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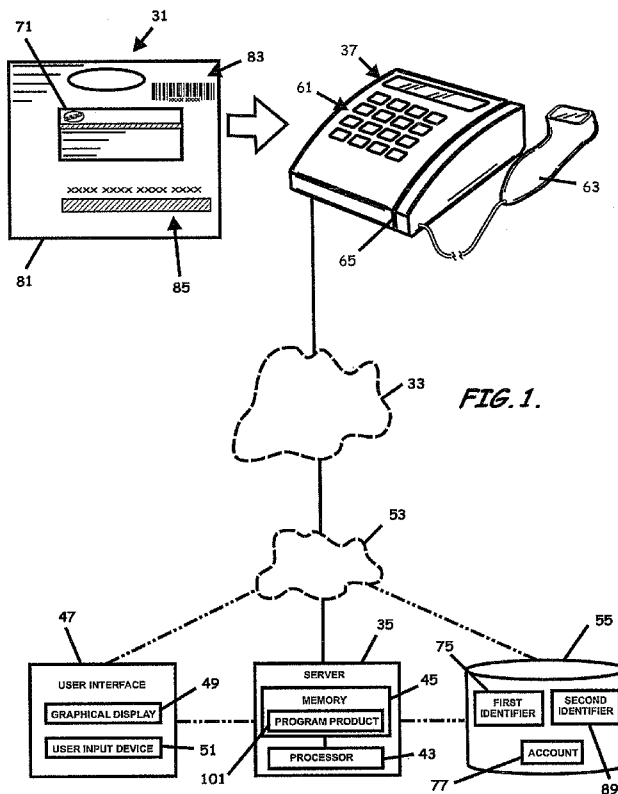
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(54) Title: SYSTEM, PROGRAM PRODUCT AND METHODS FOR RETAIL ACTIVATION AND RELOAD ASSOCIATED WITH PARTIAL AUTHORIZATION TRANSACTIONS



(57) Abstract: Systems, program product (101), apparatus and method for transmitting and processing the sale of a transaction card product (31) over an existing payment network (33) using partial authorization messaging, are provided. An example of such a system (30) can include a merchant POS apparatus (37) equipped to support partial authorization messaging, a transaction card issuer server (35) in communication therewith, and a transaction card product (31). The transaction card product (31) can include a conventional transaction card (71) securely wrapped within a tamper evident container (81) that can carry its own magnetic strip (85). The container magnetic strip (85) can store an assigned unique card identifier (89) linked to, but different from, the card identifier (75) normally associated with the card (71). The container card identifier (89) stored in the container magnetic strip (85) is compatible with the merchant POS card reader (37, 65) and is usable to activate the card (71) without the merchant or consumer having access to the card (71), the card identifier (75), or the card magnetic strip (73).

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**PCT PATENT APPLICATION**  
**SYSTEM, PROGRAM PRODUCT AND METHODS FOR RETAIL ACTIVATION AND**  
**RELOAD ASSOCIATED WITH PARTIAL AUTHORIZATION TRANSACTIONS**

**SYSTEM, PROGRAM PRODUCT AND METHODS FOR RETAIL ACTIVATION  
AND RELOAD ASSOCIATED WITH PARTIAL AUTHORIZATION  
TRANSACTIONS**

**BACKGROUND OF THE INVENTION**

**1. Related Applications**

[0001] This application claims priority to and the benefit of U.S. Provisional Patent Application No. 61/148,752, filed on January 30, 2009, titled "System, Program Product and Methods for Retail Activation and Reload Associated With Partial Authorization Transactions," U.S. Provisional Patent Application No. 61/110,332, filed October 31, 2008, titled "System, Program Product and Methods for Retail Activation and Reload Associated With Partial Authorization Transactions," U.S. Provisional Patent Application No. 61/094,335, filed September 4, 2008, titled "System, Program Product and Methods for Retail Activation and Reload Associated With Partial Authorization Transactions," and U.S. Provisional Patent Application No. 61/118,127, filed on November 26, 2008, titled "System, Apparatus, Methods and Program Product for Electronic Inventory Tracking," and is related to U.S. Provisional Patent Application No. 61/110,319, filed on October 31, 2008, titled "System, Methods, and Program Product for Electronic Order Entry," each incorporated by reference in its entirety.

**2. Field of the Invention**

[0002] The present invention relates generally to the financial service and card product industries, and more specifically, to systems, program products, and associated methods of activating financial and non-financial transaction cards and reloading debit-type and other prepaid payment or other cards using partial authorization messaging.

**3. Description of Related Art**

[0003] It has been known that banks offer and sell bank card products such as debit cards, credit cards, automatic teller machine (ATM) cards, gift cards, and combinations thereof, e.g., ATM/debit card, which provide an alternative payment methodology to that of using cash (hard-currency) or paper checks when making purchases. Such cards typically have advantages that can not be provided by the use of cash. For example, if cash is stolen, even if the thief is caught, it is almost impossible to prove ownership of the cash. Further, the issuers

of the cards typically have procedures to absolve or limit liability of the consumer if the theft is reported within a preset time frame. Such cards also can have or provide built in procedures that help prevent usage by less educated thieves. Further, because of the convenience and flexibility, such cards have become a valuable tool used by retailers to provide consumers with rebates, in-store credit, and promotions.

[0004] From the aspect of the consumer, use of such cards, particularly debit cards, e.g., pre-paid debit cards, branded gift cards, etc., are functionally similar to writing a check, as the funds are withdrawn directly from either the bank account, or in some cases, from the remaining balance on the card. Although credit cards have been popular for many years, the use of debit-type cards has only more recently become wide-spread, and is still growing. Such use, in fact, in many countries, has quickly moved to a point of becoming more popular than the "paper" check, and at least by volume, in certain instances, has even exceeded the use of cash.

[0005] From the aspect of the merchant, there has traditionally been a substantial difference in the methodology of handling debit cards from that of handling credit cards. For example, credit card purchases have traditionally been processed through use of a merchant account affiliated with a credit card payment network such as, for example, Visa®, MasterCard®, American Express®, Discover®, etc., whereas debit card purchases have traditionally been processed through an interbank network such as, for example, Cirrus®, PLUS®, etc.

[0006] Debit cards supplied directly by a bank that provide access to funds of a specific user bank savings or checking account have traditionally been mailed directly to the user's address provided by the user for the bank to send monthly bank statements and are activated using a 1-800 number. Other types of the cards, for example, gift and other prepaid cards, however, are generally delivered directly by the merchant. Activation of such prepaid cards has typically been through use of proprietary activation terminals unique to the card issuer's distributor. This type of system is typically referred to as a "closed system." In one exemplary closed system, at the time of sale, the retail merchant enters a card identifier and a value into a dedicated activation terminal. The activation terminal connects to the computer system of the card issuer's distributor and sends the entered value to request activation of the identified card. Although somewhat functional, such closed systems can be expensive to implement, both monetarily and space wise, due to the requirement for having the dedicated terminal. Further, such systems can limit a merchant's ability to easily switch between

different card issuers, as one card issuer's distributor's activation terminal would not be expected to be compatible with a different card issuer's distributor's system.

[0007] Some newer types of card systems utilize the multi-application capability of the merchant's standard POS terminals provided by "open systems" payment vendors to permit a "closed system" application to reside in the "open systems" payment terminal. Such systems can allow access to the card issuer via the traditional debit network, through a sponsor bank, or via a direct connection, etc. Such systems, however, can be expensive to implement and can have a significant impact on the point-of-sale system. For example, such systems require substantial software upgrades to the merchant's point-of-sale ("POS") system. Such upgrades typically have a substantial lag (e.g., six months or more) between the time a merchant requests such upgrades and the time such upgrades are tested and delivered. Accordingly, such systems can also limit a merchant's ability to easily switch between different card issuers, as one card issuer's software upgrades would not be expected to be compatible with a different card issuer's system. Further, such systems can slow down the checkout line as they may require an interruption in the normal register operations once a merchant begins to process the sale of the prepaid card. Recognized by the inventors, however, is that "open systems" nevertheless have the potential for providing the merchant needed flexibility.

[0008] These tradition closed and hybrid card systems also characteristically implement the settlement of activation funds as a funding transaction between the merchant and the issuer's distributor and then between the issuer's distributor and the issuer. Such methodology adds a significant delay and risk in protecting and facilitating the accessibility of the customer's money.

[0009] Accordingly, recognized by the inventors is the need for a system, apparatus, program product, and methods which can allow activation of gift and other prepaid cards via the merchant's POS system that does not require significant software upgrades, that can use existing POS system communication networks, and that does not require interruption in normal register operations, and that can settle activation funding directly between merchant and issuer in a timely manner.

#### SUMMARY OF THE INVENTION

[0010] In view of the foregoing, various embodiments of the present invention advantageously provide a system, apparatus, program product, and methods that can allow activation of gift and other prepaid cards via the merchant's point-of-sale ("POS") system

without the need to perform a significant software upgrade to the merchant's POS equipment. Such embodiments of the present invention advantageously can use existing POS equipment communication networks to communicate between the POS equipment and the card issuer/affiliated financial institution. Embodiments of the present invention also advantageously do not require interruption of normal register operations when processing a purchase of a prepaid or gift card along with other retail items.

[0011] More particularly, various embodiments of the present invention advantageously provide systems for activating and processing the sale of a serialized transaction card product over existing payment networks utilizing partial-authorization messaging. An example of a system according to an embodiment of the present invention, for example, includes a financial institution server positioned at a financial institution site, remote from, and in communication with, a merchant point-of-sale ("POS") apparatus through an open payment network, and transaction card account activation and processing computer program product stored in the memory of the financial institution server to manage transaction card activation. The financial institution server is typically owned or associated with a transaction card issuer.

[0012] The transaction card account activation and processing computer program product can include a set of instructions that, when executed by a computer such as, for example, the financial institution server, cause the computer to perform various operations to include receiving a first payment message including transaction card account activation request data from the merchant point-of-sale apparatus through the existing open payment network responsive to a user interfacing a transaction card product account activation indicator with the merchant point-of-sale apparatus, and sending activation approval data to the merchant POS apparatus through the payment network (e.g., data indicating a partial authorization approval balance of zero dollars) responsive to receiving at least portions of the activation request data. The account activation indicator is positioned on a portion of an external surface of a retail container of a transaction card product securely containing a transaction card, which carries a first storage medium containing indicia of a first unique transaction card identifier associated with a unique transaction card transaction account. The account activation indicator includes a second storage medium containing indicia of a second unique transaction card identifier associated with the first unique transaction card identifier, and the activation request data includes at least a portion of the second unique transaction card identifier and a flag indicating a capability of the merchant POS apparatus to support partial-authorization messaging.

[0013] The operations can also include receiving from the merchant POS apparatus through the payment network, a second payment message including transaction card product purchase acknowledgment data (e.g., a purchase acknowledgment indicating that the merchant POS apparatus and/or a merchant associated therewith received sufficient monetary funds from a purchasing customer to purchase the transaction card product), and a completing activation of the transaction card responsive to receiving at least portions of the purchasing knowledge data. This can include translating a portion of the second unique transaction card identifier (e.g., "Activation BIN") to at least a portion of the first unique transaction card identifier (e.g., "Transaction Bin" or "Actual Transaction Card ID"), and funding the associated transaction card transaction account, for example, according to the transaction card value advertised on the retail packaging.

[0014] The transaction card product, according to the exemplary embodiment of the system, provides a transaction card including a first magnetic strip storing the first unique transaction card identifier associated with or otherwise linked to a unique transaction card transaction account, and a tamper evident retail packaging container securely containing the transaction card. The packaging container carries a product identification indicator positioned on a first portion of an external surface, and the account activation indicator positioned on a second portion of the external surface. The account activation indicator can include a second magnetic strip storing the assigned second unique transaction card identifier, which is different from, but linked to, the first transaction card identifier, so that a prospective thief having knowledge of the second unique transaction card identifier would not readily have knowledge of the first transaction card identifier or the associated unique transaction card transaction account. The second unique transaction card identifier is beneficially associated with the first transaction card identifier so that the financial institution server can activate the unique transaction card transaction account responsive to receiving an indication of at least portions of the second transaction card identifier without having first received at least portions of the first transaction card identifier.

[0015] Various embodiments of the present invention also provide transaction card account activation and processing computer program product as a standalone product stored in a computer readable medium, to manage transaction card activation. An example of such program product, according to an embodiment of the present invention, can include a set of instructions that, when accessed and executed by a computer (e.g., financial institution server or servers, or other computer or computers, etc.), cause the computer or computers to



perform various operations including the operation of receiving a first payment message including transaction card account activation request data from a merchant point-of-sale apparatus through an existing, e.g., open payment network responsive to a user interfacing a transaction card product account activation indicator with the merchant point-of-sale apparatus. The activation request data can include at least a portion of the second unique transaction card identifier and a flag indicating a capability of the merchant POS apparatus to support partial-authorization messaging. The account activation indicator is typically carried on a retail packaging container of the transaction card product securely containing the transaction card. The account activation indicator includes a second storage medium storing the assigned second unique transaction card identifier. The second unique transaction card identifier is different from, but linked to, the first unique transaction card identifier. The activation request data includes at least a portion of the second unique transaction card identifier and a flag indicating a capability of the merchant POS apparatus to support partial-authorization messaging.

[0016] The operations can also include sending activation approval data to the merchant POS apparatus through the payment network responsive to receiving at least portions of the activation request data, and can include completing activation of the transaction card responsive to receiving the second payment message. The activation approval data can include data indicating a partial authorization approval balance of, e.g., zero dollars for the transaction card transaction account. The operations can further include receiving a second payment message including transaction card product purchase acknowledgment data from the merchant POS apparatus through the payment network. The purchasing acknowledgment data can include a purchase acknowledgment that the merchant POS apparatus or a merchant associated therewith has received sufficient monetary funds from a purchasing customer to purchase the transaction card product.

