MOBILE DEVICE CARD KEEPER

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ABSTRACT

A mobile device card holder is provided that can include a mobile device housing component, and a receiving structure mechanically coupled to the mobile device housing component to hold cards such as a credit card and driver license. In one arrangement, the receiving structure can be externally integrated onto a mobile device housing. Other embodiments are disclosed.
MOBILE DEVICE CARD KEEPER

CROSS-REFERENCE

[0001] This application claims the priority benefit of U.S. Provisional Patent Application No. 61/198,815 filed Nov. 10, 2008, the entire contents of which are hereby incorporated by reference.

FIELD

[0002] The present disclosure relates generally to card carrying cases and more specifically to a mobile device card holder.

BACKGROUND

[0003] Credit cards and driver licenses are important personal identification objects that are generally carried on the person by way of a wallet, purse, or pocket. Although mobile devices and laptops can hold digital information, such as credit card information and personal data, such electronic devices are not considered a replacement for the credit cards or driver license. Credit cards, driver licenses, and other identification cards are generally required to be presented in original form and not on a mobile device or laptop. The physical card is also commonly viewed as indispensable by many of their users.

SUMMARY

[0004] In a first embodiment, a card keeper includes a card sleeve to hold cards and a mechanism for coupling the card sleeve to a mobile device. The card sleeve can include at least one opening to show a portion of a face of a card in the sleeve. The card sleeve can also contain one or more cut-outs to provide access to a camera or data ports of the mobile device that would otherwise be covered or obscured by the card keeper when no cards are inserted. The card sleeve can include a front section and back section that differ in texture to introduce varying levels of friction such that the back portion is rough, providing more grip for less frequently used cards, and the front section is smooth to permit sliding of more frequently used cards.

[0005] The mechanism can attach the card receiver to the mobile device via a bonding agent comprising glue, epoxy or mechanical fasteners. The device could also be attached via magnetic attraction, suction, or static attraction of the card sleeve to the mobile device. A back side of the mechanism can be contoured to a shape of the mobile device to compensate for any non-flat surface feature of the mobile device thereto attached. In one arrangement it can be a detachable battery cover that couples the card sleeve to the mobile device. A secondary pouch or sleeve can be provided to include a Radio Frequency Identification Device (RFID) or transponder device.

[0006] In a second embodiment a card holder can be integrated into mobile device housing component. The receiving structure can be closed to completely hide a face of a card in the sleeve. The receiving structure can include a front section and back section that differ in texture to introduce varying levels of friction such that the back portion is rough, to grip less frequently used cards, and the front section is smooth to permit sliding of more frequently used cards. The receiving structure can comprise a flexible L-shaped railing or flexible C-shaped railing and a top notch protruding from the receive structure to secure cards in place once fully inserted. The card holder can also include an RFID or transponder device embedded within card holder structure.

[0007] In a third embodiment a card keeper battery cover can include a receive structure comprising two slide rails having a closed end and an open end. The card keeper battery cover can be suitable for use with a mobile device. The open end can receive one or more cards by way of a sliding action that can be guided by the two side rails when one or more cards are inserted and slid to the closed-end. The card keeper battery cover can be detachable and include a back face for enclosing a battery onto the mobile device, and a front face that is partially open to permit a viewing of a portion of the cards and permit a manual sliding in and out of the cards by way of a thumb or finger. The card keeper can also include a secondary pouch with a clear cover on the front side of the device. Items that are meant to be readable can be placed in the clear pouch. An example of how such a pouch would be useful is, a bar coded tag provided for checking-in at a gym or work site could be placed in the pouch and then read by a scanner without the need to remove the tag from the card keeper.

[0008] The receive structure can include a flexible L-shaped railing or flexible C-shaped railing, and a top notch protruding from the receive structure to secure the cards in place once fully inserted. In one arrangement, the receive structure can include tiered railings for receiving cards via a sliding action to stagger the cards in the receiving structure such that a user can see portions of each card within the receiving structure when the cards are fully inserted. An RFID or transponder device can be embedded within the receive structure.

