode, the merchant sends information about the transaction to a consumer warranty database manager. The consumer warranty database manager can be an agent of the merchant, the merchant's acquirer, the merchant's processor, the merchant's handler, or another party. The consumer warranty database manager stores the account holder's account with the item purchased on the account, after matching the purchased item with previously stored warranty received from the manufacturer or other warrantor, as indicated by blocks 408-412. In certain implementations, the consumer warranty database manager verifies that the conditions for storing the warranty information in the account holder's warranty file have been met.

Within the exemplary payment processing system depicted in FIG. 1, discussed below, FIG. 5 depicts a method 500 for how purchases of items under warranty can be made with an account issued to a consumer with the warranties of those purchased items. Method 500 does not require a purchase of an item to have been made on the consumer's account. Instead, past purchases of items under warranty, whether or not purchased on the consumer's account, can be put into a consumer warranty database so as to associate the item purchased with the warranty and the consumer's account. As indicated by blocks 502-504, any party

consumer under a warranty whether or not the purchase was made in a transaction associated with the consumer's account. A manager for the consumer warranty database, which can be the merchant, the merchant's acquirer, the transaction handler, and/or another party, may match or otherwise associate the identifier for the purchased item with a previous warranty in a warranty database. For each match or association, the consumer's account is associated in the consumer warranty database with the purchased item and its warranty, as indicated by blocks 506-510. In certain implementations, the consumer warranty manager will also verify that the conditions for storing this information in the warranty file have also been met. As shown in block 512, warranties associated with purchased items can be retrieved by a requestor (e.g., a consumer accessing a website over the Internet) who submits a corresponding account identifier. For instance, such access may be based on the account number of an account issued by an issuer to the consumer, where the account number is associated by the consumer to purchase items having corresponding transaction data and warranties that are stored in the Consumer Warranty Database.

In one implementation of block 512, each retrieved warranty can include, in addition to the express warranty for the corresponding item that had been previously purchased, one or more implied warranties. To obtain the implied warranties, previous transaction information is retrieved as pertains to the transaction in which the corresponding item had been previously purchased, such as the date, location, jurisdiction of the purchase, the merchant and category thereof from whom the item was purchased. This information may be used to access one or more legal databases 234 in communication over network 232 as seen in block 514. Such access to the one or more legal databases 234 is used to retrieve the one or more implied warranties representing the state of the law of commerce for the purchase of goods or services on the date, at the location, within the jurisdiction of the transaction, and at the merchant and category thereof of the transaction.

In addition to the express and implied warranties, other information pertaining to the transaction for the purchase of the item can also be retrieved via data mining of

assist a purchaser to understand rights, privileges and responsibilities as per corresponding item that had been previously purchased in a transaction with a merchant.

In certain implementations, individual blocks of Figure 3-5 described above can be combined, eliminated, or reordered. In certain implementations, instructions are encoded in a non-transient computer readable medium wherein those instructions are executed (e.g.; by one or more processors) to perform functions associated with one or more of the blocks seen in FIGS. 2-5. In yet other implementations, instructions reside in any other program product, where those non-transient instructions are executed by hardware (e.g., more computerized apparatus) external to, or internal to, a system of hardware performing functions associated with one or more of the blocks seen in FIGS. 2-5. In either case, instructions may be encoded in a computer readable medium comprising, for example, a magnetic information storage medium, an optical information storage medium, a semiconductor information storage medium, and the like. "Electronic storage media," may mean, and without limitation, one or more devices, such as and without limitation, a PROM, EPROM, EEPROM, Flash PROM, CompactFlash, SmartMedia, and the like. The steps of a process, or algorithm described in connection with the implementations disclosed herein may be embodied directly in hardware, in a software module executed by a processor, or a combination of the two. In certain implementations, instructions are encoded in a computer readable medium wherein those instructions are executed by hardware to perform one or more of the functions associated with the blocks seen, as described with respect to FIGS. 2-5.

The following example is presented to further illustrate to persons skilled in the art how to make and use the invention. This example is not intended as a limitation upon the scope of the invention, which is defined only by the appended claims.

EXAMPLE

By way of example and not limitation, a manufacturer may decide to offer a new line of an electro-mechanical household appliance it produces and to participate in a v

co-branded store credit card. The merchant provides the information regarding the warranty to the manufacturer, along with the items for which the extended warranty is provided and the requirement that each such item be purchased using a co-branded store credit card.

A consumer may then present one of the manufacturer's electro-mechanical appliances at the POS of the merchant for purchase using the merchant's co-branded store credit card. Using a scanner of the POS, the merchant scans a bar code on the electro-mechanical household appliance's packaging and reads, using a magnetic stripe reader, the account information stored in a magnetic stripe on the back of the consumer's co-branded store credit card.

The POS then forms an authorization request message, which includes the account identifier, the merchant's warranty identifier, and the identifier for the extended warranty offered by the merchant. In certain implementations, the manufacturer's warranty identifier may be the same as a product identifier used by the merchant for stock keeping (e.g., Stock Keeping Unit or SKU). In certain implementations, the manufacturer's warranty identifier is a code provided by or to the merchant's POS. In other implementations, the manufacturer's warranty identifier is a code entered into the POS by the merchant.

The authorization request message is then sent to the merchant's acquirer, which forwards it to the transaction handler, who forwards it to the issuer of the account associated with the consumer's co-branded store credit card. The issuer then returns an authorization response message to the transaction handler. Where the authorization request message is approved, the transaction handler matches the manufacturer's warranty identifier and the merchant's warranty identifier with the warranties stored in its database.

The transaction handler additionally verifies that any requirements for the warranties in a consumer's warranty file have been met. In the present example, the transaction handler verifies, for the manufacturer's warranty, that the item is being purchased from an authorized retailer. Additionally, for the merchant's warranty, the transaction handler

warranty file is identified by the account identifier of the account associated with the co-branded store credit card.