[0017] Various embodiments of the present invention also provide apparatus, e.g., in the form of a retail transaction card product, to facilitate retail activation and processing the sale of a transaction card utilizing partial-authorization messaging. An example of an apparatus, according to an embodiment of the present invention, can include or otherwise provide a financial or non-financial transaction card including a magnetic strip storing a first unique transaction card identifier associated with or otherwise linked to a unique transaction card transaction account, which can have an account number that is the same as the card identifier or a different series of numbers. The apparatus can also include a tamper evident retail

container containing the transaction card and carrying or otherwise including a product identification indicator, e.g., UPC, and an account activation indicator, e.g., magnetic strip, storing or otherwise including indicia of an assigned second unique transaction card identifier different from that of the first transaction card identifier. The account activation indicator is positioned to allow a remotely positioned financial institution, through a merchant POS and a payment network, to identify the transaction card while the transaction card is securely contained within the container. The second unique transaction card identifier is either directly associated with the first unique transaction card identifier or indirectly associated therewith through an association with the unique transaction card transaction account which is directly associated with the first unique transaction card identifier, for example, to allow ready identification and activation of the transaction card without the need to open the retail package.

[0018] Various embodiments of the present invention also provide methods of activating and processing the sale of a serialized transaction card product over existing payment networks utilizing partial-authorization messaging. An example of a method, according to an embodiment of the present invention, can include various steps including associating each of a plurality of transaction cards, e.g., branded gift and prepaid debit cards (each associated with a separate first unique transaction card identifier) with a corresponding separate one of a plurality of unique transaction card transaction accounts. The method can also include the steps of generating a second unique transaction card identifier for each separate one of the plurality of transaction cards, linking or otherwise associating each second unique transaction card identifier to a separate corresponding first transaction card identifier, packaging each of the plurality of transaction cards in a separate retail container to form a plurality of retail transaction card products, and distributing the plurality of retail transaction card products to a merchant having point-of-sale ("POS") apparatus that supports partial-authorization messaging in a POS environment. Each retail container can include or have affixed thereto a product identification indicator (e.g., UPC) and an activation account indicator (e.g., magnetic strip) storing or otherwise including indicia of an assigned one of the plurality of second unique transaction card identifiers.

[0019] The method can also include the steps of receiving a first payment message including activation request data from the merchant POS apparatus of an existing, e.g., open payment network by a suitably configured computer such as, for example, the financial institution server described above, responsive to a user interfacing an account activation indicator of a

selected one of the transaction card products with the merchant POS apparatus, and sending activation approval data to the merchant POS apparatus through the payment network responsive to receiving at least portions of the activation request data. The activation request data is associated with a selected one of the retail transaction card products to be purchased containing one of the plurality of transaction cards and can include at least a portion of the second unique transaction card identifier assigned to the selected transaction card, and a flag indicating a capability of the merchant POS apparatus to support partial-authorization messaging. The activation approval data corresponding can include data indicating a partial authorization approval balance for the transaction card transaction account associated with the selected transaction card.

[0020] The method can also include the steps of receiving a second payment message by the computer containing transaction card product purchase acknowledgment data from the merchant POS apparatus through the payment network, and can include completing activation of the selected transaction card responsive to receiving at least portions of the purchase acknowledgment data. The purchase acknowledgment data can include a purchase acknowledgment (indication) indicating that the merchant POS apparatus or a merchant associated therewith received sufficient monetary funds from a purchasing customer to purchase the selected transaction card.

[0021] Further, having activated the card via partial-authorization messaging, the method can further include the issuer settling funds directly (merchant bank to issuing bank) to acquire the customer's value from the merchant to fund the card account. That is, responsive to the partial-authorization which placed the merchant in a position to apply a separate tender via a standard payment transaction to pay for the "value sold", the issuer advantageously can settle directly with the merchant, e.g., via ACH, for the pre-denominated amount of the transaction plus contract fees.

[0022] Various embodiments of the present invention also provide methods of forming apparatus to facilitate retail activation and processing the sale of a transaction card utilizing partial-authorization messaging. An example of such a method, according to an embodiment of the present invention, can include various computer-implemented steps including generating a plurality of first unique transaction card identifiers each to be assigned or otherwise associated with a separate one of a plurality of transaction cards, and generating a plurality of second unique transaction card identifiers each to be assigned or otherwise associated with a separate one of the plurality of transaction cards and each to be applied to a

corresponding separate one of a plurality of e.g., tamper evident retail containers configured to contain a respective one of the plurality of transaction cards. The step of generating the plurality of first unique transaction card identifiers can include combining or otherwise associating each of a plurality of unique numbers with a first common Bank Identification Number ("BIN") defining a transaction BIN to thereby form the plurality of first unique transaction card identifiers. The step of generating a plurality of second unique transaction card identifiers can include combining or otherwise associating each of the plurality of unique numbers with a second common BIN defining an activation BIN to form a plurality of second unique transaction card identifiers.

[0023] The method can also include the steps of directly associating each second unique transaction card identifier of the plurality of second unique transaction card identifiers with a corresponding separate one of a plurality of first unique transaction card identifiers, for example, to use of a look-up table, or indirectly associating each separate one of the plurality of second unique transaction card identifiers with a corresponding separate one of the plurality of first unique transaction card identifiers via associating each respective second unique transaction card identifier with a corresponding separate one of the plurality of unique transaction card transaction accounts, which is, in turn, associated with the respective separate one of the plurality of first unique transaction card identifiers. This can be accomplished, for example, through use of a pair of lookup tables. Note, in a typical embodiment of the present invention, the first unique transaction card identifier and/or the second unique transaction card identifier each incorporate the associated transaction card transaction account number or a number associated therewith. Accordingly, identification of the transaction card transaction account number via either one of the first or second associated unique transaction card identifiers can be used to identify the other unique transaction card identifier.

[0024] The method can also include positioning each transaction card of the plurality of transaction cards within a separate one of the plurality of containers, and affixing to each of the plurality of containers, corresponding unique indicia (e.g., an open payment network processing system compatible magnetic strip, RFID, etc.) indicating the respective second unique transaction card identifier directly or indirectly associated with the first unique transaction card identifier stored in the storage medium carried by the transaction card contained within the container, to thereby form the plurality of transaction card product

apparatus for distribution and retail sale, for example, according to the methodologies described above using the systems described above.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0025] So that the manner in which the features and advantages of the invention, as well as others which will become apparent, may be understood in more detail, a more particular description of the invention briefly summarized above may be had by reference to the embodiments thereof which are illustrated in the appended drawings, which form a part of this specification. It is to be noted, however, that the drawings illustrate only various embodiments of the invention and are therefore not to be considered limiting of the invention's scope as it may include other effective embodiments as well.

[0026] FIG. 1 is a schematic block diagram of a system for activating and processing the sale of a serialized transaction card product over existing payment networks utilizing partial-authorization messaging according to an embodiment of the present invention;

[0027] FIGS. 2A-2B are a perspective view of the front and back of a tamper evident transaction card product according to an embodiment of the present invention;

[0028] FIGS. 2C-2D are a perspective view of the front and back of a transaction card to be positioned in the tamper evident transaction card product according to an embodiment of the present invention;

[0029] FIG. 3 is a schematic block flow diagram illustrating the steps of forming and delivering the transaction card product shown in FIGS. 2A-2B according to an embodiment of the present invention;

[0030] FIG. 4 is a schematic block flow diagram illustrating the steps for generating a second unique transaction card identifier for each of the transaction cards according to an embodiment of the present invention;

[0031] FIG. 5 is a schematic block flow diagram illustrating the steps for packaging each of the transaction cards in a separate retail container to form a retail transaction card product according to an embodiment of the present invention;

[0032] FIG. 6 is a schematic block flow diagram illustrating the steps for processing the transaction card package at the merchant POS according to an embodiment of the present invention;

[0033] FIG. 7 is a schematic flow diagram illustrating the steps activating the transaction card using partial authorization messaging according to an embodiment of the present invention;

[0034] FIG. 8 is a schematic block flow diagram illustrating a "successful transaction" scenario for a method of activating and processing the sale of a serialized transaction card product over an existing payment network utilizing partial-authorization messaging according to an embodiment of the present invention;

[0035] FIG. 9 is a schematic block flow diagram illustrating a "pre-payment void" scenario according to an embodiment of the present invention;

[0036] FIG. 10 is a schematic block flow diagram illustrating a "transaction declined by issuer" scenario according to an embodiment of the present invention; and

[0037] FIG. 11 is a schematic block flow diagram illustrating a "post-payment void (product returned)" scenario according to an embodiment of the present invention.

#### **DETAILED DESCRIPTION**

[0038] The present invention will now be described more fully hereinafter with reference to the accompanying drawings, which illustrate embodiments of the invention. This invention may, however, be embodied in many different forms and should not be construed as limited to the illustrated embodiments set forth herein. Rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout.

[0039] FIGS. 1-11 illustrate a system 30, program product, and methods for activating and processing the sale of a serialized transaction card product 31 over existing payment networks utilizing partial-authorization messaging. Such system 30, program product, and methods can allow activation of a transaction card via the merchant's point-of-sale ("POS") systems or apparatus 37 without the need to perform a significant software upgrade to the existing merchant's POS systems or apparatus 37. As such, the transaction card product 31 can be distributed to and sold by a merchant without a significant burden on either the merchant, the merchant's employees, the merchant's computer system, or the merchant's floor space, etc., for the merchant to be able to begin immediately selling the transaction card product 31.

[0040] As perhaps best shown in FIG. 1, and as identified above, various embodiments of the present invention provide a system 30 for activating and processing the sale of a serialized transaction card product 31 (see, e.g., FIGS 2A-2B), e.g., packaged/wrapped gift, prepaid debit-type cards, secured credit cards, phone cards, etc., over an existing open payment network 33, e.g., Visa®, MasterCard®, American Express®, Discover®, etc., utilizing partial-authorization messaging.

[0041] Note, although not necessarily used in the manner for which it was developed, according to various embodiments of the present invention, partial-authorization messaging provides a useful tool for activating the serialized transaction card product 31. Partial-authorization messaging is a communication capability implemented, for example, by Visa®, which allows Visa® to return a purchase authorization value for a Visa® prepaid card to be the current account balance instead of the requested value when the requested value is over the associated account balance. For example, if a gasoline pump configured to accept partial authorizations, transmits a purchase authorization request of, for example, \$50, in response to a payment from a Visa® prepaid card, but the account balance of the associated account is only \$30, the Visa® debit processing system can return a partial authorization of \$30. Accordingly, the pump can configure itself to automatically shut off if the meter reaches \$30. If the pump was not configured to support partial authorizations, a Visa® would have returned a message indicating insufficient funds were available. Thus, the account balance would need to be verified by the user so that the pump could be set, for example, by the merchant, to be limited to the amount of fuel representing an amount equal to or less than the account balance.

[0042] As further shown in FIG. 1, the system 30, according to an embodiment of the present invention, can include the transaction card product 31 and a financial institution computer (e.g. financial institution server 35), positioned at a financial institution site and affiliated, for example, with an issuer of the transaction card product 31. The system 30 can also include a merchant POS apparatus 37 positioned remote from the financial institution server 35 and in communication with the financial institution server 35 through the payment network 33.

[0043] The financial institution server 35 can contain or otherwise include a processor 43, and memory 45 coupled to the processor 43 to store software and database records therein, for example, connected directly to system/non-system components and/or networked to such components. As such, the system 30 can further include a user interface 47, which can include a graphical display 49 for displaying graphical images, and a user input device 51 as

known to those skilled in the art, to provide a user access to manipulate the software and database records. The user interface 47 can be either directly connected to the server 35, or through, e.g., a local area network 53, as known to those skilled in the art.

[0044] Note, the memory 45 can include volatile and nonvolatile memory known to those skilled in the art, including, for example, RAM, ROM, and magnetic or optical disks, just to name a few. Note also, it should also be understood that the preferred server configuration of server 35 is given by way of example and that other types of servers or computers configured according to various other methodologies known to those skilled in the art, can be used. The server 35 shown schematically, for example, in FIG. 1, represents a server or server cluster or server farm and is not limited to any individual physical server. The server 35 can be a personal computer capable of functioning as a server, a plurality of computers on a local area network, or a "traditional" server as known by those skilled in the art. The server site may be deployed as a server farm or server cluster managed by a serving hosting provider. The number of servers and their architecture and configuration may be increased based on usage, demand and capacity requirements for the system 30.

[0045] The merchant POS apparatus 37 can include a keypad 61 for entering in alphanumeric symbols, a barcode scanner 63, and a magnetic strip reader/slot 65. Alternative embodiments of the merchant POS apparatus 37 can include an RFID interface (not shown) and/or a contact memory button reader (not shown). The merchant POS apparatus 37 further includes various software and hardware for interfacing with the payment network 33 as known and understood by those skilled in the art.

[0046] The transaction card product 31 (see, e.g., FIGS 2A-2B) can include a transaction card 71 (see, e.g., FIGS 2C-2D) which can be either a financial or non-financial transaction card. The transaction card 71 can include a storage media, e.g., magnetic strip 73, storing a first unique transaction card identifier 75 associated with a unique transaction card transaction account/number 77 (terms used interchangeably throughout). The transaction card transaction account 77 can have an account number that is the same as the card identifier 75 or a different series of numbers as known to those skilled in the art. Note, it should be understood that although magnetic strip 73 provides the typical storage media configuration for most types of transaction card 71, other forms of storage including RFID, contact memory, etc., are within the scope of the present invention.



[0047] As shown in FIGS. 2A-2B, the transaction card product 31 can also include a retail package container 81 containing the transaction card 71. According to a preferred configuration, the packaging container 81 is in the form of a tamperproof and tamper evident packaging container 81 which not only masks and prevents access to the magnetic strip 73 of the transaction card 71, but also includes characteristics known to those skilled in the art, which result in the packaging container 81 having various tamper evident features such that the container 81 readily visually indicates to the merchant, any attempts by a customer or thief to remove the card 71 or gain physical access to the transaction card 71. Note, where the storage media storing the first unique transaction card identifier 75 is in the form of RFID chip, the packaging container 81 can further include appropriate radiofrequency shielding as known to those skilled in the art.