BRIEF DESCRIPTION OF DRAWINGS

[0009] The features of the system, which are believed to be novel, are set forth with particularity in the appended claims. The embodiments herein can be understood by reference to the following description, taken in conjunction with the accompanying drawings, in the several figures of which like reference numerals identify like elements, and in which:

[0010] FIG. 1 shows a frontal view of the Mobile Device Card Keeper in accordance with one embodiment.

[0011] FIG. 2 depicts an illustration of the Mobile Device Card Keeper receiving a card in accordance with one embodiment.

[0012] FIG. 3 depicts an illustration of an attachment of the Mobile Device Card Keeper to a receiving device in accordance with one embodiment.

[0013] FIG. 4 illustrates an exemplary configuration of the Mobile Device Card Keeper wherein a back portion is contoured to the shape of a receiving device to provide a flat backing for the card sleeve.

DETAILED DESCRIPTION

[0014] The present disclosure provides a mechanism for carrying cards, such as, but not limited to, credit cards, driver licenses, business cards, debit cards, identification cards or insurance cards with a mobile device. The Mobile Device Card Keeper can include a sleeve that holds one or more cards in order to facilitate carrying the cards with the mobile device. The Mobile Device Card Keeper can comprise a sleeve or pouch physically attached via glue, epoxy, fasteners, or other adhesive means to a mobile device or it can be a sleeve or pouch integrated directly into the housing of the mobile
device. The Mobile Device Card Keeper can also support RFID or similar technologies embedded into it to allow for transactional services to be facilitated without the need to remove a card from the card carrying pouch. The Mobile Device Card Keeper can also support a pouch or sleeve to carry and retain an RFID or similar technology device.

[0015] A frontal view of the mobile device card keeper 100 according to one embodiment is shown in FIG. 1. As illustrated, the mobile device card keeper 100 can include a sleeve or pouch 11 for receiving cards (shown by the diagonally hatched area labeled). The Mobile Device Card Keeper 100 allows a person to carry and extract cards (e.g., credit cards, business card, drivers license, etc.) with a mobile device (e.g., cell phone, PDA, laptop, etc) with relative ease. The mobile device card keeper 100 comprises a backing 12 (vertically hatched area) that can run the entire width and height of the keeper and forms the back of the pouch 11. A front section of the pouch 11 can be shorter than the back section of the pouch in order to allow a user to easily remove a card from the pouch. The Mobile Device Card Keeper 100 can attach to, be integrated with, or coupled to a portable music player, cell phone, PDA, or a battery cover of a device. The Mobile Device Card Keeper 100 allows users to access their cards by sliding them in and out of the sleeve or pouch 11.

[0016] The pouch configuration is not limited to the arrangement illustrated. As one example, the front section can be tapered 16 downward for example to permit a user when grasping a mobile device coupled to the mobile device card keeper to slide a thumb around the device and remove one of the cards. In such an advantageous arrangement, the user can use one hand to extract cards instead of two hands. Alternatively, an elongated elliptical hole 14 if not used for other purposes herein mentioned can be used as a thumb push to extract a card. Moreover, the texture of the front and back section can differ to introduce varying levels of friction on the cards. For instance, the back portion can be rough to grip less frequently used cards in the back, and the front portion can be smooth to permit sliding of more frequently used cards. The mobile device card keeper 100 can have a tab 17 that is used to hold cards in the sleeve once the card has been fully inserted into the sleeve.

[0017] In one arrangement, the mobile device card keeper 100 can attach to or be coupled with a mobile device. The mobile device can have card or bus ports that require opening for usability. One embodiment allows for access to areas of a housing by providing a cutout 13 in the backing material of the card carrying pouch. The opening 13 in FIG. 1 shows how an opening can be left in the shown embodiment such that access or usage of a camera or other feature is retained. The cutout in the sleeve can accommodate access to a camera or other ports on a device if they are present.

