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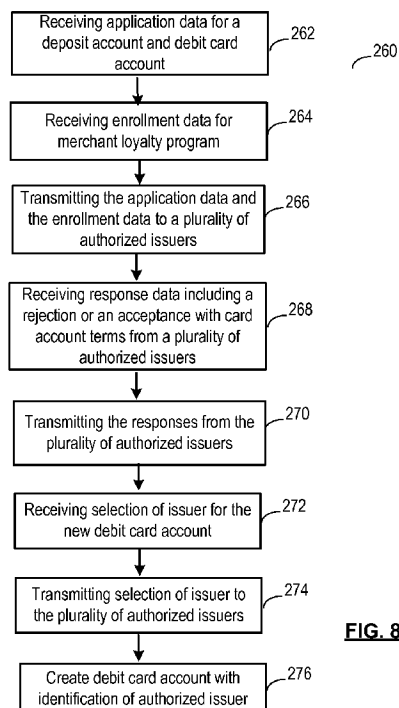


FIG. 8

(57) Abstract: A merchant debit card program is described that includes a plurality of authorized issuers for debit card accounts. The merchant debit card program includes a merchant loyalty program that provides rewards to enrolled debit card accounts. The authorized issuers provide management of the debit card accounts including customer statements, payment authorizations and customer service. Application data for a new debit card account is transmitted from the merchant to the selected issuer by a card processing system. Enrollment data to the merchant loyalty program may also be transmitted from the merchant to an authorized issuer by the card processing system.



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SYSTEM AND METHOD FOR A MERCHANT DEBIT CARD PROGRAM INCLUDING A PLURALITY OF ISSUERS

CROSS-REFERENCE TO RELATED APPLICATIONS

5 This PCT Application claims priority to U.S. Provisional Application Serial No. 61/096,589, filed September 12, 2008, titled "System and Method for a Merchant Debit Card Program Including a Plurality of Issuers," and to U.S. Patent Application Serial No. 12/412,361, filed March 27, 2009, titled "System And Method For A Merchant Debit Card Program Including A Plurality Of Issuers," each of which is incorporated herein by reference.

FIELD

10 This invention relates generally to a system and method for debit card processing and more particularly to a system and method for processing of a merchant debit card program which includes a plurality of issuers.

BACKGROUND

15 A debit card is associated with a deposit account, such as a checking, savings, or other type of financial account. When a purchase is made with a debit card, the funds are deducted from the balance in the associated deposit account. Typically, the issuer of the debit card maintains the associated deposit account.

20 Different types of debit cards are currently offered in the marketplace. For example, two types of debit cards are an online debit card and an offline debit card. Online debit cards require electronic authorization of every transaction. The transaction may be additionally secured with a personal identification number or PIN authentication. Online debit transactions can be handled by regional ATM networks or by a national proprietary debit network such as the Interlink network operated by VISA Inc. When an online debit transaction is authenticated using the PIN,
25 it offers the service of obtaining cash back from a merchant.

Offline debit cards are processed in a similar manner as a credit card. Offline debit transactions are processed through a proprietary card processing network such as VISANET operated by VISA Inc. in the same manner as credit card transactions. As such, offline debit cards are generally accepted worldwide at virtually all merchants that accept credit cards of the
30 corresponding brand. Online debit card service and offline debit card services may be provided as features on the same debit card.

Debit cards have gained popularity with a shift from cash and checks to debit spending by many consumers. Merchants have offered co-branded credit cards in the past that also provide merchant loyalty reward programs. Due to their growing popularity, merchants are now
35 seeking to offer co-branded debit cards that also provide merchant loyalty reward programs to

customers. However, since debit cards must be associated with a deposit account, it is difficult for merchants to establish a national or international debit card program with a single issuer. If a customer does not have an existing banking relationship with the single issuer, the customer is reluctant to move an existing account or open a new account with the single issuer to obtain a merchant debit card. In addition, merchants generally fund the loyalty reward program themselves due to the lack of funding that an issuer typically shares on revenue from out-of-store purchases.

One current solution includes having a single issuer associate a merchant co-branded debit card with an existing customer account at another financial institution. When a purchase is made, the issuer then coordinates the withdrawal or debit of funds from the customer's account using an automated clearing house (ACH) network. However, there are severe disadvantages to an ACH network for debit card transactions. ACH processes large volumes of debit transactions which are originated in batches. The ACH network aggregates the ACH transactions by a customer each day and then withdraws the total amount of the ACH transactions from the associated debit account. The customer's deposit account thus only reflects a single, aggregated withdrawal and does not track each individual transaction. It is difficult then for a customer to dispute a single transaction or charge from their merchant debit card. This disadvantage presents regulatory issues as well.

Therefore, a need exists for an improved merchant debit card program that overcomes these disadvantages.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic block diagram of an embodiment of a processing system in accordance with the present invention;

Figure 2 is a logic diagram of an embodiment of a method for a merchant debit card program in accordance with the present invention;

Figure 3 is a logic diagram of another embodiment of a method for a merchant debit card program in accordance with the present invention

Figure 4 is a schematic block diagram of an embodiment of a storage system in accordance with the present invention;

Figure 5 is a logic diagram of an embodiment of a method for establishing a merchant debit card program data in accordance with the present invention;

Figure 6 is a logic diagram of an embodiment of a method for creating a debit card account under the merchant debit card program in accordance with the present invention;

Figure 7 is a logic diagram of another embodiment of a method for creating a debit card account under the merchant debit card program in accordance with the present invention;

Figure 8 is a logic diagram of another embodiment of a method for creating a debit card account under the merchant debit card program in accordance with the present invention; and

5 Figure 9 is a logic diagram of an embodiment of a method for enrolling a debit card account under a merchant loyalty program in accordance with the present invention;

Figure 10 is a logic diagram of an embodiment of a method for processing transaction data to identify qualified transactions for a merchant loyalty program in accordance with the present invention;

10 Figure 11 is a logic diagram of an embodiment of a method for processing transaction data for qualified transactions to determine reward data for a merchant loyalty program in accordance with the present invention;

Figure 12 is a logic diagram of an embodiment of an authorization method for processing transaction data in accordance with the present invention;

15 Figure 13 is a logic diagram of an embodiment of a clearing and settlement method for processing transaction data in accordance with the present invention;

Figure 14 is a logic diagram of another embodiment of a method for establishing a merchant debit card program data in accordance with the present invention;

20 Figure 15 is a schematic block diagram of an embodiment of a card processing device in accordance with the present invention; and

Figure 16 is a schematic block diagram of an embodiment of a merchant processing device in accordance with the present invention.

DETAILED DESCRIPTION

25 In an embodiment, a merchant debit card program is established with a plurality of authorized issuers. The merchant debit card program includes a merchant loyalty program that provides rewards to enrolled debit card accounts. The authorized issuers provide management of the debit card accounts including customer statements, payment authorizations and customer service. Application data for a new debit card account is transmitted from a merchant system to one or more authorized issuers by a card processing system. Enrollment data for the merchant
30 loyalty program may also be transmitted from the merchant system to an authorized issuer by the card processing system. When debit card accounts are used by the customers, the card processing system performs authorization of the transaction and clearing and settlement of the transaction with the issuers and merchant. The card processing system may also identify qualified transactions that are eligible to earn rewards under the merchant loyalty program. The

merchant or card processing system may process the qualified transactions to determine rewards for the debit card accounts. The reward data is reported to the authorized issuers of the associated debit card accounts for the customers' account statements.

Figure 1 is a schematic block diagram of an embodiment of a system 5 that includes a card processing system 10, a plurality of proprietary interfaces 18-30, a plurality of issuer systems 32-36, a plurality of merchant systems 40-46, a merchant processing system 60, one or more acquirer systems 48, a proprietary gateway 50, a wide area network 52, and a plurality of customer devices 54-56. The merchant systems 40-46 are point of sale devices associated with a merchant that sells products and/or services. Such a merchant may have a single location or multiple national or international locations. The merchant may have an online or internet store. The issuer systems 32-36 are each associated with a different issuer. An issuer is a bank, financial institution or other entity that issues a debit card to commercial entities or consumers.

The card processing system 10 includes a card processing device 12, a storage system 14 and a proprietary network 16. The card processing device 12 includes one or more computing devices (e.g., computers, servers, super computers, main frames, etc.) coupled to the proprietary network 16. The proprietary network 16 and card processing device 12 have a storage system 14 coupled thereto. The storage system 14 may be one or more databases implemented in internal memory devices, storage area networks, network attached storage devices, or other storage devices located in one geographical location or multiple geographical locations. The storage system 14 may be structured as relational, network, hierarchal or object based or other type of structured database operable to store and locate data files.

The card processing device 12, the storage system 14, and the proprietary network 16 may be operated and maintained by a single transactional processing entity. For example, Visa, Inc. may provide its VisaNet® or Interlink® or Visa/Plus® ATM Network or combination thereof as the proprietary network 16. In another embodiment, the card processing system 12, the storage system 14 and the proprietary network 16 are owned and operated by different legal entities.

The network 52 provides access to the proprietary network 16 through the proprietary gateway 50. The network 52 may be a wide area network, such as the internet, or an access network or another proprietary network that connects devices to the proprietary network 16 through the proprietary gateway 50. The proprietary gateway 50 includes one or more edge network nodes that control access to the proprietary network 16 and may also provide firewall and routing services to the proprietary network 16 to ensure only authorized communications are transmitted in the proprietary network 16.

