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(54) MULTI-FUNCTION DETACHING DEVICE FOR MAGNETIC ANTI-THEFT MECHANISMS

MEHRFUNKTIONSTRENNVORRICHTUNG FÜR MAGNETISCHE
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**EP-A- 0 564 864 WO-A-2005/100722
GB-A- 2 426 030**

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Description

[0001] The present invention refers to a multi-function detaching device for magnetic anti-theft mechanisms.

[0002] The main magnetic anti-theft mechanisms currently marketed are composed, in particular, but not in a limiting way, of anti-theft cases adapted to contain inside them and to protect objects such as, but not limited to, compact discs, DVDs, musicassettes, videocassettes and the like, or of elongated anti-theft elements for eyeglasses, or of elements to be attached to clothes and the like.

[0003] These types of anti-theft mechanisms have been known in the art for years; in order to remove the objects contained therein, those operating with the magnetic attraction principle must be equipped with so-called "detaching" devices, containing magnetic elements with various shapes and dimensions: when the magnetic anti-theft mechanism approaches such detaching devices, they magnetically attract the closing elements with which such anti-theft mechanisms are equipped and allow their opening and the removal of the object contained and protected therein.

[0004] The most common types of anti-theft devices that can be found nowadays are:

- devices for protecting clothes, usually of a circular shape and small sizes;
- cases for protecting CDs, DVDs and the like, but also commonly used objects such as razor blades or deodorants, with opening and closing elements with an elongated or pushbutton shape;
- devices for protecting bottles, with a cylindrical shape to be placed around the bottle cork and neck;
- other devices with various shapes and configurations.

[0005] These opening operations are usually performed in payment counters of commercial shops, that are equipped with such anti-theft arrangements and, in the currently marketed versions, these detaching devices has two major types of problems:

- due to the presence of magnetic anti-theft mechanisms with various shapes, sizes and closing and opening methodologies, it is not rare that, above all in big department stores, it is necessary to provide different detaching devices, each one adapted to open a particular type of anti-theft mechanism. This has obvious operating and space problems for the above operators;
- since the detaching devices are usually secured to the surface where they must operate, they remain, in certain times of the day (for example during the night or on holidays when the commercial shops are closed), not surveyed by anyone and therefore subjected to be used incorrectly by anyone that has access thereto, obviously in order to open the magnetic

anti-theft mechanisms and to fraudulently take their contents.

[0006] Document US-A-5.956.81 is related to a universal detaching device, which, however, as can be seen from its drawings, allows opening only cases of the type adapted to contain CDs, DVDs, videocassettes and the like, through a common bench-type detaching device accessible to everyone.

[0007] Document WO-A-2005/100722 of the same Applicant of the present invention discloses a multi-function detaching device, that however is not adapted to open some types of anti-theft devices, for example the one for protecting bottles, nor it is adapted to be transported by a user.

[0008] Detaching devices are also known that allow opening a plurality (practically all types of anti-theft devices that can be found nowadays on the market) of different types of magnetic anti-theft mechanisms with a single practical arrangement, with small sizes and composed of very few parts, which allows highly reducing their cost and making their application easy even in small spaces. Such multi-function detaching devices are further equipped with means that prevent the undesired access to detaching elements contained therein. Moreover, these detaching devices are preferably of the portable type, namely they can be removed from their supporting base, commonly placed on a shop counter, and can be transported by a user to their place of use.

[0009] This latter characteristic, desirable in order to widen the operating flexibility of the detaching device, in some cases however is a problem, since the detaching device, once freed from its operating base, could be stolen and illegally used for opening, given its base characteristic, all types of above-mentioned anti-theft devices. EP-A-0 564 864 discloses a detaching device according to the preamble of Claim 1.

[0010] Object of the present invention, therefore, is solving the above prior art problems, by providing a multi-function detaching device that can be detached from its resting and protecting base, generally placed on a shop counter, but cannot be definitively separated therefrom, stolen or used very far away from the base itself, and therefore from the payment counter of the shop.

[0011] The above and other objects and advantages of the invention, as will result from the following description, are obtained by a multi-function detaching device according to claim 1. Preferred embodiments of the present invention are the subject matter of the dependent claims.

[0012] The present invention will be better described by some preferred embodiments thereof, provided as a non-limiting example, with reference to the enclosed drawings, in which:

- Figure 1 is a perspective view of the multi-function detaching device of the present invention in its closing position;

- Figure 2 is a perspective view of the supporting base of the detaching device of Fig. 1;
- Figure 3 is a perspective view of the detaching device of Fig. 1 in an arrangement thereof ready for use on its supporting base;
- Figures 4, 5, 6 and 7 are perspective views that show the detaching steps of the detaching device body from the supporting base for another operating arrangement thereof, and moreover the steps for taking such body from its operating position to its closing position on the supporting base, in order to go back to the arrangement of Fig. 1;
- Figure 5 is a sectional view of the detaching device of Fig. 4;
- Figure 6 is a detailed view of a sealing part of the device of Fig. 5;
- Figure 8 is a top perspective view of the detaching device in an operating configuration thereof;
- Figure 9 is a perspective sectional view of Fig. 3; and
- Figures 10 and 11 are side sectional views similar to Fig. 9 that show two operating, detaching/re-connecting positions between body and supporting base.

[0013] With reference to the Figures, a preferred, but not limiting, embodiment of the multi-function detaching device 1 of the present invention, is shown. It will immediately be obvious to the skilled people in the art that numerous modifications and variations can be made to the described device 1, without departing from the scope of the invention, as defined in the enclosed claims.

[0014] With reference to the preferred embodiment shown in Figure, the multi-function detaching device 1 for magnetic anti-theft mechanisms of the invention substantially comprises:

- a supporting body 2;
- at least one first magnetic detaching element 3 with an elongated shape, adapted to be moved between two different operating positions placed at 90° one with respect to the other (as will be better described below);
- at least one second magnetic detaching element 5 with a circular shape;
- a supporting base 2A adapted to contain the supporting body 2 in two positions, a rest position in which the detaching device 1 is not accessible from outside for its operation, and an operating position in which the detaching device 1 is accessible from outside for its operation; and
- means (not shown) adapted to allow moving the first magnetic detaching element 3 between its two operating positions.

[0015] The improved detaching device 1 of the present invention further comprises connecting means 72, 74, 76, 78, 80 for performing an operating connection be-

tween the supporting body 2 and the supporting base 2A; such connecting means 72, 74, 76, 78, 80 are adapted to allow the body 2 to operate within a certain operating distance range from its supporting base 2A and are adapted to provide an anti-theft alarm warning if they are tampered with in order to allow detaching the supporting body 2 from the supporting base 2A.