[0018] The mobile device card keeper 100 also anticipates a usage of RFID or other transponder technologies to facilitate transactions or convey credit card or other information. The embodiment shown in FIG. 1 depicts the embedding of an RFID 14 in a material of the mobile device card keeper 100. This can facilitate financial transactions without the user being required to remove a card. In another embodiment the mobile device card keeper 100 can provide a special pouch or sleeve 18 to allow an RFID device to be inserted into, and retained by, the mobile device.

[0019] FIG. 2 illustrates one exemplary arrangement wherein a card (21) can be inserted into the mobile device card keeper for storage. In this arrangement, the mobile device card keeper pouch 11 comprises a front layer 22 and a rear layer 23 to form a receiving sleeve. The card can be slipped into the receiving sleeve formed by the front layer (22) and the rear layer (23) of the mobile card keeper. The mobile device card keeper can secure to a mobile device via a physical mechanism, for example such as a clip or by way of glue, epoxy, or other adhesive or mechanical fasteners. The mechanical receiving sleeve can include fabricated materials that stretch or strain in relation to the number of cards stored. The sleeve can also include, for example, a flexible plastic L shaped holder 24 to permit 1 to 5 cards to be firmly held without slip. An exterior ralling of the flexible plastic L shaped holder 24 can be conditioned to flex inward when only 1-2 cards are present, but flex to a rigid upright position when 3-5 cards are present. Alternatively, a curved railing can also be employed with similar effect to receive one or more cards 21. In another arrangement, micro springs 25 can be employed to establish force for keeping the cards 21 in place.

[0020] As one example, the cards can be stored in either a single compartment or in the tiered (or staggered) card configuration. The receiving sleeve can also include tiered railings 26 offset from one another for receiving cards via a sliding action to stagger the cards in the receiving structure such that a user can see portions of each card within the receiving structure when the cards are fully inserted. In the tiered card configuration, multiple pouches can each be slightly offset to make cards stored behind other cards more easily accessible. FIG. 3 shows how a standalone embodiment can be attached to a mobile device. The back side of 10 can be placed into contact with a surface of the mobile device 31. The surface contact can be maintained by a physical bonding or adhesive means such as glue, epoxy, tape, mechanical fasteners, or any coupling arrangement that will keep both devices secured to each other. The back side of the mobile device card keeper 100 refers to the area of the mobile device card keeper 100 that comes into contact with the housing of a device. In such an arrangement, the mobile device card keeper 100 may or may not be integrated into the housing of a device, but operate a separate entity.

[0021] FIG. 4 depicts a bottom view for an embodiment of the invention. In this embodiment the back side of the invention 41 is curved to account for a similar curvature on the surface of the mobile device that it is being attached to. The bottom of the card carrying pouch is illustrated by the cross hatched area 42.

[0022] Notably, the surface at the area of attachment with mobile devices is not limited to being flat. In this case, to provide a flat surface for the card carrying pouch of the invention, the back side of the card keeper can be contourd. The back side of the invention can have a varying thickness from point to point. The contoured back side can account for variations in the mobile devices surface as illustrated in FIG. 4. The surface variation can include curvature, but it can also include protrusions or recesses on the surface, such as a battery door latch or camera lens.

[0023] In another arrangement, the card carrying pouch or sleeve can be integrated directly into the housing of a mobile device. For instance, a battery cover of a mobile device can be designed with an L-shaped flexible railing or a curved receiving sleeve to accept one or more cards. As one example, the battery cover door can be manufactured from a plastic injection mold process that introduces the novel features of the
mobile card carrying keeper for gripping the cards. The card receiver can also be injection molded onto an exterior of a mobile device housing.

