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(71) Applicant: Manufacturas Metálicas Publicitarias,S.A.20600 Eibar (Guipúzcoa) (ES)

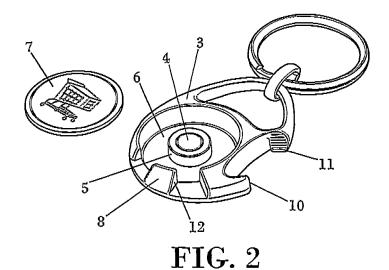
(72) Inventor: SANZ BARCENA, Alberto 20600 Eibar (Guipúzcoa) (ES)

(74) Representative: Izquierdo Faces, JoséGeneral Salazar, 1048012 Bilbao (ES)

# (54) MULTIFUNCTION KEYRING

(57) Multifunction keyring which includes a ring (1) for holding keys, a body (3), and a magnet (4) located in a central platform (5) defined in a housing (6) of the body (3), wherein said housing (6) is delimited by a circularwall which hold a circular token (7) used for unlocking shopping trolleys. The housing (6) of said keyring has an annular configuration enabling tilting and partial insertion

of one side of the token (7) when it is pressed on any side of the perimeter thereof and elevation of the opposite side for extraction thereof. In addition the keyring includes an inclined shaped surface for lifting a ring-pull (9) for a container base with respect to said base when the keyring is pressed against the ring-pull (9) and a bottle opener.



EP 2 098 130 A2

#### **OBJECT OF THE INVENTION**

**[0001]** The present invention relates to keyring field having the special feature of an additional use apart from the movement of keys.

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**[0002]** The object of the invention comprises the fact that the keyring is additionally used as a support carrier of a token used for unlocking shopping trolleys in supermarkets, the keyring including means for opening a container, said container having a ring-pull in its base and a bottle opener. on one hand facilitating the grouping together of the trolleys in a specific site and, on the other hand inciting the users to move said trolleys to said grouping site.

#### **BACKGROUND OF THE INVENTION**

**[0003]** The use of devices mounted on the handle of trolleys in large supermarkets is widely expanded, on one hand facilitating the grouping together of the trolleys in a specific site and, on the other hand inciting the users to move said trolleys to said grouping site.

**[0004]** This type of devices works with coins so that the introduction of a coin thereon provides the unblocking of the trolley with respect to another trolley which is bound. The device comprises firstly a small box provided with a slot fitted out for the introduction of the coin and secondly an anchor portion to be plunged in the small box of the following trolley. In the locking position between trolleys, the anchor portion of a trolley is plunged into the small box of another trolley. When a coin is introduced in said small box, the anchor portion of a trolley is moved apart from the small box of another trolley and the trolleys are released.

**[0005]** The users of these trolleys do not always have a coin to hand to introduce in the trolley and they would go to a checkout or cash desk to change the notes into coins, the checkouts being occasionally far from the site where the trolleys are together.

**[0006]** The utility model ES 1 056 450 proposes a solution and it is related to a keyring comprising a fiat body and a ring for holding keys, having a body in one side of the body housing a token made of a ferromagnetic material of similar diameter as a coin, held by a magnetic field, said housing having a box ready to remove the token by sinking a portion of the outline in the box and by lifting the opposing portion.

**[0007]** The token is within the housing attracted by a magnet located in a central and projecting position with respect to the remaining housing.

**[0008]** This utility model has several limitations In the way the token is removed, since it is only released when it is pressed on a specific point of the perimeter thereof. A partial crown is within said housing comprising the support along with the magnet. The remaining space to form the complete crown defines the specific site which ena-

bles the partial introduction of the token by pressing with a finger. After pressing the token on this specific site, the token would be pushed on the opposing end towards the outside to reach the complete removal.

**[0009]** Additionally, the disclosed keyring of the utility model has only this additional supporting function of a token for unlocking trolleys. Other functions providing an added value to the keyring are not included.

#### O DESCRIPTION OF THE INVENTION

**[0010]** The multifunction keyring comprising the object of this invention considers a number of improvements related to the keyring above disclosed, since it is fitted with an optimized design facilitating the positional stability of the token in the keyring during the transport, and the comfortable and simple removal in the moment when it is required. In addition, two new functions are provided to give an additional value to the keyring. These two functions are the possibility to lift and drive the ring-pull which may have a container on one of the sides and a bottle opener.