Finally, the authorization response message is forwarded by the transaction handler acquirer, who forwards it to the merchant.

At a subsequent time, when the consumer is experiencing problems with a mechanical household appliance, the consumer uses a web browser on a personal computer to browse to a website of the transaction handler's (or agent(s) thereof) and logs into the website having access to the consumer's warranty file. Once logged into the account, the personal computer renders a display having a listing for all of the warranties for items the consumer has purchased which are stored in the consumer's warranty file. The consumer selects a manufacturer's warranty for the electro-mechanical household appliance and selects the display to show information relating to that warranty, such as whether the warranty is valid, how to make a claim under the warranty, and where the closest authorized service center is located. Additionally, a link may be provided which, when engaged, causes a print command to be sent to the personal computer to print out a copy of a proof of purchase for the electro-mechanical household appliance. Advertisements and notifications may also be displayed, such as, for example and not limitation, that the manufacturer's warranty will expire soon and an extended warranty is available for purchase.**

PAYMENT PROCESSING SYSTEM

Turning now to FIG. 1, an exemplary payment processing system 100 is depicted depicting a general environment in which the payment processing system 200 can be performed. In payment processing system 100, a network 110 can conduct a transaction for goods and/or services with an account user (au) or merchant (m) (i.e., a prepaid account) issued to an account holder (a) 108 by an issuer (i) 104. The processes of paying and being paid for the transaction are coordinated by a transaction handler (th) 102, where the transaction handlers 102 include transaction handler (1) through transaction handler (N) (TH), and where TH can be up to and greater than an eight digit integer. The

Payment processing system 100 has a plurality of prepaid accounts 108 each held by a corresponding account holder (1) 108 through account holder (A) 108, where A is up to and greater than a ten digit integer.

Payment processing system 100 includes account user (1) 108 through account user (AU) 108, where AU can be as large as a ten digit integer or larger. Each account user (1) 108 conducts a transaction for goods and/or services with merchant (m) 110 using an account (1) 108 (prepaid account) that has been issued by an issuer (i) 104 to a corresponding account holder (a) 108. Data from the transaction on the account is collected by merchant (m) 110 and forwarded to a corresponding acquirer (q) 106. Acquirer (q) 106 forwards the data to transaction handler 102 who facilitates payment for the transaction from the prepaid account issued by issuer (i) 104 to account holder (a) 108.

Payment processing system 100 has a plurality of issuers 104. Each issuer (i) 104 is assisted in processing one or more transactions by a corresponding agent issuer (ai) 104, where 'i' can be an integer from 1 to I, where 'ai' can be an integer from 1 to AI, and where AI can be as large as an eight digit integer or larger.

Payment processing system 100 has a plurality of acquirers 106. Each acquirer (q) 106 may be assisted in processing one or more transactions by a corresponding agent acquirer (aq) 106, where 'q' can be an integer from 1 to Q, where aq can be an integer from 1 to AQ, and where Q and AQ can be as large as an eight digit integer or larger.

Payment processing system 100 has a transaction handler 102 to process a plurality of transactions. The transaction handler 102 can include one or a plurality of network/switches 102. Each network/switch (ns) 102 can be a mainframe computer in a location different than each other network/switch (ns) 102, where 'ns' is an integer from 1 to NS, and where NS can be as large as a four digit integer or larger.

Dedicated communication systems 120, 122 (i.e., private communication systems) facilitate communication between the transaction handler 102 and each issuer (i) 104 and acquirer (q) 106. The Internet 112, via e-mail, the World Wide Web, cellular telephony, etc., facilitate communication between the transaction handler 102 and each issuer (i) 104 and acquirer (q) 106.

110 and each account holder (a) 108, and each account holder (a) 108 and each is respectively.

Each acquirer (q) 106 may be assisted in processing one or more transactions corresponding agent acquirer (aq) 106, where 'q' can be an integer from 1 to Q, where Q is an integer from 1 to AQ, and where Q and AQ can be as large as an eight digit integer.

Merchant (m) 110 may be a person or entity that sells goods and/or services. Merchant (m) 110 may also be, for instance, a manufacturer, a distributor, a retailer, a local drugstore, a grocery store, a gas station, a hardware store, a supermarket, a boutique, or a doctor's office. In a business-to-business setting, the account holder (a) 108 is a second merchant making a purchase from another merchant (m) 110. Merchant (m) 110 may utilize at least one point-of-sale terminal (POS) that can communicate with acquisition transaction handler 102, or issuer (i) 104. Thus, the POS terminal is in operative communication with the payment processing system 100.

Typically, a transaction begins with account user (au) 108 presenting a portable device to merchant (m) 110 to initiate an exchange for a good or service. The portable device may be associated with an account (e.g., a prepaid account) of account holder (a) 108 that was issued to the account holder (a) 108 by issuer (i) 104.

The portable consumer device may be in a form factor that can be a payment card, a smartcard, a smart media, a payroll card, a healthcare card, a wrist band readable medium containing account information, a keychain device, such as a SPIN device commercially available from ExxonMobil Corporation, or a supermarket discount card, a cellular phone, personal digital assistant, a pager, a security card, an access card, a terminal, or a transponder. The portable consumer device may include a volatile or non-volatile memory to store information such as the account number or an account holder (a) 108.

Merchant (m) 110 may use the POS terminal to obtain account information, such as the account number of the account of the account holder (a) 108, from the portable consumer device. The portable consumer device may interface with the POS terminal using a mechanism in

Issuer (i) 104 may authorize the transaction using transaction handler 102. handler 102 may also clear the transaction. Authorization includes issuer (i) 104, or handler 102 on behalf of issuer (i) 104, authorizing the transaction in connection with 104's instructions such as through the use of business rules. The business rules can be instructions or guidelines from transaction handler 102, account holder (a) 108, or merchant (m) 110, acquirer (q) 106, issuer (i) 104, a related financial institution, or combination thereof. Transaction handler 102 may maintain a log or history of authorized transactions. Once approved, merchant (m) 110 will record the authorization, allowing account user to receive the good or service from merchant (m) 110 or an agent thereof.

