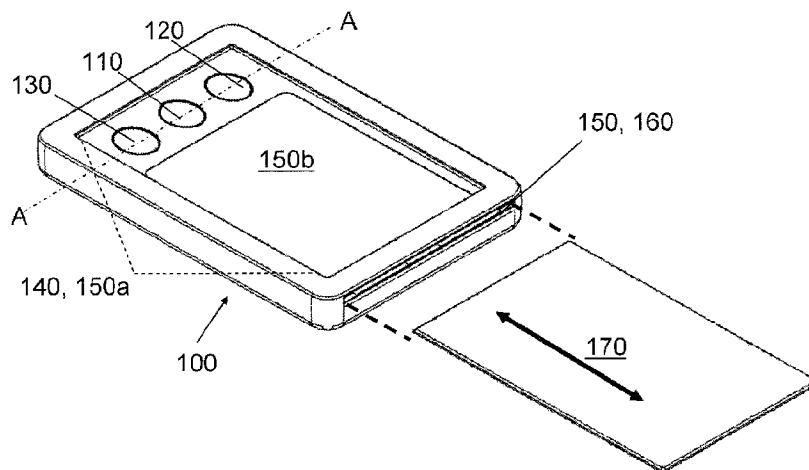




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(54) **Titre : SUPPORT POUR CARTE D'IDENTITE ELECTRONIQUE**
(54) **Title: AN ELECTRONIC IDENTITY CARD HOLDER**



(57) **Abrégé/Abstract:**

An electronic identity card holder (100). The holder (100) comprises a slot (150) for receiving an identity card (170). The slot (150) has a first side (150a) and an opposing second side (150b), the first side (150a) of the slot (150) having a viewing window (140) that is positioned to allow viewing of the second side (150b) of slot (150). The second side (150b) of the slot (150) comprises a first button (110) configured to perform a function in response to user-actuation. The first button (110) is positioned so as to be covered by an identity card (170) in the slot (150).

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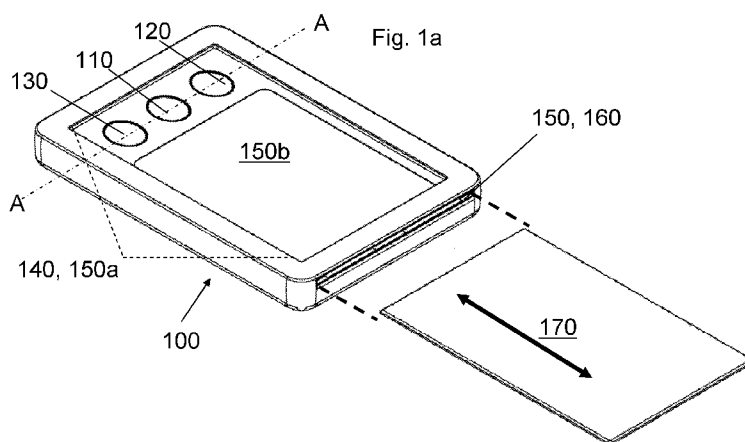
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(54) Title: AN ELECTRONIC IDENTITY CARD HOLDER



(57) Abstract: An electronic identity card holder (100). The holder (100) comprises a slot (150) for receiving an identity card (170). The slot (150) has a first side (150a) and an opposing second side (150b), the first side (150a) of the slot (150) having a viewing window (140) that is positioned to allow viewing of the second side (150b) of slot (150). The second side (150b) of the slot (150) comprises a first button (110) configured to perform a function in response to user-actuation. The first button (110) is positioned so as to be covered by an identity card (170) in the slot (150).

The technical field relates to electronic devices that hold identity cards.

In environments such as hospitals, schools, construction sites, etc, those present on site are required to wear identity cards to show they are authorised to be there. These identity cards are typically placed within holders (not necessarily electronic) that have a slot for receiving those cards. These holders act like a sheath for those cards within which the identity cards can be releasably held. Basic holders are generally not specific to any one user or environment and can be exchanged between different users and even between different working environments. Clips are used to retain identity cards in such holders.

Summary of the Invention

The first button may be configured to protrude above a surface of the second side of the slot so as to provide a friction fit for an identity card received in the slot. This aids in securing a

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card within the slot so that it is not dislodged unintentionally. Also, while clips in current card holders require a user to use both hands to disengage the clips and remove the card, this friction fit approach means no clips are necessary and single-handed removal of the card from the slot is possible.

