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(54) **Compact for cosmetic products, particularly a travel compact.**

(57) A compact for cosmetic products comprises a base (2) for housing the cosmetic products and a lid (3) hinged to the base (2) and moveable between a position in which the compact is closed and a position in which

it is open for access to the base (2), and contains a reflective element (27). The reflective element (27) is operatively connected to the base (2) and to the lid (3) so that in the said open position the reflective element (27) adopts a position convenient to the user.

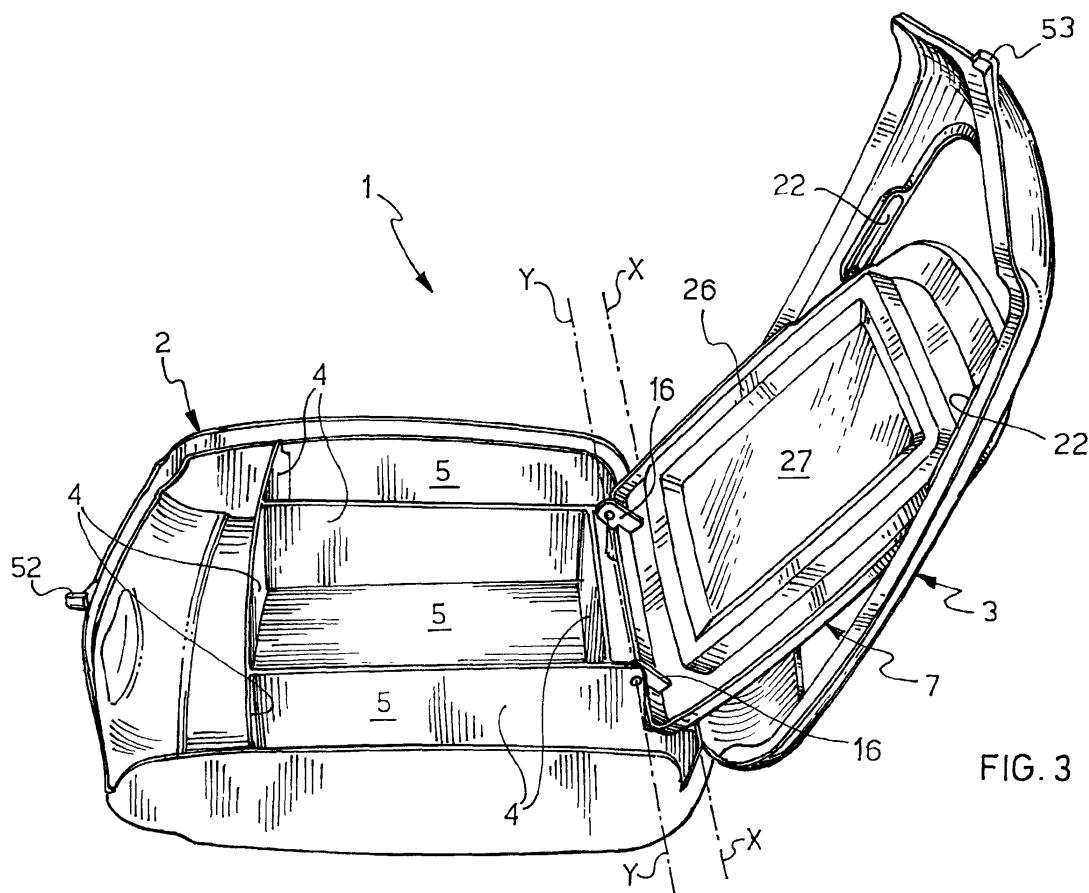


FIG. 3

## Description

**[0001]** The present invention relates to a compact for cosmetic products, particularly but not exclusively a travel compact, and still more particularly a compact of the type that fits into a beauty case.

**[0002]** Compacts for cosmetic products are known, particularly for travel use, e.g. for fitting into a beauty case. They consist of a shell comprising two complementary half-shells, one forming a base and the other a lid. The two half-shells are variously hinged along the edges of respective rear sides so that the lid can rotate about an axis parallel to its rear side from a position in which the compact is closed to an open position at an angle of approximately 180 degrees away from the closed position.

**[0003]** The base is normally provided in its interior with dividing walls or partitions that define compartments designed to contain the cosmetic products. Mounted on the inside of the lid is a mirror, of small dimensions but still useful in situations in which a wall mirror is unavailable.

**[0004]** However, the mirror is awkward to use because when the compact is open the base and lid lie on approximately the same plane: the mirror is therefore parallel with the surface on which the compact is resting. To move the mirror to where the user can conveniently use it the lid must therefore be supported, by hand or by means of whatever support happens to be available, in a position intermediate between the closed and open positions. All this makes the compact unergonomic.