The merchant processing system 60 includes a merchant processing device 62 and may also include other nodes, networks, storage systems or other devices. The merchant processing system 60 is operable to receive application data 64 and enrollment data 66. In an embodiment, application data 64 and enrollment data 66 may be received from a web browser running on a customer device 54-56 that accesses a debit card order graphical user interface (GUI) program, such as HTML documents, downloaded from a web server at either one of the plurality of issuer systems 32-36 or from the merchant processing system 60.

Figure 2 is a logic diagram of an embodiment of a method for a merchant debit card program in accordance with the present invention. To establish the merchant debit card program, the merchant and plurality of authorized issuers agree on financial and other terms for issuance of debit card accounts under the merchant debit card program. The authorized issuers also agree on management of deposit accounts associated with the debit card accounts. The authorized issuers may also be requested to perform certain support processes for the merchant loyalty program, such as reporting reward data on deposit account statements, management of reward redemptions, etc. In step 80, the merchant debit card program data is transmitted by the merchant processing system 60 to the card processing system 10. The card processing system 10 stores the merchant debit card program data in storage system 14. The program data includes information for the plurality of issuers. In step 82, a debit card account is created by the card processing system 10 under the merchant debit card program. The debit card account includes an identification of one of the plurality of authorized issuers. In addition, the debit card account may include enrollment data in the merchant loyalty program. In step 84, the card processing system 10 processes transaction data from a plurality of financial transactions. The plurality of financial transactions includes transactions from debit card accounts enrolled in the merchant loyalty program as well as financial transactions from other card accounts. The card processing system 10 identifies the qualified transactions from the plurality of financial transactions that are eligible or qualified to receive rewards under the merchant loyalty program. In step 86, the qualified transactions are processed to determine reward data, such as currency, points, miles or other rewards, for the associated debit card accounts. The merchant processing system 60 or card processing system may perform the processing in step 86. Reward data for the debit card accounts is then consolidated and transmitted to the merchant processing system 60. The reward data is also transmitted to each of the authorized issuer systems 32-36 for their respective debit card accounts.

Figure 3 illustrates a logic diagram of an embodiment of a method 100 for a merchant debit card program in accordance with the present invention. The method 100 illustrates several

embodiments that may be employed to select one of the plurality of authorized issuers for a debit card account under the merchant loyalty program. Though only issuer A system 32 and issuer B system 34 are shown, additional issuer systems may be included in the embodiments described. As shown in step 102, merchant debit card program data is transmitted from the merchant processing system 60 to the card processing system 10 to establish the merchant debit card program. The merchant debit card program data includes issuer data for a plurality of issuers. In an embodiment, the merchant debit card program data also includes merchant loyalty program data. The card processing system 10 stores the program data in storage system 14.

In step 104, the merchant processing system 60 transmits application data to the card processing system 10. In an embodiment, the application data 64 includes a selection or identification from a customer of one of the plurality of authorized issuers. For example, a customer may request a debit card account to be associated with an existing deposit account managed by an authorized issuer. In another example, a customer may include a request for a new deposit account with a selected authorized issuer as well as a debit card account. For example, a customer may not have an existing deposit account with one of the authorized issuers and prefers to open a new deposit account with one of the authorized issuers. In another embodiment, the merchant processing system 60 may select an authorized issuer and include an identification of the authorized issuer in the application data. For example, the merchant processing system 60 may select an authorized issuer based on issuer selection criteria, such as geographical region, application flow, financial terms or other criteria.

When the application data 64 includes an identification of an authorized issuer, the card processing system 10 processes the application data and transmits application data to the selected authorized issuer as shown in step 106. The application data transmitted to the selected authorized issuer may be the same application data or may be modified by the card processing system 10. The selected authorized issuer then transmits an application response with an acceptance or rejection of the debit card account and if requested, an associated deposit account. The application response may also include debit card account and deposit account terms and conditions. The card processing system 10 receives the application response in step 108 and transmits the application response to the merchant processing system 60 in step 110.

When accepted, enrollment data for the debit card account in the merchant loyalty program is transmitted in step 112 to the card processing system 10. The card processing system 10 transmits the enrollment data to the authorized issuer in step 114. Alternatively, the enrollment data for the merchant loyalty program may also be included in the application data.

In another embodiment, the application data does not include a selection or identification of one of the plurality of issuers. In step 116, application data, including enrollment data, is transmitted to the card processing system 10. In this embodiment, the card processing system 10 selects one of the plurality of authorized issuers. For example, the card processing system 10 may select an authorized issuer based on issuer selection criteria from the merchant processing system 10, such as geographical region, application flow, financial terms or other criteria. The card processing system 10 then transmits the application data and enrollment data to the selected authorized issuer in step 118. The selected authorized issuer then transmits an application response with an acceptance or rejection of the debit card account and if requested, an associated deposit account in step 120. The card processing system 10 receives the application response and transmits the application response to the merchant processing system 60 in step 122.

In another embodiment, the card processing system 10 transmits the application data to more than one of the plurality of issuers. The application data may include an identification of multiple authorized issuers selected by the customer. Alternatively, the merchant processing system 60 or card processing system 10 may select multiple issuers based on issuer selection criteria, such as geographical region, application flow, financial terms or other criteria. In step 124, the card processing system 10 receives the application data and transmits the application data to a plurality of authorized issuers in steps 126 and 128. The card processing system 10 receives application response from a plurality of issuers in steps 130, 132. The application response from each issuer includes either a rejection of the application or an approval of the debit card account and deposit account, if requested, with the issuer's terms and conditions. The card processing system transmits the application responses to the merchant processing system 60 in step 134. When more than one of the plurality of issuers approves an application, in step 136, the card processing system 10 receives a selection response from the merchant processing system 60. The selection response includes a selection of one of the responding authorized issuers. The selection of the issuer may be performed by the customer, e.g. based on preference of an issuer's terms and conditions or other criteria. The selection of the issuer may also be performed by the merchant processing system 60 or card processing system 10 based on issuer selection criteria, such as geographical region, application flow, financial terms or other criteria. The card processing system 10 transmits the selection response to the responding authorized issuers in step 138 and 140.

In another embodiment, an existing debit card account is enrolled in the merchant loyalty program. In step 142, enrollment data for an existing debit card account is received by the card

processing system 10. The card processing system 10 transmits the enrollment data to the issuer of the existing debit card account in step 144.

Figure 4 is a schematic block diagram of an embodiment of the storage system 14 in accordance with the present invention. Figure 4 illustrates the type of data that may be stored by the card processing system 10 in an embodiment of the invention. The merchant debit card program data 150 includes issuer data 152 and authorized issuer data 154a-n for each of the plurality of authorized issuers. The issuer data 152 includes identification of the authorized issuers, financial terms, and other needed data applicable to the plurality of authorized issuers. The authorized issuer data 154a-n includes data applicable to one of the authorized issuers. Issuer selection criteria 156 may also stored in an embodiment of the invention. Issuer selection criteria includes information for the card processing system 10 to select an authorized issuer from the plurality of issuers 32-26, e.g. for transmission of application data. The merchant debit card program data 150 also includes merchant loyalty program data 158. The merchant loyalty program data 158 includes qualified transactions criteria 160 and program reward data 162 needed to process transaction data for the merchant loyalty program.

The storage system 14 also stores information for debit card accounts 164a-n issued under the merchant debit card program. The debit card accounts 164a-n include issuer identification 166 that provides identification of the issuer for the debit card account. Enrollment data 168 is stored that specifies enrollment status of the debit card account under the merchant loyalty program. In an embodiment, reward data 170 may also be stored for the debit card accounts 164a-n. The storage system 14 also stores qualified transaction data 172 for the merchant loyalty program in one or more consolidated files.

Figure 5 is a logic diagram of an embodiment of a method 200 for establishing a merchant debit card program in accordance with the present invention. In step 202, the card processing system 10 receives and stores program data 150 for a merchant debit card program. In step 204, card processing system 10 receives and stores issuer data 152, 154 for a plurality of authorized issuers. In step 206, the card processing system 10 receives and stores merchant loyalty program data 158 for the merchant loyalty program. In step 208, the card processing system 10 receives and stores qualified transaction criteria 160 to identify transactions qualified to receive rewards under the merchant loyalty program. In step 210, the card processing system 10 receives and stores program reward data 162 that provides guidelines or policies or rules for assigning rewards, such as points, miles, credits, cash back, etc., to a debit card account based on the qualified transactions.

Figure 6 illustrates a logic diagram of an embodiment of a method 220 for creating a debit card account under the merchant debit card program in accordance with the present invention. In steps 222 and 224, the card processing system 10 receives application data for a debit card account and enrollment data for the merchant loyalty program. In step 226, the card processing system 10 transmits the application data and enrollment data to one of the plurality of authorized issuer systems 32-36, wherein the one of the plurality of authorized issuers manages a deposit account identified in the application data. In step 228, the card processing system 10 receives an application response with an acceptance or rejection of the debit card account. In step 230, the card processing system 10 transmits the application response to the merchant processing system 60. When an approval is received from the authorized issuer in the application response, the card processing system 10 creates a debit card account with an identification of the authorized issuer in step 232.