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Others aspects of the invention are recited in the claims and will be apparent from the description which follows.

Figures

10 Figures 1a and 1b show a perspective view of a first embodiment of an electronic identity card holder with an identity card that corresponds to a slot of that holder.

Figure 1c shows a cross-section view of the first embodiment, taken through A-A on Figure 1a.

15 Figure 2 shows a perspective view of another embodiment of an electronic identity card holder.

Specific Description

We will now describe a first embodiment with reference to Figure 1a which shows an electronic device that is an identity card holder 100.

20

A housing of the card holder 100 has a slot 150 for receiving an identity card 170. The housing is formed of a blend of polycarbonate and ABS, but it will be appreciated that other materials can also be used to form the housing. The slot is dimensioned to accept identity cards that conform to various ISO standards (e.g. ISO/IEC 7810 ID1 - 85.6mm x 53.98mm but thickness can vary, which can be on the order of 1-3mm) through slot opening 160. The
25 slot 150 has a first side 150a and an opposing second side 150b. The first side 150a of the slot 150 has a viewing window 140 positioned to allow viewing of the an identity card 170 inserted into the slot. When the card 170 is not in the slot 150 the viewing window 140 allows viewing of the second side 150b of the slot 150.

30

The second side 150b of the slot 150 comprises a first button 110, a second button 120, and a third button 130. Housed internally (not shown) within the holder 100 is circuitry that is connected to the respective buttons 110-130. Each button 110-130 is configured to perform a

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function provided by that circuitry in response to user-actuation of a particular button 110-130.

Figure 1b shows the card holder 100 when an identity card has been inserted into the slot. As can be seen from this figure, the buttons 110-130 are hidden by the card 170 when the card 170 is fully inserted in the slot. The buttons 110-130 are positioned on the second side 150b of the slot so as to be rendered inaccessible when the card 170 is in the slot. The buttons 110-130 are therefore covered by a card 170 in the slot. In this example the buttons 110-130 are rendered selectively accessible by the presence/absence of an identity card 170 in the slot. This can enable a user to prevent accidental activation of functions provided by their card holder, e.g. due to knocking against an object or button activation within their pocket. This also hides the buttons 110-130 from view so that people other than the user would not be aware that the electronic card holder 100 itself would provide any functions. In other examples the card 170 can be made to be flexible enough to allow a user to press the buttons 110-130 through the card 170. Other options can include the card 170 being opaque to fully hide the buttons 110-130, or the card being transparent to allow viewing of the buttons 110-130 through the card.

It will be appreciated that while three buttons 110-130 have been shown, in some embodiments only first button 110 could be provided (e.g. to provide a clock-in/clock-out functionality), or any number of buttons could be provided, depending on the functionality desired for the card holder.

In a slightly modified example, the buttons 110-130 are configured to protrude above the surface of the second side 150b of the slot so as to provide a friction fit for an identity card 170 received in the slot 150. This can, for example, be provided by a rubber surface integrally formed with or disposed on the button 110, e.g. an elastic polymer. This can be seen to aid in securing a card within the slot so that it is not dislodged unintentionally. Also, while clips in current card holders require a user to use both hands to disengage the clips and remove the card, this friction fit approach means no clips are necessary and single-handed removal of the card from the slot is possible. A user can clasp the holder with one hand, with the viewing window facing upwards from the palm of their hand, and the user can slidably disengage the card from the holder just using their thumb.

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Figure 1c shows another slightly modified example, where the first button 110 is configured to protrude above the surface of the second and third buttons 120 and 130. The difference between the protrusions of the first button 110 and second/third buttons 120, 130 thereby causes a flex in the identity card 170 within the slot to further secure said identity card in the slot.

In Figure 1c, because the card holder 100 has three buttons and the second and third buttons 120, 130 are positioned on opposite sides of the first button 110, the identity card is caused to be flexed in a curved manner about the first button 110 to secure said identity card in the slot.

It will be appreciated that if just two buttons were used, or if the arrangement of the buttons was different then the flexing need not be curved, but could result in the identity card being elastically distended to secure the card within the slot.

In Figure 1c it is the height of the buttons themselves that control the friction fit. In another example, the first button 110 and the second/third buttons 120, 130 comprise first and second respective raised tactile profiles, e.g. due to embossed or overmolded patterns using materials like silicon rubber, and the patterns can be raised/formed into patterns like numbers/letters etc. The height of the raised tactile profiles can therefore control the extent of the protrusion of the respective buttons. Figure 2 shows an example where the buttons have overmolded numbers '1', '2' and '3' that provide the heightened protrusions to provide said friction fit.