[0024] While the preferred embodiments of the invention have been illustrated and described, it will be clear that the embodiments of the invention are not so limited. Numerous modifications, changes, variations, substitutions and equivalents will occur to those skilled in the art without departing from the spirit and scope of the present embodiments of the invention as defined by the appended claims.

What is claimed is:

1. A card keeper, comprising:
   a card sleeve to hold cards; and
   a mechanism for coupling the card sleeve to a mobile device.

2. The card keeper of claim 1, wherein the card sleeve comprises a front section and back section that differ in texture to introduce varying levels of friction such that the back portion is rough to grip less frequently used cards in a back, and the front section is smooth to permit sliding of more frequently used cards.

3. The card keeper of claim 1, wherein the mechanism attaches the card receiver to the mobile device via a bonding agent comprising glue, epoxy or mechanical fasteners, and wherein a back-side of the mechanism is contoured to a shape of the mobile device to compensate for any non-flat surface feature of the mobile device thereto attached.

4. The card keeper of claim 1, wherein the mechanism is a magnetic device, static attraction device or suction device for coupling the card sleeve to the mobile device and wherein a back-side of the mechanism is contoured to a shape of the mobile device to compensate for any non-flat surface feature of the mobile device thereto attached.

5. The card keeper of claim 1, wherein the mechanism is a detachable battery cover and includes a back face for enclosing a battery onto the mobile device, and couples the card sleeve to the mobile device.

6. The card keeper of claim 1, wherein the at least one opening is a cut-out to provide access to a camera or data ports of the mobile device that would otherwise be covered or obscured by the card keeper when no cards are inserted.

7. The card keeper of claim 1, further comprising a secondary pouch or sleeve provided to receive a Radio Frequency Identification Device (RFID) or transponder.

8. The card keeper of claim 1, further comprising a Radio Frequency Identification Device (RFID) or transponder device embedded within the receiving structure.

9. The portable card holder of claim 1, further comprising a top notch protruding from the receive structure to secure cards in place once fully inserted.

10. A card holder, comprising:
   a card receiver integrated into a mobile device housing component to hold cards.

11. The card keeper of claim 10, wherein the card receiver is external to the mobile device housing component and comprises a cut-out to provide access to a camera or data ports of the mobile device that would otherwise be covered or obscured by the card keeper when no cards are inserted into the card receiver.

12. The portable card holder of claim 10, wherein the receiving structure comprises a front section and back section that differ in texture to introduce varying levels of friction such that the back portion is rough to grip less frequently used cards in a back, and the front section is smooth to permit sliding of more frequently used cards.

13. The card keeper of claim 10, further comprising a secondary pouch or sleeve provided to receive a Radio Frequency Identification Device (RFID) or transponder device.

14. The card keeper of claim 10, further comprising a Radio Frequency Identification Device (RFID) or transponder device embedded within the receiving structure.

15. The portable card holder of claim 10, further comprising a top notch protruding from the receive structure to secure cards in place once fully inserted.

16. A card keeper battery cover suitable for coupling to a mobile device, the card keeper comprising a receive structure comprising a pouch having a closed end and an open end, wherein the open end receives one or more cards by way of a sliding action and the one or more cards are inserted when slid to the closed-end.

17. The card keeper of claim 10, comprising a secondary pouch with a clear or transparent front cover, such that an item can be placed into the pouch and wherein the contents of the pouch are read by a scanner.

18. The card keeper of claim 10, wherein the card receiver is injection mold designed externally onto the mobile device housing.

19. The card keeper battery cover of claim 10, wherein the receive structure is externally integrated onto the mobile device and comprises a flexible L-shaped railing or flexible C-shaped railing; and a top notch protruding from the receive structure to secure the cards in place once fully inserted.

20. The card keeper battery cover of claim 10, wherein the receive structure is externally integrated onto the mobile device and comprises a flexible L-shaped railing or flexible C-shaped railing; and a top notch protruding from the receive structure to secure the cards in place once fully inserted.