**[0011]** This keyring has a universal system for opening or removing since the token may be released from the body of the keyring by pressing on any side of the perimeter thereof. The release of the token only requires the pressing action.

**[0012]** Therefore, it has been foreseen that the keyring comprises a body with a large circular housing of diameter measured to receive said token, wherein a central platform is located leaving the bottom portion of the housing and having a lower height than the housing, a cavity being defined in the central platform provided with a magnet exerting an attraction force over the token which remains thereby supported and integrated in the housing of the body in the keyring.

**[0013]** A space is defined between the central platform and the circular wall, preferably ring-shaped, having height enough to enable the partial introduction of the token when a finger presses on any side of the perimeter thereof, overcoming the attraction force exerted by the magnet. The tilting of the token by a point toward the Inner part of the housing enables its removal from the opposing point using the other hand.

[0014] Thus, the release and removal of the token are carried out by just pressing the token on any side of the perimeter thereof. By doing so, a more comfortable and simple solution to manipulate the token is provided comparing with the proposal by other keyrings.

[0015] Said central platform comprises the supporting portion of the token and has the suitable dimensions so that the token is perfectly supported and integrated in a flat position.

**[0016]** On the other hand, the housing has depth enough so that the token should penetrate into the inner portion when it is pressed, being in contact with the bottom portion of the housing and adopting a tilted position wherein a minimum magnetic attraction is sustained to

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avoid the falling down of the token but to enable the manipulation to its removal by the other end.

**[0017]** It has been foreseen that the dimensions of the token are within the rules to avoid the risk of confusion with legal tender, more particularly they comply the specifications according to the Rule CE 2182/2004 by the Board of December 6, 2004 on medals and tokens similar to 1 euro coins.

**[0018]** Additionally, the keyring may have a tilted surface, preferably located on the perimeter of the body in the keyring and forming a wedge. Said tilted surface has a configuration for lifting a ring-pull located in one of the bases of a container, for example a can, with respect to said base when the keyring is pressed against the ring-pull.

**[0019]** Therefore, the keyring includes an additional feature providing an added value. In some cases, the fact of opening the can may cause some difficulties, due to the proximity to the base disabling the introduction of the nail or due to the fact that the nails are too short to gain access to the space between the ring-pull and the container or can. The tilted surface of the keyring solves these problems.

**[0020]** By pressing the keyring against the ring-pull the tilted surface lifts the ring-pull. In addition, the wedge which may be formed by the tilted surface and the body may form a space employed to house the ring-pull of the container. This space remains closed once the token is within the housing, the ring-pull being retained.

**[0021]** The ring-pull has access to said space if, by pressing the keyring against the ring-pull, the token has been pressed in an opposing point with respect to the location of the wedge or the tilted surface. Once the ring-pull is located in said space, the token closes the space when returning to its housing. Therefore, the keyring may be used for driving the ring-pull and for opening the container, improving both the look of the access to the ring-pull and the comfort to pull the ring-pull.

**[0022]** Further, the keyring may comprise a bottle opener in the lateral perimeter of the body. Said bottle opener has a first hook-shaped protuberance from the lateral perimeter of the body and a second protuberance, opposing the first protuberance, delimited by two planes linked in an edge parallel to the plane defined by the token located in the housing and the lateral perimeter of the body.

**[0023]** The bottle opener would be used such that the first protuberance is in the top portion of the sheet of the bottle, close to the perimeter of the sheet or crown, and the second protuberance lifts using a lever supporting one of the planes on the crown of the sheet, in the bottom portion thereof. This characteristic provides a third use of the keyring.

**[0024]** Thus, a keyring according to the disclosure in this invention enables us to move keys and have a token always to hand to release the trolley and the means to open a can or bottle, for example, after doing the shopping.

## **DESCRIPTION OF THE DRAWINGS**

**[0025]** In order to supplement the above description and to understand better the features of the invention, according to a preferred example of the practical embodiment, a set of drawings is enclosed as an integrating part of said description, where illustratively, but not limited to, the following is represented:

Figure 1 illustrates a perspective view of the keyring. Figure 2 illustrates a plan view where the body of the keyring and the separated coin are depicted.