Figure 2 also shows details of another embodiment that is similar to that of Figures 1a-1c except that there is also a micro-USB slot 280 that allows a user to connect another device to the card holder 200 to allow for initialisation and/or customisation. For example, the buttons 210-230 provide predetermined functions, which can be preset during manufacture, or can be user-configurable via the micro-USB slot (or even configurable via the card holder 200 in isolation).

Figure 2 also shows an area 295 which has a camera aperture 296 provided. This can allow for images to be taken when the camera aperture 296 is unobscured. Other features or elements (e.g. temperature sensors, light meters, radiation sensors, etc) could be provided on the second side of the slot 250b so that they are selectively accessible in a similar fashion to the buttons 210-230 depending on whether a card is in the slot or not.

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What can also be seen from Figures 1a and 2, is that the buttons are positioned proximal to the closed end away from the opening 160/260 to allow for access to said button(s) upon partial removal of the identity card from the slot. Just moving the card a short distance out of the slot reveals the buttons for use. This can be advantageous for quick user-access to the

5 buttons without fully removing the card. Other buttons could be provided further along the second side of the slot so that certain functions are revealed depending on the extent to which the card is inserted/removed from the slot.

Figure 2 also shows a wearing tag 290 which allows a lanyard, wrist strap or arm band to be

10 attached to the card holder for wearing by a user.

Other examples can look substantially the same the card holders as shown in Figures 1a-c and 2. Other examples need not be bound to looking the same as those card holders depicted.

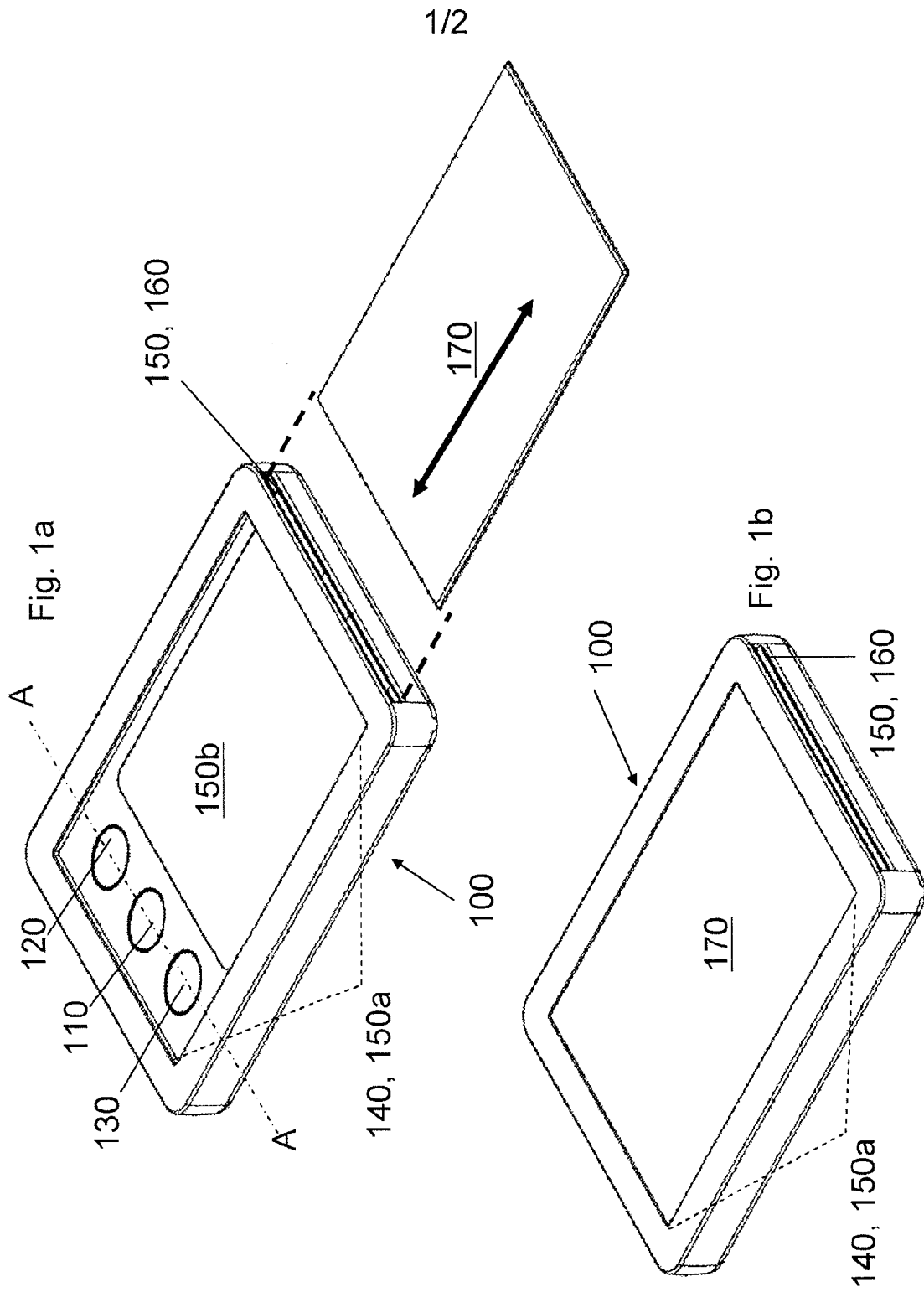
15 The skilled person would realize that the raised tactile profile may be applied only to the first button 110, for example when there exists only one button, or when there exists more than one button. Equally, the raised tactile profile may be applied to any one or more buttons in any configuration.

