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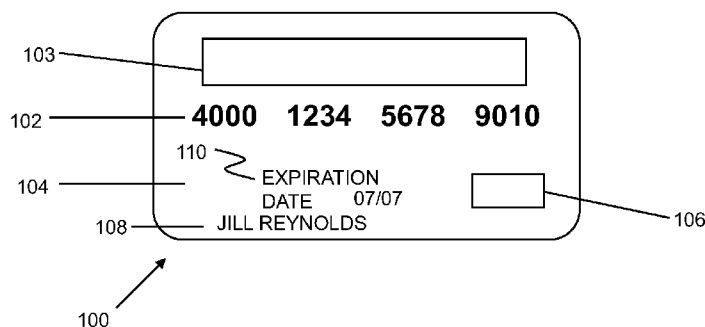


FIGURE 1

(57) Abstract: A financial transaction card having a card with a front face and a back face, a financial payment device on or in the card, an advertising screen on one of the front face and the back face, and at least one activating arrangement connected to the advertising screen, configured to activate and deactivate the screen.

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ADVERTISING SCREEN ON PAYMENT CARD

FIELD OF THE INVENTION

[0001] Aspects of financial transaction cards are described.

BACKGROUND INFORMATION

[0002] The need for conducting accurate transactions between parties, such as between a customer using a credit card and a merchant, becomes paramount as the financial transaction card industry strives for increasingly cost efficient, safe and secure apparatus and methods to complete these transactions.

Conventional technologies used by financial institutions and consumers alike, while providing the ability to conduct financial transactions, are not adaptable to make the consumer aware of new offers for service.

[0003] Conventional cards, such as credit cards, bank cards, debit cards and other financial transaction cards are configured with a plastic body that has a unique identification number imprinted on the card. The cards also have a magnetic strip that allows for a magnetic verification of the authenticity of the card to the financial institution issuing the card. Cards having additional functionality are desired.

SUMMARY OF THE INVENTION

[0004] In one configuration, a financial transaction card is presented. The financial transaction card has a front face and a back face. A financial payment device is positioned on or in the card. An advertising assembly is also positioned on one of the front face and the back face. At least one activating arrangement is connected to the advertising assembly configured to activate and deactivate the advertising assembly.

[0005] In another aspect, a method of advertising is presented. The method comprises: conducting a financial transaction between the merchant and a card holder including use of a payment card, communicating between a merchant communication device and the payment card to transfer information between the merchant communication device and the payment card, and conducting an advertisement on the payment card from the information obtained from the merchant communication device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Figure 1 is a front view of a payment card as described in the detailed description.

[0007] Figure 2 is a back view of the payment card of Figure 1.

[0008] Figure 3 is a flow chart of a method of advertising.

DETAILED DESCRIPTION

[0009] Referring to Figure 1, a financial transaction card **100** is presented. In the illustrated configuration, the financial transaction card **100** has a rectangular shape. Although illustrated as a rectangular shape, other shapes may be used. The financial transaction card **100** is a plastic bodied card however other materials may be used. The financial transaction card **100** may be configured in a conventional shape such that various automated payment machines may accept the financial transaction card **100**.

[0010] A serial number **102** is located on a first (e.g., front) face **104** of the financial transaction card **100**. The serial number **102** is unique to the individual card and allows an issuing organization to track financial purchases and

transactions to the financial transaction card **100**. The serial number **102**, as it is unique, allows an issuing organization to identify potential fraud occurring through the unauthorized use of the financial transaction card **100**. A database of serial numbers for financial transaction cards that have been stolen or compromised may be maintained by the issuing organization thereby preventing further fraudulent transactions from occurring with a compromised financial transaction card **100**. The front face **104** of the financial transaction card **100** may be a smooth surface with raised numbers. Tactile features may be placed on the front face **104** of the financial transaction card **100** to allow a user to quickly identify the front face **104** from the back face **200** of the financial transaction card **100**. Other tactile features, such as Braille encoding may be included on the front face **104** of the financial transaction card **100** thereby allowing individuals who have visual difficulty to nonetheless use the financial transaction card **100**.

[0011] A holograph **106** may also be located on the front face **104** of the financial transaction card **100**. The holograph **106** provides an additional protection against fraud by allowing a merchant to quickly identify if a financial transaction card **100** is a validly authorized card. An authorization name **108** is also located on the front face **104** of the financial transaction card **100**. Additionally, an expiration date **110** is located on the front face **104** of the financial transaction card **100**. The expiration date **110** quickly indicates to a merchant the expiration date of the financial transaction card **100** such that purchases after the expiration date **110** cannot be performed.