[0048] In an exemplary scenario, a thief, whom can be a number of types of individuals ranging from merchant employees to third-party customers, removes one or more packaged prepaid cards from a merchant store shelf, carefully removes the cards from the packaging, scans the magnetic strip, inserts the cards back in the package, and places the cards back on the shelf. The thief then loads a blank card with the scanned card data and periodically checks the website of the card issuer to determine if the card has been activated by a consumer. An unsuspecting consumer then purchases the same "tampered with" card or cards. Once activated, the thief utilizes the counterfeit card to make purchases. Such scenarios reflect why prepaid cards are typically displayed from behind the counter or in a fairly secure location that can be easily watched, and why closed systems have traditionally been used.

[0049] Accordingly and beneficially, a tamper evident packaging container 81, according to an embodiment of the present invention, can make it difficult for a prospective thief to scan the transaction card 71 without causing easily recognized damage to the packaging container 81--warning the merchant and consumer not to activate the tampered-with card. Thus, the transaction card product 31 beneficially need not be displayed from "behind the counter," but can be positioned out on the main floor of the merchant establishment with minimal security.

[0050] According to a preferred configuration, the retail-packaging container 81 containing the transaction card 71 can include a product identification indicator 83 positioned on a first portion of the external surface of the container 81, and an account activation indicator 85 positioned on a second portion of the external surface of the container 81. The product identification indicator 83 can be collocated with the account activation indicator 85 or can be

positioned spaced apart from the account activation indicator 85 as shown in FIG. 2A. According to the preferred configuration, the product identification indicator 83 can be in the form of a universal product code ("UPC") and/or a stock-keeping unit ("SKU"), which is scannable by a barcode reader/wand 63. The product identification indicator 83 can, however, alternatively be presented in other forms known to those skilled in the art to include text, RFID, etc. The product identification indicator 83 allows the merchant POS apparatus 37 to recognize the product being purchased--i.e., \$50 prepaid card, \$100 prepaid card, non-denominated prepaid card having a \$500 limit, phone card, etc.

[0051] According to the preferred configuration, the account activation indicator 85 can be in the form of a magnetic strip 85 storing an assigned second unique transaction card identifier 89. The magnetic strip 85 is located along an edge of the packaging container 81, and the portion of the container carrying the magnetic strip 85 is sufficiently thin so that the respective portion of the container 81 carrying the magnetic strip 85 can be "swiped" through, and the transaction card identifier 89 read by, the magnetic strip reader/slot 65. Note, although the account activation indicator 85 was described in the form of a magnetic strip, other forms of indicator are within the scope of the present invention. For example, the account activation indicator 85 can be in the form of a barcode, or can be provided in the form of an RFID chip or contact memory as known to those skilled in the art.

[0052] The second unique transaction card identifier 89 is explicitly made different from the first transaction card identifier 75 so that a prospective thief having knowledge of the second unique transaction card identifier (e.g., by scanning the magnetic strip 85) would not readily have knowledge of the first transaction card identifier 75 or the associated unique transaction card transaction account number 77, thus, thwarting the previously described theft scenario.

[0053] According to the preferred embodiment of the transaction card product 31, the first unique transaction card identifier 75 preferably in the form of a transaction Primary Account Number ("PAN"), which can include a transaction Bank Identification Number ("BIN") 91 (also interchangeably referred to as an Issuer Identifier Number ("IIN")), typically the first six digits of the PAN, for example, and which is used to identify the issuing bank or other issuer. The PAN can also include a unique number 92, typically a sequential number, for example, which can provide the "uniqueness" for the transaction card identifier/PAN, and a checksum digit 93. Other variations are, however, within the scope of the present invention. These numbers are used for routing payment information through the payment network 33

and for recognition of the transaction card transaction account/number 77, as known and understood by those skilled in the art.

[0054] Similarly, the second unique transaction card identifier 89 preferably in the form of an activation PAN including an activation BIN 95 used for routing activation information through the payment network 33, a unique number 96, and a checksum 97, which individually or collectively can be used for internal recognition of the transaction PAN of the first identifier 75 and/or the transaction card transaction account/number 77. That is, the transaction card identifier 75 (e.g., transaction PAN) can be linked with the activation card identifier 89 (e.g., activation PAN) to create a relationship so that when the activation PAN (e.g., activation BIN plus unique number) is presented in a transaction, it has a one-to-one relationship with the transaction (financial) card PAN (transaction BIN plus unique number).

[0055] According to the preferred configuration, in order to prevent unauthorized identification of the transaction PAN, the activation PAN is different from the transaction PAN and the activation BIN is preferably correspondingly different from that of the transaction BIN, but the unique transaction number 92 is either the same number or is otherwise in correspondence with the unique transaction number 96.

[0056] Further, according to the preferred configuration, the activation BIN 95 is issued and dedicated to use for "activation." The activation BIN 95 can be either financial (will settle transactions) or non-financial (will not settle transactions). A series of activation PANs can be generated from the activation BIN 95, which are separately assigned to a like number of transaction cards 71. Each generated activation PAN is then linked, for example, to a unique identifier on the card 71 (e.g., the transaction card identifier/PAN 75)

[0057] As indicated above, the second unique transaction card identifier 89 including or consisting of one of the generated activation PANs, the associated unique number 96, and/or the associated activation BIN 95, is either directly or indirectly associated with the first transaction card identifier 75, and thus, the unique transaction card transaction account/number 77 linked to the specific transaction card 71, so that the financial institution server 35 can activate the transaction card transaction account 77 (i.e., activate the card 71 and fund/allow access to the associated transaction account 77). Beneficially, due to such association/linking, the financial institution server 35 can perform at least portions of the activation process in response to receiving an indication of the PAN or unique number portion of the second transaction card identifier 89 without having first received the first

transaction card identifier/PAN 75. I.e., the activation PAN can be provided solely for the purpose of "activating" the specific transaction card 71 while the card is still sealed in the packaging container 81, where the transaction PAN can be provided for transactional use of the card 71 after the account 77 has been activated and the card 71 removed from the packaging container 81.

[0058] As shown in FIG. 1, the system 30 can also include a database 55 stored, for example, in the memory 45 (internal or external, networked, or non-networked) of the server 35, as shown, for example, in FIG. 1, or stored in the memory of a database server (not shown). The database 55 can contain data related to the first transaction card identifier 75, the second transaction card identifier 89, the transaction card transaction account 77, and the UPC and/or SKU 83 of each of a plurality of transaction cards 71 and/or products 31. According to one configuration of many different types of configurations known to those skilled in the art of computer systems, the database 55 can, for example, include or be in the form of a table (not shown) listing for each transaction card 71 and/or product 31, the transaction card transaction account/number 77, the first transaction card identifier 75, the second transaction card identifier 89, and optionally, the UPC and/or SKU 83 and/or the merchant name if delivered to or earmarked for a specific merchant. Note, rather than, or in addition to, the entire first or second transaction card identifier 75, 89, the table can separately include the transaction BIN 91, the unique number 92 portion of the transaction PAN, and the activation BIN 95 and/or unique number 96 portion of the activation PAN. If the unique number 92 is the same number as unique number 96, the table can include the transaction BIN 91, activation BIN 95, and the unique number 92/96 (in a single entry). Regardless, such table can allow the card issuer (e.g., via server 35) to readily determine the account/number 77 separately from either the transaction or activation PAN or associated first or second transaction card identifier 75, 89, respectively.

[0059] The system 30 can also include transaction card account activation and processing computer program product 101 stored, for example, in the memory 45 of the financial institution server 35, to manage transaction card activation and payment processing. Note, the program product 101 can be in the form of microcode, programs, routines, and symbolic languages that provide a specific set or sets of ordered operations that control the functioning of the hardware and direct its operation, as known and understood by those skilled in the art. Note also, the program product 101, according to an embodiment of the present invention, need not reside in its entirety in volatile memory of the server 35, but can be selectively

loaded, as necessary, according to various methodologies as known and understood by those skilled in the art of computer systems.

[0060] The program product 101 can include a set of instructions that, when executed by the financial institution server 35, cause the server 35 to perform various operations, to include receiving activation request data including a first payment message from the merchant POS apparatus 37 responsive to either the customer or the merchant sliding the magnetic strip 85 through the magnetic strip reader/slot 65 of the merchant POS apparatus 37 to upload activation approval data to the merchant POS apparatus 37, receiving from the merchant POS apparatus 37, a second payment message defining a card purchase acknowledgment that the merchant POS apparatus 37 or a merchant associated therewith received from a purchasing customer, sufficient monetary funds to purchase the transaction card product 31, and completing activation of the transaction card 71 responsive to receiving the second payment message. The activation request data can include at least a portion of the second unique transaction card identifier 89, a flag indicating a capability of the merchant POS apparatus 37 to support partial-authorization messaging, and/or the transaction dollar amount. The activation approval data can include data indicating a partial authorization approval balance of, e.g., zero dollars, for the transaction card transaction account 77. The operation of completing activation of the account 77 can include transferring monetary funds into the account 77 associated with the selected (purchased) transaction card 71, and retiring the second unique transaction card identifier 89 or PAN associated with the selected transaction card 71. The activation process, according to embodiments of the present invention, will be described in more detail below.

[0061] FIG. 3 provides a high-level flow diagram illustrating a method (and/or operations) for activating and processing the sale of a serialized transaction card product 31 over an existing payment network 33 utilizing partial-authorization messaging. For example, according to an embodiment of the present invention, the card issuer obtains or provides a plurality of transaction cards 71 such as, for example, gift or prepaid debit cards (block 201), and if not already accomplished, generates and/or assigns each transaction card 71 a first unique transaction card identifier 75 (e.g., financial transaction PAN) including a transaction BIN 91 and a unique "transaction" number 92 (block 203). The card issuer further associates each of the plurality of transaction cards 71 with a corresponding unique transaction card transaction account 77 identified by account number (block 205).

[0062] The card issuer also generates a second unique transaction card identifier 89 (e.g., activation PAN) for each of the transaction cards 71 (block 207). As shown in FIG. 4, generating a second transaction card identifier 89 for each of the transaction cards 71 can include obtaining a BIN 95 preferably dedicated to use for activating of each of the transaction cards 71 (block 211), generating a series of unique "activation" numbers 96 to be associated with the activation BIN 95 (block 213), and combining the activation BIN 95 with each separate one of the plurality of unique numbers 96 to form a corresponding number of second unique transaction card identifiers (e.g., activation PANs) 89 (block 215).

[0063] As further shown in FIG. 3, each of the second transaction card identifiers 89 or PANs can be linked or associated to a corresponding separate one of the first unique transaction card identifiers 75 directly and/or indirectly via association with an associated unique transaction card transaction account 77 (block 221), which, in turn, is associated with a respective first unique transaction card identifier 75. Also, each of the transaction cards 71 are packed in a separate retail packaging container 81 to form a retail transaction card product 31 (block 223). Note, the steps/operations associated with blocks 203, 205, 207, and 221, are normally performed, at least in part, by server 35.

[0064] As shown in FIG. 5, prior to or at some time very shortly after "wrapping" each transaction card 71 in its respective packaging container 81, if not already accomplished, as part of the step of packaging the transaction cards 71, a product identification indicator 83 (e.g., bar code) is affixed to the container 81 (block 231). An account activation indicator 85 (e.g., magnetic strip or other storage device) containing or otherwise configured to contain indicia of an assigned second unique transaction card identifier 89, is also affixed to the container 81 (block 233). The packaging container 81 is sealed to mask the magnetic strip 73 or other account identification storage medium of the respective transaction card 71 and to incorporate tamper evident characteristics that readily indicate to the merchant if an unauthorized attempt has been made to physically access the transaction card 71 from within the packaging container 81, prior to purchase (block 235).

[0065] As further shown in FIG. 3, the transaction card product 31 is distributed to a merchant having a POS apparatus 37 that supports partial-authorization messaging in a POS environment (block 241).

[0066] As shown in FIG. 6, to purchase a transaction card 71, a customer brings a card product 31 to the POS checkout counter, for example. The merchant scans the product

identification indicator 83, e.g., 12 digit UPC, to record the sale of the card 71 (block 251). The card 71 may be a pre-denominated (e.g., \$25 gift card) for an open denominated card at which point the POS apparatus 37, according to an embodiment of the present invention, will prompt for that amount. At the end of purchase process, the merchant POS apparatus 37 begins its end-of-sale tendering process and prompts for "payment" (block 253). The first "payment" presented should be a "swipe" of the magnetic strip 85 of the card product 31 through the magnetic strip reader/slot 65 of the POS apparatus 37 (block 255), which begins communication with the institution server 35 through the payment network 33.

[0067] As shown in FIG. 7, the financial institution server 35 receives the activation request data from the merchant POS apparatus 37 (block 261) responsive to a user interfacing the magnetic strip 85 or other account activation indicator with the merchant POS apparatus 37. The activation request data provided to the server 35 can include at least a portion of the second unique transaction card identifier 89 (e.g., the respective activation PAN) assigned to the respective transaction card 71 to be purchased and a flag indicating a capability of the merchant POS apparatus 37 to support partial-authorization messaging. The data can also include the transaction amount (e.g. \$25 for a \$25 gift card). In an alternative embodiment of the present invention, the transaction amount can include a value to be added to the transaction card 71 associated with a transaction account 77 that has been originated with, for example, a zero balance, pending activation of the associated transaction card 71.

[0068] In response to the activation PAN, for example, the server 35 sends activation approval data to the merchant POS apparatus 37 (block 263). The activation approval data can include data indicating that the "card issuer" "approves" the transaction, but rather than responding with the card face or requested value, responds with a partial authorization available balance of, e.g., "\$0.00," for the respective transaction card 71 to be purchased. The merchant POS apparatus 37 records this event and then prompts the purchaser for an additional form of payment (block 265). Note, the steps/operations indicated by 255, 261, 263, and 265, can be repeated for the purchase of multiple transaction cards 71 sold in a single POS transaction. After each magnetic strip 85 of each transaction card product 31 to be purchased has been swiped, the customer is expected to provide, and the merchant is expected to receive, a valid additional form of payment (block 267).

[0069] Once the server 35 receives an acknowledgment from the merchant POS apparatus 37 that the merchant received sufficient funds from the purchasing customer (block 271), the server 35 completes activation of the purchased card 71 (block 273). This can include

transferring monetary funds into the respective transaction card's transaction account 77 associated with the selected transaction card 71, and retiring the second unique transaction card identifier 89 or PAN associated with the respective purchased transaction card 71. The card issuer or financial institution (if not the issuer) and merchant then settle the accounts based on the amount of value added or otherwise provide to the transaction card 71 (i.e., account 77), along with any contract fees (block 275).