[0016] In this way, it is possible, as will be described below in more detail, to open the detaching device 1, remove the body 2 and perform all necessary detachments within a certain range of action from the supporting base 2A which usually remains fixed onto the payment counter, but it will not be allowed to move too far away from such base 2A, to prevent a fraudulent use of the detaching device 1 itself.

[0017] In particular, such connecting means 72, 74, 76, 78, 80 are composed of at least one wire 72 secured at one end to the supporting base 2A, into which it penetrates through a hole 78, through a securing element 80 and on the other end to an elastic member 74 operatively housed and secured to a recess 76 of the supporting body 2. With this arrangement, once having ended to operatively use the detaching device 1, the elastic member 74 (usually composed of a plane spring wound around and pre-loaded inside the recess 76 of the supporting body 2), after having been pulled following the unwinding of the wire 72 from the body 2, in order to perform the detachment through the body 2, once the pulling force from a user is lacking, allows re-winding the wire 72 inside the recess 76 when the elastic member 74 is taken back to its rest position inside the body 2.

[0018] It is obviously possible to provide for a symmetrical arrangement (not shown), in which the elastic member 74 is contained in the supporting base 2A inside a recess and the wire 72 is unwound from the same recess and is connected to the body 2 through suitable connecting means.

[0019] In order to allow issuing warnings in case of breakage of said means 72, 74, 76, 78, 80 (in particular in case of cutting the wire 72), the detaching device 1 is also equipped with an alarm circuit (not shown) connected to the wire 72: such alarm circuit is adapted to trigger the issue of a sound and/or visual alarm in case of cutting the wire 72, through a known arrangement for the skilled people in this particular field.

[0020] In particular, even if not shown, the means for moving are composed of a chute-shaped support on which a pushing member, actuated by a spring and having a side with a complementary shape to the support one, is adapted to slide and push the first magnetic detaching element 3 upwards in order to realise a final operating position that is at 90° with respect to the detaching device 1 plane.

[0021] The first magnetic detaching element 3 is of the moving type and is adapted to assume a first, unmovable operating position parallel to the detaching device 1 plane (in the Figures the horizontal position) and a second movable operating position parallel to the detaching device

1 plane: the first magnetic detaching element 3, when it is in the second movable operating position, is adapted to be pushed upwards with respect to the detaching device 1 plane (in the Figures the vertical positions).

[0022] In order to allow the safe use of the detaching device 1, the supporting base 2A is further equipped with locking means 46 adapted to secure the supporting body 2 to the supporting base 2A in its two, resting and operating positions. In fact, before going from the position in Fig. 1 to the position in Fig. 3, an authorised operator must, by unlocking the locking means 46, free the supporting body 2 from the supporting base 2A, then remove the supporting body 2 (Fig. 8), rotate it by 180° (Fig. 4 - 7), place it again in the supporting base 2A, this time in its operating position, and then lock it again through the locking means 46.

[0023] In particular, such locking means 46 are composed of a key (not shown) and a lock 46.

[0024] As shown, in the first operating position, the first and the second magnetic detaching elements 3, 5 are placed in a respectively coaxial position, in order to detach a magnetic anti-theft mechanism equipped with locking members both of the lamellar spring type, and of the cylindrical pin-spring type, and of the round type, like those used for protecting clothes. For this purpose, preferably the second magnetic detaching element 5 is used, of the super-magnet type, namely with an attraction force on the order of 9000 Gauss.

[0025] Still in particular, as shown, the first magnetic detaching element 3 is preferably composed of two parallelepiped elongated bars 18, 20 placed mutually side by side.

[0026] For a better operation, the detaching device 1 of the invention further comprises aligning means 22, 23 that cooperate with the first magnetic detaching element 3 in order to align the area of the magnetic anti-theft mechanism to be subjected to detachment with the first magnetic detaching element 3.

[0027] As shown, the aligning means 22, 23 are composed of at least two elongated projections adapted to engage corresponding holes obtained in an anti-theft device for bottles. Obviously, other aligning means (not shown) could probably be employed, of the elongated or extended type for the whole length of the first magnetic detaching element 3. In order to allow housing such aligning means 22, 23 and their supporting base, a suitable housing 70 is provided, obtained in the supporting base 2A.

[0028] In its most commonly used position, the supporting base 2A is equipped with at least one through-hole 30 adapted to allow securing the supporting base 2A itself to a surface that must be unmovably equipped with the multi-function detaching device 1, such as for example a shop counter. When instead it is desired to use the device 1 in a "portable" way, after having removed it from its supporting base 2A, it can be manually used in other places or in other applications, thereby increasing the application flexibility of the device 1 itself.

[0029] As can be seen, the detaching device 1 of the invention is of a universal type, since, through its component parts and the way in which they can be mutually moved and rearranged, the device 1 is able to assume all detaching positions that are necessary to unlock all currently existing anti-theft mechanisms. Non-limiting examples of such anti-theft mechanisms are: anti-theft cases containing compact discs, DVDs, musicassettes, videocassettes and the like; anti-theft elements for eyeglasses; anti-theft elements for clothes; anti-theft elements for bottles.

[0030] As regards the materials of which they are composed, the first and the second magnetic detaching element 3, 5 are made of magnetic material, while all other components of the multi-function detaching device 1 are made of light metal (such as for example screws, small cylinders, spring) or plastic material, to guarantee lightness, compactness and handiness to the device 1.

[0031] The Figures show the embodiment in which the first magnetic detaching element 3 reaches its operating positions through manual movements: it will obviously be possible to apply automatic means for moving and locking/unlocking, without departing from the scope of the present invention, as defined by the enclosed claims.

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Claims

1. Multi-function detaching device (1) for magnetic anti-theft mechanisms comprising:

- a supporting body (2);
- at least one magnetic detaching element (5) of a circular shape; and
- a supporting base (2A) adapted to contain said supporting body (2) in two positions, a rest position in which said detaching device (1) is not accessible from outside for its operation, and an operating position in which said detaching device (1) is accessible from outside for its operation;
- said detaching device (1) further comprising means (72, 74, 76, 78, 80) for operatively connecting said supporting body (2) and said supporting base (2A), said connecting means (72, 74, 76, 78, 80) being adapted to allow operating the body (2) within a certain operating distance range from said supporting base (2A);

characterised in that:

- said multi-function detaching device (1) comprises at least one further magnetic detaching element (3) of an elongated shape; and
- said connecting means (72, 74, 76, 78, 80) are adapted to provide an anti-theft alarm warning if said connecting means (72, 74, 76, 78, 80) are tampered with in order to allow a detachment between said supporting body (2) and said supporting base (2A).