Figure 7 is a logic diagram of another embodiment of a method 240 for creating a debit card account under the merchant debit card program in accordance with the present invention. In step 242, the card processing system 10 receives application data for a deposit account and debit card account. In step 244, the card processing system 10 receives enrollment data for the merchant loyalty program. In step 246, the card processing system 10 transmits the application data to one of the plurality of authorized issuer systems 32-36, wherein the one of the plurality of authorized issuers is selected based on issuer selection criteria. In step 248, the card processing system 10 receives an application response with an acceptance or rejection of the debit card account and deposit account. In step 250, the card processing system 10 transmits the application response to the merchant processing system 60. When receiving approval of the debit card account from the selected authorized issuer, the card processing system 10 transmits enrollment data to the authorized issuer system 32-36 in step 252. In step 254, the card processing system 10 creates a new debit card account with the debit card application data, wherein the debit card account includes an identification of the authorized issuer.

Figure 8 is a logic diagram of another embodiment of a method 260 for creating a debit card account under the merchant debit card program in accordance with the present invention. In step 262, the card processing system receives application data for a deposit account and debit card account. In step 264, the card processing system 10 receives enrollment data for the merchant loyalty program. In step 266, the card processing system 10 transmits the application data and enrollment data to a plurality of authorized issuer systems 32-36. In step 268, the card processing system 10 receives application response data from one or more of the plurality of the authorized issuer systems 32-36, wherein the application response data includes an acceptance or

approval for a debit card account and card account terms for the debit card account. The application response data may also include a rejection of the debit card account. In step 270, the card processing system 10 transmits the application response data from the one or more of the plurality of authorized issuers to the merchant processing system 60. In step 272, the card processing system 10 receives a selection of an authorized issuer. In step 274, the card processing system 10 transmits the selection to the selected authorized issuer system 32-36. In step 276, the card processing system 10 creates a new debit card account with the debit card application data, wherein the debit card account includes an identification of the selected authorized issuer.

Figure 9 is a logic diagram of an embodiment of a method 280 for enrolling a debit card account under a merchant loyalty program in accordance with the present invention. In this embodiment, an existing debit card account is enrolled in the merchant loyalty program. In step 282, card processing system 10 receives enrollment data for an existing debit card account. In step 284, the card processing system 10 transmits the enrollment data to the issuer system 32-36 of the existing debit card account. In step 286, the card processing system 10 stores the enrollment data in the existing debit card account in the storage system 14.

Figure 10 is a logic diagram of an embodiment of a method 300 for processing transaction data to identify qualified transactions for a merchant loyalty program in accordance with the present invention. In step 302, the card processing system 10 receives transaction data for a plurality of financial transactions. The transactions may be received from a plurality of different merchant systems 40-46 or acquirers 48, as shown in Figure 1. The transactions may be from a plurality of different types of cards, including credit cards, debit cards, prepaid cards, gift cards, etc. In step 304, the card processing system 10 processes the transaction data from the plurality of financial transactions to identify qualified transactions. Qualified transactions include transactions from debit card accounts enrolled in the merchant loyalty program that are eligible for rewards. In one embodiment, the card processing system 10 identifies qualified transactions by determining from the transaction data whether the card account is associated with the merchant debit card program as shown in step 306. When the card account is associated with the merchant debit card program, the card processing system 10 determines from the transaction data whether the debit card account is enrolled in the merchant loyalty program as shown in step 308. When the debit card account is enrolled in the merchant loyalty program, the card processing system 10 determines from the transaction data whether the transaction meets the qualified transaction criteria 160 for the merchant loyalty program, as shown in step 310.

The qualified transaction criteria 160 defines transactions that are eligible for rewards under the merchant loyalty program. The qualified transaction criteria 160 may be modified as desired by the merchant from time to time in managing the merchant loyalty program. For example, the qualified transaction criteria 160 may specify that only transactions originating from the merchant are qualified for rewards under the merchant loyalty program. The qualified transaction criteria 160 may specify that only transactions over a certain value or dollar amount are qualified for rewards under the merchant loyalty program. The qualified transaction criteria 160 may specify that only a specified number of transactions during a period qualify for rewards under the merchant loyalty program. The qualified transaction criteria 160 may include different requirements, policies or criteria as well.

When the transaction meets the qualified transaction criteria 160, the card processing system 10 identifies the transaction as a qualified transaction under the merchant loyalty program, as shown in step 312. When a transaction fails to meet one of the requirements, the card processing system 10 omits the transaction data from the qualified transactions, as shown in step 314.

In an embodiment, the card processing system 10 consolidates the transaction data for the qualified transactions in one or more files in step 316 and in step 318, transmits the qualified transactions to a merchant processing system. The card processing system 10 may transmit the consolidated files of transaction data for qualified transactions on a daily basis, weekly basis or other time period.

Figure 11 is a logic diagram of an embodiment of a method 320 for processing transaction data for qualified transactions to determine reward data for a merchant loyalty program in accordance with the present invention. In an embodiment, the merchant processing system 60 processes the transaction data to determine reward data. In this embodiment, the merchant processing system 60 receives the consolidated files of transaction data for qualified transactions from the card processing system 10 as shown in step 322. In step 324, the merchant processing system 60 determines associated debit card accounts for the qualified transactions and in step 326, processes the transaction data to determine reward data based on the program reward data 162.

The program reward data includes criteria, rules, policies or requirements for assigning reward data to debit card accounts for qualified transactions. For example, the program reward data may specify that qualified transactions originating from the merchant receive a first predetermined number of reward points while qualified transactions originating from other merchants receive a second number of reward points. The program reward data may specify that

reward points are assigned based on value or dollar amount of the transaction or based on a number of transactions. The program reward data may specify that rewards include points or miles toward future purchases from the merchant, cash back rewards, discounts or credits at the merchant, credits that may be exchanged for other merchant products or services, etc.

5 When the reward data is determined, the merchant processing system 60 stores reward data for the qualified transactions in associated debit card accounts in step 328. In step 330, the merchant processing system 60 transmits the reward data for debit card accounts to the authorized issuer systems 32-36 via the network 52 or via the proprietary network 16. The merchant processing system 60 may transmit the reward data to the card processing system 10 as
10 well.

In another embodiment, the card processing system 10 processes the transaction data to determine reward data as shown in steps 324 and 326. In this embodiment, the card processing system 10 may store reward data for the qualified transactions in associated debit card accounts in storage system 14 and transmits the reward data for debit card accounts to the merchant
15 processing system 60 and authorized issuer systems 32-36.

Figure 12 is a logic diagram of an embodiment of an authorization method 350 for processing transaction data in accordance with the present invention. In step 352, the card processing system 10 receives an authorization request for a transaction from an acquirer system 48 or merchant system 40-46. In general, the authorization request is initiated when a merchant
20 system 40-46 receives card information and obtains a transaction amount. The merchant system 40-46 transmits the card information and the transaction amount to an acquirer system 48 which combines the card information and the transaction amount into an authorization request. The acquirer system 48 then transmits the authorization request to the card processing system 10. The card processing system 10 routes the authorization request to one of a plurality of issuer
25 system 32-326 in step 354. The issuer system 32-36 approves or denies the transaction in an authorization response transmitted to the card processing system 10. The card processing system 10 then forwards the authorization response from the issuer system 32-36 to the acquirer system 48 or merchant system 40-46 in step 356. In another embodiment, the card processing system 10 may perform a stand-in review and authorization for the issuer system 32-36. Thus, in an
30 embodiment, transactions by debit card accounts under the merchant debit card program are authorized at the time of the transaction.

Figure 13 is a logic diagram of an embodiment of a clearing and settlement method 360 for processing transaction data in accordance with the present invention. An acquirer system 48 formats transaction data into a settlement request and transmits it to the card processing system

10. In step 362, the card processing network 10 receives the settlement request and in step 364 processes the settlement request to calculate settlement obligations of the issuer, processing fees, and amount due the acquirer system. The card processing network 10 then transmits the settlement request to the issuer system 32-36 in step 366. The issuer system 32-36 transmits
5 settlement data to the card processing network 10 and transfers settlement funds to a designated account of the card processing system 10 in step 368. The issuer processes the transaction data and debits each transaction separately from the customer's deposit account. The issuer system 32-36 also generates debit card account statements or deposit account statements which summarize the transactions and transaction data for a period of the customer's account. The
10 account statements provide information on each transaction performed with the debit card account. Thus, in an embodiment, a customer has a list of each transaction performed with the debit card account and each transaction amount is separately listed on their deposit account statements.

In step 370, the card processing system 10 processes the settlement data and in step 372,
15 transfers the settlement funds to the acquirer system 48. In addition, the card processing network 10 may assist in processing disputes over transactions or transaction data with dispute resolution procedures as shown in step 374. For example, a customer may dispute a transaction amount or assert that a transaction was committed fraudulently without authorization. The card processing system 10 may then initiate an investigation and a chargeback or reversal of financial liability of
20 a particular transaction by the issuer system 32-36 to an acquirer system 48. This dispute resolution process provides extra protection to a customer account holder of a debit card account under the merchant debit card program.

Figure 14 is a logic diagram of an embodiment of a method 380 for establishing a merchant debit card program data in accordance with the present invention. Figure 14 illustrates
25 an embodiment of some of the steps performed by the merchant processing system 60 for the merchant debit card program. In step 382, the merchant processing system 60 determines a plurality of authorized issuers for the merchant debit card program and financial terms for each of the authorized issuers. In step 384, the merchant processing system 60 receives application data and enrollment data for a debit card account. In step 386, the merchant processing system
30 60 approves the application data and enrollment data for the debit card account. In step 388, the merchant processing system 60 transmits the application data and enrollment data to the card processing system 10. In step 390, the merchant processing system 60 receives an application response from at least one of the plurality of issuer systems 32-36. In step 392, the merchant processing system 60 transmits the application response to the customer or customer device 54-

56. In another embodiment, the issuer system 32-36 may provide the application response to the customer or customer device 54-56.