[0070] FIG. 8 illustrates an exemplary scenario that summarizes many of the steps/operations of the process described in FIGS. 3-7, whereby the transaction (activation/funding of the card 71) is successful. This illustration includes the physical transfer of the transaction card product 31, and includes an exemplary dataflow between the merchant and the card issuer (e.g., via server 35), to include post-activation settlement. Particularly, with respect to the post activation settlement, FIG. 8 further illustrates the scenario whereby, having activated the transaction card 71 via partial-authorization messaging, the steps/operations can further include the card issuer settling funds directly (merchant bank to issuing bank) to acquire the customer's value from the merchant to fund the card account, rather than through use of the card issuer's distributor. That is, responsive to the partial-authorization which placed the merchant in a position to apply a separate tender via a standard payment transaction to pay for the "value sold", the issuer advantageously can settle directly with the merchant, e.g., via ACH, for the pre-denominated amount of the transaction plus contract fees.

[0071] FIG. 9 illustrates a scenario where the purchasing consumer is unable to produce sufficient funds to pay for the transaction card 71 at the second payment prompt. In such scenario, either via a timeout, or via communication with the merchant POS apparatus 37 which provides a request to reverse the partial authorization transaction, the server 35 responsively interrupts, or does not otherwise continue, the activation process and no settlement occurs.

[0072] FIG. 10 illustrates a scenario where the transaction is declined by the card issuer. For example, the transaction card package 31 may have been reported stolen, the merchant may no longer be in good standing financially with the issuer, or any number of other reasons known to those skilled in the art, may result in a need to decline the transaction.

[0073] FIG. 11 illustrates a scenario where the purchasing customer wishes to return the preferably unopened transaction card package 31, but the merchant has a no refund policy. In such scenario, the merchant secures the package 31 and provides the purchasing customer a



telephone number to the issuer to request a refund. Preferably through an interactive voice response system (not shown), the refund is processed directly to the purchasing customer.

[0074] It is important to note that while embodiments of the present invention have been described in the context of a fully functional system, those skilled in the art will appreciate that the mechanism of at least portions of the present invention and/or aspects thereof are capable of being distributed in the form of a computer readable medium in a variety of forms storing a set of instructions for execution on a processor, processors, or the like, and that embodiments of the present invention apply equally regardless of the particular type of signal bearing media used to actually carry out the distribution. Examples of the computer readable media include, but are not limited to: nonvolatile, hard-coded type media such as read only memories (ROMs), CD-ROMs, and DVD-ROMs, or erasable, electrically programmable read only memories (EEPROMs), recordable type media such as floppy disks, hard disk drives, CD-R/RWs, DVD-RAMs, DVD-R/RWs, DVD+R/RWs, HD-DVDs, memory sticks, mini disks, laser disks, Blu-ray disks, flash drives, and other newer types of memories, and certain types of transmission type media such as, for example, certain digital and analog communication links capable of storing the set of instructions. Such media can contain, for example, both operating instructions and the operations instructions related to the program product 101 and the computer executable portions of the method steps/operations, described above.

[0075] Accordingly, an embodiment of the present invention can include a computer readable medium that is readable by a computer, e.g., server 35, to manage transaction card activation and payment processing. The computer readable medium can include a set of instructions (e.g., program product 101 and/or above described method steps/operations in computer readable form) that, when executed by the server 35, cause the server 35 to perform various operations, including the operations of receiving activation request data including a first payment message from the merchant POS apparatus 37 over the payment network 33 in response to either the customer or the merchant sliding the magnetic strip 85 through the magnetic strip reader/slot 65 of the merchant POS apparatus 37, which can result in an automated transmission thereto, and sending activation approval data to the merchant POS apparatus 37 over the payment network 33.

[0076] The activation request data associated with the first payment message can include at least a portion of the second unique transaction card identifier 89, a flag indicating a capability of the merchant POS apparatus 37 to support partial-authorization messaging,

and/or the transaction dollar amount. The activation approval data can correspondingly include data indicating a partial authorization approval balance of, e.g., zero dollars, for the transaction card transaction account 77.

[0077] The operations can also include receiving from the merchant POS apparatus 37 over the payment network 33, a second payment message defining a card purchase acknowledgment that the merchant POS apparatus 37 or a merchant associated therewith received from a purchasing customer, sufficient monetary funds to purchase the transaction card product 31, and can include completing activation of the transaction card 71 responsive to receiving the second payment message. The operation of completing activation of the account 77 can include transferring monetary funds into the account 77 associated with the selected (purchased) transaction card 71, and retiring the second unique transaction card identifier 89 or activation PAN associated with the selected transaction card 71. Additional details of the activation process, according to embodiments of the present invention, were described above.

[0078] This application is related to U.S. Provisional Patent Application No. 61/148,752, filed on January 30, 2009, titled "System, Program Product and Methods for Retail Activation and Reload Associated With Partial Authorization Transactions," U.S. Provisional Patent Application No. 61/110,332, filed October 31, 2008, titled "System, Program Product and Methods for Retail Activation and Reload Associated With Partial Authorization Transactions," and U.S. Provisional Patent Application No. 61/094,335, filed September 4, 2008, titled "System, Program Product and Methods for Retail Activation and Reload Associated With Partial Authorization Transactions," U.S. Provisional Patent Application No. 61/118,127, filed on November 26, 2008, titled "System, Apparatus, Methods and Program Product for Electronic Inventory Tracking," U.S. Provisional Patent Application No. 61/110,319, filed on October 31, 2008, titled "System, Methods, and Program Product for Electronic Order Entry," each incorporated by reference in its entirety.

[0079] In the drawings and specification, there have been disclosed typical preferred embodiments of the invention, and although specific terms are employed, the terms are used in a descriptive sense only and not for purposes of limitation. The invention has been described in considerable detail with specific reference to these illustrated embodiments. It will be apparent, however, that various modifications and changes can be made within the spirit and scope of the invention as described in the foregoing specification.

**THAT CLAIMED IS:**

1. A computer-assisted method of activating and processing the sale of a serialized transaction card product (31) over an existing open payment network (33) utilizing partial-authorization messaging, the method comprising the step of associating each of a plurality of transaction cards (71) with a corresponding separate one of a plurality of unique transaction card transaction accounts (77), each of the plurality of transaction cards (71) being associated with a separate first unique transaction card identifier (75), the method being characterized by the steps of:

generating a second unique transaction card identifier (89) for each separate one of the plurality of transaction cards (71);

associating each second unique transaction card identifier (89) of the plurality of second unique transaction card identifiers (89) with a corresponding separate one of the plurality of first unique transaction card identifiers (75);

packaging each of the plurality of transaction cards (71) in a separate retail container (81) to form a plurality of retail transaction card products (31), each retail container (81) including a product identification indicator (83) and an account activation indicator (85) including indicia of an assigned one of the plurality of second unique transaction card identifiers (89);

distributing the plurality of retail transaction card products (31) to a merchant having point-of-sale ("POS") apparatus (37) that supports partial-authorization messaging in a POS environment;

receiving a first payment message comprising activation request data from the merchant POS apparatus (37) through the existing open payment network (33) by a computer (35) configured to process transaction card activation requests responsive to a user interfacing the account activation indicator (85) of one of the plurality of transaction card products (31) with the merchant POS apparatus (37), the account activation indicator (85) associated with a selected one of the plurality of retail transaction card products (31) to be purchased containing one of the plurality of transaction cards (71) to define a selected transaction card (71), the activation request data including at least a portion of the second unique transaction card identifier (89) assigned to the selected transaction card (71) and a flag indicating a capability of the merchant POS apparatus (37) to support partial-authorization messaging;

sending activation approval data to the merchant POS apparatus (37) by the computer (35) through the payment network (33) responsive to receiving at least portions of the activation request data, the activation approval data including data indicating a partial authorization approval balance for the transaction card transaction account (77) associated with the selected transaction card (71);

receiving a second payment message by the computer (35) comprising transaction card product purchase acknowledgment data from the merchant POS apparatus (37) through the open payment network (33), the purchase acknowledgment data comprising a purchase acknowledgment indicating that one or more of the following received sufficient monetary funds from a purchasing customer to purchase the selected transaction card (71): the merchant POS apparatus (37) and a merchant associated therewith; and

completing activation of the selected transaction card (71) responsive to receiving at least portions of the purchase acknowledgment data.

2. A method as defined in Claim 1, wherein the partial authorization approval balance represents zero dollars available at the time the activation approval data is sent to the merchant POS apparatus (37).

3. A method as defined in either of Claims 1 or 2, wherein the step of generating a second unique transaction card identifier (89) for each separate one of the plurality of transaction cards (71) comprises the step of:

generating a plurality of unique numbers (96) associated with a common Bank Identification Number ("BIN") defining an activation BIN (95) to form the plurality of second unique transaction card identifiers (89).

4. A method as defined in Claim 3, wherein the activation BIN (95) is a non-financial BIN.

5. A method as defined in Claim 3, wherein the activation BIN (95) is a financial BIN dedicated for use in activating each of the plurality of transaction cards (71).

6. A method as defined in any of Claims 3-5, being further characterized by the step of:

associating each separate one of the plurality of second unique transaction card identifiers (89) or unique numbers (96) to one or more of the following: a corresponding separate one of the plurality of first unique transaction card identifiers (75) and a corresponding separate one of the plurality of unique transaction card transaction accounts (77).

7. A method as defined in any of Claims 1-6, wherein the step of packaging each of the plurality of transaction cards (71) in a separate retail container (81) comprises for each separate one of the plurality of transaction cards (71) and associated retail container (81), the steps of:

positioning the product identification indicator (83) on a first portion of an external surface of the retail container (81); and

positioning the account activation indicator (85) on a second portion of the external surface of the retail container (81), the account activation indicator (85) including the respective assigned second unique transaction card identifier.

8. A method as defined in any of Claims 1-7, wherein the account activation indicator (85) comprises a magnetic strip (85).

9. A method as defined in Claim 8,

wherein the merchant POS apparatus (37) includes a POS magnetic strip card reader slot (65) adapted to read magnetic card strips (73, 85);

wherein the user interfacing the account activation indicator (85) with the merchant POS apparatus (37) comprises either the purchasing customer or the merchant swiping the account activation indicator magnetic strip (85) through the POS magnetic strip card reader slot (65); and

wherein the monetary funds have a predetermined value sufficient to fund the transaction card transaction account (77) associated with the selected transaction card (71).

10. A method as defined in any of Claim 1-9, wherein the step of completing activation of the selected transaction card (71) comprises the steps of:

transferring monetary funds into the transaction card transaction account (77) associated with the selected transaction card (71); and

retiring the second unique transaction card identifier (89) associated with the selected transaction card (71).

11. An apparatus (31) to facilitate retail activation and processing the sale of a transaction card (71) utilizing partial-authorization messaging, the apparatus (31) comprising a transaction card (71) including a magnetic strip (73) storing a first unique transaction card identifier (75) associated with a unique transaction card transaction account (77), the apparatus (31) being characterized by:

a retail container (81) containing the transaction card (71) and including a product identification indicator (83) and an account activation indicator (85) including indicia of an assigned second unique transaction card identifier (89) different from that of the first unique transaction card identifier (75), the assigned second unique transaction card identifier (89) being associated with one or more of the following: the first unique transaction card identifier (75) and the unique transaction card transaction account (77), to provide for identification thereof.

12. An apparatus (31) as defined in Claim 11, wherein the second unique transaction card identifier (89) is linked to the first unique transaction card identifier (75).

13. An apparatus (31) as defined in either of Claims 11 or 12,

wherein the retail container (81) is a tamper evident retail container (81);

wherein the transaction card (71) is securely contained within the tamper evident retail container (81); and

wherein the account activation indicator (85) is positioned to allow a remotely positioned financial institution, through a merchant point-of-sale ("POS") and a payment network (33), to identify the transaction card (71) when the transaction card (71) is securely contained within the container (81).

14. An apparatus (31) as defined in any of Claims 11-13, wherein the second unique transaction card identifier (89) is associated with the unique transaction card transaction account (77).

15. An apparatus (31) as defined in Claim 14,  
wherein the transaction card (71) is securely contained within the retail container (81);  
and

wherein the account activation indicator (85) is positioned to allow a remotely located financial institution, through a merchant point-of-sale ("POS") (37) and a payment network (33), to identify the transaction card (71) when the transaction card (71) is securely contained within the container (81).

16. An apparatus (31) as defined in any of Claims 11-15,  
wherein the first unique transaction card identifier (75) comprises a transaction Primary Account Number ("PAN") (75) including a transaction Bank Identification Number ("BIN") (91) and a first number (92);

wherein the second unique transaction card identifier (89) comprises an activation PAN (89) including an activation BIN (95) and a second number (96); and

wherein the activation BIN (95) is different from the transaction BIN (91) and the activation PAN (89) is different from the transaction PAN (75).

17. An apparatus (31) as defined in Claim 16,  
wherein one or more of the following is dedicated for use in activating the transaction card: the activation BIN (95) and the activation PAN (89); and

wherein the first number (92) is the same number as the second number (96).

18. An apparatus (31) as defined in any of Claims 11-17,  
wherein the retail container (81) includes an external surface;  
wherein the magnetic strip (73) storing first unique transaction card identifier (75) is a first magnetic strip (73) positioned on an external surface of the transaction card (71); and

wherein the account activation indicator (85) comprises a second magnetic strip (85) positioned on a portion of the external surface of the retail container (81), the second magnetic strip (85) storing the second unique transaction card identifier (89).

19. An apparatus (31) as defined in Claim 18,

wherein the second magnetic strip (85) is positioned on a first portion of the external surface of the retail container (81);

wherein the product identification indicator (83) comprises a universal product code ("UPC") positioned on a second portion of the external surface of the retail container (81); and

wherein the first portion of the external surface of the retail container (81) is sized to interface with a POS magnetic strip card reader slot (65) of a point-of-sale ("POS") magnetic strip card reader of a merchant POS apparatus (37) positioned at a merchant POS site to thereby allow swiping the account activation indicator magnetic strip (85) through the POS magnetic strip card reader slot (65).