2. Detaching device (1) according to claim 1, **characterised in that** said connecting means (72, 74, 76, 78, 80) are composed of at least one wire (72) secured at an end to said supporting base (2A), into which the wire (72) penetrates through a hole (78), by means of a securing element (80) and on another end to an elastic member (74) operatively housed and secured in a recess (76) of said supporting body (2).
3. Detaching device (1) according to claim 1, **characterised in that** said connecting means (72, 74, 76, 78, 80) are composed of at least one wire (72) secured at an end to said supporting body (2), into which the wire (72) penetrates through a hole, by means of a securing element and at another end to an elastic member (74) operatively housed and secured in a recess of said supporting base (2A).
4. Detaching device (1) according to claim 2 or 3, **characterised in that** it is equipped with an alarm circuit connected to said wire (72), said alarm circuit being adapted to trigger an issue of a sound and/or visual alarm in case of cutting of said wire (72).
5. Detaching device (1) according to claim 1, **characterised in that** said first magnetic detaching element (3) is movable between two different operating positions placed at 90° one with respect to the other, said detaching device (1) comprising for such purpose means adapted to allow the movement of said first magnetic detaching element (3) between its two operating positions.
6. Detaching device (1) according to claim 5, **characterised in that** said means for moving are composed of a chute-like support on which a pushing member, actuated by a spring and having a complementary shape to the shape of the support, is adapted to slide and to push said first magnetic detaching element (3) upwards in order to realise a final operating position at 90° with respect to a plane of said device (1).
7. Detaching device (1) according to claim 1, **characterised in that** said supporting base (2A) is further equipped with locking means (46) adapted to secure said supporting body (2) to said supporting base (2A) in its two, resting and operating positions.
8. Detaching device (1) according to claim 6, **characterised in that** said locking means (46) are composed of a key and a lock (46).
9. Detaching device (1) according to claim 1, **characterised in that** said first and second magnetic detaching elements (3, 5) are placed in a respectively coaxial position, in order to detach a magnetic anti-theft mechanism equipped with locking elements both of a lamellar spring type, and of a cylindrical pin-spring type, and of a circular type.
10. Detaching device (1) according to claim 1, **characterised in that** said first magnetic detaching element (3) is composed of two elongated parallelepiped bars (18, 20) mutually placed side by side.
11. Detaching device (1) according to claim 1, **characterised in that** said multi-function detaching device (1) further comprises aligning means (22, 23) that cooperate with said first magnetic detaching element (3) to align an area of the magnetic anti-theft mechanism to be subjected to detachment with said first magnetic detaching element (3).
12. Detaching device (1) according to claim 11, **characterised in that** said aligning means (22, 23) are composed of at least two elongated projections adapted to engage corresponding holes obtained in an anti-theft device for bottles.
13. Detaching device (1) according to claim 1, **characterised in that** said second magnetic detaching element (5) is of a super-magnet type, namely with an attraction force on the order of 9000 Gauss.
14. Detaching device (1) according to claim 1, **characterised in that** said supporting base (2A) is equipped with at least one through-hole (30) adapted to allow securing the supporting body (2) to a surface that must be unmovably equipped with said multi-function detaching device (1).
15. Detaching device (1) according to claim 1, **characterised in that** said magnetic anti-theft mechanisms are: anti-theft cases containing compact discs, DVDs, musicassettes, videocassettes and the like; or anti-theft elements for eyeglasses or for clothes; or anti-theft elements for bottles.

Patentansprüche

- 45 1. Multifunktionale Auslösevorrichtung (1) für magnetische Diebstahlschutzmechanismen, die enthält:
- einen Stützkörper (2);
 - mindestens ein kreisförmiges magnetisches Auslöseelement (5); und
 - eine Stützbasis (2A), die dazu dient, den genannten Stützkörper (2) in zwei Positionen zu halten, eine Ruhestellung, in der die genannte Auslösevorrichtung aufgrund ihrer Funktion (1) nicht von außen zugänglich ist, und eine Betriebsposition, in der die genannte Auslösevorrichtung (1) aufgrund ihrer Funktion von außen zugänglich ist;

- Die genannte Auslösevorrichtung (1) schließt außerdem Betriebsverbindungs vorrichtungen (72, 74, 76, 78, 80) zwischen dem genannten Stützkörper (2) und der genannten Stützbasis (2A) ein, die genannten Verbindungs vorrichtungen (72, 74, 76, 78, 80) dienen dazu, die Funktionsweise des Körpers (2) in einem bestimmten von der genannten Stützbasis (2A) entfernten Handlungsbereich zu ermöglichen; und ist **dadurch gekennzeichnet, dass:**
- die genannte multifunktionale Auslösevorrichtung (1) mindestens ein weiteres langes magnetisches Auslöselement (3) einschließt;
 - die genannten Verbindungs vorrichtungen (72, 74, 76, 78, 80) dazu dienen, eine Diebstahlalarmanzeige auszugeben, falls die genannten Verbindungs vorrichtungen (72, 74, 76, 78, 80) manipuliert werden, um die Auslösung zwischen dem genannten Stützkörper (2) und der genannten Stützbasis (2A) zu ermöglichen.
2. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** die Verbindungs vorrichtungen (72, 74, 76, 78, 80) aus mindestens einem Draht (72) bestehen, der an einem Endstück der genannten Stützbasis (2A) befestigt ist, in die er durch eine Bohrung (78) mit Hilfe eines Befestigungselements (80) eindringt, und am anderen Endstück an einem elastischen Element (74) befestigt ist, das operativ sitzt und in einem Hohlraum (76) des genannten Stützkörpers (2) befestigt ist.
3. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** die Verbindungs vorrichtungen (72, 74, 76, 78, 80) aus mindestens einem Draht (72) bestehen, der an einem Endstück des genannten Stützkörpers (2) befestigt ist, in die er durch eine Bohrung mit Hilfe eines Befestigungselements eindringt, und am anderen Endstück an einem elastischen Element (74) befestigt ist, das operativ sitzt und in einem Hohlraum der genannten Stützbasis (2A) befestigt ist.
4. Auslösevorrichtung (1) gemäß Patentanspruch 2 oder 3, die **dadurch gekennzeichnet ist, dass** sie mit einem Alarmkreis ausgestattet ist, der mit dem genannten Draht (72) verbunden ist, der genannte Alarmkreis dient dazu, die Emission eines akustischen und/oder visuellen Alarms auszulösen, falls der genannte Draht (72) durchgeschnitten wird.
5. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** das genannte erste Auslöseelement (3) zwischen zwei verschiedenen Betriebspunkten, die 90° zueinander liegen, beweglich ist, die genannte Auslösevorrichtung (1) schließt zu diesem Zweck Mittel ein, die dazu dienen, die Verschiebung des genannten ersten ma-
- netischen Auslöseelements (3) zwischen seinen beiden Betriebspunkten zu ermöglichen.
6. Auslösevorrichtung (1) gemäß Patentanspruch 5, die **dadurch gekennzeichnet ist, dass** die genannten Verschiebungsmittel aus einer Halterung mit geheimer Fläche bestehen, auf denen ein Stoßelement, das durch eine Feder angetrieben wird und eine Seite mit einer Form hat, die die Halterungsform ausgleicht, dazu dient, zu rutschen und das genannte erste magnetische Auslöseelement (3) nach oben zu drücken, um eine abschließende Betriebspunktion von 90° gegenüber der Fläche der genannten Vorrichtung (1) zu realisieren.
7. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** die genannte Stützbasis (2A) außerdem mit Blockievorrichtungen (46) ausgestattet ist, die dazu dienen, den genannten Stützkörper (2) in der Ruhestellung und in der Betriebspunktion an der genannten Stützbasis (2A) zu befestigen.
8. Auslösevorrichtung (1) gemäß Patentanspruch 6, die **dadurch gekennzeichnet ist, dass** die genannten Blockievorrichtungen (46) aus einem Schlüssel und einem Riegel (46) bestehen.
9. Auslöseelement (1) gemäß Patentanspruch 1, das **dadurch gekennzeichnet ist, dass** die genannten ersten und zweiten magnetischen Auslöseelemente (3, 5) in entsprechend koaxialer Position angeordnet sind, um einen magnetischen Diebstahlschutzmechanismus auszulösen, der mit Blockierelementen wie sowohl einer Lamellenfeder als auch einem Walzenzapfen/einer zylindrischen/kreisförmigen Feder ausgestattet ist.
10. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** das genannte erste magnetische Auslöseelement (3) aus zwei langen parallelenflachen Einsätzen (18, 20) besteht, die nebeneinander angeordnet sind.
11. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** die genannte multifunktionale Auslösevorrichtung (1) außerdem Ausrichtungsvorrichtungen (22, 23) enthält, die mit dem genannten ersten magnetischen Auslöselement (3) zusammenarbeiten, um den Bereich des magnetischen Diebstahlschutzmechanismus auszurichten, der der Auslösung mit dem genannten ersten magnetischen Auslöselement (3) unterstellt werden muss.
12. Auslösevorrichtung (1) gemäß Patentanspruch 11, die **dadurch gekennzeichnet ist, dass** die genannten Ausrichtungsvorrichtungen (22, 23) aus minde-