The embodiments of the merchant debit card program provide a merchant with the ability to have a plurality of issuers for their debit card accounts. This ability increases access to more customers over a broader geographic area rather than being restricted to customers of a single issuer. The card processing network described in embodiments herein facilitates the interaction between the merchant and the plurality of issuers. For example, the card processing network helps facilitate creation of new debit card accounts and enrollment in the merchant loyalty program. In addition, the card processing system provides processing services such as processing transaction data to identify qualified transactions for the merchant loyalty program and processing qualified transactions to determine reward data for debit card accounts. The merchant debit card program with a plurality of issuers also maintains the direct relationship between the issuer and debit card account holder. The debit card account holder has access to their deposit account and visibility into each transaction with the debit card account. In addition, the card processing network provides transaction authorization processing, clearing and settlement and transaction dispute resolution procedures.

Figure 15 is a schematic block diagram of an embodiment of the card processing device 12 in accordance with the present invention. The card processing device 12 includes an input/output (I/O) module 402, a processing module 404 and a memory 406. In an embodiment, the card processing device 12 includes one or more servers, computers or similar processing devices. In such an embodiment, the processing module 404 includes a central processing unit; the memory 406 includes system memory, cache memory, and read only memory; the I/O module 402 includes a graphical user interface and/or a peripheral device interface (e.g., to connect to a mouse, a keyboard, etc.) and a video card, printer card, etc. In general, the processing module 404 may be a single processing device or a plurality of processing devices. Such a processing device may be a microprocessor, micro-controller, digital signal processor, microcomputer, central processing unit, field programmable gate array, programmable logic device, state machine, logic circuitry, analog circuitry, digital circuitry, and/or any device that manipulates signals (analog and/or digital) based on hard coding of the circuitry and/or operational instructions. The processing module 404 may have internal memory and/or is coupled to memory 406. Memory 406 and internal memory may each be a single memory device or a plurality of memory devices. Such a memory device may be a read-only memory, random access memory, volatile memory, non-volatile memory, static memory, dynamic memory, flash memory, cache memory, and/or any device that stores digital information. Note

that when the processing module implements one or more of its functions via a state machine, analog circuitry, digital circuitry, and/or logic circuitry, the memory storing the corresponding operational instructions may be embedded within, or external to, the circuitry comprising the state machine, analog circuitry, digital circuitry, and/or logic circuitry. Further note that, the internal memory and/or memory 406 stores, and the processing module 404 is operable to execute, hard coded and/or operational instructions corresponding to steps and/or functions illustrated in Figures 1-14.

Figure 16 is a schematic block diagram of an embodiment of the merchant processing device 62 in accordance with the present invention. The merchant processing device 62 includes an input/output (I/O) module 408, a processing module 410 and a memory 412. In an embodiment, the merchant processing device 62 includes one or more servers, computers or similar processing devices. In such an embodiment, the processing module 410 includes a central processing unit; the memory 412 includes system memory, cache memory, and read only memory; the I/O module 408 includes a graphical user interface and/or a peripheral device interface (e.g., to connect to a mouse, a keyboard, etc.) and a video card, printer card, etc. In general, the processing module 410 may be a single processing device or a plurality of processing devices. Such a processing device may be a microprocessor, micro-controller, digital signal processor, microcomputer, central processing unit, field programmable gate array, programmable logic device, state machine, logic circuitry, analog circuitry, digital circuitry, and/or any device that manipulates signals (analog and/or digital) based on hard coding of the circuitry and/or operational instructions. The processing module 410 may have internal memory and/or is coupled to memory 412. Memory 412 and internal memory may each be a single memory device or a plurality of memory devices. Such a memory device may be a read-only memory, random access memory, volatile memory, non-volatile memory, static memory, dynamic memory, flash memory, cache memory, and/or any device that stores digital information. Note that when the processing module implements one or more of its functions via a state machine, analog circuitry, digital circuitry, and/or logic circuitry, the memory storing the corresponding operational instructions may be embedded within, or external to, the circuitry comprising the state machine, analog circuitry, digital circuitry, and/or logic circuitry. Further note that, the internal memory and/or memory 412 stores, and the processing module 410 is operable to execute, hard coded and/or operational instructions corresponding to steps and/or functions illustrated in Figures 1-14.

As may be used herein, the term “operable to” indicates that an item includes one or more of processing modules, data, input(s), output(s), etc., to perform one or more of the described or

necessary corresponding functions and may further include inferred coupling to one or more other items to perform the described or necessary corresponding functions. As may still further be used herein, the term “associated with”, includes direct and/or indirect association of separate data and/or one data being embedded within another item.

5 The present invention has also been described above with the aid of method steps illustrating the performance of specified functions and relationships thereof. The boundaries and sequence of these functional building blocks and method steps have been arbitrarily defined herein for convenience of description. Alternate boundaries and sequences can be defined so long as the specified functions and relationships are appropriately performed. Any such alternate
10 boundaries or sequences are thus within the scope and spirit of the claimed invention.

 The present invention has been described above with the aid of functional building blocks illustrating the performance of certain significant functions. The boundaries of these functional building blocks have been arbitrarily defined for convenience of description. Alternate boundaries could be defined as long as the certain significant functions are appropriately
15 performed. Similarly, flow diagram blocks may also have been arbitrarily defined herein to illustrate certain significant functionality. To the extent used, the flow diagram block boundaries and sequence could have been defined otherwise and still perform the certain significant functionality. Such alternate definitions of both functional building blocks and flow diagram blocks and sequences are thus within the scope and spirit of the claimed invention. One of
20 average skill in the art will also recognize that the functional building blocks, and other illustrative blocks, modules and components herein, can be implemented as illustrated or by one or multiple discrete components, networks, systems, databases or processing modules executing appropriate software and the like or any combination thereof.

CLAIMS

What is claimed is:

1. A method for a merchant debit card program, the method comprising a plurality of steps each being performed by hardware executing software, wherein the steps include:

5 storing program data for a merchant debit card program, wherein the program data includes issuer data for a plurality of authorized issuers and loyalty program data for a merchant loyalty program; and

creating a debit card account under the merchant debit card program, wherein the debit card account is issued by one of the plurality of authorized issuers.

10 2. The method as defined in Claim 1, wherein the steps further comprise:

receiving transaction data for a plurality of financial transactions; and

processing the transaction data from the plurality of financial transactions to identify qualified transactions for debit card accounts enrolled in the merchant loyalty program.

3. The method as defined in Claim 2, wherein the steps further comprise processing
15 the transaction data for the qualified transactions to determine reward data for debit card accounts enrolled in the merchant loyalty program.

4. The method as defined in Claim 1, wherein creating a debit card account under the merchant debit card program, comprises:

20 receiving application data for a debit card account and enrollment data for the merchant loyalty program;

transmitting the application data and enrollment data to one of the plurality of authorized issuers, wherein the one of the plurality of authorized issuers manages a deposit account identified in the application data;

receiving approval of the debit card account from the authorized issuer; and

25 storing a new debit card account with the debit card application data, wherein the debit card account includes an identification of the authorized issuer.

5. The method as defined in Claim 1, wherein creating a debit card account under the merchant debit card program, comprises:

receiving application data for a deposit account and debit card account;

30 receiving enrollment data for the merchant loyalty program;

transmitting the application data and enrollment data to one of the plurality of authorized issuers, wherein the one of the plurality of authorized issuers is selected based on issuer selection criteria; and

when receiving approval of the debit card account from the selected authorized issuer, storing a new debit card account with the debit card application data, wherein the debit card account includes an identification of the authorized issuer.

6. The method as defined in Claim 1, wherein creating a debit card account under the merchant debit card program, comprises:

receiving application data for a debit account and debit card account;
receiving enrollment data for the merchant loyalty program; and
transmitting the application data and enrollment data to a plurality of authorized issuers.

7. The method as defined in Claim 6 wherein creating a debit card account under the merchant debit card program, further comprises:

receiving response data from one or more of the plurality of the authorized issuers, wherein the response data includes an acceptance for a debit card account and card account terms for the debit card account;

transmitting the response data from the one or more of the plurality of authorized issuers;

receiving a selection of an authorized issuer from the one or more of the plurality of authorized issuers; and

storing a new debit card account with the debit card application data, wherein the debit card account includes an identification of the selected authorized issuer.

8. The method as defined in Claim 2, wherein processing the transaction data from the plurality of financial transactions to identify qualified transactions for debit card accounts enrolled in the merchant loyalty program comprises:

determining from the transaction data whether the debit card account is associated with the merchant debit card program;

when the debit card account is associated with the merchant debit card program, determining from the transaction data whether the debit card account is enrolled in the merchant loyalty program;

when the debit card account is enrolled in the merchant loyalty program, determining from the transaction data whether the transaction meets the qualified transaction criteria for the merchant loyalty program; and

when the transaction meets the qualified transaction criteria for the merchant loyalty program, identifying the transaction as a qualified transaction under the merchant loyalty program.

9. The method as defined in Claim 8, wherein the steps further comprise:
consolidating the transaction data for the qualified transactions under the merchant
loyalty program; and
transmitting the qualified transactions to a merchant processing system.