Merchant (m) 110 may, at discrete periods, such as the end of the day, submit authorized transactions to acquirer (q) 106 or other transaction related data for processing through the payment processing system 100. Transaction handler 102 may also submit a submitted authorized transaction list with its own log of authorized transactions. In addition, transaction handler 102 may route authorization transaction amount request to the corresponding acquirer (q) 106 to the corresponding issuer (i) 104 involved in each transaction. Once acquirer (q) 106 receives the payment of the authorized transaction amount from issuer (i) 104, acquirer (q) 106 can forward the payment to merchant (m) 110 less any transaction fees such as fees for the processing of the transaction. If the transaction involves a debit card, acquirer (q) 106 may choose not to wait for the issuer (i) 104 to forward the payment to paying merchant (m) 110.

There may be intermittent steps in the foregoing process, some of which may occur simultaneously. For example, acquirer (q) 106 can initiate the clearing and settlement which can result in payment to acquirer (q) 106 for the amount of the transaction. Acquirer (q) 106 may request from transaction handler 102 that the transaction be cleared. Clearing includes the exchange of financial information between the issuer (i) 104 and acquirer (q) 106 and settlement includes the exchange of funds. Transaction handler 102 may provide services in connection with settlement of the transaction. The settlement of a

Payment processing system 100 will preferably have network components scaling the number and data payload size of transactions that can be authorized, settled in both real time and batch processing. These include hardware, software, data and storage network devices for the same. Examples of payment processing system those operated, at least in part, by American Express, Master Card, Discover Card Corporation, Diners Club, and Visa Inc., and agents of the foregoing.

Each network/switch (ns) 102 can include one or more data centers for transactions, where each transaction can include up to 100 kilobytes of data or more corresponding to the transaction can include information about the types and quantities and services in the transaction, information about the account holder (a) 108, the issuer (au) 108, the merchant (m) 110, tax and incentive treatment(s) of the goods and services, coupons, rebates, rewards, loyalty, discounts, returns, exchanges, cash-back transactions, and other information.

By way of example, network/switch (ns) 102 can include one or more computers (i.e., one or more IBM mainframe computers) for communications over a network 122, one or more server farms (i.e., one or more Sun UNIX Superservers), where the computers and server farms can be in diverse geographic locations.

Each issuer (i) 104 (or agent issuer (ai) 104 thereof) and each acquirer (q) 104 (or acquirer (aq) 106 thereof) can use one or more router/switch (i.e., Cisco routers/switches) to communicate with each network/switch (ns) 102 via dedicated communication system 102 respectively.

Transaction handler 102 stores information about transactions processed by the payment processing system 100 in data warehouses such as may be incorporated a plurality of networks/switches 102. This information can be data mined. The transaction research and modeling can be used for advertising, account holder analysis, loyalty incentives and rewards, fraud detection and prediction, and to develop and demonstrate savings and efficiencies made possible by use of the payment processing system 100 over paying and being paid by cash, checks, or other traditional payment mechanisms.

center serves as the control point for the telecommunication facilities of the network. The network may comprise high speed leased lines or satellite connections based on IBM SNA. Preferable, the communication lines that connect an interchange center (transaction handler 1406) to remote entities use dedicated high-bandwidth telephone circuits or satellite connections based on the IBM SNA-LU0 communication protocol. Messages are sent over these links using any suitable implementation of the ISO 8583 standard.

Access points 130, 132 are typically made up of small computer systems that interface between the center's host computer and the interchange center. The access point facilitates the transmission of messages and files between the interchange center supporting the authorization, clearing and settlement of transactions. Telecommunication links between the acquirer (q) 106 and its access point, and between the access point and issuer (i) 104 are typically local links within a center and use a message format as preferred by the center.

A data processing center (such as is located within an acquirer, issuer, or processor) houses processing systems that support merchant and business locations and maintain transaction data and billing systems. Preferably, each processing center is linked to one or two interchange centers. Processors are connected to the closest interchange, and if the network experiences interruptions, the network automatically routes transactions to a secondary interchange center. Each interchange center is also linked to all of the other interchange centers. This links the data processing centers to communicate with each other through one or more interchange centers. Also, processing centers can access the networks of other programs through the interchange center. Further, the network ensures that all links have multiple backups. The connection from one point of the network to another is not usually a fixed link; instead, the interchange center chooses the best possible path at the time of any given transmission. Rerouting around a failed link occurs automatically.

Transaction handler (th) 102 can store information about transactions processed by the transaction processing system 100 in data warehouses such as may be incorporated a

The VisaNet® system is an example component of the transaction handler (the transaction processing system 100). Presently, the VisaNet® system is operated in Visa Inc. As of 2006, the VisaNet® system Inc. was processing around 300 million transactions daily, on over 1 billion accounts used in over 170 countries. Financial institutions over 16,000 connected through the VisaNet® system to around 30 million merchants. In 2007, around 71 billion transactions for about 4 trillion U.S. dollars were cleared through the VisaNet® system, some of which involved a communication length of 24,000 miles in around two (2) seconds and during which a plurality of stops are made in processing data in the transaction.

The steps, methods, processes, and devices described in connection with the implementations disclosed herein, are made with reference to the Figures, in which like numerals represent the same or similar elements. While described in terms of the best mode contemplated, it is appreciated by those skilled in the relevant arts that the description is intended to encompass alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims and their equivalents as supported by the disclosure and drawings. Reference throughout this specification to “one implementation,” or similar language means that a particular feature, structure, or characteristic described in connection with the implementation is included in at least one implementation of the present invention. Thus, appearances of the phrases “in one implementation,” “one implementation,” and similar language throughout this specification may, but do not necessarily, all refer to the same implementation.