**[0005]** In view of the state of the art as described, one object of the present invention is to provide a compact for cosmetic products that does not have the drawback described above.

**[0006]** In accordance with the present invention, this object is achieved with a compact for cosmetic products comprising a base for housing the cosmetic products and a lid hinged to the base and moveable between a position in which the compact is closed and a position in which it is open for access to the base, and containing a reflective element, the compact being characterized in that the reflective element is operatively connected to the base and to the lid so that in the said open position the reflective element adopts a position convenient to the user.

**[0007]** The features and advantages of the present invention will be made clear in the following detailed description of a practical embodiment of the invention. This is shown purely by way of a non-restrictive example in the attached drawings, in which:

Figure 1 is a perspective view from the front of a compact according to the present invention, in the closed condition;

Figure 2 is a perspective view of the compact from the side, in a partly open condition;

Figure 3 is a perspective view of the compact from

the side, in the open condition;

Figure 4 is a perspective view of the compact from the front, in the open condition;

Figures 5 and 6 are perspective views of two details of the compact;

Figure 7 is a cross section taken on a longitudinal plane through the centre of the compact in the closed condition;

Figure 8 is a cross section through the compact on the plane marked VIII-VIII in Figure 7; and

Figure 9 shows, in cross section on the plane marked IX-IX in Figure 7, another detail of the compact.

**[0008]** With reference to the drawings, a compact according to the present invention comprises a shell 1 formed by a first half-shell 2, or base half-shell or, more concisely base, and a second half-shell 3, or lid half-shell or, briefly, lid. These are complementary and in plan view may be, for example, generally rectangular or square.

**[0009]** Inside the base 2 are partitions 4 that define spaces 5 for holding cosmetic products of various kinds. The two half-shells 2, 3 may be produced by plastic moulding, and in this case the partitions 4 are preferably formed in one piece with the base 2.

**[0010]** The lid 3 comprises a frame 6, with a generally rectangular inner outline, and a central part 7 complementary in shape to the frame 6 and separable from the latter. The frame 6 is hinged basically along an edge 8 of a rear side 9 of the base 2 more or less next to a corresponding external edge 10 of a rear side 11 of the frame 6, so that it can rotate about an axis X parallel to the external edge 10 from a closed position, shown in Figure 1, to an open position, shown in Figures 3 and 4. The hinge may for example be provided by a membrane 40 of elastically deformable plastic material which unites, for approximately the whole of their length, or in discrete sections, the two edges 8, 10 of the rear sides 9, 11 of the base 2, and respectively of the frame 6. Other types of hinge are of course possible, as will readily be apparent to those skilled in the art.

**[0011]** A front side 50 of the base 2 and a corresponding front side 51 of the frame 6 are fitted with releasable snap-closing parts 52, 53 which engage to secure the compact in the closed condition, e.g. a pair of interlocking curved projections.

**[0012]** The central part 7 of the lid 3 has a rear edge 12 which, when the lid 3 is closed, engages with an inner rear edge 13 of the frame 6, and which is hinged to the base 2. The central part 7 can therefore rotate about an axis Y parallel to the axis X. In the example illustrated, as can be seen in detail in Figure 6, the hinge action is provided by a pair of pivot pins 15 supported by respective arms 16 projecting from the rear edge 12 of the central part 7, these pivot pins 15 engaging rotatably in respective slots 17 formed in two of the partitions 4 which extend in parallel in a longitudinal direction inside the

base 2. Other types of hinge action may obviously readily be conceived.

**[0013]** The central part 7 is also provided, along mutually opposite lateral edges 18, 19 and more or less close to a front edge 20 opposite the rear edge 12, with two pins 21 which slide in corresponding guide channels 22 formed along corresponding inner lateral edges 23, 24 of the frame 6. The guide channels 22 are closed at least at one end 25 close to the inner rear edge 13 of the frame in order to form a limit to the sliding of the pins 21.

**[0014]** As can be seen in Figures 7, 8 and 9 in particular, the front edge 20 of the central part 7 is rounded and forms a lip which, when the compact is closed, sits on top of a suitably rounded inner front edge 28 of the frame 6. The rear edge 12 of the central part 7, on the other hand, is shaped to form a continuous protrusion 29 which extends also partly along the lateral edges 18 and 19 as far as a point which, when the compact is closed, meets the end 25 of the channels 22. When the compact is closed the projection 29 sits underneath the inner rear edge 13 and underneath the inner lateral edges 23, 24 of the frame 6, all in such a way as to contribute to forming an essentially continuous lid (Figure 1).

