



(19)

Europäisches Patentamt

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(11)

EP 0 733 318 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
25.09.1996 Bulletin 1996/39

(51) Int. Cl.⁶: **A45D 40/22**

(21) Application number: **96200778.7**

(22) Date of filing: **20.03.1996**

(84) Designated Contracting States:
DE FR GB IT

(30) Priority: **24.03.1995 IT MI950210 U**

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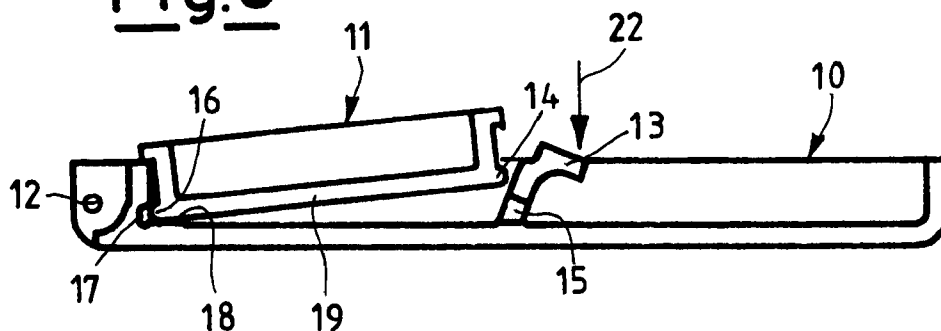
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(54) Container base, in particular for cosmetic products, with interchangeable cups

(57) A container base (10) for receiving interchangeable cups or pans (11), particularly but not exclusively for cosmetics products, in which the pan (11) is retained in place by freely releasable retention means. Said retention means consist of the combination of: at least one elastically yieldable vertical section (13) extending from said base (10), snap-retention

means (14, 15) acting between said section (13) and a first side of said pan (11), engagement means (16, 17) provided on a second side of the pan (11) opposite the first and acting between the base (10) and the pan (11), and counteracting means acting between the base (10) and the pan (11).

Fig.3



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Description

This invention relates to a container base intended to contain particularly but not exclusively cosmetics products, which are compacted into one or more interchangeable cups.

Said interchangeable cups - generally known as pans in this sector - contain cosmetics products such as eye shadow, blusher, lip gloss, rouge powder, face powder, make-up base, etc.

Said containers could however also be used for containing products of different type, such as parapharmaceuticals or others.

As is well known to the expert of the art the construction of containers in general and/or of cases for containing cosmetics products such as the aforesaid requires the solution of various technical problems.

One of these is the possibility of reutilising the container once its contained product has been used up, by merely replacing the empty pans, which are available commercially in the form of specific refills for that container.

In this respect, to assure the consumer that the product contained in the refill is original, it is desirable for the pans and the possible insert incorporated into the container base to comprise precise corresponding locators so that components of different origin cannot be fitted in.

Another technical problem relates to the facility for replacing the pans contained in the container with other pans containing a different cosmetics product or with a different number of modular pans, with ease and without soiling the fingers.

It is also desirable to provide a container with an interior in which the assembled pans form a pattern of pleasing appearance and which can be varied.

The aforesaid problems have been solved for example by the containers described and illustrated in EP-A-587252, EP-A-634117 and EP-A-635224.

In EP-A-587252 and EP-A-634117 the pan is engaged with the container base by snap-retention means, whereas in EP-A-635224 the pan is retained in position by an insert slidable between two positions, namely a position in which the pan is fixed and a position in which it can be removed.

Although the aforesaid systems for replacing the pan can be considered satisfactory, the object of the present invention is to provide a container base in which the pans can be removed even more easily without soiling the fingers.

Said object is achieved by a container base having the characteristics defined in the accompanying claims.

The structural and functional characteristics of the invention and its advantages compared with the known art will be more apparent from the following description, given with reference to the accompanying drawings which show one embodiment of a container base for interchangeable pans formed in accordance with the innovative principles of the invention. In the drawings:

Figures 1 to 5 are longitudinal sections showing stages in the removal of a pan from a container base formed in accordance with the invention;

Figure 6 is an enlarged section taken on the plane VI-VI of Figure 5;

Figures 7 to 9 are sections showing the insertion of a pan into the container base of Figures 1 to 5; and Figures 10 and 11 show a modification of the same inventive concept.