stens zwei langen Überständen bestehen, die dazu dienen, die entsprechenden Bohrungen zu spannen, die in einer Diebstahlschutzvorrichtung für Flaschen angebracht sind.

13. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** das genannte zweite magnetische Auslöselement (5) supermagnetisch ist, d. h. mit einer Zugkraft von 9000 Gauss.

14. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** die genannte Stützbasis (2A) mit mindestens einer durchgehenden Bohrung (30) ausgestattet ist, um die Befestigung des Stützkörpers (2) an einer Oberfläche zu ermöglichen, die unversetbar mit der genannten multifunktionalen Auslösevorrichtung (1) ausgestattet ist.

15. Auslösevorrichtung (1) gemäß Patentanspruch 1, die **dadurch gekennzeichnet ist, dass** die genannten magnetischen Diebstahlschutzmechanismen Diebstahlschutzgehäuse sind, die Compact Disc, DVD, Musikkassetten, Videokassetten u. ä.; oder Diebstahlschutzelemente für Brillen oder für Kleidungsstücke; oder Diebstahlschutzelemente für Flaschen enthalten.

Revendications

1. Dispositif séparateur plurifonctionnel (1) pour mécanismes antivol magnétiques comprenant:

- un corps de support (2);
 - au moins un élément séparateur magnétique (5) de forme circulaire; et
 - une base de support (2A) capable de contenir ledit corps de support (2) en deux positions, une position de repos où ledit dispositif séparateur (1) n'est pas accessible de l'extérieur pour son activation et une position opérationnelle où ledit dispositif séparateur (1) est accessible de l'extérieur pour être activé;
 - ledit dispositif séparateur (1) comprenant encore des moyens (72, 74, 76, 78, 80) de connexion opérationnelle entre ledit corps de support (2) et ladite base di support (2A), lesdits moyens de connexion (72, 74, 76, 78, 80) étant capables de permettre le fonctionnement du corps (2) dans un certain champ opérationnel de distance de ladite base di support (2A);
- caractérisé en ce que:**
- ledit dispositif séparateur plurifonctionnel (1) comprend au moins un autre élément séparateur magnétique (3) de forme allongée;
 - lesdits moyens de connexion (72, 74, 76, 78,

80) sont capables de fournir un signal d'alarme antivol si lesdits moyens de connexion (72, 74, 76, 78, 80) sont manipulés dans le but de permettre la séparation entre ledit corps de support (2) de ladite base di support (2A).

2. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** lesdits moyens de connexion (72, 74, 76, 78, 80) sont constitués d'au moins un fil (72) fixé à une extrémité de ladite base di support (2A), dans laquelle il pénètre à travers un orifice (78), au moyen d'un élément de fixation (80) et à l'autre extrémité d'un élément élastique (74) opérationnellement logé et fixé dans une cavité (76) dudit corps de support (2).

3. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** lesdits moyens de connexion (72, 74, 76, 78, 80) sont constitués d'au moins un fil (72) fixé à une extrémité de ladite base di support (2), dans laquelle il pénètre à travers un orifice au moyen d'un élément de fixation et à l'autre extrémité d'un élément élastique (74) opérationnellement logé et fixé dans une cavité dudit corps de support (2A).

4. Dispositif séparateur (1) selon la revendication 2 ou 3, **caractérisé en ce qu'il est muni d'un circuit d'alarme relié audit fil (72)**, ledit circuit d'alarme étant capable d'amorcer l'émission d'une alarme sonore et/ou visuelle si ledit fil (72) subit une coupure.

5. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** ledit premier élément séparateur magnétique (3) est mobile entre deux positions différentes placées à 90° l'une de l'autre, pour cette fonction ledit dispositif séparateur (1) comprenant des moyens capables de permettre le déplacement dudit premier élément séparateur magnétique (3) entre ses deux positions de travail.