[0012] In some embodiments, an advertising assembly **103** is located on the front face **104** of the financial transaction card **100**. In other embodiments, the advertising assembly **103** is located on the back face **200**. The advertising assembly **103**, in the illustrated configuration, is an electronic paper screen with electronic ink, such as an electrophoretic display, an electro-wetting display, a bistable LCD, a cholesteric LCD, or the like. The advertising assembly **103** may

also be a bistable screen. The advertising assembly **103** is connected to both a battery **204** and an activating arrangement or circuit **206**, described below. In the illustrated embodiment, the advertising assembly **103** and the below-described activating arrangement **206** are powered by a battery **204**. In another embodiment, financial transaction card **100** may include electrical contacts for connecting to a voltage supply terminal and a ground terminal of a merchant payment reader or terminal configured to provide power to the card **100** from an external source. In another embodiment, financial transaction card **100** may include an antenna to receive power from an external electromagnetic field of a merchant payment reader or terminal configured to provide power to the card **100**. In some embodiments, the advertising assembly **103** may not draw any power in between state changes. In other embodiments, the advertising assembly **103** may draw power for a relatively short time just before or just after a state change, and have a period between state changes when the advertising assembly **103** does not draw power. For example, the advertising assembly **103** may draw power only during the transitions between displaying the advertisement and not displaying the advertisement, and draw no power during at least a portion of the period when the advertisement is displayed. Similarly, the advertising assembly **103** may draw no power during at least a portion of the period when no advertisement is displayed.

[0013] The advertising assembly **103** allows for either a predefined advertisement to be displayed upon the advertising assembly **103** or, through use of the activating arrangement **206**, the advertising assembly **103** may display different advertisements that are received from a source exterior to the card systems. The advertising assembly **103** can display alphanumeric data or may provide a picture or logo. The advertising assembly **103** also may include a speaker or a combination of a speaker and an advertising screen. An override function/button may also be placed upon the card **100** such that advertising is halted upon the selection by the user. The advertising assembly **103** may

provide a static display in the case of a picture or text, or, in alternative aspects, provide for motion in video format.

[0014] In some embodiments, the advertising assembly **103** requires no front or back light, thereby allowing individuals to view the advertising assembly data with little power consumption. The advertising assembly **103** is also viewable under a wide range of circumstances such as from varying angles. The advertising assembly **103** is also configured such that ultra low power is used to develop and maintain an image on the financial transaction card **100**. In some embodiments, the advertising assembly **103** is also flexible and can be bent without harm to the advertising assembly **103**. Under differing electronic/magnetic fields, materials placed in the fluid environment will either gather at the surface or dissipate from the surface thereby creating images for the card user to view. By alternating the electronic/magnetic fields, different messages or video playback may be accomplished. Alternative embodiments may include a front lit screen, for example.

[0015] Referring to Figure 2, a back face **200** of the financial transaction card **100** is presented. The back face **200** of the financial transaction card **100** may be essentially smooth, unlike the front face **104** that has tactile features placed upon it. The back face **200** has a financial payment device **202** that will interact with financial transaction systems used in commerce. Examples of different types of financial payment device **202** are a magnetic stripe, a contact electronic transfer system, or a contactless data transfer system. For a contactless data transfer system, randomized authorization codes may be used to prevent fraud from occurring. In some embodiments, a radio frequency identification system is used as the contactless data transfer system. Depending on the type of financial payment device **202**, the device may be on either the front or rear surface of the card (e.g., if the device is a magnetic stripe) or embedded in the card (e.g., if the device is a chip or circuit).

[0016] In the illustrated configuration, the financial payment device **202** is a magnetic stripe that does not require charging. A battery **204** is embedded in the financial transaction card **100** to provide power to an activating arrangement **206** and an advertising assembly **103**. In the illustrated embodiment, the battery **204** is a rechargeable unit, however, the battery presented may be a one-time only charged unit. The battery **204** itself may also be incorporated into the body of the card **100** so that a user of the financial transaction card **100** does not see the battery **204**. The thin-film battery **204** is preferably a flexible unit that will withstand shock and vibration such that connection is not lost to other components on the financial transaction card **100**. In alternative configurations, the thin-film battery **204** may be a rechargeable unit and may be charged by induction coupling. The thin-film battery **204** may also be configured to be heat resistant. The thin-film battery **204** may also be waterproof and shockproof.