The described features, structures, or characteristics of the invention may be embodied in any suitable manner in one or more implementations. In the following description, specific details are recited to provide a thorough understanding of implementations of the invention. One skilled in the relevant art will recognize, however, that the invention may be practiced without one or more of the specific details, or with other methods, materials, and so forth. In other instances, well-known structures, materials, or operations are not described in detail.

The various steps or acts in a method or process may be performed in the order described, or may be performed in another order. Additionally, one or more process or method steps may be omitted or one or more process or method steps may be added to the methods and processes. An additional step, block, or action may be added in the beginning, end, or between elements of the methods and processes.

The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described implementations are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, defined 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 is:

1. A method comprising a plurality of steps, each being performed by computer hardware executing software, wherein the steps include:

receiving one or more authorization messages for a transaction on an account of a merchant and a consumer, wherein the one or more authorization messages include:

an account identifier corresponding to the account issued by or for the consumer;

one or more Globally Unique Item Identifiers (GUIIDs) each corresponding to an item purchased in the transaction; and

information pertaining to the transaction including confirmation that the transaction on the account had been authorized by the issuer of the account;

identifying, using the account identifier, a consumer file from a plurality of said consumer files stored in a consumer database;

and

for each said GUIID:

identifying, using the GUIID, the item and a corresponding Globally Unique Warranty Identifier (GUWID) in a warranty database, wherein the warranty database includes a plurality of said GUWIDs each having a corresponding express warranty for a corresponding said item;

storing in association with the identified said consumer file in the consumer database:

the GUWID for the corresponding said item; and

at least a portion of the information pertaining to the transaction;

2. The method, as defined in Claim 1, wherein the steps further comprise receiving a consumer warranty request that includes the account identifier; and retrieving, using the account identifier, the consumer file from the consumer database.

transmitting, in response to the consumer warranty request, the express warranties were retrieved from the warranty database.

3. The method, as defined in Claim 2, wherein:

each said express warranty associated with each said GUWID that is stored in the warranty database includes express warranty terms that specify the validity of the warranty;

the at least a portion of the information pertaining to the transaction that is retrieved and stored with the corresponding said GUWID includes at least one of:

- a time of the transaction;
- a location of the transaction;
- a jurisdiction of the transaction; and
- an identifier for the merchant;

the step of the retrieving, from the warranty database, further comprises:

comparing the express warranty terms for each said express warranty that was retrieved from the warranty database to at least one of:

- the time of the transaction;
- the location of the transaction;
- the jurisdiction of the transaction; and
- the identifier for the merchant;

and

deriving, from the comparison, respective subsets of the express warranties that were retrieved from the warranty database for which the warranty terms thereof are valid and are not valid;

and

the step of the transmitting further comprises transmitting information, in response to the consumer warranty request, as to the respective subsets of the express warranties that are valid and are not valid.

5. The method as defined in Claim 4, wherein:

each said authorization message is selected from the group consisting of an authorization request message, an authorization response message, and a combination of the foregoing; the account corresponding to the account identifier in the authorization message is selected from the group consisting of:

- a debit account issued by the issuer to the consumer or a party to whom the consumer is an agent;
- a credit account issued by the issuer to the consumer or a party to whom the consumer is an agent; and
- a prepaid account issued by the issuer to the consumer or a party to whom the consumer is an agent;
- an Automated Clearing House (ACH) account issued by the issuer to the consumer or a party to whom the consumer is an agent; and
- a checking account issued by the issuer to the consumer or a party to whom the consumer is an agent.

6. An apparatus comprising one or more servers in communication over a network for performing the method of Claim 1.

7. A non-transient computer readable medium comprising instructions executable by computer hardware to perform the method of Claim 1.

8. A method of storing a warranty for an item purchased on an account, the method comprising a plurality of steps, each being performed by computing hardware executing software, wherein the steps include:

- receiving a warranty storage request containing an express warranty for an item and a corresponding Globally Unique Warranty Identifier (GUWID) for the item;

- storing the express warranty, in association with the corresponding GUWID, in a warranty database comprising a plurality of said express warranties and respective said GUWIDs;

the authorization message is for a transaction on the account between the consumer and a merchant; and

the account was issued by an issuer to the consumer;

identifying, using the GUWID, the express warranty from the plurality of said warranties in the warranty database;

identifying, using the account identifier, a consumer file from a plurality of said consumer files stored in a consumer database;

storing the GUWID in association with the identified said consumer file in the database;

receiving a consumer warranty request that includes the account identifier;

retrieving, using the account identifier, the consumer file from the consumer database;

retrieving each said GUWID that was stored in the consumer file that was retrieved from the consumer database;

retrieving, from the warranty database, each said express warranty corresponding to each said GUWID stored within from the retrieved said consumer file from the consumer database; and

transmitting, in response to the consumer warranty request, the express warranties that were retrieved from the warranty database.

9. The method, as defined in Claim 8, wherein:

each said express warranty associated with each said GUWID that is stored in the warranty database includes express warranty terms that specify the validity of the warranty;

the authorization message further includes at least one of:

a time of the transaction;

a location of the transaction;

a jurisdiction of the transaction; and

an identifier for the merchant;

the step of the retrieving, from the warranty database, further comprises:

comparing the express warranty terms for each said express warranty that was retrieved from the warranty database to at least one of:

the time of the transaction;
the location of the transaction;
the jurisdiction of the transaction; and
the identifier for the merchant;

and

deriving, from the comparison, respective subsets of the express warranties that were retrieved from the warranty database for which the warranty terms thereof are valid and are not valid;

and

the step of the transmitting further comprises transmitting information, in response to a consumer warranty request, as to the respective subsets of the express warranties that are valid and are not valid.

10. The method, as defined in Claim 8, wherein:

the authorization message includes a plurality of said GUWIDs;

and

for each said GUWID in the authorization message:

identifying, using the GUWID, a corresponding said express warranty from the plurality of said express warranties in the warranty database;

identifying, using the account identifier, one said consumer file from a plurality of said consumer files stored in the consumer database; and

storing the GUWID in association with the identified said consumer file in the consumer database.