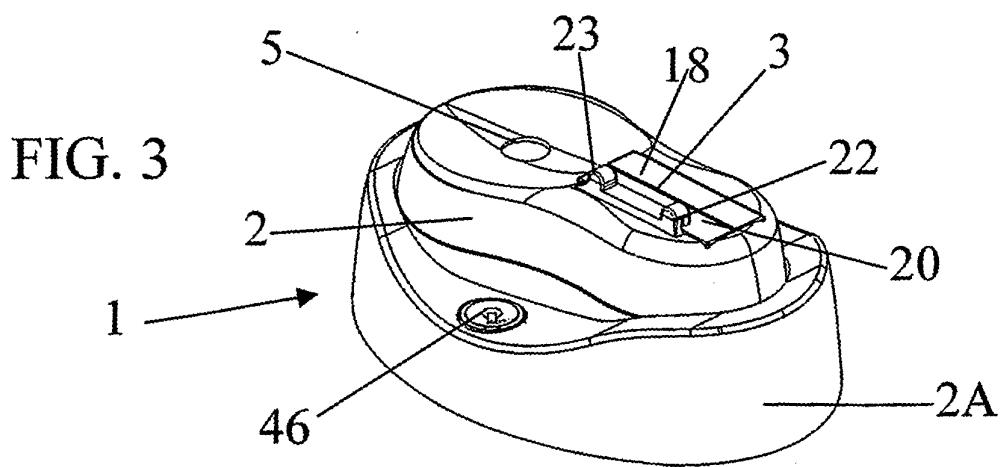
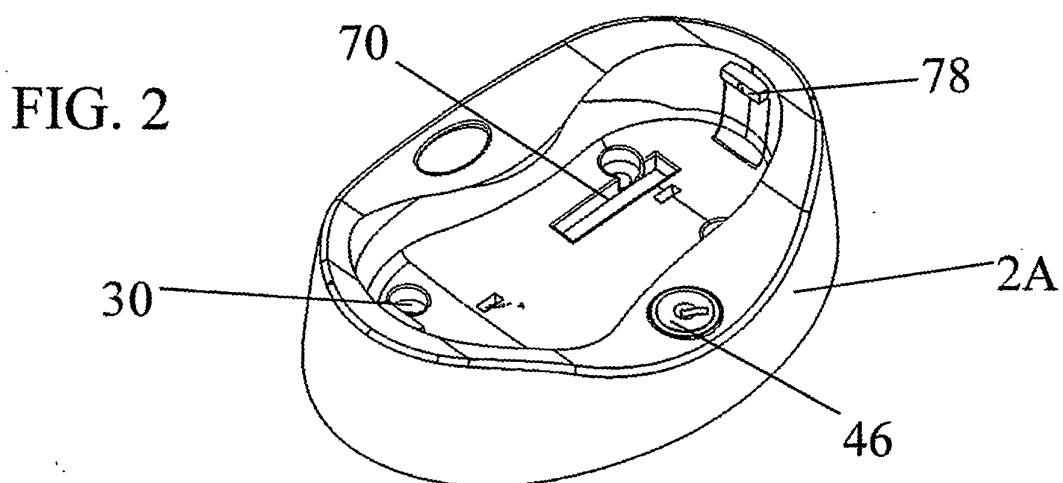
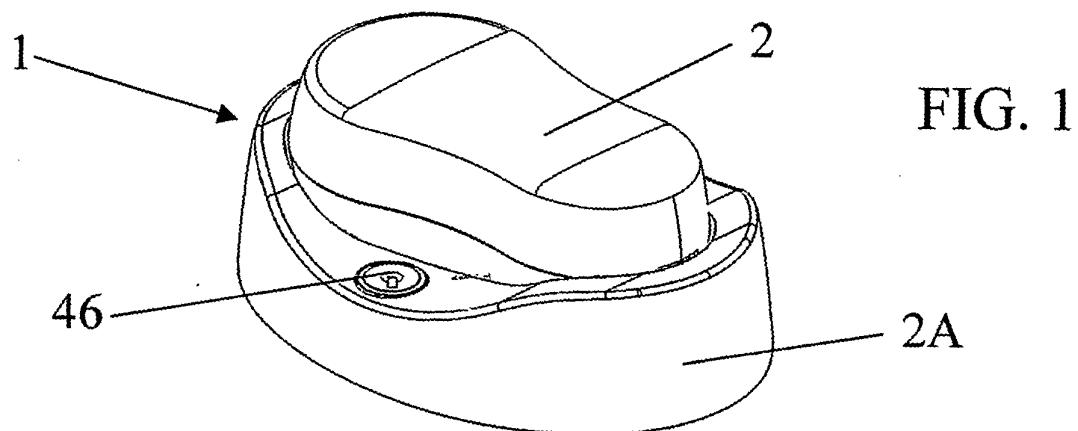
6. Dispositif séparateur (1) selon la revendication 5, **caractérisé en ce que** lesdits moyens de déplacement sont constitués d'un support à plan incliné sur lequel un élément de poussée, mu par un ressort et ayant un côté de forme complémentaire à celle du support, est capable de glisser et de pousser ledit premier élément séparateur magnétique (3) vers le haut de manière à réaliser une dernière position opérationnelle à 90° par rapport au plan dudit dispositif (1).

7. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** ladite base di support (2A) est encore munie de moyens de blocage (46) capables de fixer ledit corps de support (2) à ladite base di support (2A) dans les deux positions de repos et de travail.

8. Dispositif séparateur (1) selon la revendication 6, **ca-**

ractérisé en ce que lesdits moyens de blocage (46)
sont constitués d'une clé et d'un verrou (46).

9. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** lesdits premier et second élément séparateur magnétique (3, 5) sont placés en position respectivement coaxiale et ce dans le but de séparer un mécanisme antivol magnétique muni d'éléments de blocage, qu'il soit du type à ressort à lames ou du type tourbillons à ressort cylindriques, ou encore du type circulaire. 5
10. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** ledit premier élément séparateur magnétique (3) est formé de deux barrettes parallélépipédiques allongées (18, 20) placées respectivement côte à côte. 15
11. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** ledit dispositif séparateur plurifonctionnel (1) comprend encore des moyens d'alignement (22, 23) coopérant avec ledit premier élément séparateur magnétique (3) pour aligner la zone du mécanisme antivol magnétique à soumettre à la séparation avec ledit premier élément séparateur magnétique (3). 20 25
12. Dispositif séparateur (1) selon la revendication 11, **caractérisé en ce que** lesdits moyens d'alignement (22, 23) sont constitués d'au moins deux protubérances allongées capables de s'engager dans des orifices correspondants pratiqués dans un dispositif antivol pour bouteilles. 30
13. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** ledit second élément séparateur magnétique (5) est du type à 'super-aimant', c'est-à-dire avec une force d'attraction de l'ordre de 9000 Gauss. 35 40
14. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** ladite base de support (2A) est munie d'au moins un trou passant (30) pouvant permettre la fixation du corps de support (2) à une surface devant être équipée, en mode inamovible, dudit dispositif séparateur plurifonctionnel (1). 45
15. Dispositif séparateur (1) selon la revendication 1, **caractérisé en ce que** lesdits mécanismes antivol magnétiques sont des étuis pour disques compact, DVD, musicassettes, cassettes vidéo et analogues; ou bien des éléments antivol pour lunettes ou vêtements; ou encore des éléments antivol pour bouteilles. 50 55