5 10. The method as defined in Claim 3, wherein processing the transaction data for the
qualified transactions to determine reward data for debit card accounts enrolled in the merchant
loyalty program comprises:

determining reward data for each transaction based on the program reward data;
determining the associated debit card account for the transaction; and
10 storing the reward data for the transaction in the associated debit card account.

11. The method as defined in Claim 10, wherein the steps further comprise
transmitting the reward data for the debit card account to the authorized issuer for the debit card
account.

12. A card processing system, comprising:

15 a proprietary network;

a storage system; and

a card processing device operable to:

store program data for a merchant debit card program in the storage system,
wherein the program data includes issuer data for a plurality of authorized issuers and
20 loyalty program data for a merchant loyalty program; and

create a debit card account under the merchant debit card program, wherein the
debit card account is issued by one of the plurality of authorized issuers.

13. The card processing system of claim 12, wherein the card processing device is
further operable to:

25 receive transaction data for a plurality of financial transactions; and

process the transaction data from the plurality of financial transactions to identify
qualified transactions for debit card accounts enrolled in the merchant loyalty program.

14. The card processing system of claim 13, wherein the card processing device is
further operable to process the transaction data for the qualified transactions to determine reward
30 data for debit card accounts enrolled in the merchant loyalty program.

15. The card processing system of claim 12, wherein the card processing device is
operable to create a debit card account under the merchant debit card program by:

receiving application data for a debit card account and enrollment data for the merchant
loyalty program;

transmitting the application data and enrollment data to one of the plurality of authorized issuers, wherein the one of the plurality of authorized issuers manages a debit account identified in the application data;

receiving approval of the debit card account from the authorized issuer; and

5 storing a new debit card account with the debit card application data in the storage system, wherein the debit card account includes an identification of the authorized issuer.

16. The card processing system of claim 12, wherein the card processing device is operable to create a debit card account under the merchant debit card program by:

10 receiving application data for a deposit account and debit card account;

receiving enrollment data for the merchant loyalty program;

transmitting the application data and enrollment data to one of the plurality of authorized issuers;

receiving approval of the debit card account from the authorized issuer; and

15 storing a new debit card account with the debit card application data, wherein the debit card account includes an identification of the authorized issuer.

17. The card processing system of claim 12, wherein the card processing device is operable to create a debit card account under the merchant debit card program by:

receiving application data for a deposit account and debit card account;

20 receiving enrollment data for the merchant loyalty program; and

transmitting the application data and enrollment data to a plurality of authorized issuers.

18. The card processing system of claim 17, wherein the card processing device is further operable to:

receive response data from one or more of the plurality of the authorized issuers, wherein

25 the response data includes an acceptance for a debit card account and card account terms;

transmit the response data from the one or more of the plurality of authorized issuers;

receive a selection of an authorized issuer from the one or more of the plurality of authorized issuers; and

30 store a new debit card account with the debit card application data, wherein the debit card account includes an identification of the selected authorized issuer.

19. The card processing system of claim 13, wherein the card processing device is operable to process the transaction data from the plurality of financial transactions to identify qualified transactions for debit card accounts enrolled in the merchant loyalty program by:

determining from the transaction data whether the debit card account is associated with the merchant debit card program;

when the debit card account is associated with the merchant debit card program, determining from the transaction data whether the debit card account is enrolled in the merchant
5 loyalty program;

when the debit card account is enrolled in the merchant loyalty program, determining from the transaction data whether the transaction meets the qualified transaction criteria for the merchant loyalty program; and

when the transaction meets the qualified transaction criteria for the merchant loyalty
10 program, identifying the transaction as a qualified transaction under the merchant loyalty program.

20. The card processing system of claim 19, wherein the card processing device is operable to:

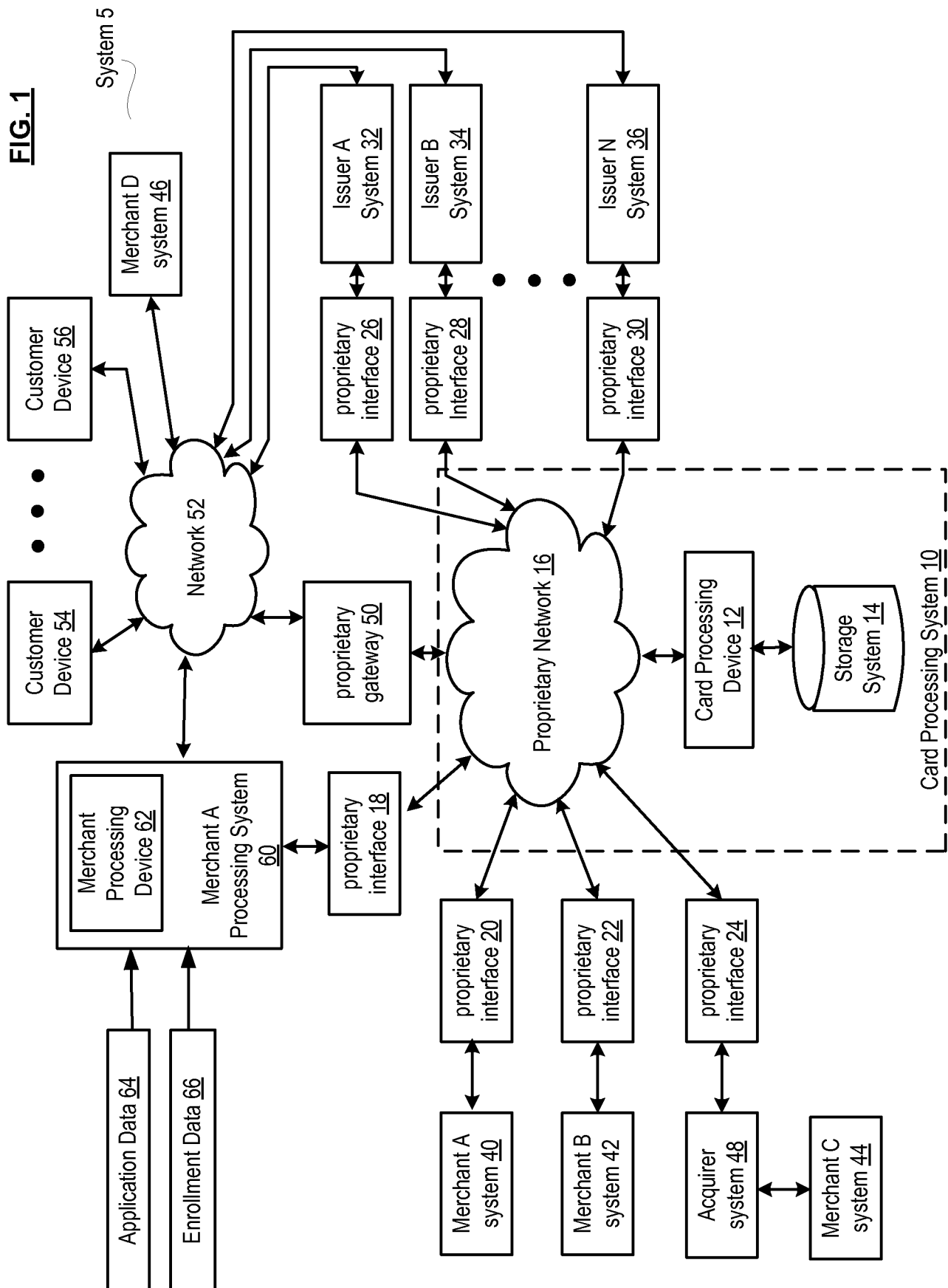
consolidate the transaction data for the qualified transactions under the merchant loyalty
15 program; and

transmit the qualified transactions to a merchant processing system.

21. The card processing system of claim 14, wherein the card processing device is operable to process the transaction data for the qualified transactions to determine reward data for debit card accounts enrolled in the merchant loyalty program by:

20 determining reward data for each transaction based on the program reward data;
determining the associated debit card account for the transaction; and
storing the reward data for the transaction in the associated debit card account.

22. The card processing system of claim 21, wherein the card processing device is further operable to transmit the reward data for the debit card account to the authorized issuer for
25 the debit card account.