20. An apparatus (31) as defined in any of Claims 11-19, wherein the retail container (81) is configured to mask the magnetic strip (73) and any other indicia of the first unique transaction card identifier (75), and to visually indicate partial or complete removal of, or physical access to, the transaction card (71).

21. A system (30) for activating and processing the sale of a serialized transaction card product (31) over an existing open payment network (33) utilizing partial-authorization messaging, the system (30) comprising a financial institution computer defining a financial institution server (35) positioned at a financial institution site and positioned remote from and in communication with a merchant point-of-sale ("POS") apparatus (37) over an existing open payment network (33) to process partial-authorization messaging, and having memory (45) associated therewith, the system (30) being characterized by:

the financial institution server (35) being configured to activate transaction cards (71) using partial-authorization messaging, the financial institution server (35) including transaction card account activation and processing computer program product (101) stored in



the memory (45) of the financial institution server (35) to manage transaction card activation and payment processing; and

the transaction card account activation and processing computer program product (101) comprising a set of instructions that, when executed by the financial institution server (35), cause the server (35) to perform the operations of:

receiving a first payment message comprising transaction card account activation request data from the merchant POS apparatus (37) through the existing open payment network (33) responsive to a user interfacing a transaction card product account activation indicator (85) with the merchant POS apparatus (37), the account activation indicator (85) being positioned on a portion of an external surface of a retail container (81) of the transaction card product (31) securely containing a transaction card (31) carrying a first storage medium (73) containing indicia of a first unique transaction card identifier (75) associated with a unique transaction card transaction account (77), the account activation indicator (85) comprising a second storage medium (85) containing indicia of a second unique transaction card identifier (89) associated with the first unique transaction card identifier (75), the activation request data including at least a portion of the second unique transaction card identifier (89) and a flag indicating a capability of the merchant POS apparatus (37) to support partial-authorization messaging;

sending activation approval data to the merchant POS apparatus (37) through the payment network (33) responsive to receiving at least portions of the activation request data, the activation approval data including data indicating a partial authorization approval balance of zero dollars for the transaction card transaction account (77);

receiving a second payment message comprising transaction card product purchase acknowledgment data from the merchant POS apparatus (37) through the payment network (33), the purchase acknowledgment data comprising a purchase acknowledgment indicating that one or more of the following received sufficient monetary funds from a purchasing customer to purchase the transaction card product (31): the merchant POS apparatus (37) and a merchant associated therewith; and

completing activation of the transaction card (71) responsive to receiving at least portions of the purchasing knowledge data.

22. A system (30) as defined in Claim 21,  
wherein the account activation indicator (85) comprises a magnetic strip (85);  
wherein the merchant POS apparatus (37) includes a POS magnetic strip card reader slot (65) adapted to read magnetic card strips (73, 85);  
wherein the user interfacing the account activation indicator (85) with the merchant POS apparatus (37) includes either the purchasing customer or the merchant swiping the account activation indicator magnetic strip (85) through the POS magnetic strip card reader slot (65); and  
wherein the monetary funds have a predetermined value sufficient to fund the transaction card transaction account (77) associated with the transaction card.
23. A system (30) as defined in either of Claims 21 or 22, wherein the operation of completing activation of the transaction card comprises the operations of:  
transferring monetary funds into the transaction card transaction account (77) associated with the transaction card (71); and  
retiring the second unique transaction card identifier or PAN (89) associated with the transaction card (71).
24. A system (30) as defined in any of Claims 21-23,  
wherein the second transaction card identifier (89) comprises a primary account number ("PAN") defining an activation PAN (89), the activation PAN (89) including an associated Bank Identification Number ("BIN") defining an activation BIN (95); and  
wherein the retail container (81) is a tamper evident retail container (81).
25. A system (30) as defined in Claim 24, wherein the activation BIN (95) is a non-financial BIN (95).
26. A system (30) as defined in Claim 24, wherein the activation BIN (95) is a financial BIN (95) dedicated to use for activating the transaction card (71).
27. A system (30) as defined in any of Claims 21-26,

wherein the first unique transaction card identifier (75) comprises transaction Primary Account Number ("PAN") (75) including a transaction Bank Identification Number ("BIN") (91);

wherein the second unique transaction card identifier (89) comprises an activation PAN (89) including an activation BIN (95); and

wherein the second unique transaction card identifier (89) is characterized by one or more of the following: the activation BIN (95) is different from the transaction BIN (91) and the activation PAN (89) is different from the transaction PAN (75).

28. A system (30) as defined in any of Claims 21-27, wherein at least portions of the first unique transaction card identifier (75) and at least portions of the second unique transaction card identifier (89) are associated with the transaction card transaction account (77) so that the financial institution server (35) can identify the associated transaction card transaction account (77) responsive to receiving an indication of at least portions of either the first transaction card identifier (75) or the second transaction card identifier (89).

29. A system (30) as defined in any of Claims 21-28,

wherein the first storage medium (73) comprises a first magnetic strip (73) storing the first unique transaction card identifier (75) associated with the unique transaction card transaction account (77);

wherein the retail container (81) securely containing the transaction card includes a product identification indicator (83) positioned on a first portion of the external surface of the retail container (81);

wherein the portion of the external surface of the retail container (81) carrying the account activation indicator (85) is a second portion of the external surface of the retail container (81);

wherein the second storage medium (85) comprises a second magnetic strip (85) storing the second unique transaction card identifier (89);

wherein the second unique transaction card identifier (89) is sufficiently different from the first transaction card identifier (75) so that a prospective thief having knowledge of the second unique transaction card identifier (89) would not readily have knowledge of the first transaction card identifier (75);

wherein the second unique transaction card identifier (89) is associated with the first transaction card identifier (75) so that the financial institution server (35) can activate the unique transaction card transaction account (77) responsive to receiving an indication of at least portions of the second unique transaction card identifier (89) without having first received the first unique transaction card identifier (75); and

wherein the operation of completing activation of the transaction card is performed without having first received the first unique transaction card identifier (75).

30. Transaction card account activation and processing computer program product (101) to manage transaction card activation for a transaction card (71) having a first storage medium (73) storing a first unique transaction card identifier (75) associated with a transaction card transaction account (77), the computer program product (101) stored in a tangible computer readable medium and comprising a set of instructions that, when executed by a computer (35) configured to access and execute the set of instructions, cause the computer (35) to perform operations being characterized by:

receiving a first payment message comprising transaction card account activation request data from a merchant point-of-sale (POS) apparatus (37) through an existing payment network (33) responsive to a user interfacing a transaction card product account activation indicator (85) with the merchant POS apparatus (37), the account activation indicator (85) being carried on a retail packaging container (81) of a transaction card product (31) securely containing the transaction card (71), the account activation indicator (85) comprising a second storage medium (85) storing an assigned second unique transaction card identifier (89), the second unique transaction card identifier (89) different from, but linked to, the first unique transaction card identifier (75), the activation request data including at least a portion of the second unique transaction card identifier (89) and a flag indicating a capability of the merchant POS apparatus (37) to support partial-authorization messaging;

sending activation approval data to the merchant POS apparatus (37) through the payment network (33) responsive to receiving at least portions of the activation request data, the activation approval data including data indicating a partial authorization approval balance for the transaction card transaction account (77);

receiving a second payment message comprising transaction card product purchase acknowledgment data from the merchant POS apparatus (37) through the payment network (33), the purchase acknowledgment data comprising a purchase acknowledgment that one or

more of the following received sufficient monetary funds from a purchasing customer to purchase the transaction card product (31): the merchant POS apparatus (37) and a merchant associated therewith; and

completing activation of the transaction card (71) responsive to receiving at least portions of the purchase acknowledgment data.

31. Program product (101) as defined in Claim 30,

wherein the account activation indicator (85) comprises a magnetic strip (85);

wherein the merchant POS apparatus (37) includes a POS magnetic strip card reader slot (65) adapted to read magnetic card strips (73, 85);

wherein the user interfacing the account activation indicator (85) with the merchant POS apparatus (37) includes either the purchasing customer or the merchant swiping the account activation indicator magnetic strip (85) through the POS magnetic strip card reader slot (65); and

wherein the monetary funds have a predetermined value sufficient to fund the transaction card transaction account (77) associated with the transaction card.

32. Program product (101) as defined in either of Claims 30 or 31,

wherein the partial authorization approval balance is zero dollars;

wherein the first unique transaction card identifier (75) comprises a transaction Primary Account Number ("PAN") (75) including a transaction Bank Identification Number ("BIN") (91);

wherein the second unique transaction card identifier (89) comprises an activation PAN (89) including an activation BIN (95); and

wherein the second unique transaction card identifier (89) is characterized by at least one of the following: the activation BIN (95) is different from the transaction BIN (91) and the activation PAN (89) is different from the transaction PAN (75).

33. Program product (101) as defined in Claim 32, wherein the operation of completing activation of the transaction card (71) comprises the operations of:

transferring monetary funds into the transaction card transaction account (77) associated with the transaction card (71); and

retiring the second unique transaction card identifier (89) or activation PAN (89) associated with the transaction card (71).

34. Program product (101) as defined in Claim 33, the operations being further characterized by:

initiating settlement of financial funds directly between an issuing bank of a transaction card issuer and a merchant bank associated with the merchant to acquire at least a portion of the monetary funds from the merchant to fund the transaction card transaction account (77).

35. Program product (101) as defined in any of Claims 30-34,

wherein the first unique transaction card identifier (75) comprises a first unique number (92) and a first common BIN defining a transaction BIN (91); and

wherein the operations are further characterized by:

generating the second unique transaction card identifier (89) by associating the first unique number (92) with a second common BIN (95) defining an activation BIN (95) to form the second unique transaction card identifier (89).

36. A method of forming transaction card product apparatus (31) to facilitate retail activation and processing the sale of a transaction card (71) utilizing partial-authorization messaging, the method comprising the step of generating a plurality of first unique transaction card identifiers (75), each separate one of the plurality of first unique transaction card identifiers (75) to be assigned to a separate one of a corresponding plurality of transaction cards (71), the step of generating the plurality of first unique transaction card identifiers (75) including the step of associating each of a plurality of unique numbers (92) with a first common Bank Identification Number ("BIN") (91) defining a transaction BIN (91) to thereby form the plurality of first unique transaction card identifiers (75), the method being further characterized by the steps of:

generating a plurality of second unique transaction card identifiers (89), each separate one of the plurality of second unique transaction card identifiers (89) to be associated with a

separate one of the plurality of transaction cards (71) and each separate one of the plurality of second unique transaction card identifiers (89) to be applied to a separate one of a corresponding plurality of tamper evident retail containers (81) configured to contain a respective one of the plurality of transaction cards (71), the step of generating the plurality of second unique transaction card identifiers (89) including the step of associating each of the plurality of unique numbers (92) with a second common BIN (95) defining an activation BIN (95) to form the plurality of second unique transaction card identifiers (89);

associating each second unique transaction card identifier (89) of the plurality of second unique transaction card identifiers (89) with a corresponding separate one of the plurality of first unique transaction card identifiers (75);

positioning each transaction card (71) of the plurality of transaction cards (71) within a separate one of the corresponding plurality of retail containers (81) to be securely contained therein; and

for each of the plurality of retail containers (81) to contain one of the corresponding plurality of transaction cards (71), affixing to the respective retail container (81) indicia indicating the respective one of the plurality of second unique transaction card identifiers (89) associated with the respective transaction card (71) to be contained therein, to thereby form a corresponding plurality of transaction card product apparatus (31).

37. A method as defined in Claim 36, being further characterized by the steps of:

assigning each first unique transaction card identifier (75) of the plurality of first unique transaction card identifiers (75) to a separate one of a corresponding plurality of unique transaction card transaction accounts (77);

assigning each first unique transaction card identifier (75) of the plurality of first unique transaction card identifiers (75) to a separate one of the plurality of transaction cards (71); and

for each of the plurality of transaction cards (71), storing indicia of the assigned separate one of the first unique transaction card identifiers (75) of the plurality of first unique transaction card identifiers (75) in a storage medium (73) carried thereon.

**AMENDED CLAIMS**  
**received by the International Bureau on 20 December 2009 (20.12.2009)**

CLAIMS

THAT CLAIMED IS:

1. A computer implemented method for performing a process of activating a transaction card product (31) over an existing open payment network (33) using partial-authorization messaging and a process of associating the transaction card product to a customer account, the method characterized by the steps of:

assigning a transaction card account (77) to a first transaction card identifier (75) including on a transaction card (71), and a second transaction card identifier (89) on a transaction card packaging (81);

performing a partial authorization of the transaction card account (77) responsive to the receipt of a first payment message from the existing open payment network (33), the first payment message originating from a merchant point-of-sale ("POS") apparatus (37) and being generated in response to a user interfacing an account activation indicator (85) on the transaction card packaging (81) with the merchant POS apparatus (37), the first payment message including at least a portion of the second transaction card identifier (89) assigned to the transaction card account (77) and a flag indicating a capability of the merchant POS apparatus (37) to support partial-authorization messaging;

notifying the merchant POS apparatus (37) of the partial authorization of the transaction card account (77) through the payment network (33), the merchant POS apparatus (37) receiving data indicating a partial authorization approval balance for the transaction card account (77);

performing a full activation of the transaction card account (77) responsive to the receipt of a second payment message from the merchant POS apparatus (37), the second payment message comprising transaction card purchase acknowledgment data from the merchant POS apparatus (37) through the open payment network (33), the transaction card purchase acknowledgment data including customer payment confirmation, the merchant POS apparatus (37) and a merchant associated with the merchant POS apparatus (37);

transferring monetary funds into the transaction card transaction account (77) associated with the transaction card (71); and

retiring the second transaction card identifier (89) associated with the transaction card (71).