**[0015]** The inside of the central part 7 of the lid 3 is also provided with an enclosure 26 for a mirror 27. The mirror 27 is therefore operatively connected to the lid 3 and to the base 2 of the compact.

**[0016]** When the compact is closed (Figure 1), the central part 7 combines with the frame 6 to form an essentially continuous lid 3, the edges 12, 18, 19 and 20 of the central part 7 fitting closely against the corresponding inner edges 13, 23, 24, 28 of the frame 6.

**[0017]** On opening the compact, after first releasing the closure devices 52, 53, while the frame 6 is rotating about the axis X, the central part 7 rotates about the axis Y and the pins 21 run along the guide channels 22 towards the limit point at the end 25 of the channels 22. In the course of this movement the central part 7 gradually comes away from the frame 6 (Figure 2). On reaching the end 25 of the channels 22, the pins 21 abut against the closed end 25 of each channel 22 and thereby prevent the lid 3 from being opened any further, and the central part 7, which supports the mirror 27 in the enclosure 26, remains in an inclined position relative to the base 2 at an angle intermediate between 0° and 180°, e.g. of between 40° and 60°, which depends on the length of the guide channels 22. If the base 2 of the compact is placed on a supporting surface, the mirror 27 is therefore automatically in a convenient position for the user, making it unnecessary to find a prop or, worse still, to support the lid by hand, as is the case with known compacts. The use of the compact according to the invention for the application of cosmetics is therefore made very easy.

**[0018]** It will be clear that variations and/or additions to what has been described above and illustrated can be adopted without thereby departing from the scope of

protection defined in the following claims.

**[0019]** For example, with reference to the example shown in the figures, the central part 7 of the lid could have only one pin 21 on one of the two edges 18, 19, and the frame 6 could have only one channel 22 along the corresponding edge 23 or 24.

**[0020]** The lid of the compact could be designed as one piece rather than in the form of a frame and a central part, by providing a separate support for the mirror which would slide relative to the lid and be hinged to the base, or by providing the mirror directly with parts to enable it to slide relative to the lid and to be hinged to the base.

**[0021]** Also possible are other types of operative connection of the mirror, or of the mirror support where provided, with the base and lid of the compact, provided they allow the mirror to adopt a position convenient to the user when the lid is in the open position, such as crank mechanisms, for example.