11. The method, as defined in Claim 8, wherein:

the authorization message is a financial transaction card originated message having

a debit account issued by an issuer to the consumer or a party to whom the consumer is an agent;

a credit account issued by an issuer to the consumer or a party to whom the consumer is an agent; and

a prepaid account issued by an issuer to the consumer or a party to whom the consumer is an agent;

an Automated Clearing House (ACH) account issued by an issuer to the consumer or a party to whom the consumer is an agent; and

a checking account issued by an issuer to the consumer or a party to whom the consumer is an agent.

13. An apparatus comprising one or more servers in communication over a network for performing the method of Claim 8.

14. A non-transient computer readable medium comprising instructions executable by hardware to perform the method of Claim 8.

15. A method comprising a plurality of steps, each being performed by computer hardware executing software, wherein the steps include:

receiving one or more item purchase storage requests, wherein each said item purchase storage request includes:

a Globally Unique Consumer Identifier (GUCID);

a Globally Unique Item Identifier (GUIID) corresponding to an item purchased in a transaction; and

information pertaining to the transaction;

for each said item purchase storage request that was received:

identifying, using the GUCID, a consumer file from a plurality of consumer files stored in a consumer database;

identifying, using the GUIID, the item and a corresponding Globally Unique Warranty Identifier (GUWID) in a warranty database, wherein

receiving a consumer warranty request that includes the GUCID;
retrieving, using the GUCID, the consumer file from the consumer database;
retrieving each said GUWID that was stored in the consumer file that was retrieved from the consumer database;

retrieving, from the warranty database, each said express warranty corresponding to each said GUWID stored within the retrieved said consumer file from the consumer database;
and

transmitting, in response to the consumer warranty request, the express warranty information that was retrieved from the warranty database.

16. The method, as defined in Claim 15, wherein:

each said express warranty associated with each said GUWID that is stored in the warranty database includes express warranty terms that specify the validity of the warranty;

for each said item purchase storage request, the information pertaining to the request includes at least one of:

- a time of the transaction;
- a location of the transaction;
- a jurisdiction of the transaction; and
- an identifier for the merchant;

the steps further include storing with the GUWID, in association with the identifier for the consumer file in the consumer database, at least one of:

- the time of the transaction;
- the location of the transaction;
- the jurisdiction of the transaction; and
- the identifier for the merchant;

the step of the retrieving, from the warranty database, further comprises:

comparing the express warranty terms for each said express warranty

deriving, from the comparison, respective subsets of the express warranties that were retrieved from the warranty database for which the warranty terms thereof are valid and are not valid;

and

the step of the transmitting further comprises transmitting information, in response to a consumer warranty request, as to the respective subsets of the express warranties that are valid and are not valid.

17. The method as defined in Claim 15, wherein:

each said GUCID is an identifier for an account issued by an issuer to a consumer; and
each said transaction was conducted on the account between a merchant and a consumer for the purchase of one or more said items each having a corresponding said GUCID.

18. The method as defined in Claim 17, wherein each said account issued by the issuer to each said consumer is selected from the group consisting of:

a debit account issued by the issuer to the consumer or a party to whom the consumer is an agent;

a credit account issued by the issuer to the consumer or a party to whom the consumer is an agent; and

a prepaid account issued by the issuer to the consumer or a party to whom the consumer is an agent;

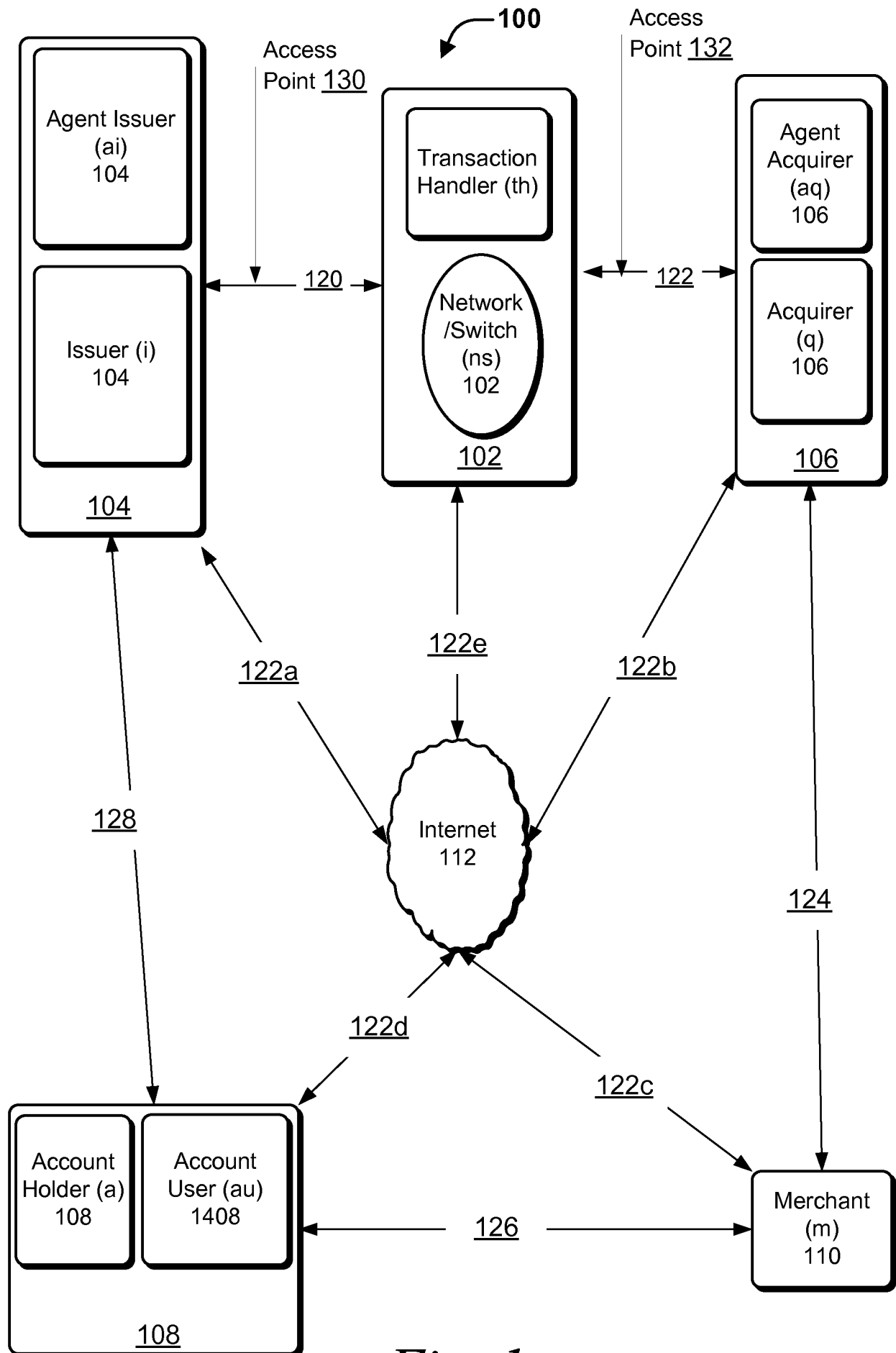
an Automated Clearing House (ACH) account issued by the issuer to the consumer or a party to whom the consumer is an agent; and