2. A computer implemented method as defined in Claim 1, wherein the partial authorization approval balance represents zero dollars available at the time the activation approval data is sent to the merchant POS apparatus (37).
3. A computer implemented method as defined in either of Claims 1 or 2, wherein the first transaction card identifier (75) comprises a transaction Primary Account Number ("PAN") (75) including a transaction Bank Identification Number ("BIN") (91) and a first number (92) and the second transaction card identifier (89) for the transaction cards(71) is generated by generating unique numbers (96) associated with an activation BIN (95).
4. A computer implemented method as defined in Claim 3, wherein the activation BIN (95) is a non-financial BIN.
5. A computer implemented method as defined in Claim 3, wherein the activation BIN (95) is a financial BIN dedicated for use in activating the transaction card (71).
6. A computer implemented method as defined in any of Claims 1 or 2 wherein the account activation indicator (85) comprises a magnetic strip (75).
7. An apparatus (31) to facilitate retail activation and processing the sale of a transaction card (71) utilizing partial-authorization messaging, the apparatus (31) being characterized by:
  - a transaction card (71) including a magnetic strip (73) storing a first transaction card identifier (75) associated with a transaction card transaction account (77), the first transaction card identifier (75) comprises a transaction Primary Account Number ("PAN") (75) including a transaction Bank Identification Number ("BIN") (91) and a first number (92); and
  - a retail container (81) containing the transaction card (71) and including a product identification indicator (83) and an account activation indicator (85) including indicia of an assigned second transaction card identifier (89) different from the first transaction card identifier (75), the second transaction card identifier (89) comprising an activation PAN (89) different

from the transaction PAN (75), the activation PAN (89) including an activation BIN (95) different from the transaction BIN (91) and a second number (96), the second transaction card identifier (89) being associated with the first unique transaction card identifier (75) or the transaction card account (77), to provide for identification of the transaction card account (77).

8. An apparatus (31) as defined in either of Claim 7,

wherein the retail container (81) is a tamper evident retail container (81);

wherein the transaction card (71) is securely contained within the retail container (81) so that when the transaction card (71) is contained within the retail container the magnetic strip (73) can not be accessed; and

wherein the account activation indicator (85) can be coupled to a merchant point-of-sale ("POS") apparatus (37) and an open payment network (33), to identify the transaction card (71) when the transaction card (71) is securely contained within the container (81).

9. An apparatus (31) as defined in Claim 7 or 8,

wherein the first number (92) is the same number as the second number (96).

10. An apparatus (31) as defined in any of Claims 7 or 8,

wherein the retail container (81) includes an external surface;

wherein the magnetic strip (73) storing first transaction card identifier (75) is a first magnetic strip (73) positioned on an external surface of the transaction card (71); and

wherein the account activation indicator (85) comprises a second magnetic strip (85) positioned on a portion of the external surface of the retail container (81), the second magnetic strip (85) storing the second unique transaction card identifier (89).

11. An apparatus (31) as defined in Claim 10,

wherein the second magnetic strip (85) is positioned on a first portion of the external surface of the retail container (81);

wherein the product identification indicator (83) comprises a universal product code ("UPC") positioned on a second portion of the external surface of the retail container (81); and

wherein the first portion of the external surface of the retail container (81) is sized to interface with a POS magnetic strip card reader slot (65) of a point-of-sale ("POS") magnetic strip card reader of a merchant POS apparatus (37).

12. A computer program product operable on a computer and stored in memory thereon to perform a process of activating a transaction card product (31) over an existing open payment network (33) using partial-authorization messaging and a process of associating the transaction card product to a customer account, the computer program product performing the steps of:

assigning a transaction card account (77) to a first transaction card identifier (75) on a transaction card (71), and a second transaction card identifier (89) on a transaction card packaging (81);

performing a partial authorization of the transaction card account (77) responsive to the receipt of a first payment message from the existing open payment network (33), the first payment message originating from a merchant point-of-sale ("POS") apparatus (37) and being generated in response to a user interfacing an account activation indicator (85) on the transaction card packaging (81) with the merchant POS apparatus (37), the first payment message including at least a portion of the second transaction card identifier (89) assigned to the transaction card account (77) and a flag indicating a capability of the merchant POS apparatus (37) to support partial-authorization messaging;

notifying the merchant POS apparatus (37) of the partial authorization of the transaction card account (77) through the payment network (33), the merchant POS apparatus (37) receiving data indicating a partial authorization approval balance for the transaction card account (77);

performing a full activation of the transaction card account (77) responsive to the receipt of a second payment message from the merchant POS apparatus (37), the second payment message comprising transaction card purchase acknowledgment data from the merchant POS apparatus (37) through the open payment network (33), the transaction card purchase acknowledgment data including customer payment confirmation, the merchant POS apparatus (37) and a merchant associated with the merchant POS apparatus (37);

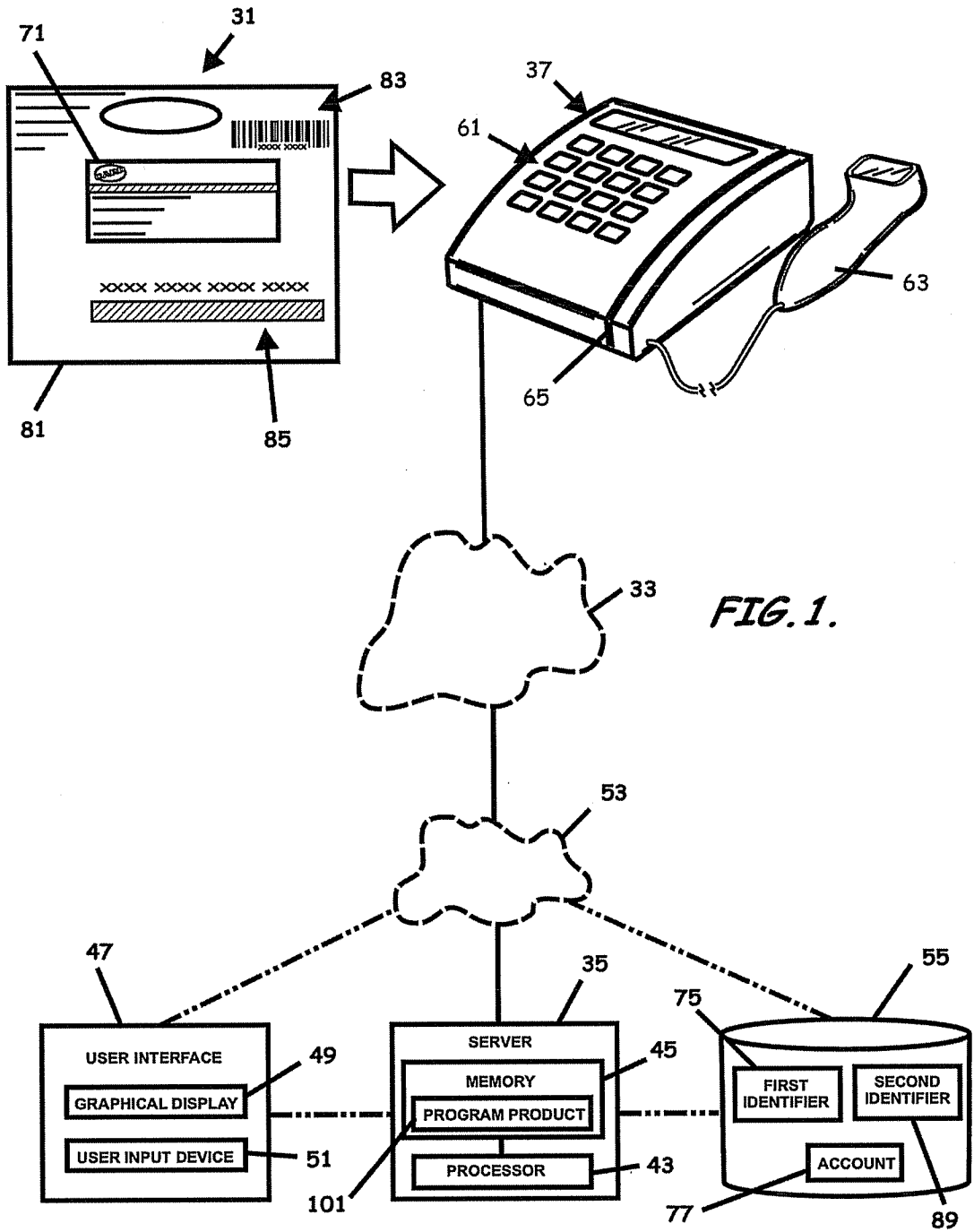
transferring monetary funds into the transaction card transaction account (77) associated with the transaction card (71); and

retiring the second unique transaction card identifier (89) associated with the transaction card (71).

13. A computer program product as defined in Claim 12, wherein the partial authorization approval balance represents zero dollars available at the time the activation approval data is sent to the merchant POS apparatus (37).

14. A computer program product as defined in Claim 12 or 13, wherein the first transaction card identifier (75) comprises a transaction Primary Account Number ("PAN") (75) including a transaction Bank Identification Number ("BIN") (91) and a first number (92) and the second transaction card identifier (89) for the transaction cards(71) is generated by generating unique numbers (96) associated with an activation BIN (95).

15. A computer program product as defined in any of Claims 12 or 13, wherein the account activation indicator (85) comprises a magnetic strip (75).



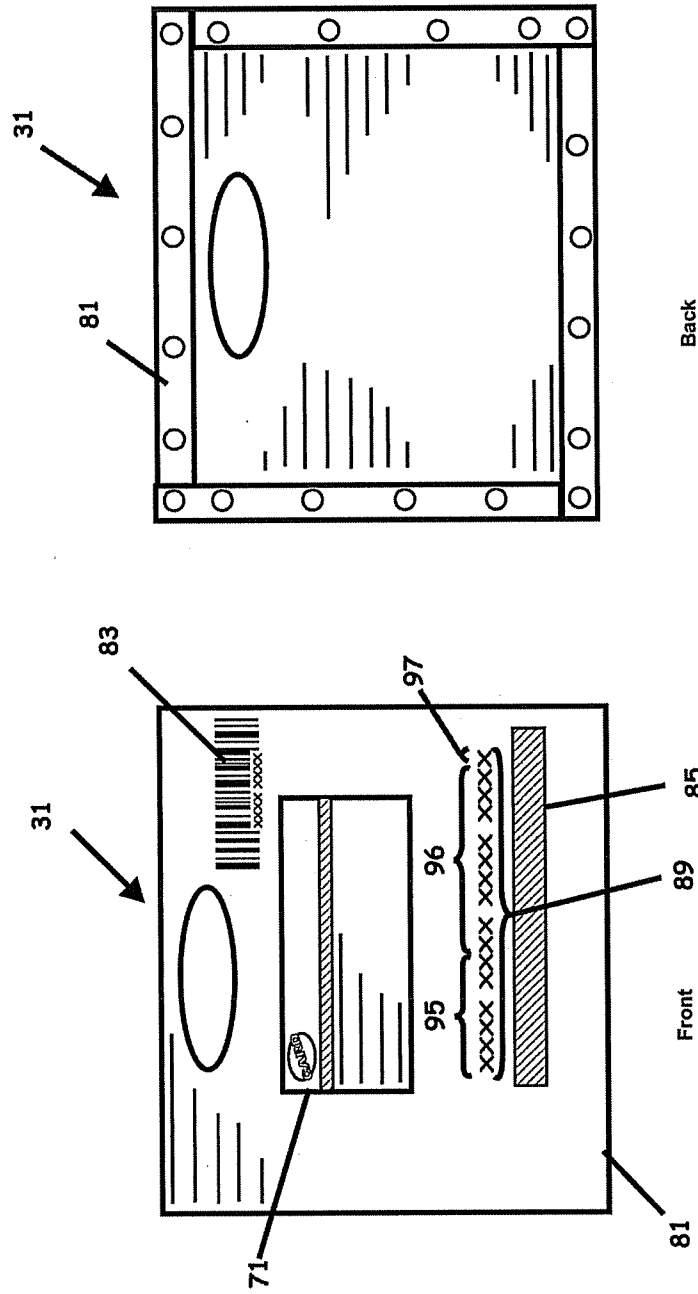


FIG. 2A.

FIG. 2B.

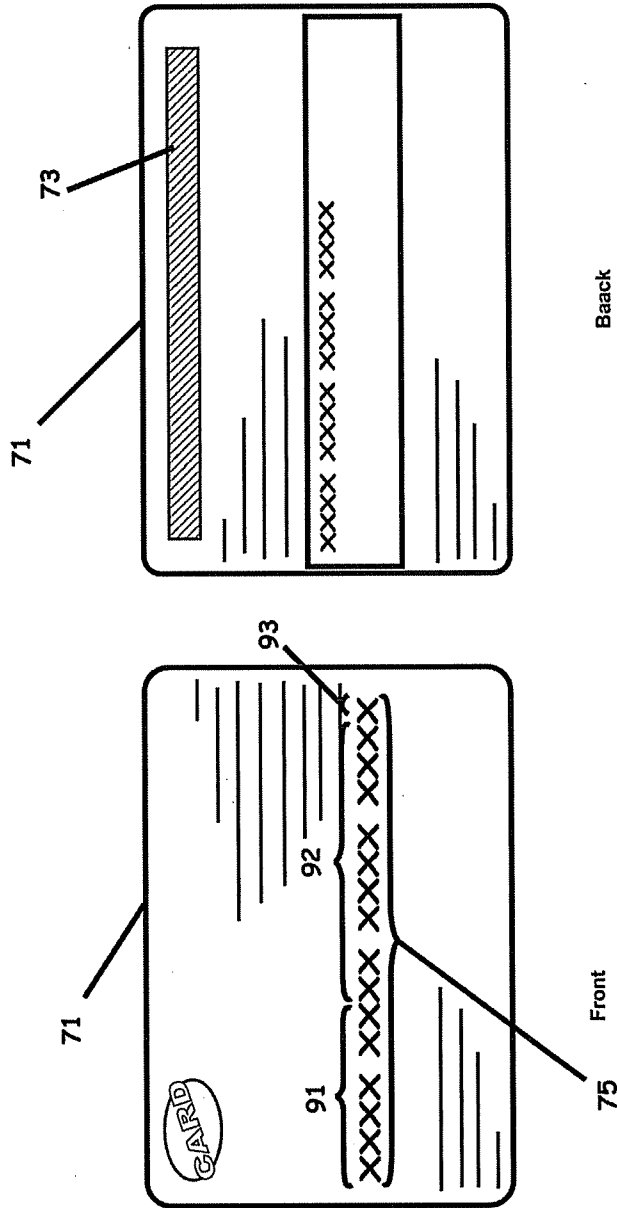


FIG. 2D.