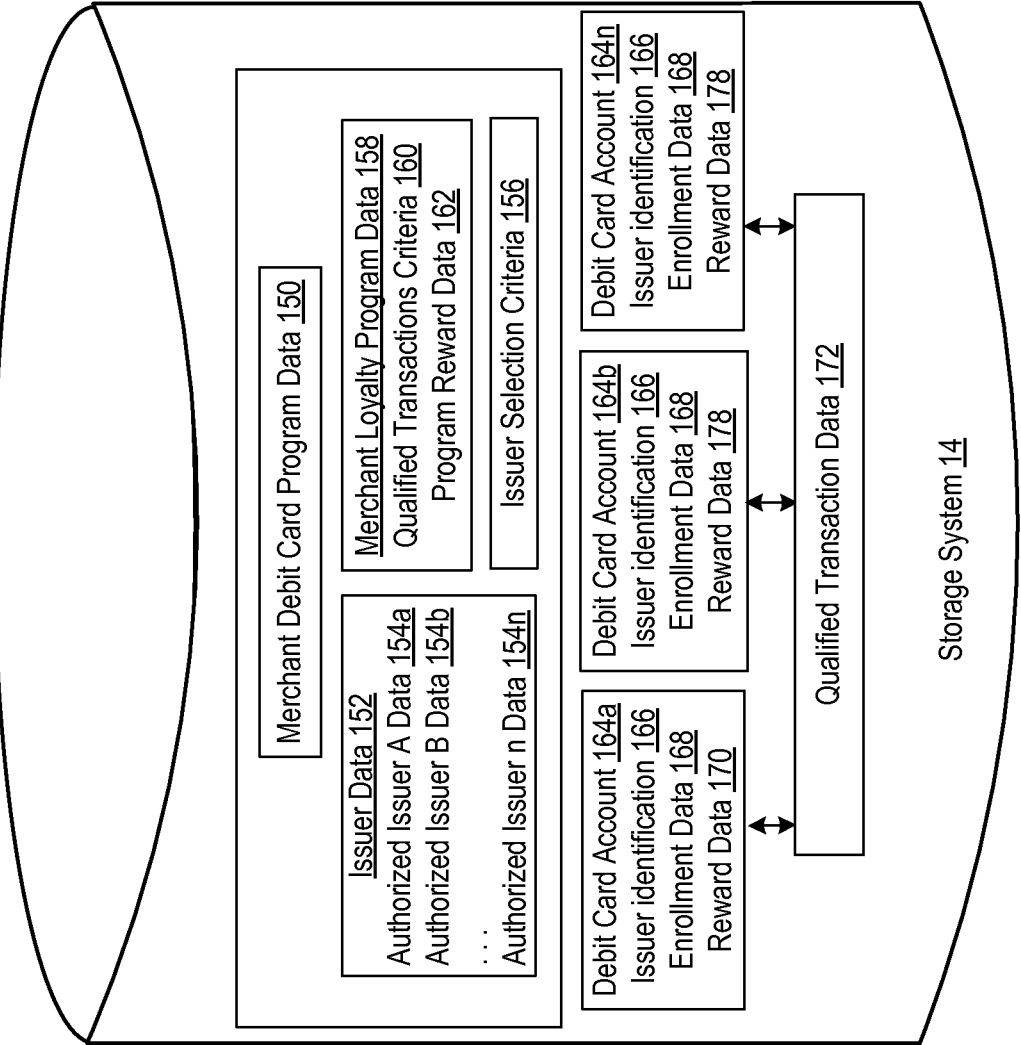


FIG. 4

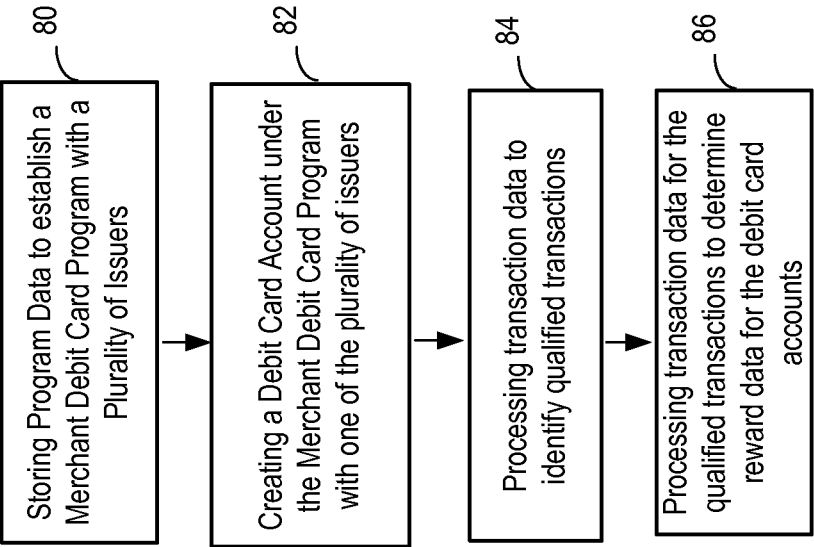


FIG. 2

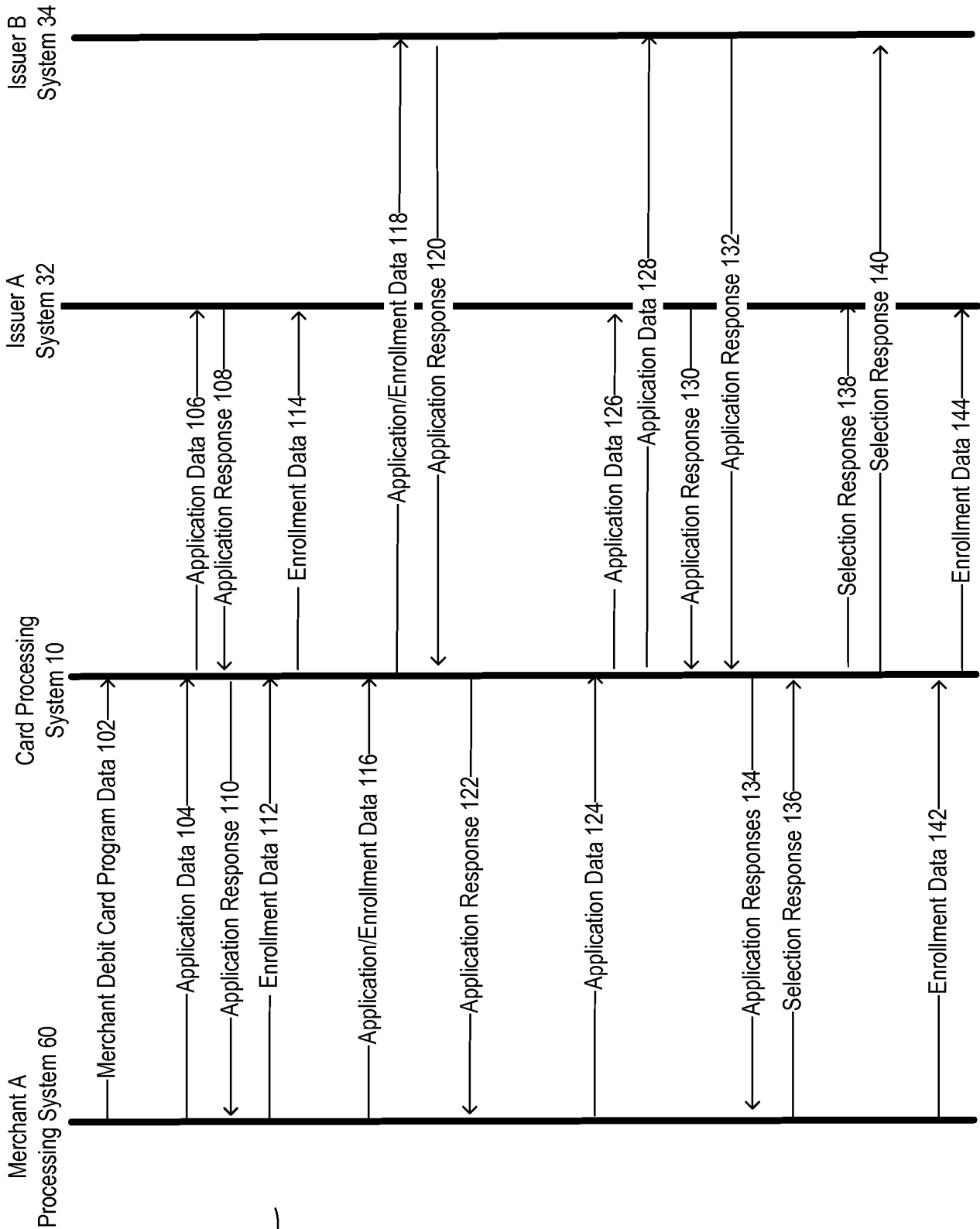


FIG. 3

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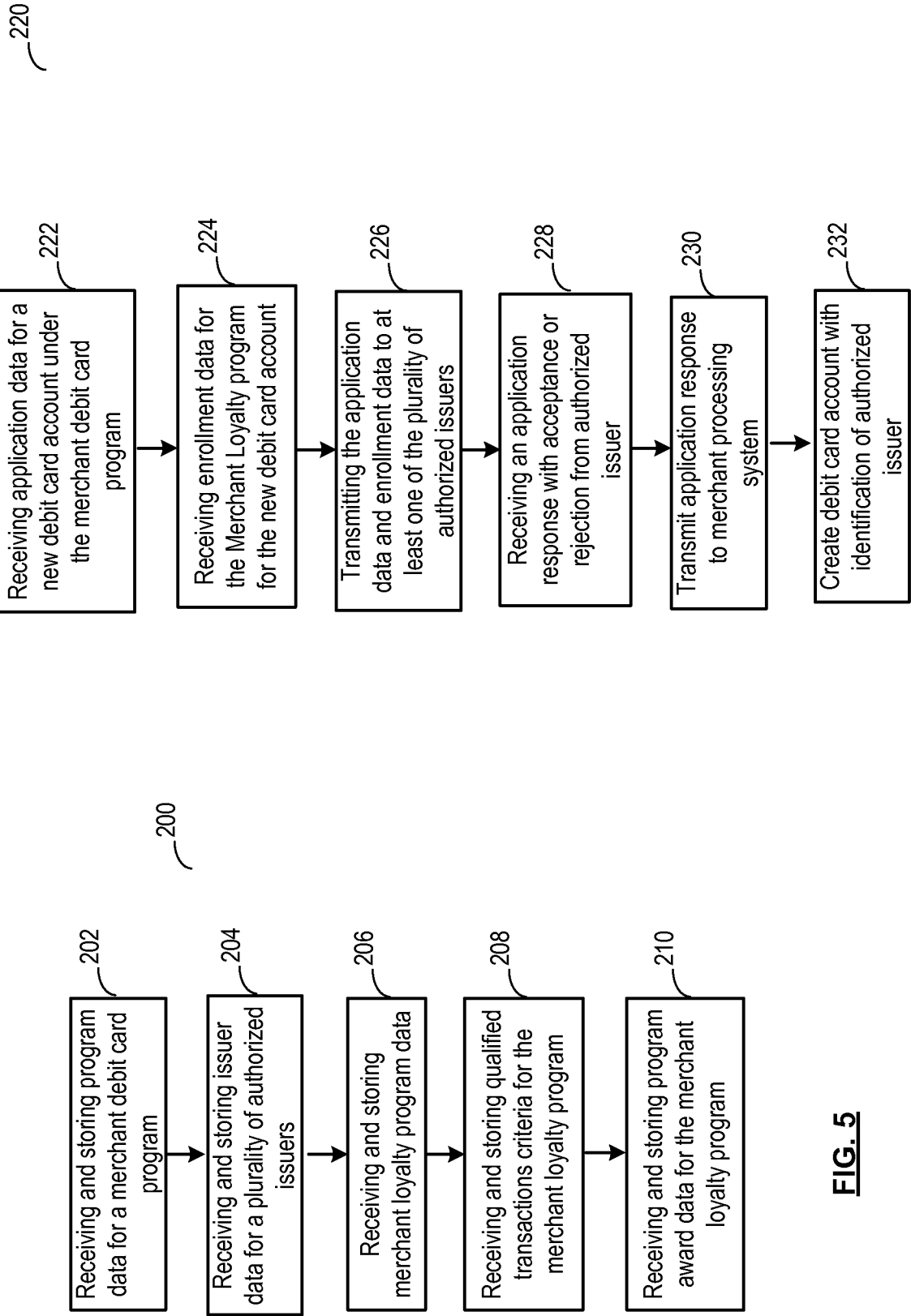