[0017] An activating arrangement **206** is illustrated on the back face **200** of the financial transaction card **100**. The activating arrangement **206**, in the illustrated configuration, may include a computer or application specific integrated circuit chip that can receive wired or wireless transmission from an outside source, such as from a merchant communication device, through a built-in communication arrangement or circuit. The activating arrangement **206** is connected to the advertising assembly **103** located on the front face **104** of the financial transaction card **100**. The activating arrangement **206** allows the financial transaction card **100** to accept data from a merchant communication device (e.g., reader or terminal), decode the data, and outputting the data such that the data is displayed upon the advertising assembly **103** of the financial transaction card **100**. In some embodiments, the activating arrangement **206** also provides a storage buffer (e.g., a plurality of memory cells) for rate matching. The storage buffer may be advantageous for decoding and displaying video or sequences of multiple images, for example.

[0018] The information transmitted to the financial transaction card **100** may also be an open source or standard format data transfer, thereby minimizing decoding requirements of the card **100**. In an alternative configuration, the activating arrangement **206** is connected to the financial payment device **202**. As an additional security check, the activating arrangement **206** may activate the financial payment device **202**, thereby authorizing a financial transaction. A security code **208** is also located on the back face **200** of the financial transaction card **100**. A bearer of the financial transaction card **100** is also provided with an authorized signature block **210** thereby allowing a merchant to check a signature of the cardholder. Either the front face **104** or the back face **200** may be configured with a photo identification of the bearer of the card. Artwork/Logo work may also be located on various portions of the card **100**. The front face **104** and the back face **200** of the financial transaction card **100** may also be configured with contact information and payment information for the issuer of the card **100**.

[0019] Referring to Figure 3, a method **300** of advertising is presented. In the method **300**, a financial transaction card is provided to a merchant such that a financial transaction can be completed **302**. Next, a financial transaction is conducted between a merchant and the cardholder **304**. This can be, for example, a purchase of an item from the vendor/merchant. A communication is established between a merchant communication device and the financial transaction card such that information is transferred between the merchant communication device and the financial transaction card **306**. In the illustrated configuration provided, the merchant communication device may be a transmitter that sends data over a wireless network to a financial transaction card it is capable of receiving information placed upon the wireless network. The data may be encoded or may not be encoded in different configurations. The financial transaction card then takes the information from the merchant communication device and displays the information on an advertising assembly located on the financial transaction card **308**. The advertisement may be terminated **310** based

upon either elapse of a preset time or a signal received from the merchant communication device that terminates the advertisement placed on the financial transaction card **100**.

[0020] In the foregoing specification, the configurations have been described with reference to specific configurations thereof. It will, however, be evident that various modifications and changes may be made thereunto without departing from the broader spirit and scope of the configurations as set forth in the appended claims. The specification and drawings are accordingly to be regarded in an illustrative rather than in a restrictive sense.

What is claimed is:

1. A financial transaction card, comprising:
a card with a front face and a back face;
a financial payment device on or in the card;
an advertising assembly on one of the front face and the back face; and
at least one activating arrangement connected to the advertising assembly, configured to activate and deactivate the advertising assembly.
2. The financial transaction card according to claim 1, wherein the advertising assembly includes a bistable screen that is configured to draw power only when the screen changes between a first state and a second state.
3. The financial transaction card according to claim 1, wherein the advertising assembly includes a screen that is configured to draw power to display an advertisement, and is configured to not draw power during at least a portion of a period when the advertisement is being displayed.
4. The financial transaction card according to claim 1, wherein the at least one activating arrangement comprises a computer chip.
5. The financial transaction card according to claim 1, wherein the financial payment device has electrical contacts.
6. The financial transaction card according to claim 5, wherein the contact driven transaction arrangement is a magnetic stripe.
7. The financial transaction card according to claim 1, wherein the financial payment device is a contactless device.
8. The financial transaction card according to claim 1, further comprising:
a battery attached to the at least one activating arrangement.

9. The financial transaction card according to claim 8, wherein the battery is a rechargeable battery.

10. The financial transaction card according to claim 1, wherein:
the advertising assembly includes a screen coupled to the at least one activating arrangement,
the activating arrangement is configured to activate and deactivate the screen, and
the advertising assembly further comprises a communication device configured to interface with the screen to transfer information from an outside source to the screen.

11. A method of advertising, comprising:
conducting a financial transaction between a merchant and a card holder, including use of a financial transaction card at a merchant point of sale;
communicating between a merchant communication device at the merchant point of sale and the financial transaction card to transfer information between the merchant communication device and the financial transaction card;
and
conducting an advertisement on the financial transaction card from the information obtained from the merchant communication device.

12. The method according to claim 11, wherein the conducting of the advertisement includes displaying information on at least one of a front face and a back face of the card.