## Claims

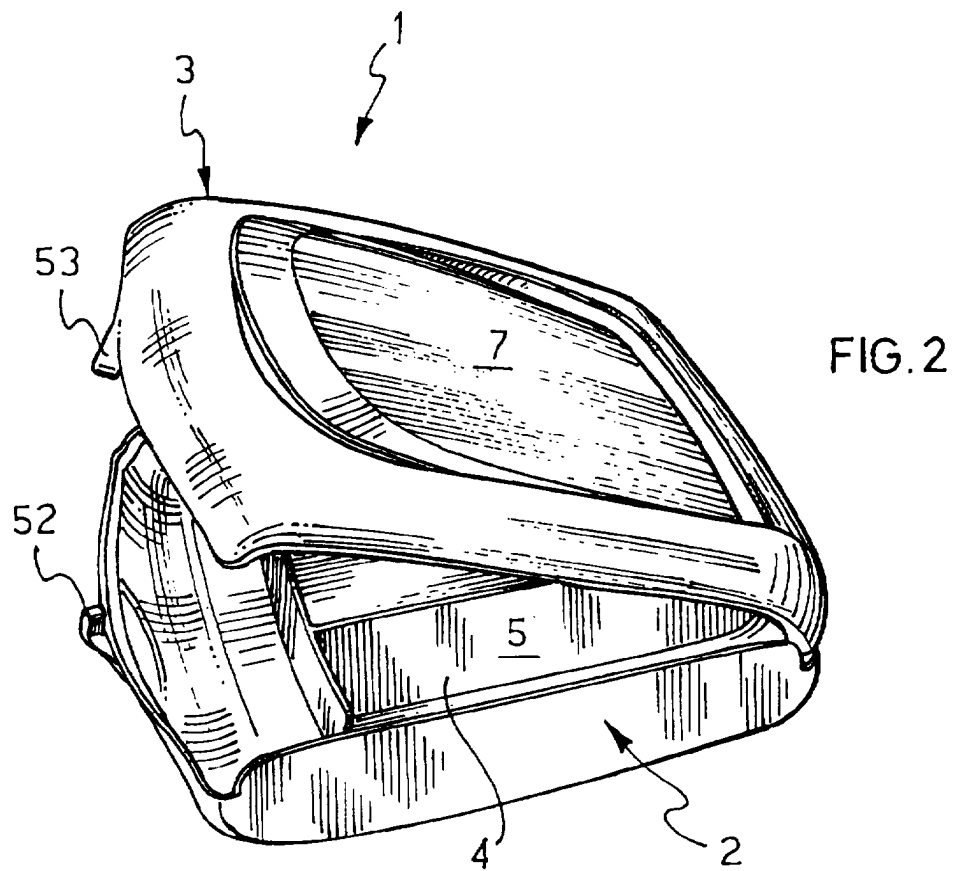
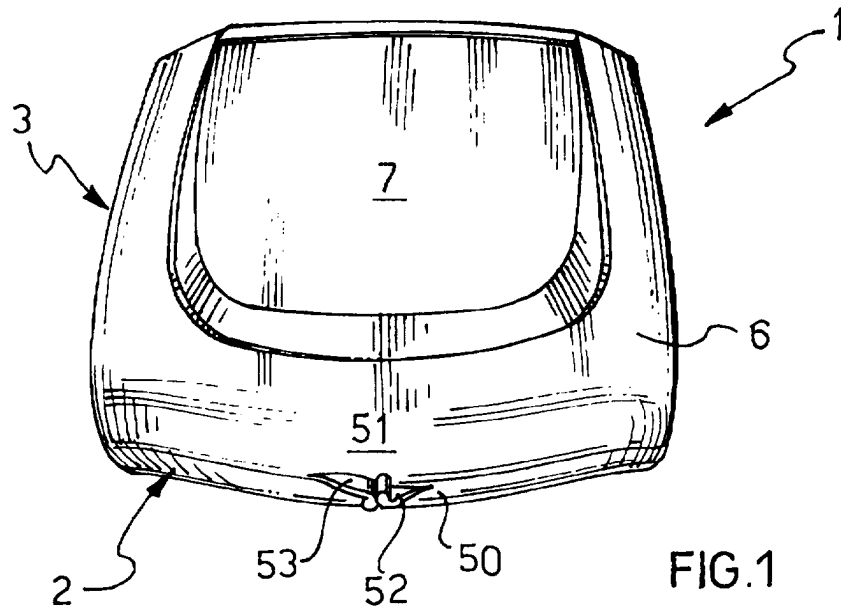
1. Compact for cosmetic products comprising a base (2) for housing the cosmetic products and a lid (3) hinged to the base (2) and moveable between a position in which the compact is closed and a position in which it is open for access to the base (2), and containing a reflective element (27), the compact being characterized in that the reflective element (27) is operatively connected to the base (2) and to the lid (3) so that in the said open position the reflective element (27) adopts a position convenient to the user.
2. Compact for cosmetic products according to Claim 1, characterized in that the reflective element (27) is hinged to the base (2) and slidably connected to the lid (3).
3. Compact for cosmetic products according to Claim 2, characterized in that the lid (3) comprises a frame part (6) and a frame-enclosed part (7) of complementary shape, these parts together forming, when the lid (3) is in the position in which the compact is closed, an essentially continuous lid, the frame part (6) being hinged to the base (2) about a first axis (X), the frame-enclosed part (7) rigidly supporting the reflective element (27) and being hinged to the base (2) about a second axis (Y) parallel to the first axis (X) and connected in sliding fashion to the frame part (6).
4. Compact according to Claim 3, characterized in that the frame part (6) and the frame-enclosed part (7) have mating edges (12, 13; 18, 23; 19, 24; 20, 28) which, when the lid (3) is in the position in which the compact is closed, engage to form an essentially continuous lid.

