VIRTUAL WALLET CARD SELECTION APPARATUSES, METHODS AND SYSTEMS

[0001] This application for letters patent discloses and describes various novel innovations and inventive aspects of VIRTUAL WALLET CARD SELECTION technology (hereinafter "disclosure") and contains material that is subject to copyright, mask work, and/or other intellectual property protection. The respective owners of such intellectual property have no objection to the facsimile reproduction of the disclosure by anyone as it appears in published Patent Office file/records, but otherwise reserve all rights.

PRIORITY CLAIM

[0002] This application claims priority under 35 USC § 119 to United States provisional patent application serial no. 61/492,854 filed June 3, 2011, entitled "VIRTUAL WALLET CARD SELECTION APPARATUSES, METHODS AND SYSTEMS," attorney docket no. P-42069PRV|20270-139PV. The entire contents of the aforementioned applications are expressly incorporated herein by reference.

FIELD

[0003] Embodiments of t~~T~~he present invention~~innovations~~ generally address apparatuses, methods, and systems for electronic purchase transactions, and more particularly, include VIRTUAL WALLET CARD SELECTION APPARATUSES, METHODS AND SYSTEMS ("VWCS").

BACKGROUND

[0004] Consumer transactions require a customer to select a product from a store shelf, and then to check them out at a checkout counter. Product information is entered into a point-of-sale terminal device, or the information is entered automatically by scanning an item barcode with an integrated barcode scanner, and the customer is usually provided with a number of payment options, such as cash, check, credit card or debit card. Once payment is made and approved, the point-of-sale terminal memorializes the transaction in the merchant's computer system, and a receipt is generated indicating the satisfactory consummation of the transaction.

SUMMARY OF INVENTION

[0004a] According to a first aspect, there is provided a virtual wallet card selection system, comprising: a computing processor; a network communication device disposed in communication with the computing processor; and a memory disposed in communication with the computing processor, and storing computing processor-executable instructions to: obtain, via the network communication device operatively connected to a payment network server, a user authentication request for a purchase transaction; extract, via the computing processor operatively connected to the payment network server, a universal card account number based on parsing the user authentication request; determine, based on querying a database memory operatively connected to the payment network server, using the universal card account number, that the user is authorized to access a virtual wallet; determine, based on querying a database memory using the universal card account number, that the user

desires to maintain privacy of user payment data from a merchant involved in the purchase transaction by utilizing a secure network communication with the user's mobile device to provide payment data to the payment network server to process the purchase transaction; identify, via the computing processor of the payment network server, a plurality of card selection options to provide securely to a user mobile device of the user via the network communication device, to maintain the privacy of the user payment data from the merchant involved in the purchase transaction; provide via the network communication device, upon determining that the user is authorized to access the virtual wallet, a secure user virtual wallet card selection request including the card selection options to the user mobile device via an encrypted out-of-band network communication, thus reducing bandwidth usage and network latency of an electronic payment communication network; obtain, via the network communication device at a payment network server, user selection of a virtual wallet card account from the plurality of securely provided card selection options, from the user mobile device via the network communication device; and provide, via the network communication device, an encrypted purchase transaction request message for transaction processing, using the user selection of the virtual wallet card account.

[0004b] According to a second aspect, there is provided a virtual wallet card selection system, comprising: a processor; and a memory disposed in communication with the processor and storing processor-executable instructions to: obtain a user authentication request for a purchase transaction; extract, via the processor, a universal card account number based on parsing the user authentication request; determine, based on querying a database using the universal card account number, that the user is authorized to access a virtual wallet; provide a user virtual wallet card selection request

to a user device, upon determining that the user is authorized to access the virtual wallet; obtain user selection of a virtual wallet card account; and provide a purchase transaction request message for transaction processing, using the user selection of the virtual wallet card account.

[0004c] According to a third aspect, there is provided a non-transitory computer-readable medium storing processor-executable virtual wallet card selection instructions to: obtain a user authentication request for a purchase transaction; extract, via the processor, a universal card account number based on parsing the user authentication request; determine, based on querying a database using the universal card account number, that the user is authorized to access a virtual wallet; provide a user virtual wallet card selection request to a user device, upon determining that the user is authorized to access the virtual wallet; obtain user selection of a virtual wallet card account; and provide a purchase transaction request message for transaction processing, using the user selection of the virtual wallet card account.

[0004d] According to a fourth aspect, there is provided a virtual wallet card selection processor-implemented method, comprising: obtaining a user authentication request for a purchase transaction; extracting, via a computing processor, a universal card account number based on parsing the user authentication request; determining, based on querying a database using the universal card account number, that the user is authorized to access a virtual wallet; providing a user virtual wallet card selection request to a user device, upon determining that the user is authorized to access the virtual wallet; obtaining user selection of a virtual wallet card account; and providing a

purchase transaction request message for transaction processing, using the user selection of the virtual wallet card account.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] The accompanying appendices, drawings, figures, images, etc. illustrate various example, non-limiting, inventive aspects, embodiments, and features ("e.g.," or "example(s)") in accordance with the present disclosure:

[0006] FIGURES 1A-C show block diagrams illustrating example aspects of a virtual wallet card selection-based purchase transaction in some embodiments of the VWCS;

[0007] FIGURE 2 shows application user interface diagrams illustrating example features of a virtual wallet card selection mobile app for selecting from various payment options in some embodiments of the VWCS;

[0008] FIGURES 3A-C show application user interface diagrams illustrating example features of a virtual wallet card selection mobile app for securing user data and preventing fraud in some embodiments of the VWCS;