13. The method according to claim 11, wherein the advertisement is displayed on a display screen of the card.

14. The method according to claim 13, wherein the screen includes a bistable screen that is configured to draw power only when the screen changes between a first state and a second state..

15. The method according to claim 13, wherein the display screen is configured to draw power during a state change to display the advertisement, and is configured to not draw power during at least a portion of a period when the advertisement is being displayed.

16. The method according to claim 11, further comprising:
terminating displaying of the advertisement on the financial transaction card after an amount of elapsed time.

17. The method according to claim 16, wherein the amount of time is a preset time.

18. The method according to claim 11, wherein the advertisement is a static picture.

19. The method according to claim 11, wherein the advertisement is a video clip.

20. The method according to claim 11, wherein the advertisement is a sound clip.

21. The financial transaction card according to claim 1, wherein the advertising assembly includes a speaker configured to play a sound.

22. The financial transaction card according to claim 1, wherein the advertising assembly comprises a speaker and a bistable screen that is

configured to draw power only when the screen changes between a first state and a second state..

23. The financial transaction card according to claim 1, wherein the advertising assembly comprises a speaker and a screen that is configured to not draw power during at least a portion of a period when the advertisement is not displayed.

24. A computer-readable medium, encoded with data and instructions, that when executed by a computing-device causes the computing device to:

- conduct a financial transaction between the merchant and a card holder;
- communicate between a merchant communication arrangement and the financial transaction card to transfer information between the merchant communication arrangement and the financial transaction card; and
- conduct an advertisement on the financial transaction card from the information obtained from the merchant communication arrangement.

25. The computer-readable medium, according to claim 24, wherein the conducting of the advertisement is on at least one of a front face and a back face of the card.

26. The computer-readable medium, according to claim 24, wherein the advertisement is displayed on a display screen for the card.

27. The financial transaction card according to claim 1, wherein the advertising assembly is a bistable screen that is configured to not draw power during at least a portion of a period between a first change of state and a second change of state.

