CONTEXT-BASED CARD SELECTION DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application contains subject matter similar to U.S. patent application Ser. No. 10/744,169, entitled "Over-the-Air Card Provisioning System and Method", filed on Dec. 23, 2003, which is incorporated herein by reference for all purposes.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

REFERENCE TO A MICROFICHE APPENDIX

Not applicable.

FIELD OF THE INVENTION

The present invention relates to the consolidation of multiple card transaction devices into a single device. More particularly, embodiments of the present invention provide for rules that specify which of a plurality of surrogates for card transaction devices are to be used based on the context of their use.

BACKGROUND OF THE INVENTION

Data can be stored in various types of cards and other portable items that can be referred to generically as card transaction devices. One category of card transaction device can include payment cards such as credit cards, debit cards, gift cards, and cards for various prepaid services or goods. Data is typically stored on such cards in a magnetic strip. Another category of card transaction device can be referred to as "smart cards". These cards contain data processing circuitry that offers more computing capacity than magnetic strip cards.

In addition to account and payment information, data that might be stored on card transaction devices can include information related to loyalty reward programs such as those operated by airlines, grocery stores, and other retail merchants. Electronic coupons, electronic tickets, personal identification information, medical information, passwords, and other types of information can also be stored on card transaction devices.

Another category of card transaction device includes cards known as radio frequency identification, or RFID, cards. RFID cards can uniquely identify a person or object associated with the card and are therefore sometimes used as keys to allow access to restricted areas. For example, a reading device capable of reading data embedded in an RFID card can be placed near an entrance to a restricted area. When an RFID card is brought into the proximity of the card reader, a radio frequency signal is exchanged between the card and the reader. If the identifying information in the card indicates that a person associated with the card is allowed access to the area, the reader can cause access to be granted.

RFID cards can also be used to make automatic payments of, for example, highway tolls. An RFID card in an automobile can be read by a card reader at a toll booth. As the automobile passes through the toll booth, the card reader can

cause a toll to be automatically deducted from a prepaid account or credited to a credit card.

Any device that can be used for this purpose or that functions in the manner of the RFID cards described above will be referred to herein as a traditional RFID card. It should be understood that traditional RFID cards and other card transaction devices mentioned herein can have shapes and sizes other than a wallet-sized card. The term "card reader" refers to a device that can send information to and receive information from a traditional RFID card or other card transaction device and take an action in response to the received information.

SUMMARY OF THE INVENTION

An embodiment of the invention is card transaction device for selecting virtual cards for transactions based on a context. The portable device includes a plurality of virtual cards, and a storage device for storing the plurality of virtual cards. The cards may relate to credit or debit cards, loyalty cards, reward cards, security or access cards, or identification cards, for example. The portable device includes a user interface for a user to maintain rules for selection of one or more virtual cards based on the context of the transaction. The portable device also includes a processor to process the rules and select at least one of the virtual cards based on the context of the transaction.

An alternative embodiment is a method for selecting a card from among a plurality of virtual cards based on a context. The method includes communicating between a mobile device and a card reader. The mobile device maintains a plurality of virtual cards. The method includes receiving, by the mobile device, information regarding a context. The information also includes processing a set of rules to select one or more of the plurality of virtual cards based on the context.

In one embodiment, the present disclosure provides a system for selecting a virtual card appropriate for a context. The system includes a plurality of virtual cards and a set of rules related to one or more of the plurality of virtual cards. The set of rules has a context component. The system also includes a processor to apply at least one of the set of rules and select one or more of the plurality of virtual cards based on the context component.

These and other features and advantages will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the presentation and the advantages thereof, reference is now made to the following brief description, taken in connection with the accompanying drawings in detailed description, wherein like reference numerals represent like parts.

FIG. **1** is a block diagram of a context-based card selection system, according to one embodiment of the present disclosure.

FIG. **2** is a flowchart of a method for context-based card selection, according to another embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

It should be understood at the outset that although an exemplary implementation of one embodiment of the present