Figure 3 illustrates a sectional view of the keyring having the coin within the housing.

Figure 4 illustrates a sectional view of the keyring having the coin pressed before the complete removal

Figure 5 illustrates a perspective view wherein the keyring withholding the ring-pull is depicted.

Figure 6 illustrates a perspective view where the keyring is used for opening a bottle.

#### PREFERRED EMBODIMENT OF THE INVENTION

**[0026]** In accordance with the figures, now a preferred method of carrying out the multifunction keyring comprising the object of this invention is described.

[0027] As it is seen in Figure 1, the multifunction keyring comprises a ring (1) for holding keys having a link (2) attached to a body (3), and a magnet (4) represented in figures 2-4 located in a central platform (5) defined in a housing (6) of the body (3), wherein said housing (6) is delimited by a circular wall which hold a circular token (7) used for unlocking shopping trolleys.

[0028] Said wall is interrupted by the inclusion of a tilted surface (8) in a wedge (12) in the perimeter of the body (3), as it is seen in figures 1 and 2. Regarding the housing (6), the wedge (123) would not modify the outline of the housing (6) and the circular wall delimiting it. The interruptions of the wall in both sides of the wedge (12) enable the binding of the ring-pull (9) of the container as it will be discussed below in the description of the figure 5.

**[0029]** In the lateral perimeter of the body (3) a bottle opener may be located as it is seen in figure 1 and 2. Said bottle opener comprises a first hook-shaped protuberance (10) from the lateral perimeter of the body (3) and a second protuberance (11), opposing the first protuberance (10), delimited by two planes linked in an edge parallel to the plane defined by the token (7) located in the housing (6) and the lateral perimeter of the body (3). The figure 3 depicts a token (7) being supported on the central platform (5), attracted by the magnet (4) and perfectly integrated within the body (3) of the keyring.

**[0030]** According to the object of the invention, the housing (6) has a ring-shaped configuration having uniform height along the extension, except in the interruption for the inclusion of the wedge (12), enabling the tilting and a partial insertion of one side of the token (7) when

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it is pressed on any side of the perimeter thereof and elevation of the opposite side for extraction thereof. The height of the housing (6) is greater than the height of the central platform (5) and the magnet (4) remains at the same level as the upper surface of the central platform (5).

[0031] As it is seen in figure 4, the tilted position of the token (7) being derived from the precise pressure exerted thereon remains stable while it is being pressed, due to the particular relation between the height of the housing (6) where the token (7) is partially introduced and the attraction force of the magnet (4). In this situation, the magnet (4) is easily released, being separated from the keyring as it is seen in the figure 2, being ready for using, normally ready to be introduced in the small box of the trolley so that it is unlocked from another trolley which is anchored.

**[0032]** By pressing the token (7) on the site opposing the contact point with the wedge (12), a space for the ring-pull (9) of the container is provided. Said space is illustrated in figure 2. By keeping the token (7) pressed and by pressing the keyring against the ring-pull (9), the ring-pull (9) is eventually lifted to occupy the space. When stopping pressing the token (7), the space remains closed, as it is depicted in the figure 5. Therefore, by pulling the keyring the ring-pull is driven (9) and the container or can is opened.

**[0033]** The figure 6 depicts how the keyring is used to open a bottle, removing the sheet covering it. Both the first protuberance (10) and the second protuberance (11) would be located in the perimeter or crown of the sheet. The first protuberance (10) would be located above and the second protuberance (11) would be below, so that a plane delimited by the second protuberance (11) is in contact with the lower portion of the crown. Thus, the sheet would be removed by using a lever with both protuberances (10, 11).

#### Claims

- 1. Multifunction keyring which includes a ring (1) for holding keys, a body (3), and a magnet (4) located in a central platform (5) defined in a housing (6) of the body (3), wherein said housing (6) is delimited by a circular wall which hold a circular token (7) used for unlocking shopping trolleys, characterized in that the housing (6) of said keyring has an annular configuration enabling tilting and partial insertion of one side of the token (7) when it is pressed on any side of the perimeter thereof and elevation of the opposite side for extraction thereof.
- 2. Multifunction keyring according to claim 1, **characterized in that** the body (3) has an inclined shaped surface (8) for lifting a ring-pull (9) for a container base with respect to said base when the keyring is pressed against the ring-pull (9).