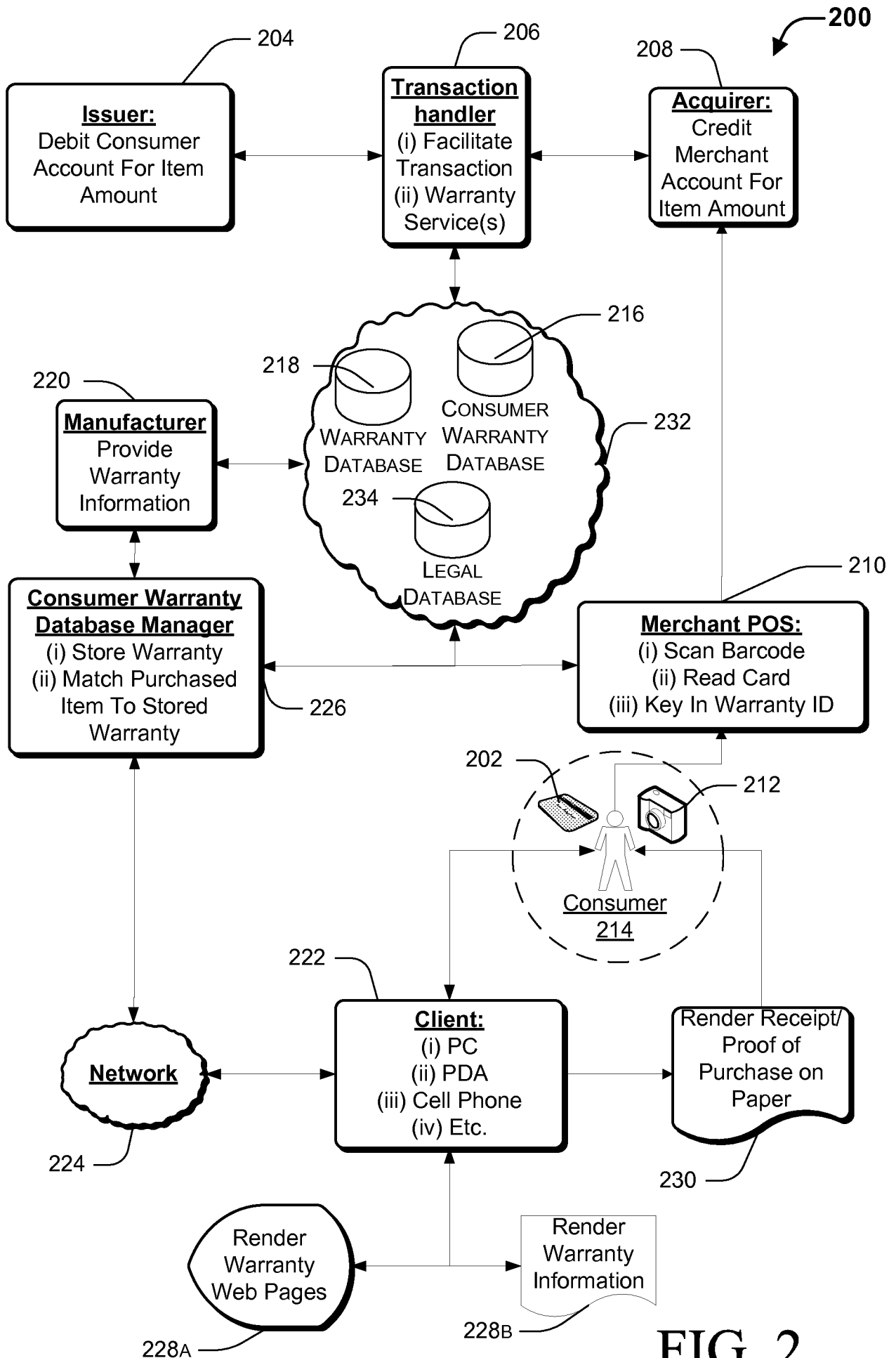
a checking account issued by the issuer to the consumer or a party to whom the consumer is an agent.