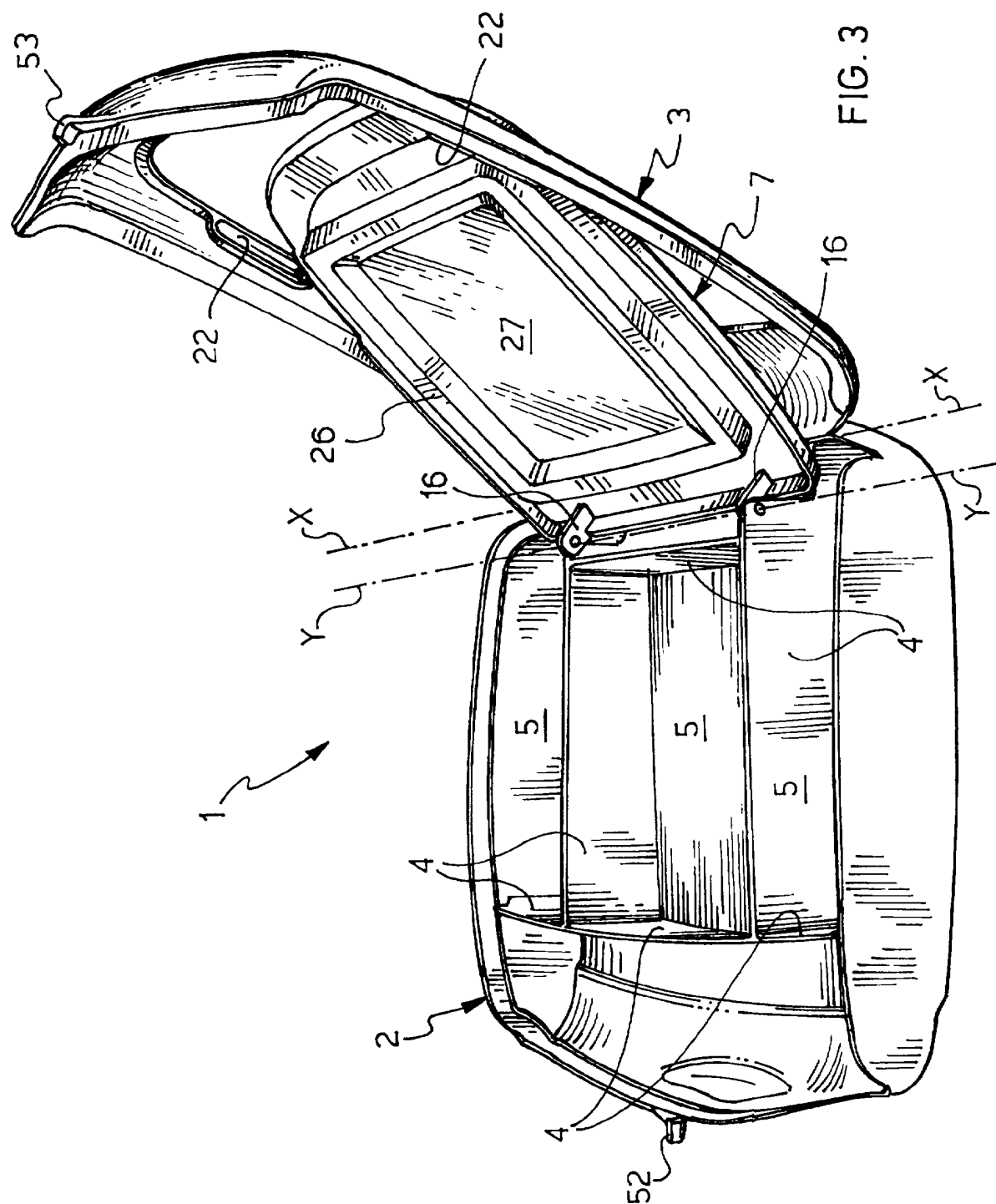
5. Compact according to Claim 4, characterized in that the frame part (6) is hinged basically to a rear side (9) of the base (2), and the frame-enclosed part (7) is hinged to the base (2) in a position away from the said rear side (9) towards the interior of the base (2). 5
6. Compact according to Claim 5, characterized in that the frame part (6) is provided with at least one slideway (22) for the sliding of a corresponding sliding engaging part (21) of the frame-enclosed part (7), and with limit means (25) that prevent further sliding of the sliding engaging part (21) when the reflective element (27) is in the said position convenient to the user. 10  
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7. Compact according to Claim 6, characterized in that the said limit means (25) act together with the sliding engaging part (21) to limit the rotation of the frame part (6) relative to the base (2). 20