20 It will be appreciated that various features from some embodiments described above can be combined with other embodiments without departing from the scope of the present disclosure.

Claims

1. An electronic identity card holder, comprising a slot for receiving an identity card in the holder, the slot having a first side and an opposing second side, the first side of the slot comprising a viewing window positioned to allow viewing of the second side of slot, and the second side of the slot comprising a first button configured to perform a function in response to user-actuation, wherein the first button is positioned so as to be covered by an identity card in the slot, wherein the electronic identity card holder further comprises circuitry, wherein the circuitry is connected to the first button.
2. The card holder of claim 1, wherein the first button is positioned so as to be selectively accessible by the presence/absence of an identity card in the slot.
3. The card holder of claim 1, wherein the first button is configured to protrude above the surface of the second side of the slot so as to provide a friction fit for an identity card received in the slot.
4. The card holder of claim 1, comprising a second button, wherein the second button is configured to protrude above the surface of the second side of the slot, wherein the first button is configured to protrude above the surface of the at least second button, the difference between the protrusions of the first and second buttons thereby flex an identity card within the slot to further secure said identity card in the slot.
5. The card holder of claim 4, wherein the first and second buttons comprise first and second respective raised tactile profiles, the height of the raised tactile profiles controlling the protrusions of the first and second buttons.
6. The card holder of claim 4, wherein the card holder comprises a third button, the second and third buttons being positioned on opposite sides of the first button to flex the identity card in a curved manner about the first button to secure said identity card in the slot.
7. The card holder of claim 1, wherein the or each button initially has a function which is preset during manufacture, or is user-configurable.

8. The card holder of claim 1, wherein the card holder comprises other elements provided on the second side of the slot, these other elements being selectively accessible by the presence/absence of an identity card in the slot.
9. The card holder of claim 1, wherein the slot comprises an open end for receiving an identity card and a closed end, wherein the button(s) are positioned proximal to the closed end to allow for access to said button(s) upon partial removal of the identity card from the slot.
10. The card holder of claim 1, wherein the card holder is configured to be wearable.
11. The card holder of claim 1, wherein the dimensions of the slots are configured to accept an identity card conforming to one or more ISO standards.



2/2

Fig. 1c

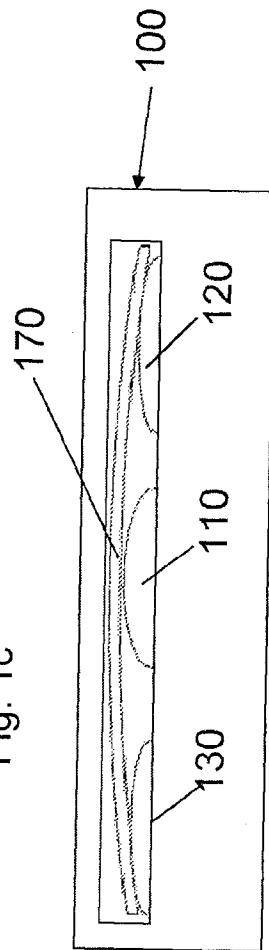


Fig. 2