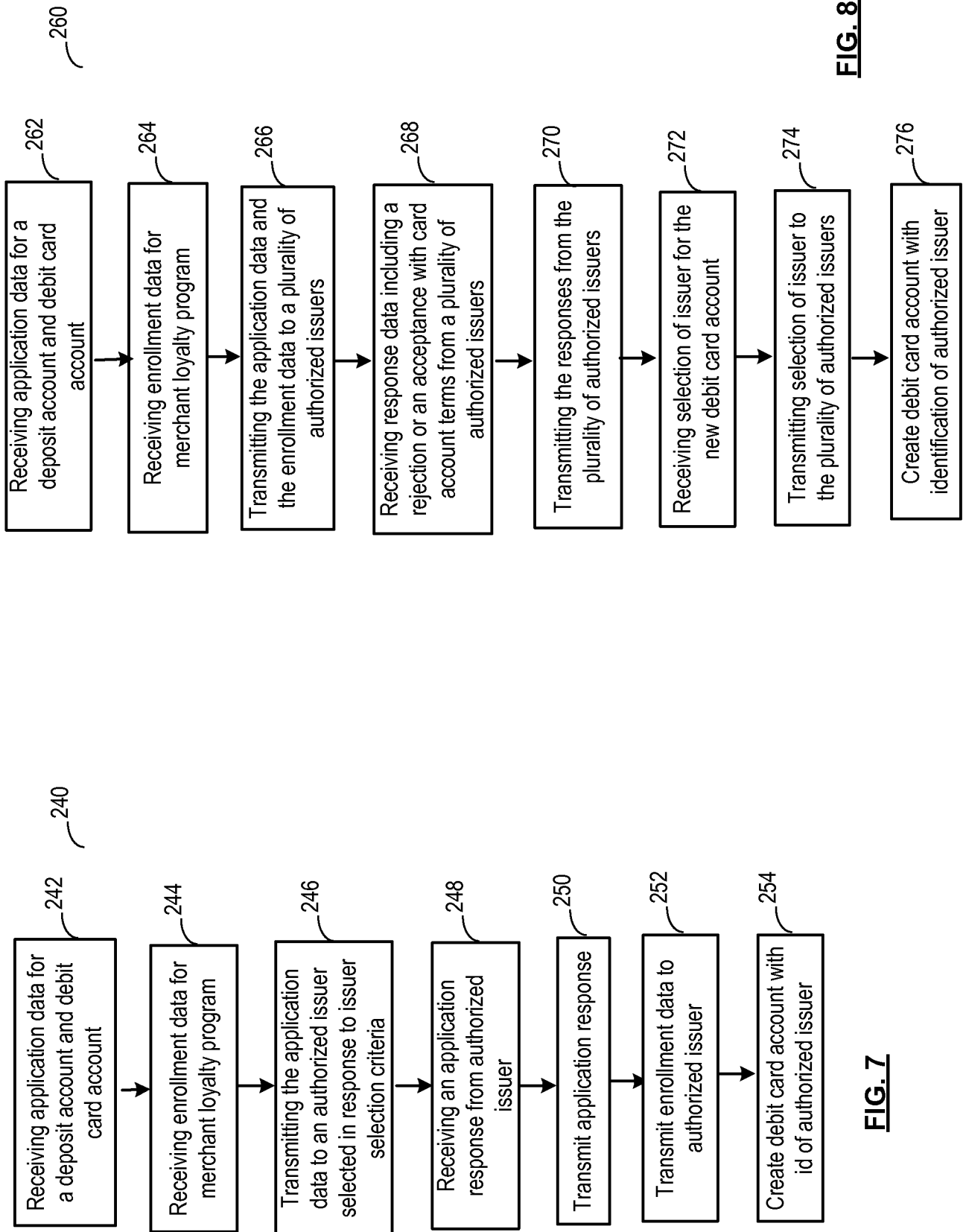
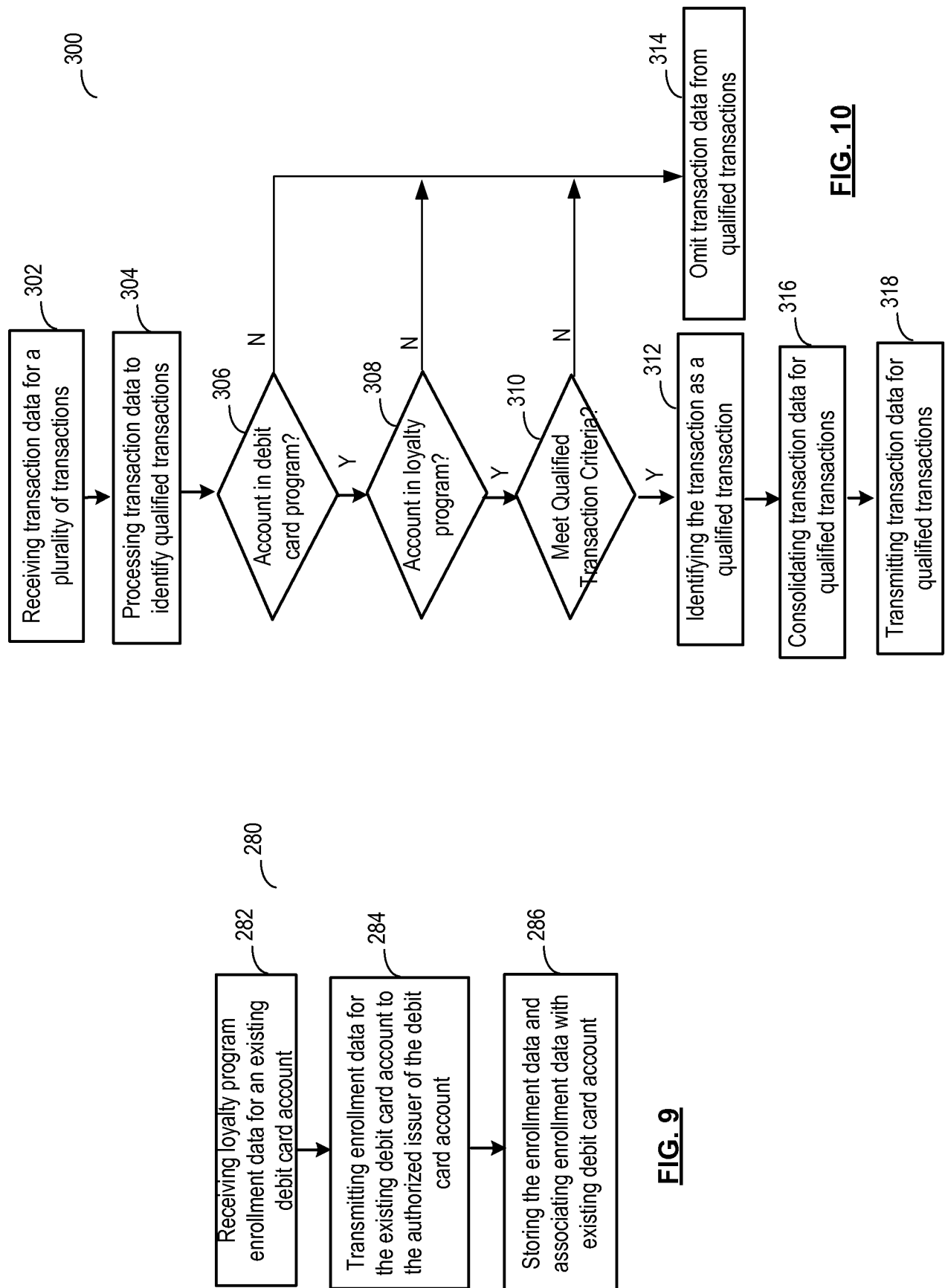
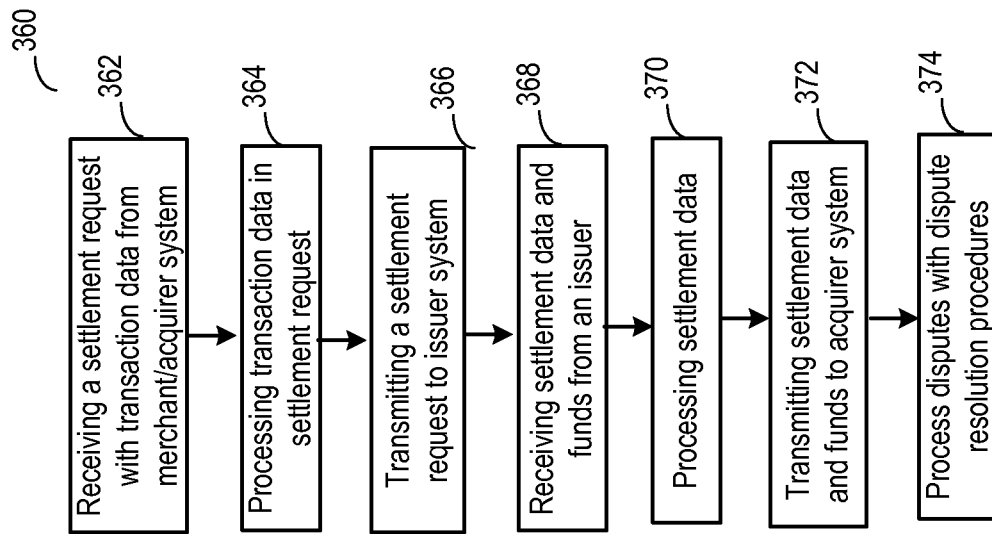
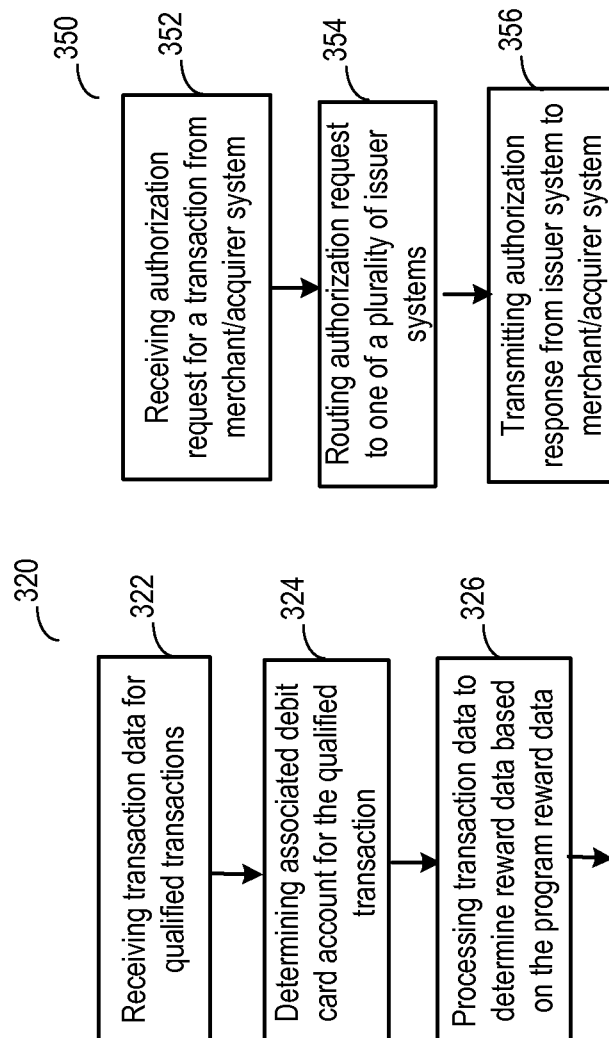
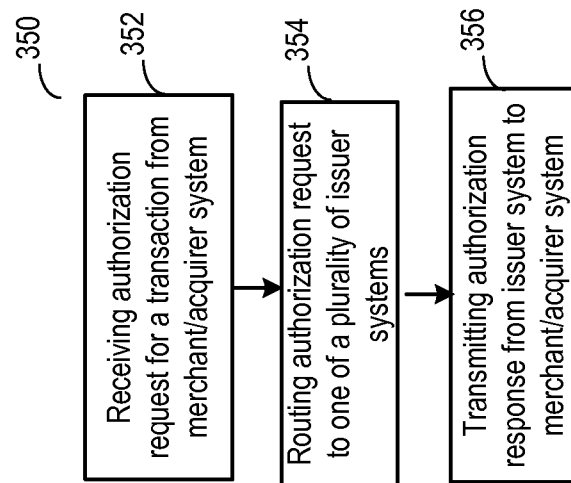