8. Compact according to Claim 7, characterized in that the said slideway(s) (22) is/are connected longitudinally to a corresponding inner lateral edge (23, 24) of the frame part (6), and the said sliding engaging part (21) comprises a pin connected to a corresponding lateral edge (18, 19) of the frame-enclosed part (7). 25
9. Compact according to Claim 8, characterized in that the said limit means (25) are a closed end of the said slideway(s) (22) . 30
10. Compact according to any one of Claims 3 to 9, characterized in that the base (2) is provided internally with partitions (4) defining compartments (5) for holding cosmetic products, and the frame-enclosed part (7) is provided with at least one pivot pin (15) that engages rotatably in a corresponding seat (17) formed in the said partitions (4). 35  
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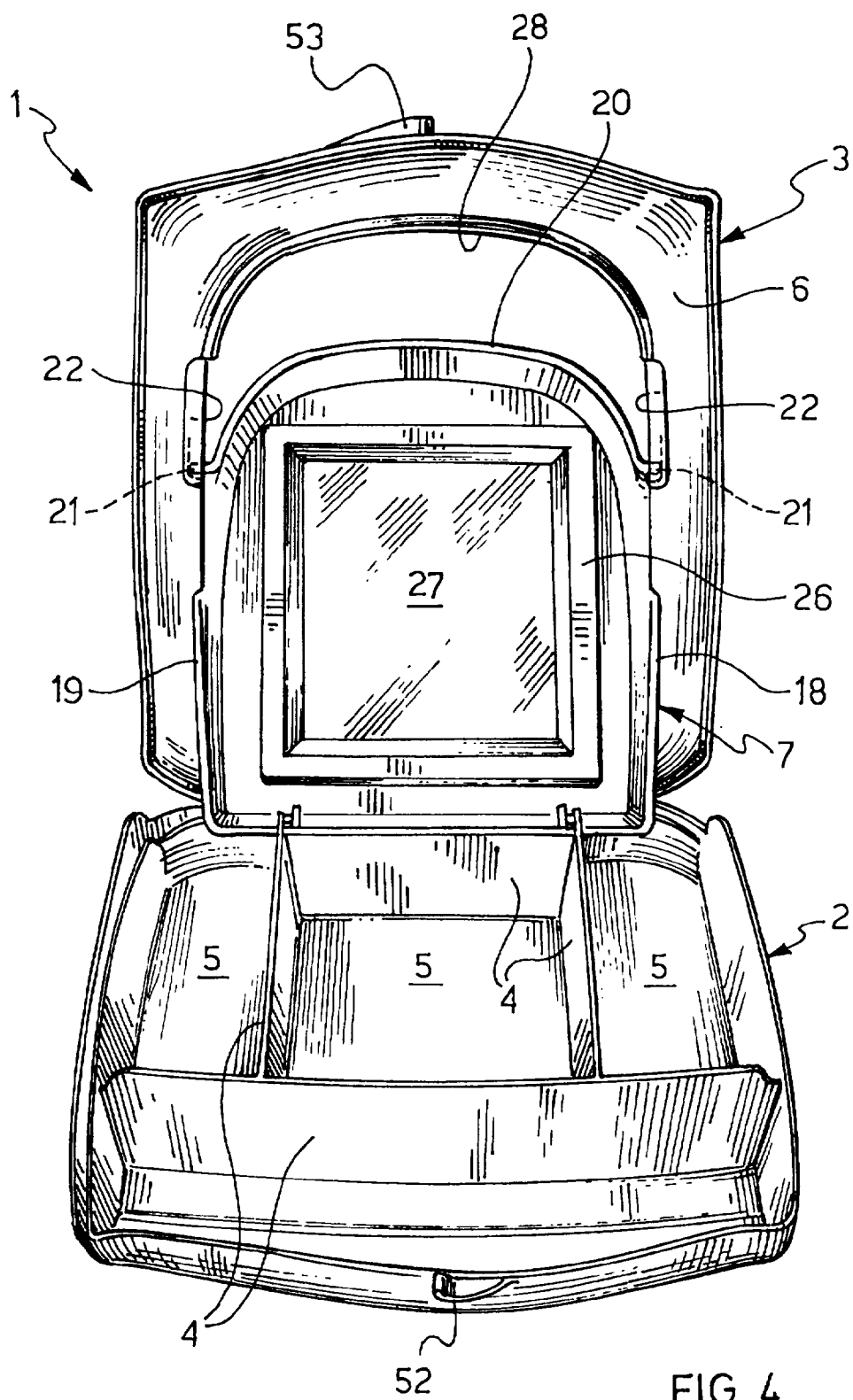
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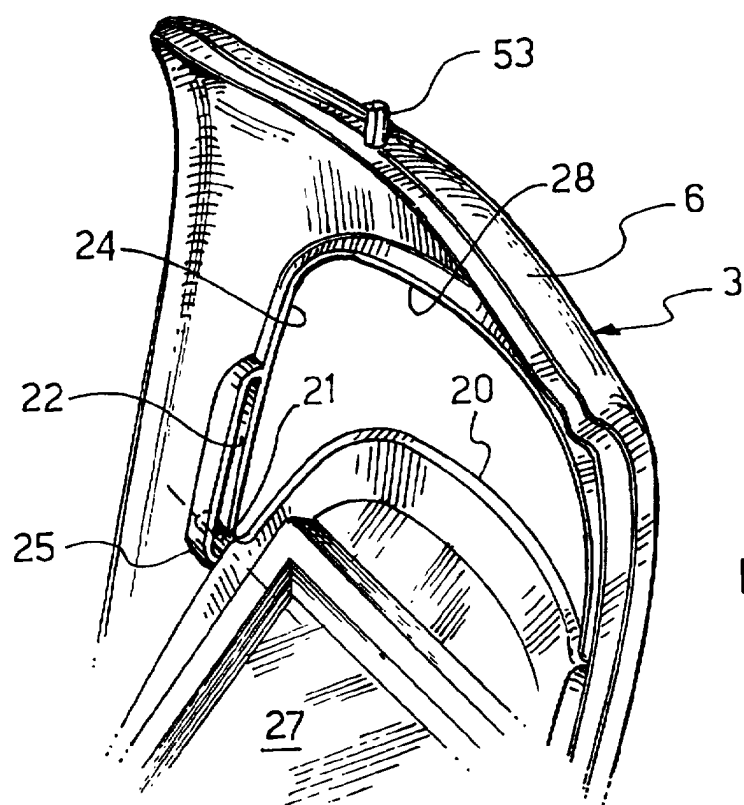