- 3. Multifunction keyring according to any one of claims 1-2, **characterized in that** a bottle opener is located in the lateral perimeter of the body (3), the bottle opener comprising a first hook-shaped protuberance (10) from the lateral perimeter of the body (3) and a second protuberance (11), opposing the first protuberance (10), delimited by two planes linked in an edge parallel to the plane defined by the token (7) located in the housing (6) and the lateral perimeter of the body (3).
- 4. Multifunction keyring according to any one of claims 1-3, characterized in that the greatest height of the housing (6) is greater than the height of the central platform (5).
- 5. Multifunction keyring according to any one of claims 1-4, **characterized in that** the magnet (4) remains at the same level as the upper surface of the central platform (5).
- 6. Multifunction keyring according to any one of claims 1-5, characterized in that the relation between the greatest height of the housing (6) where the token (7) is partially introduced and the attraction force of the magnet (4) is such that the tilted position of the token (7) being derived from the precise pressure exerted thereon remains stable while it is being pressed.
- 7. Multifunction keyring according to any one of claims 2-6, **characterized in that** the tilted surface (8) is part of a wedge (12).
- 35 8. Multifunction keyring according to claim 7, characterized in that the wedge (12) is located in the perimeter of the body (3).
  - 9. Multifunction keyring according to claim 8, characterized in that the space delimited by the wedge (12) and the housing (6) of the body (3) has such configuration to house the ring-pull (9) and to withhold said ring-pull (9) the token (7) being within the housing (6).

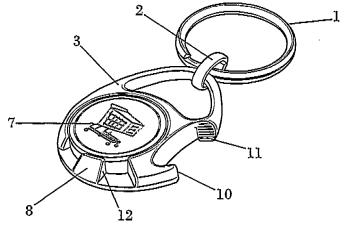
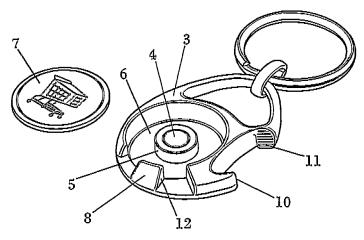
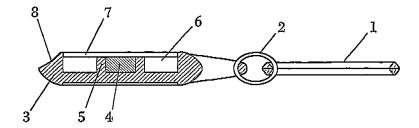


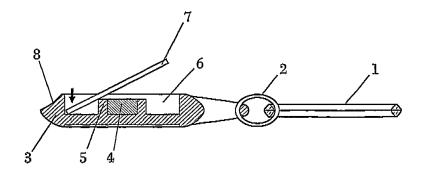
FIG. 1



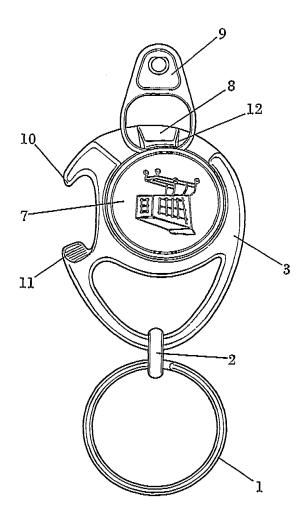
**FIG.** 2



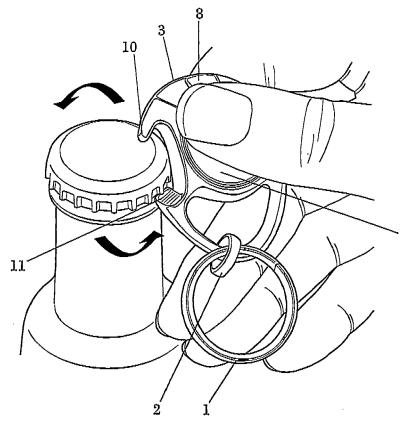
**FIG.** 3



**FIG.** 4



**FIG.** 5



# EP 2 098 130 A2

## REFERENCES CITED IN THE DESCRIPTION

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