FIG. 6

FIG. 5

**FIG. 7****FIG. 8**



**FIG. 13****FIG. 11****FIG. 12**

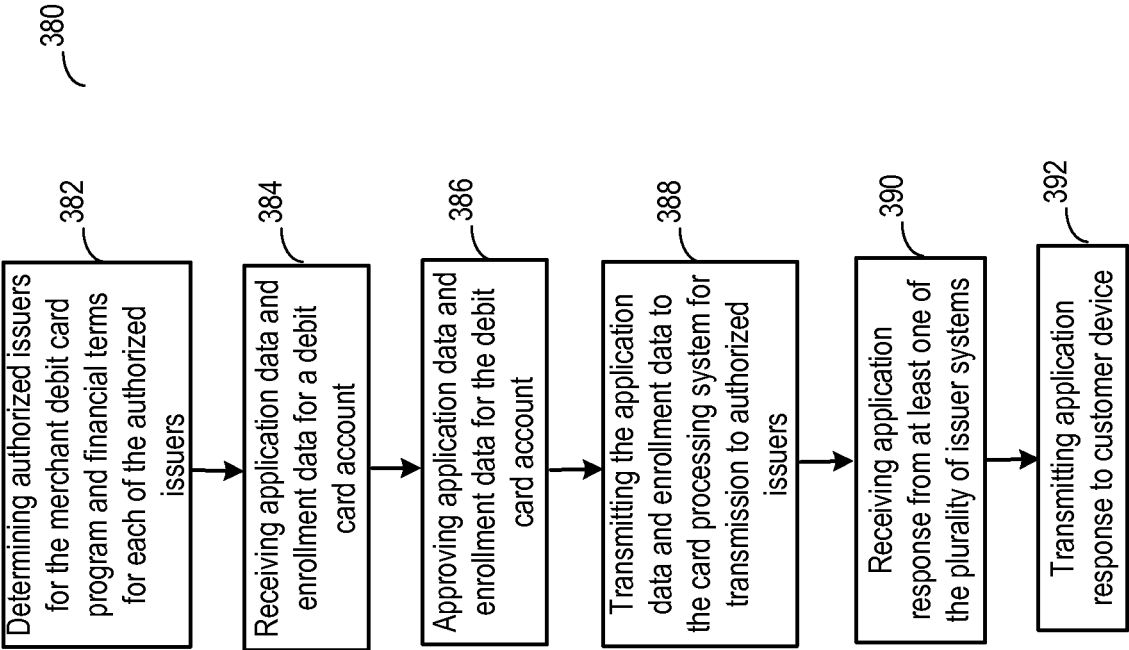


FIG. 14

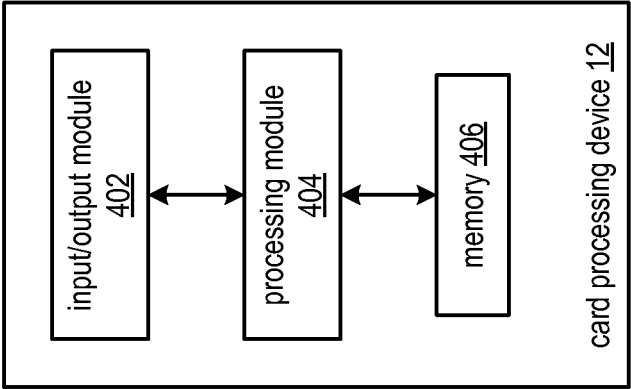


FIG. 15

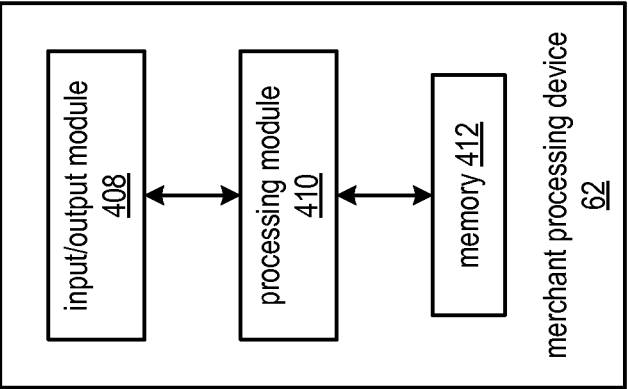


FIG. 16