19. The method, as defined in Claim 15, wherein, for each said express warranty corresponding to each said GUCID stored within the retrieved said consumer warranty database, the steps further comprise:

retrieving from a legal database, using the information pertaining to the transaction,

20. A non-transient computer readable medium comprising instructions e:
hardware to perform the method of Claim 15.

*Fig. 1*



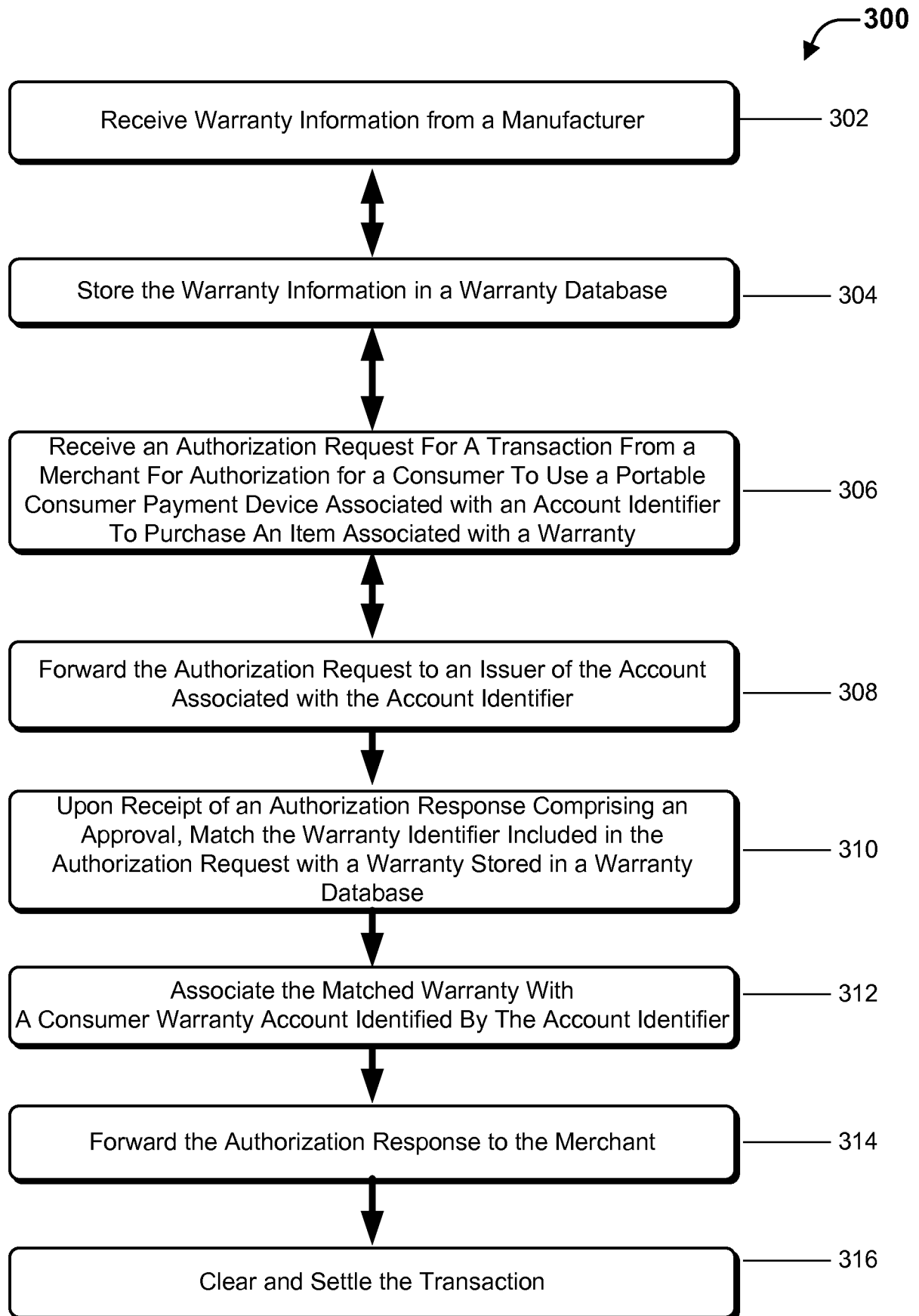


FIG. 3

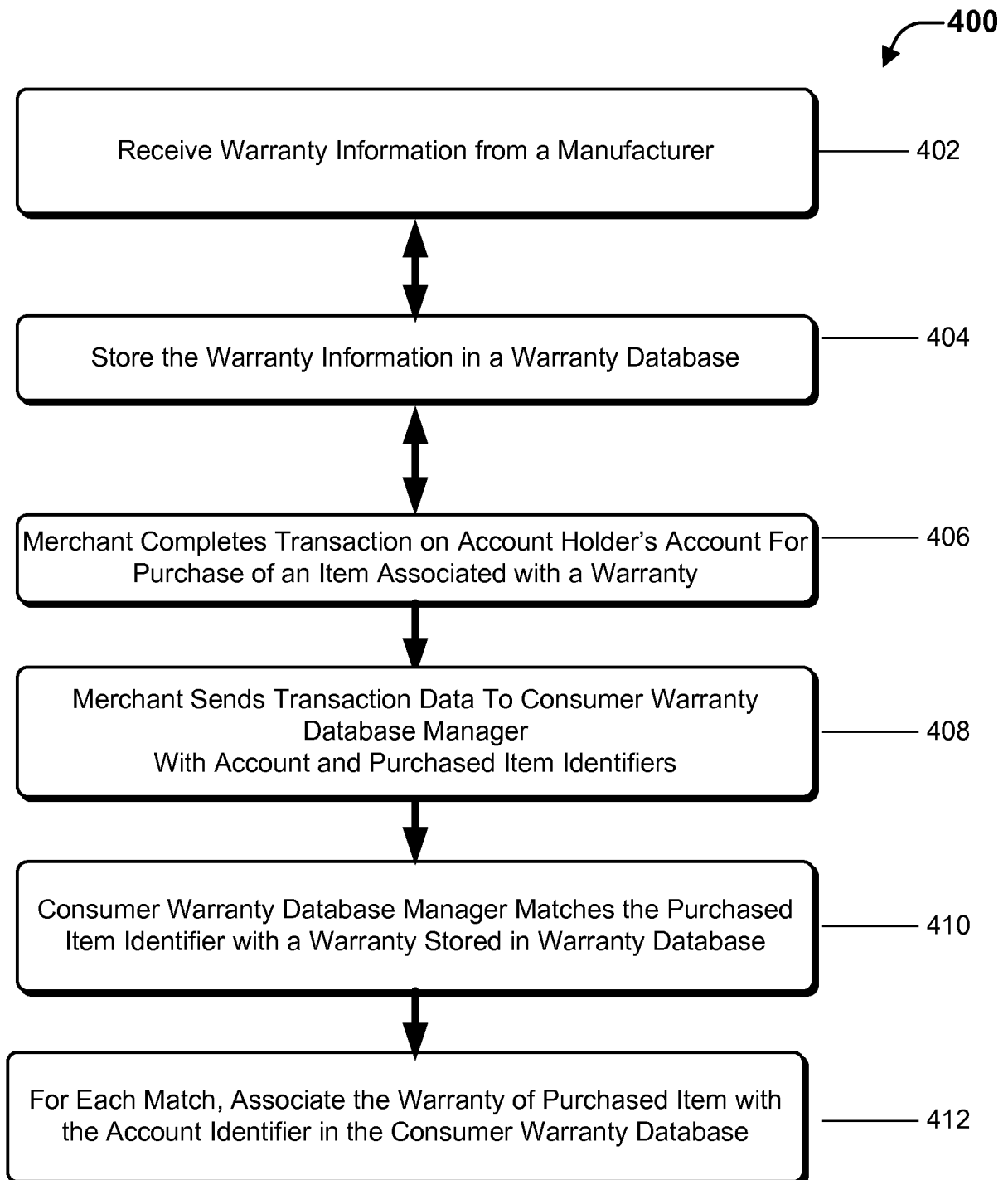


FIG. 4

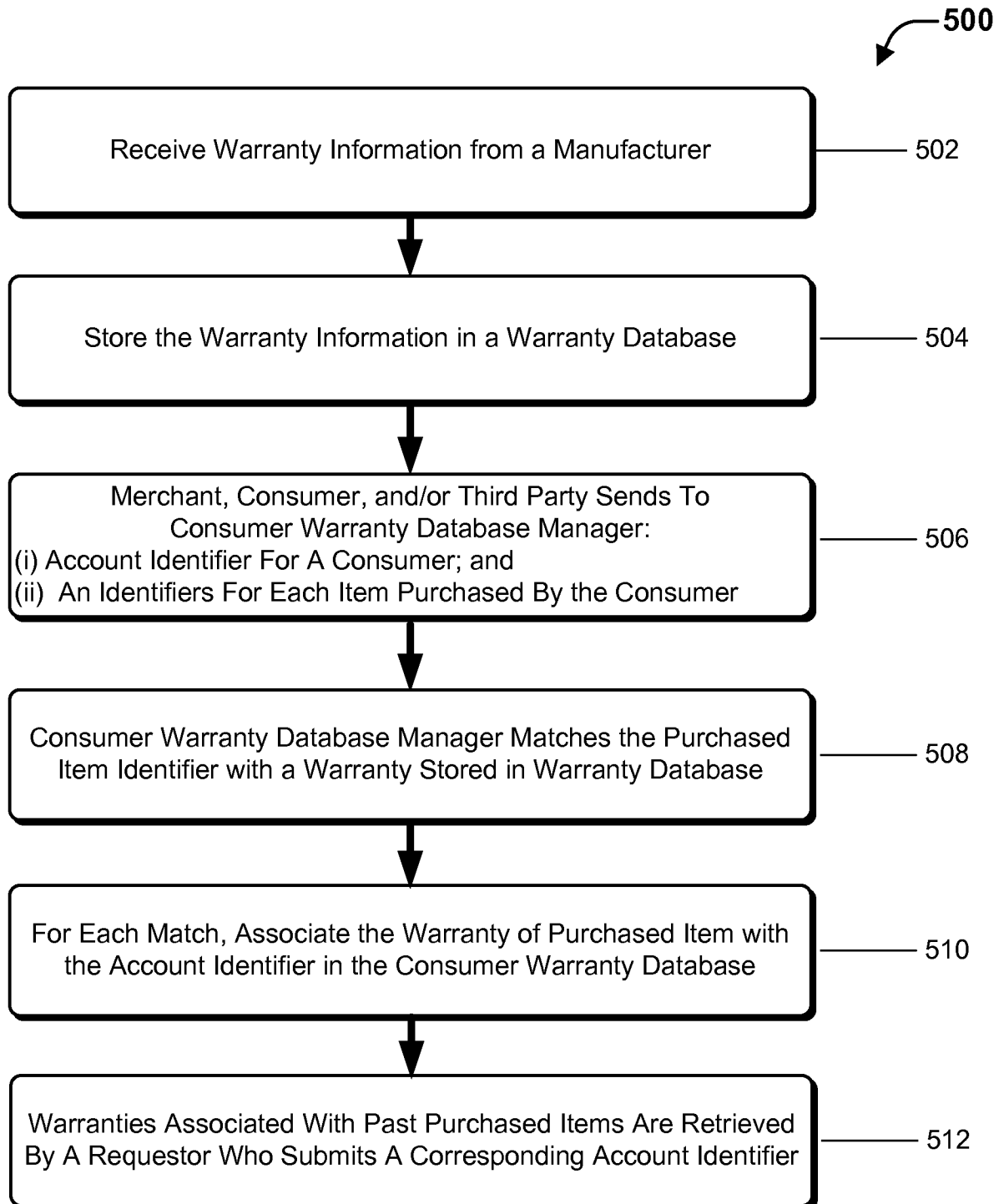


FIG. 5