FIG. 5

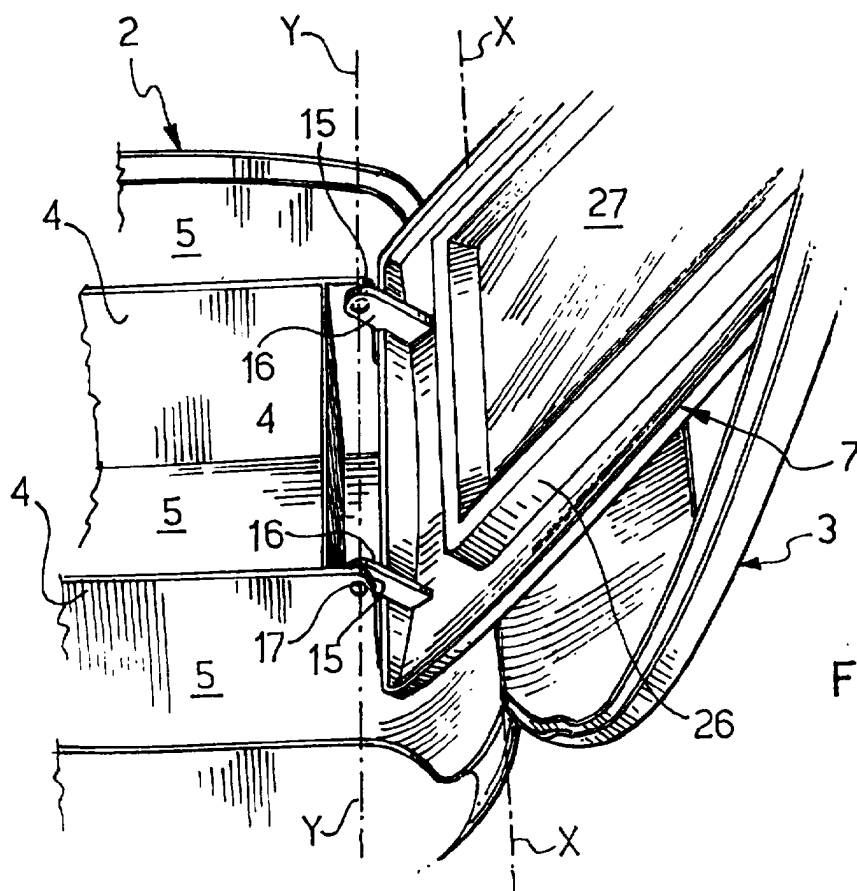
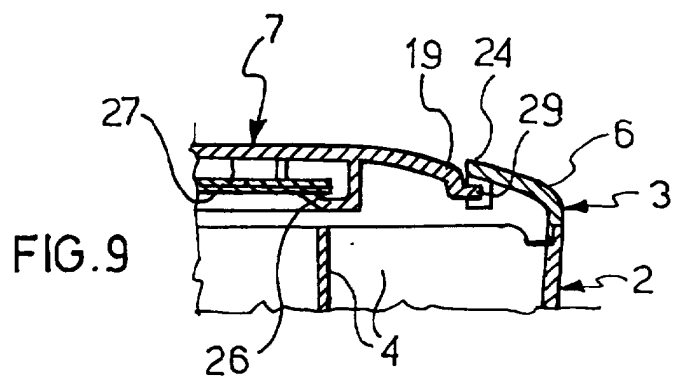
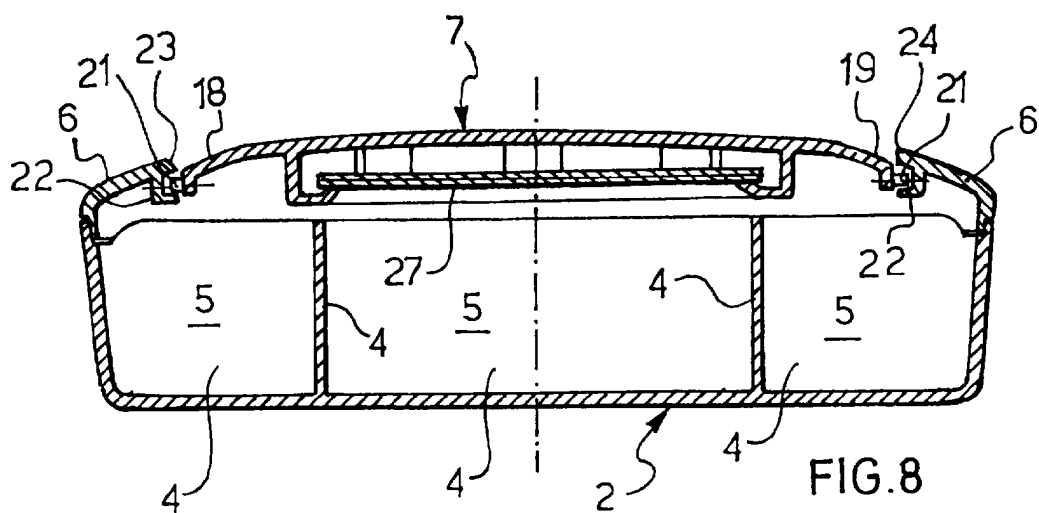
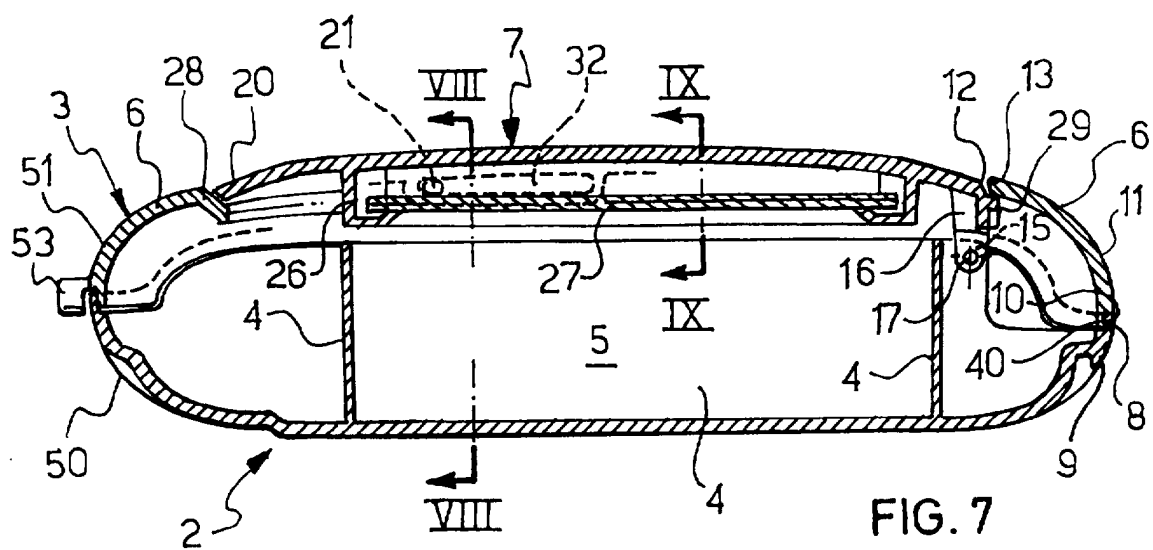