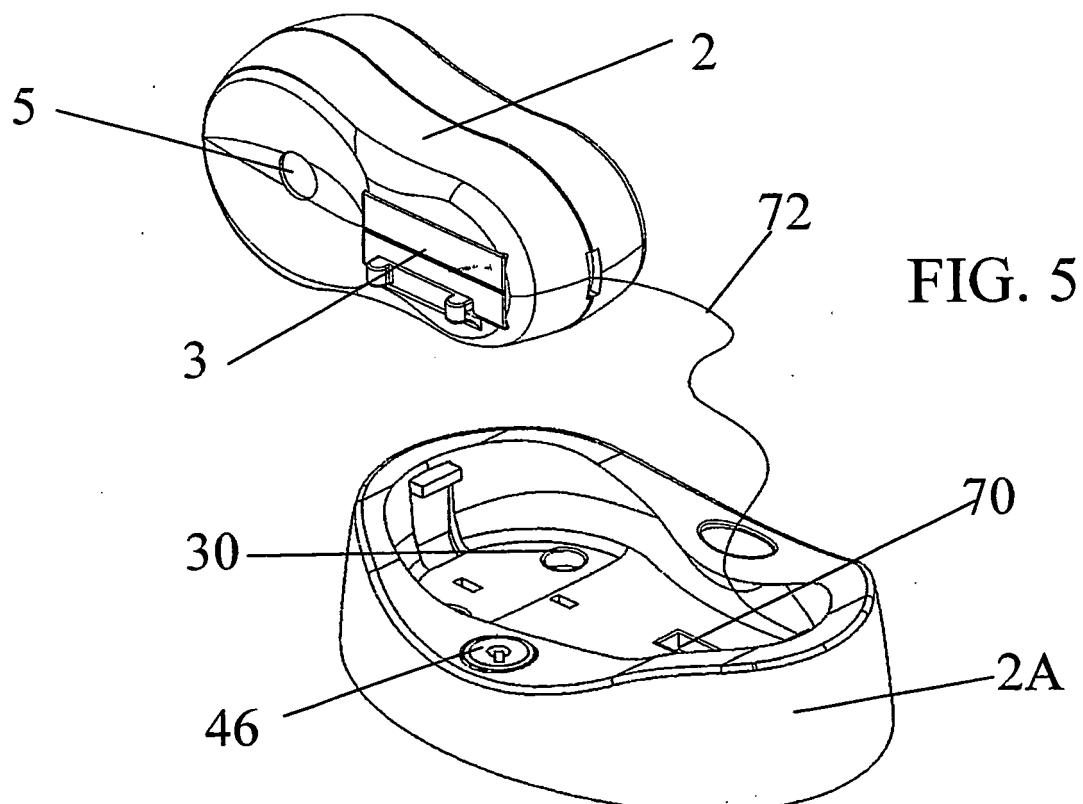
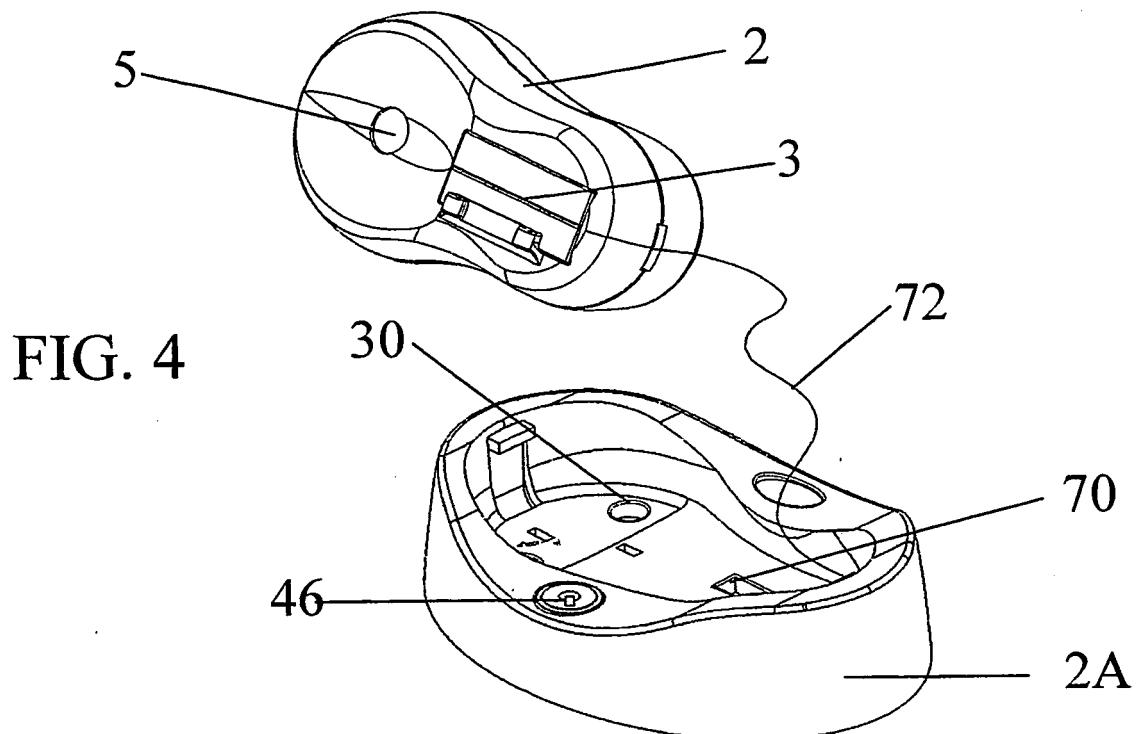