FIG. 2C.

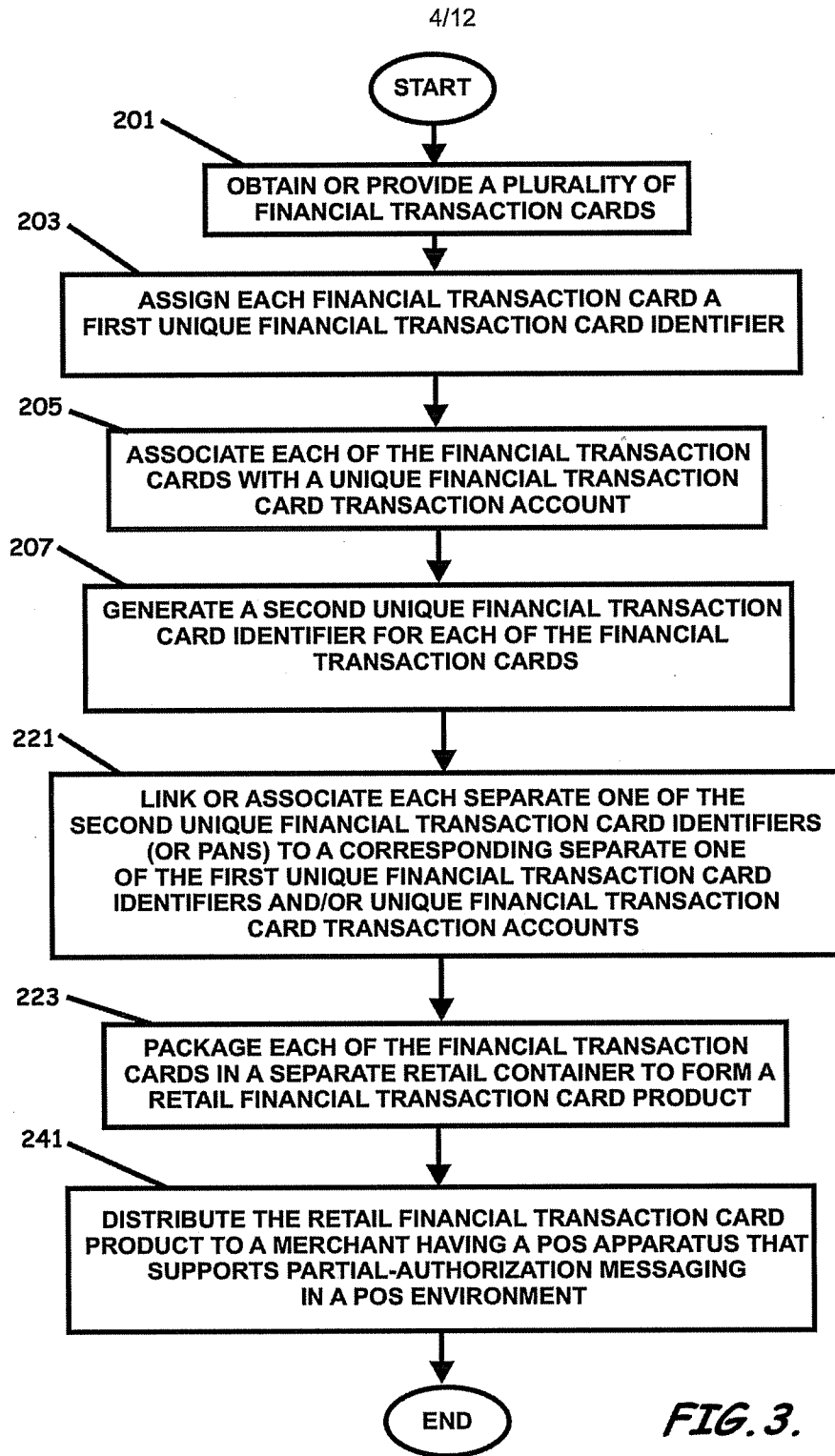
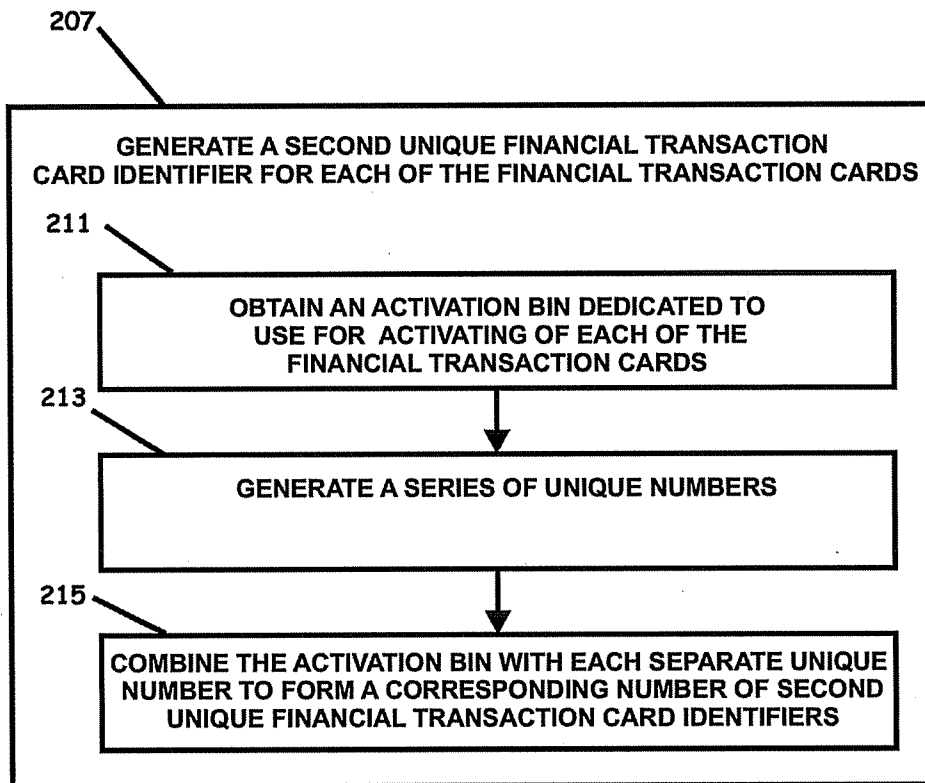
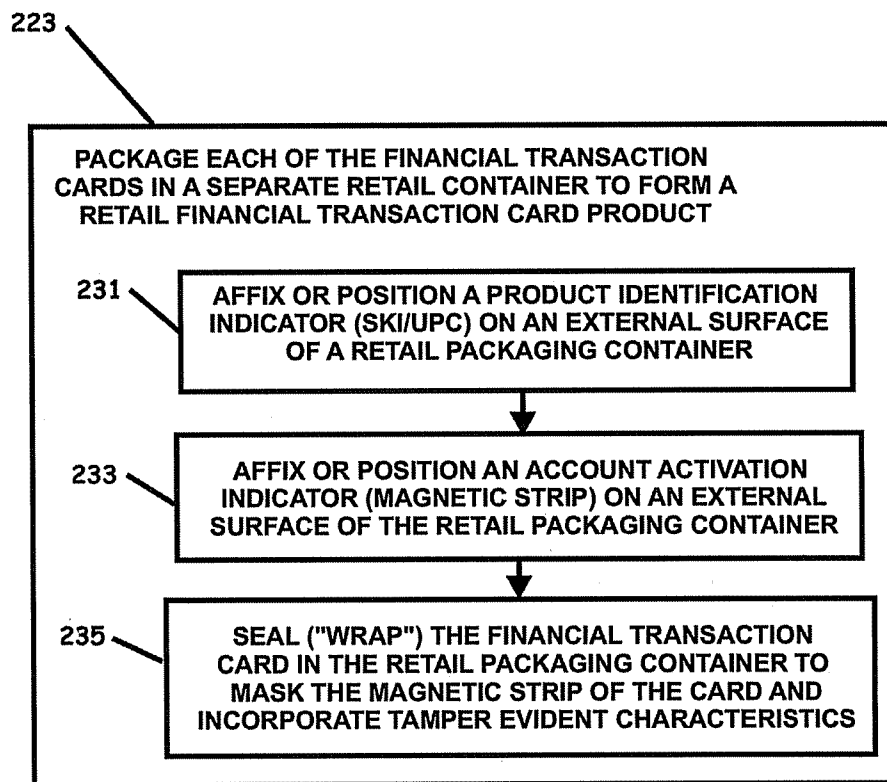


FIG. 3.



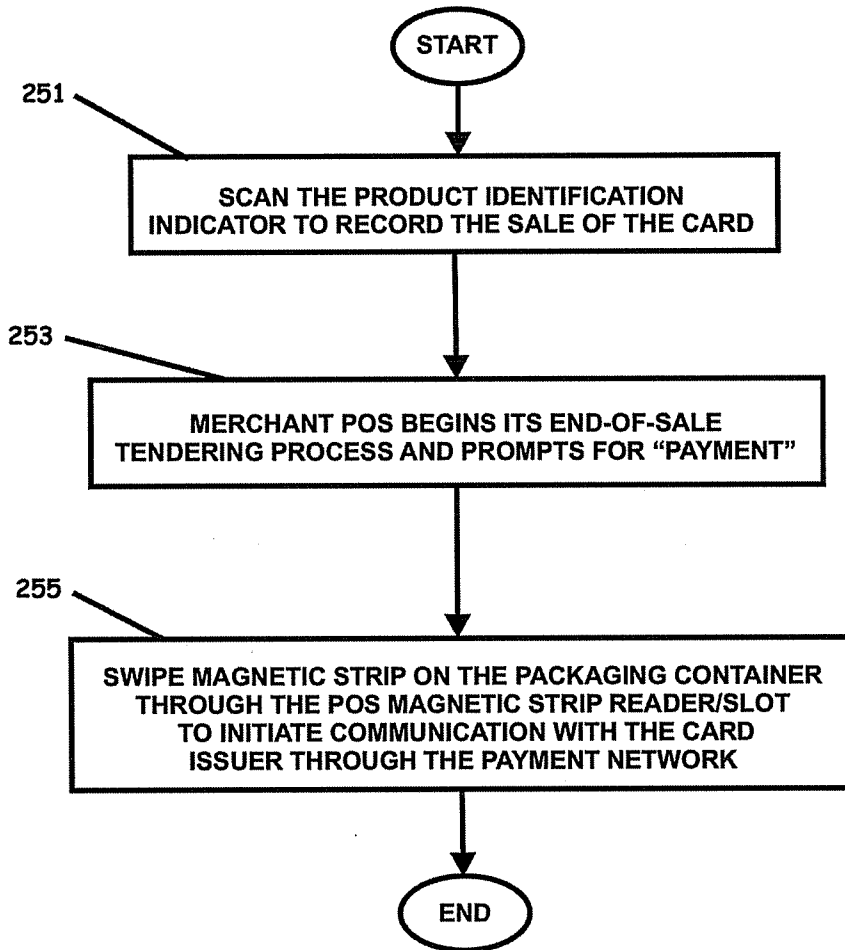


**FIG. 4.**



**FIG. 5.**

7/12



**FIG. 6.**

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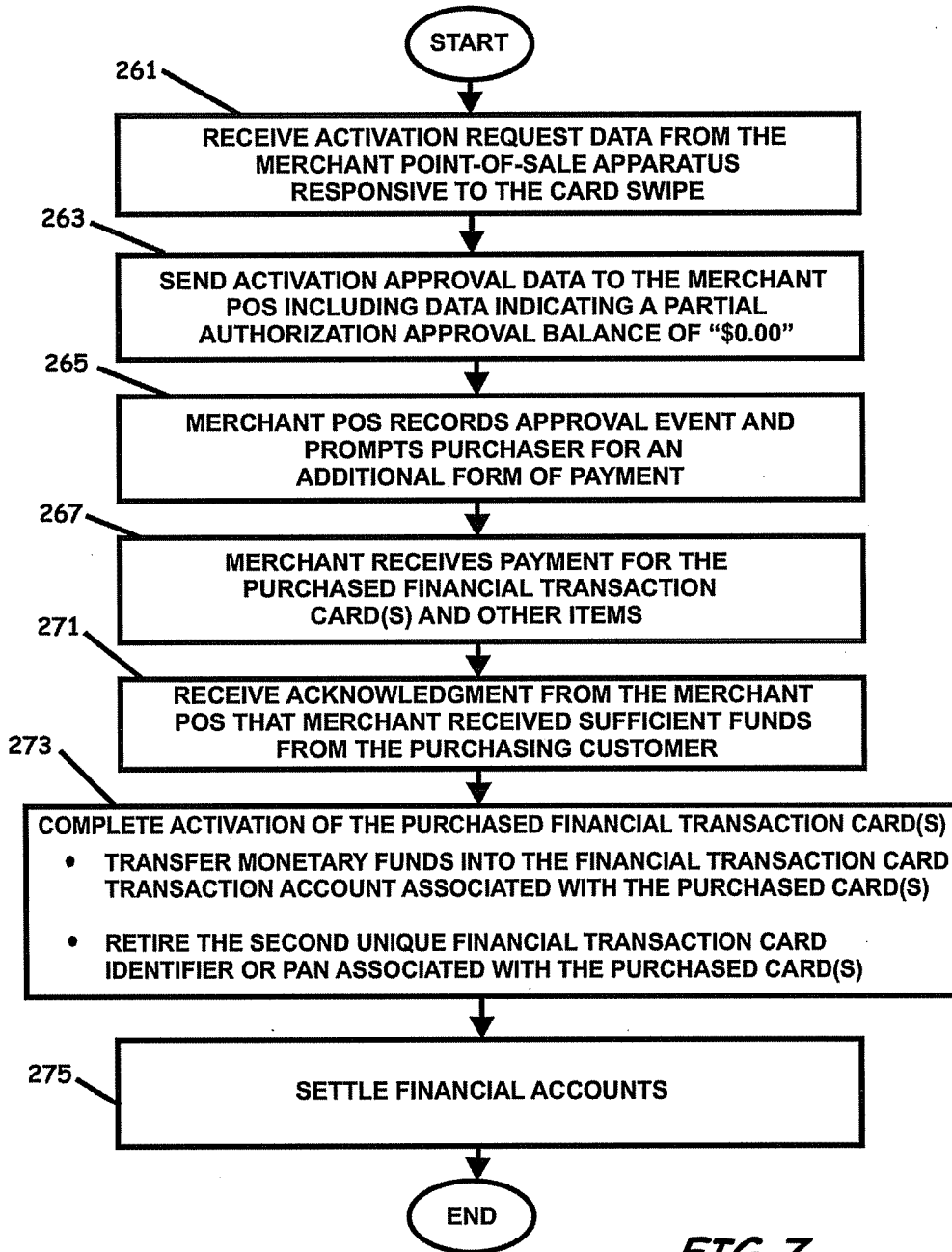


FIG. 7.