FIG. 6







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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 83 0550

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X	US 2 025 971 A (PERCY J. CALLOWHILL) 31 December 1935 (1935-12-31) * column 2, line 17 - column 3, line 12; figures 3,5-8 *	1,2	A45D33/00		
A	---	3-10			
X	US 1 645 351 A (JULIUS ROSS AND EMIL A. SCHUELKE) 11 October 1927 (1927-10-11) * page 1, line 29-51; figures 1-3 *	1,2			
X	DE 24 43 417 A (DEYHLE GEB) 25 March 1976 (1976-03-25) * page 6; figures 1,2 *	1,2			
A	US 4 807 773 A (TSAI AARON) 28 February 1989 (1989-02-28) * figure 6 *	10			
A	US 2 570 314 A (EVE BRAND) 9 October 1951 (1951-10-09) * column 2, line 13 - column 3, line 40; figures 4,5 *	3	<table border="1"> <tr> <td>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</td> </tr> <tr> <td>A45D</td> </tr> </table>	TECHNICAL FIELDS SEARCHED (Int.Cl.7)	A45D
TECHNICAL FIELDS SEARCHED (Int.Cl.7)					
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The present search report has been drawn up for all claims					
Place of search <b>MUNICH</b>		Date of completion of the search <b>2 March 2000</b>	Examiner <b>Lang, D</b>		
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 99 83 0550

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02-03-2000

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