FIG. 6

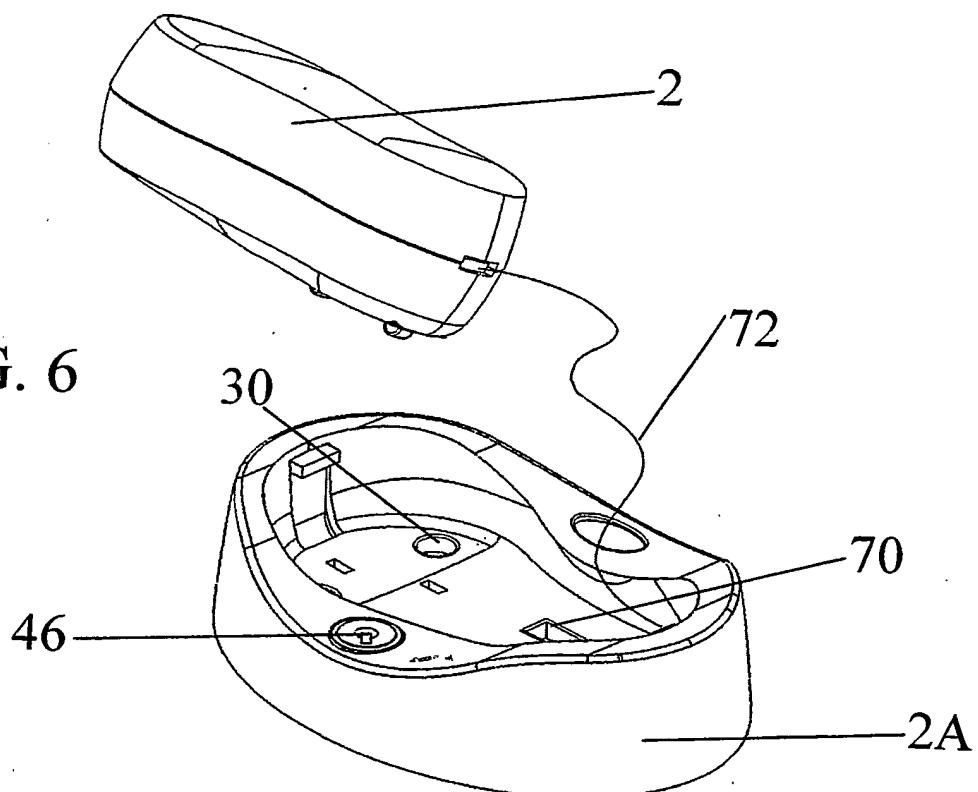
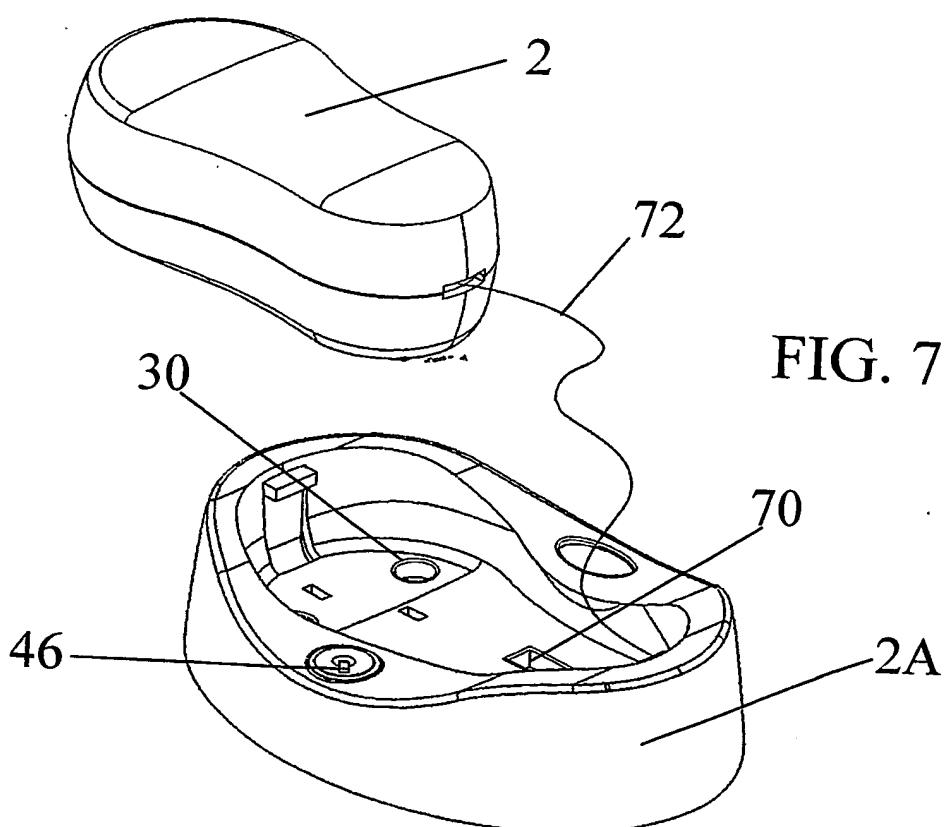