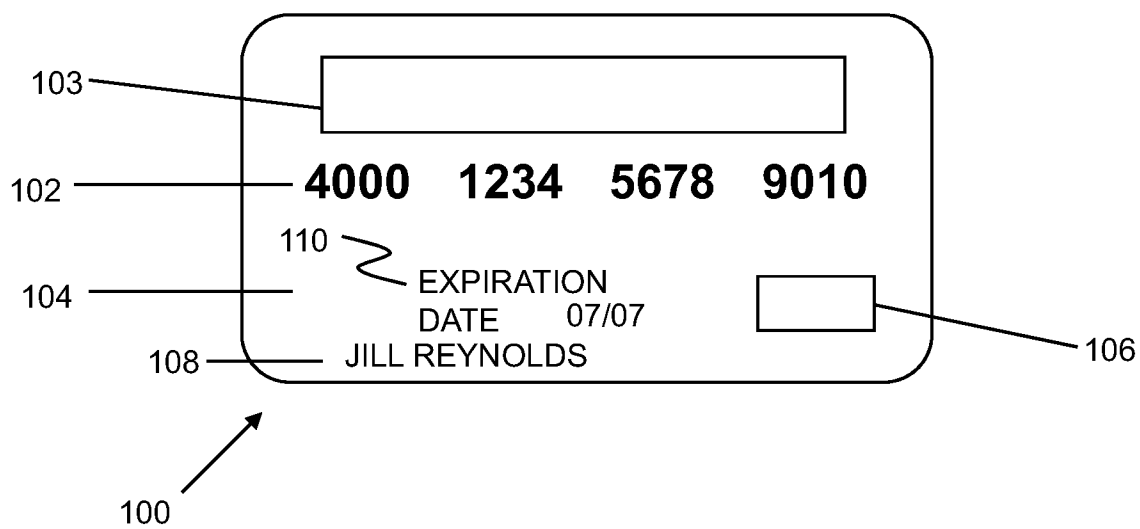


FIGURE 1

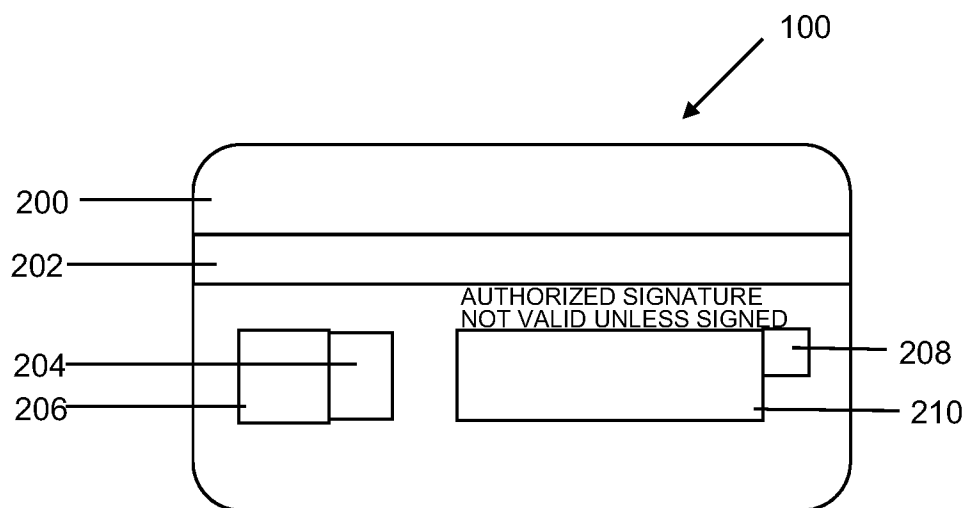


FIGURE 2

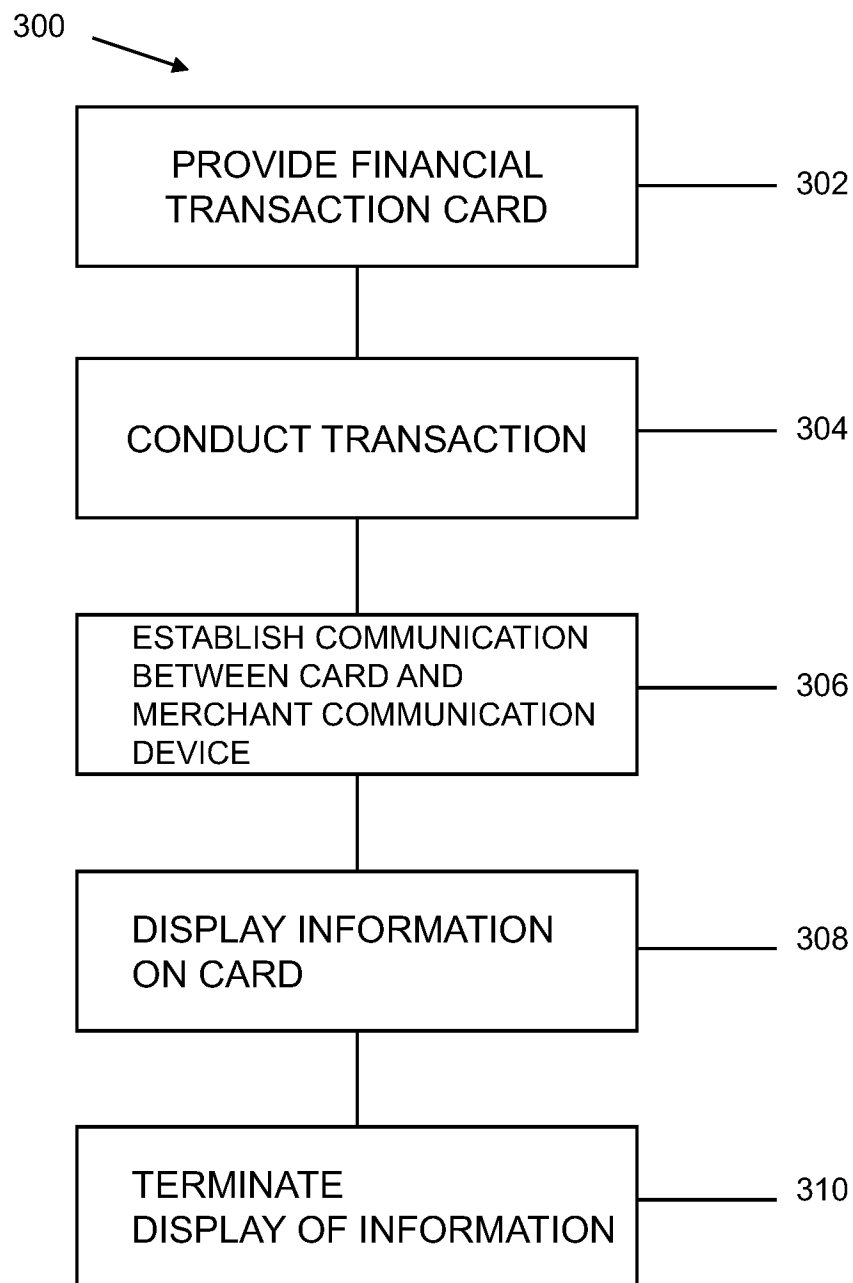


FIGURE 3