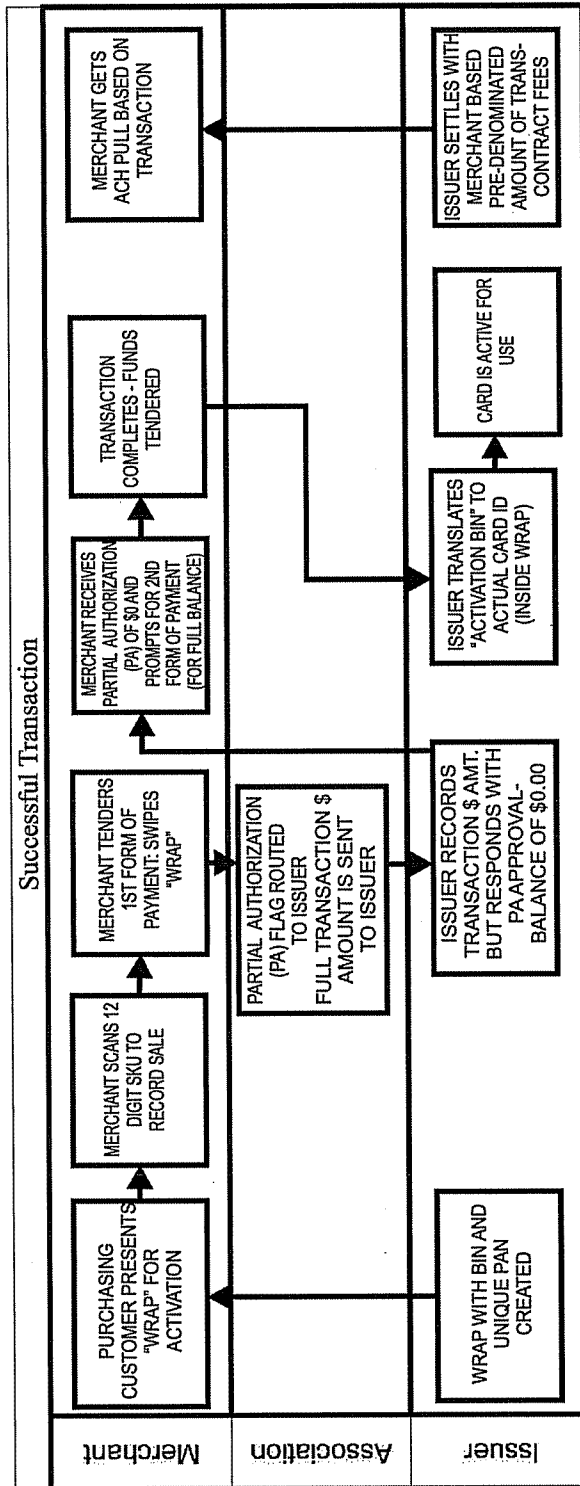


FIG. 8.

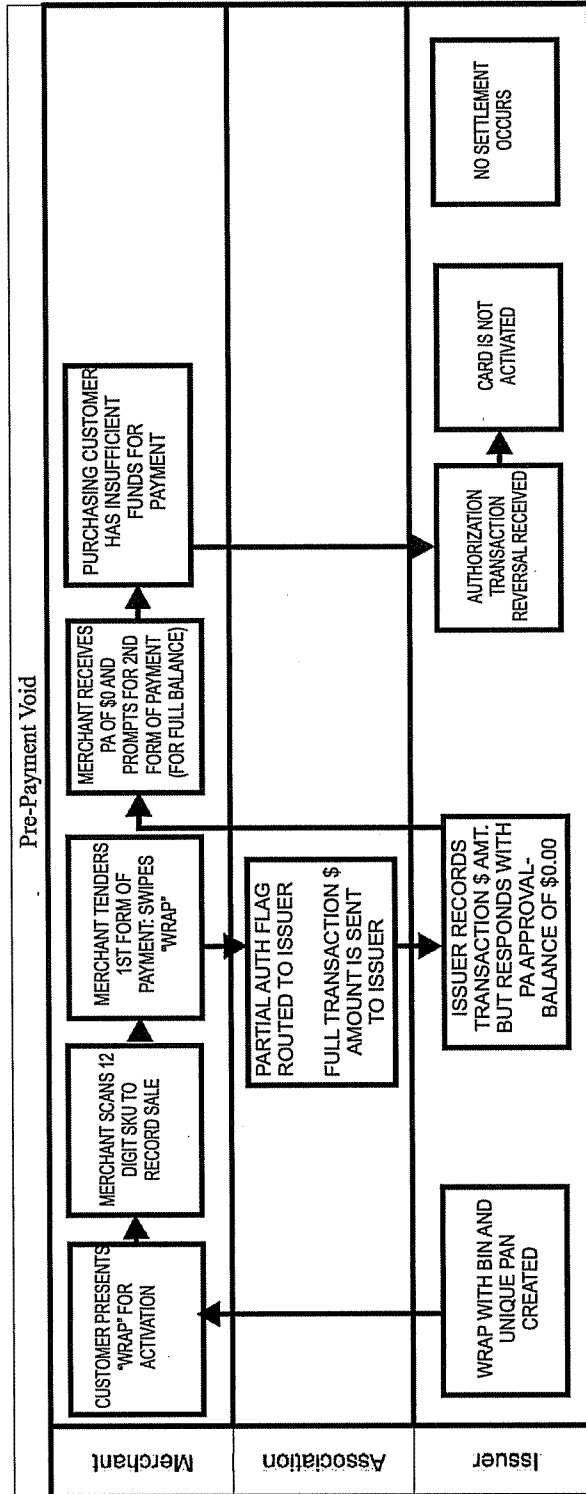


FIG. 9.

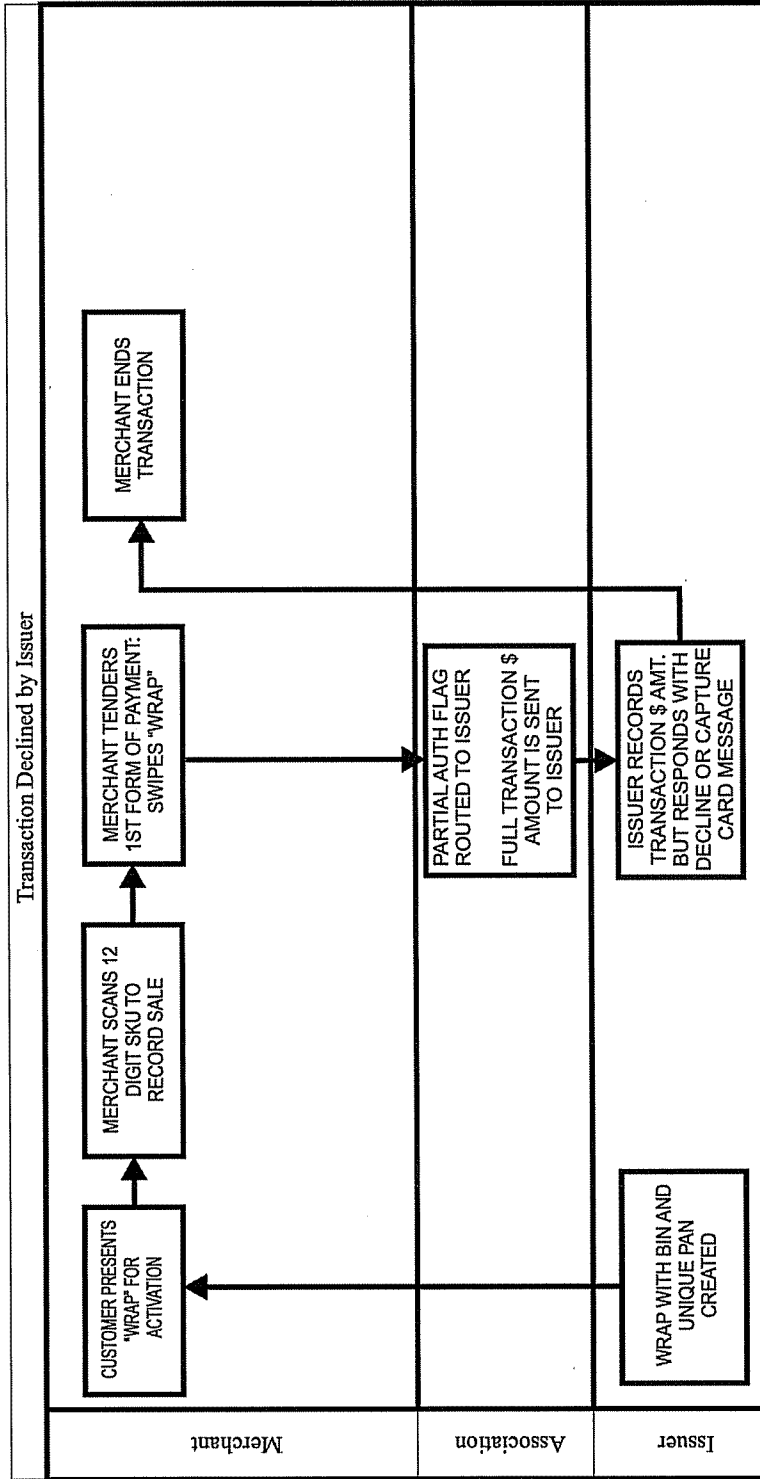


FIG. 10.

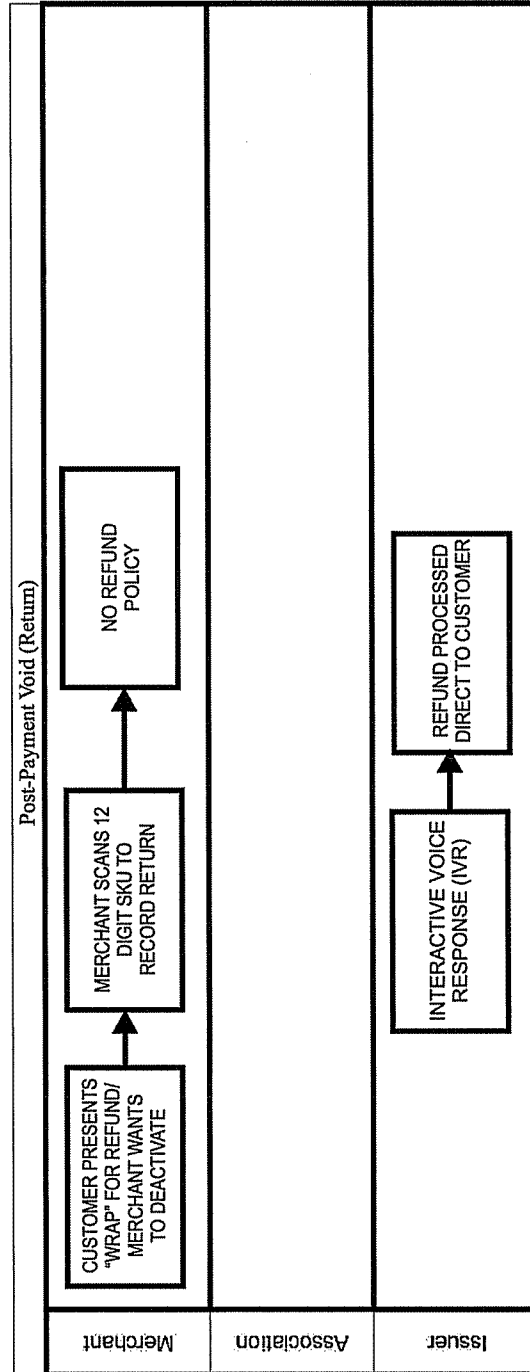


FIG. 11.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 09/56072

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(8) - G06Q 20/00 (2009.01) USPC - 705/64 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC (8) - G06Q 20/00 (2009.01) USPC - 705/64 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 705/16; 705/41; 705/44 (See Keywords Below)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Pub WEST (USPT, PGPB, JPAB, EPAB), Google Scholar Search Terms Used: activate, gift card, prepaid card, stored value card, transaction card, account, partial authorization message, activation identifier, bank, issuer, identifier, BIN, card identifier, merchant, first, second, identifier, number, serial, open network.....		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/0197059 A1 (TIDBALL et al.), 23 October 2003 (23.10.2003), entire document, especially abstract; para [0014]-[0015], [0017]	1-5, 11-13, 21-23, 30-34 and 36-37
Y	US 2005/0205663 A1 (ALLGIENE), 22 September 2005 (22.09.2005), entire document, especially para [0010], [0020]-[0021], [0025], [0028]-[0030]	1-5, 11-13, 21-23, 30-34 and 36-37
Y	US 2006/0249570 A1 (SEIFERT et al.), 09 November 2006 (09.11.2006), entire document, especially para [0034]-[0037], [0041]-[0044], [0046]	1-5, 21-23 and 30-34
Y	US 6,000,608 A (DORF), 14 December 1999 (14.12.1999), entire document, especially	3-5, 32-34 and 36-37
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/>		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 08 October 2009 (08.10.2009)		Date of mailing of the international search report <b>20 OCT 2009</b>
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 09/56072

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

- 1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
- 2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
- 3.  Claims Nos.: 6-10, 14-20, 24-29 and 35  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

- 1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
- 2.  As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
- 3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
- 4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.