FIG. 7



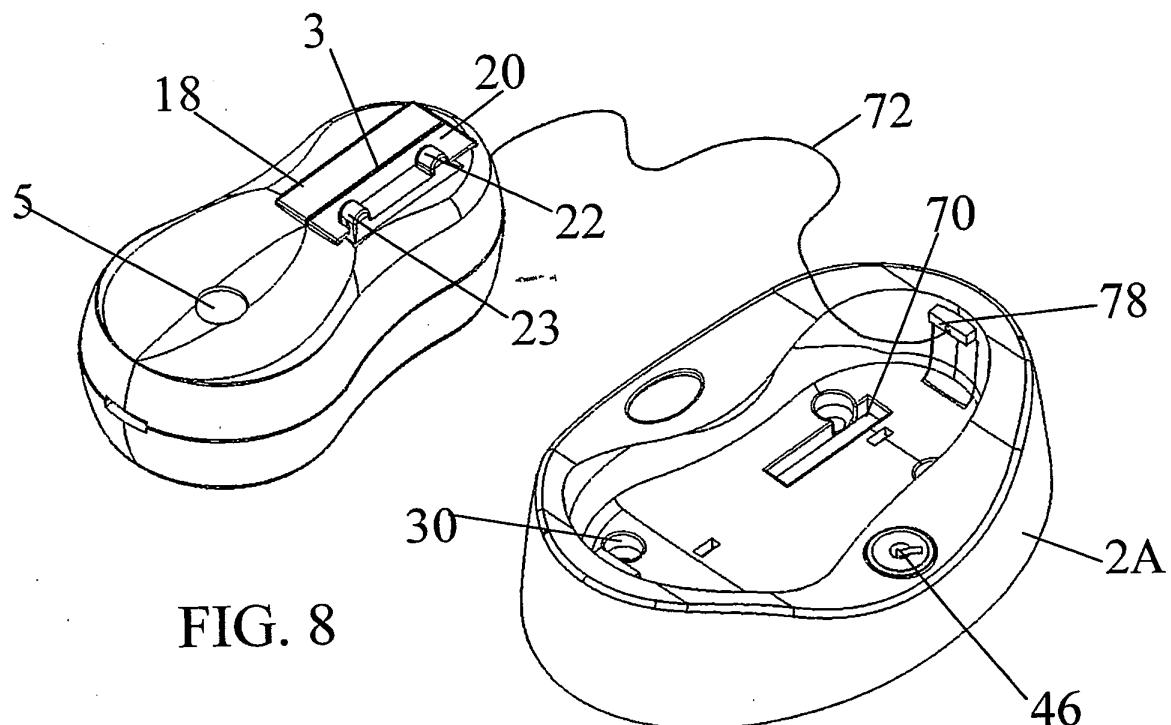


FIG. 8

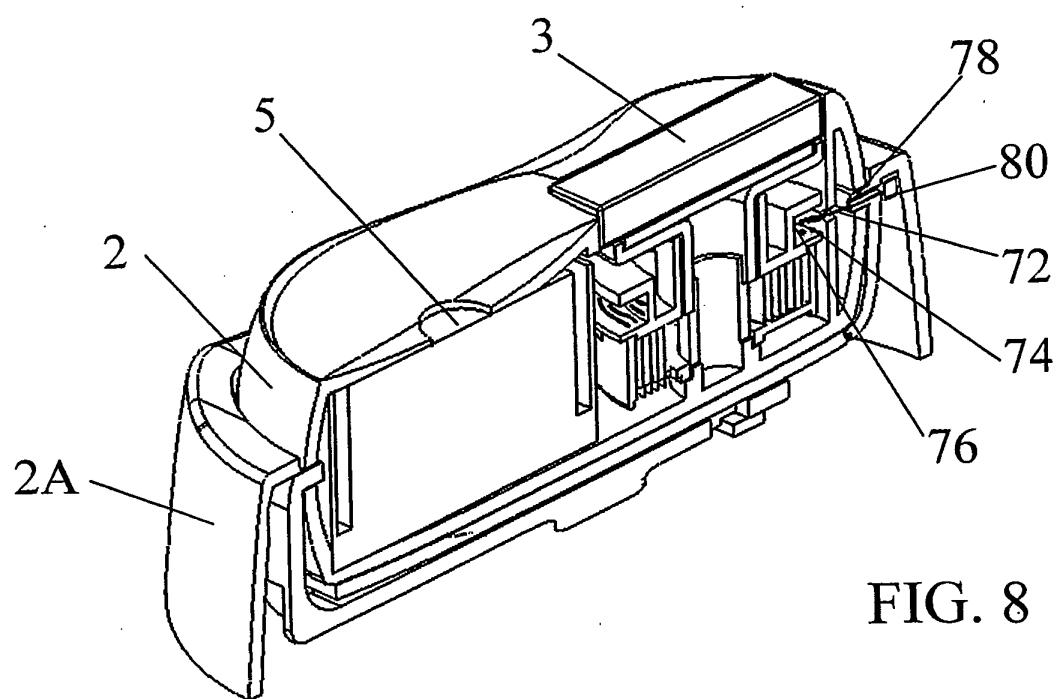
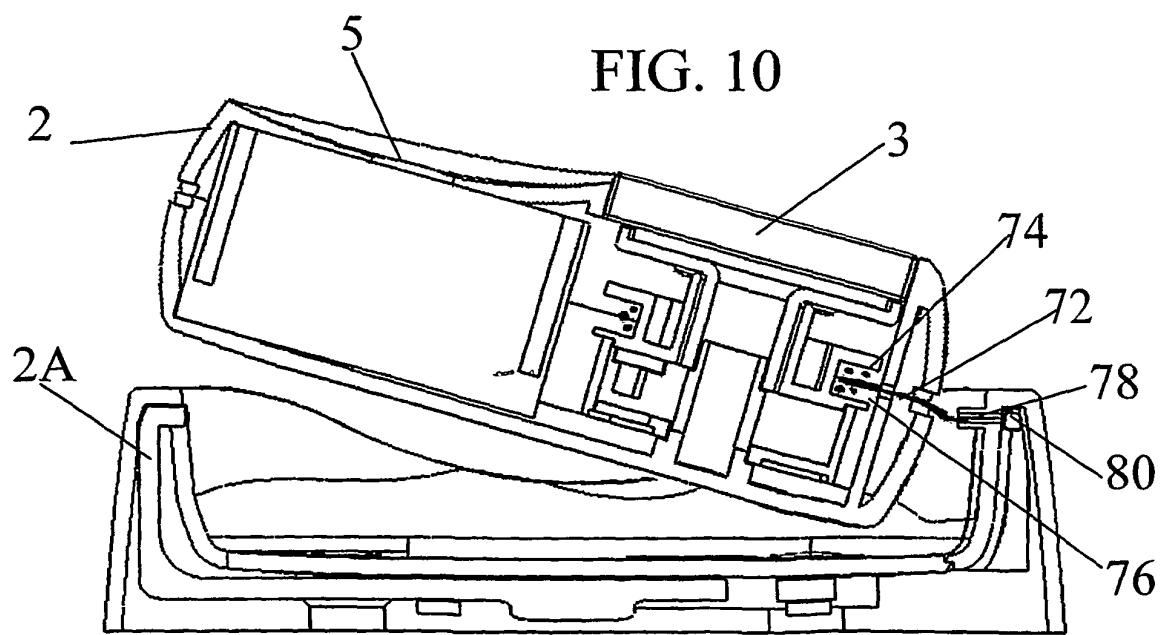
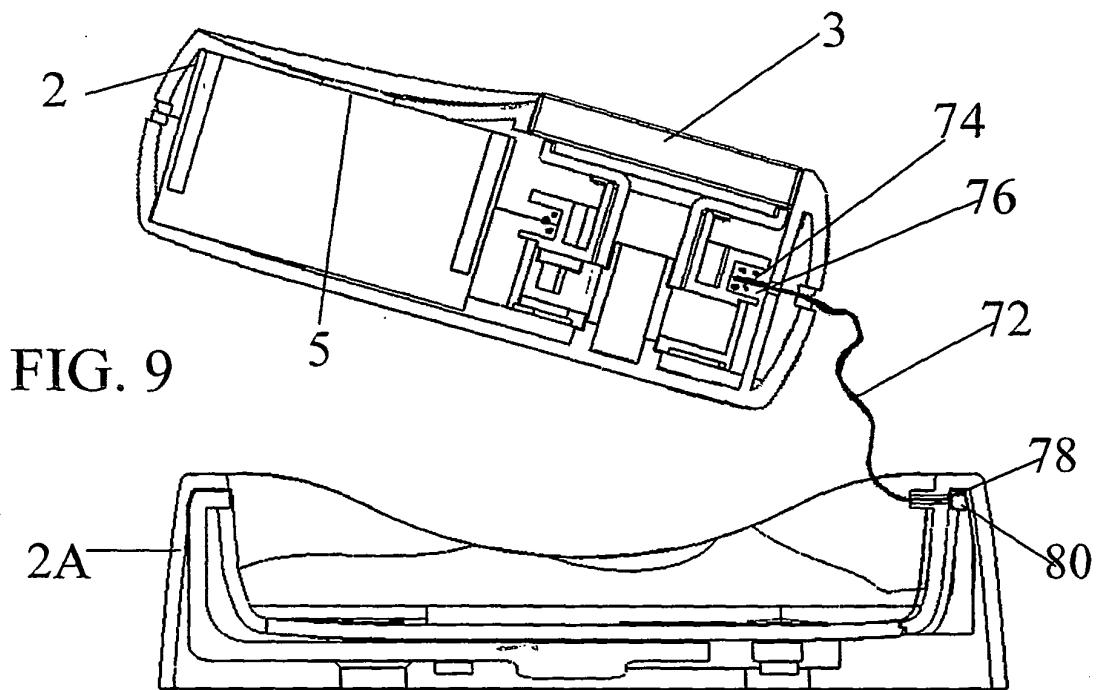


FIG. 8



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