With reference to the drawings, the reference numeral 10 indicates a container base formed in accordance with the invention and 11 indicates a pan removably inserted into said base 10.

A closure lid (not shown) is intended to be hinged to said base 10 at 12.

According to the invention, the interchangeable pan 11 is retained in position within the base 10 by retention means formed by the combination of:

- an elastically yieldable vertical section 13 extending from said base 10;
- a tooth 14 extending from a first side of the pan 11 and snap-engaging into an undercut 15 in said section 13;
- a tooth 16 extending from a second side of the pan 11, opposite the first, and engaging in a corresponding seat 17 in the base 10; and
- projections 18 on the base 10 which cooperate with the underlying surface 19 of the pan 11.

With the container base of the invention, to remove the pan it is sufficient merely to press against the elastically yieldable section (wall) 13 in the direction of the arrow 22 (substantially in a direction perpendicular to the base 10) for the section 13 to move into the positions shown in Figures 2 and 3, so that the pan 11 (because of the force applied to it in the direction of the arrows 23 of Figures 1 and 2 by virtue of the presence of the projections 18, which thrust against the surface 19) rises automatically into the position shown in Figure 5, in which it can be easily gripped and extracted from the base 10.

A new pan can be easily inserted as shown in Figures 7 to 9, by inserting the pan into the seat provided in the base 10 such that the tooth 16 engages in the seat 17 (Figure 7), and then pressing on the pan 11 in the direction of the arrow 24 of Figure 8, so causing the flexible section 13 to move with resultant snap-engagement of the tooth 14 in the undercut 15, this placing the pan 11 under slight tension because of the action of the projections 18 against its underlying surface 19.

Figures 10 and 11 show a modification of the inventive concept illustrated by way of non-limiting example in Figures 1 to 9, in which the pair of projections 18 provided at the corners of the base 10 are replaced by a single central projection 25 which, cooperating with the underlying surface of the pan 11, performs the same

aforedescribed function of automatically extracting the pan from its seat.

Additionally, in the embodiment of Figures 10 and 11, the wall 26 of the base 10 at the hinge 12 can be at least partly yieldable, to facilitate insertion of the pan 11 into its seat by pressing in the direction of the arrow 27 on the opposite side to that shown in Figures 7 to 9.

It should be noted that the particular configuration and arrangement of the flexible section 13 enables the user to easily operate it by pressing in a vertical direction perpendicular to the base 10 instead of by a more uncomfortable horizontal action, as is the case in container bases of known type, which do not use the combination of a presser element 13 and counteracting means 18, 19.

This results in more comfortable use of the container, enabling the pan to be extracted automatically without changing the grip on the container if held in the hand, and also allowing it to be easily used when resting on a horizontal surface.

The flexibility of the section 13 and of the wall 26 can be achieved in various ways, for example by making cuts of lesser resistance or by thinning down the thickness of the material.

The object stated in the introduction to the description, of providing a container, particularly but not exclusively for cosmetics, in which pan replacement is greatly facilitated, is, hence attained.

Claims

1. A container base (10) for receiving interchangeable cups or pans (11), particularly but not exclusively for cosmetics products, in which the pan (11) is retained in place by freely releasable retention means, characterised in that said retention means consist of the combination of: at least one elastically yieldable vertical section (13) extending from said base (10), snap-retention means (14, 15) acting between said section (13) and a first side of said pan (11), engagement means (16, 17) provided on a second side of the pan (11) opposite the first and acting between the base (10) and the pan (11), and counteracting means acting between the base (10) and the pan (11).
2. A container base as claimed in claim 1, characterised in that said counteracting means are provided in correspondence with said second side of the pan (11).
3. A container base as claimed in claim 1, characterised in that said counteracting means are provided centrally.
4. A container base as claimed in claim 1, characterised in that said snap-retention means consist of a tooth (14) extending from a first side of the pan (11)

and snap-engaging in an undercut (15) in the section (13).

5. A container base as claimed in claim 1, characterised in that said engagement means consist of a tooth (16) extending from a second side of the pan (11) opposite the first and engaging in a corresponding seat (17) in the base (10).
6. A container base as claimed in claim 1, characterised in that said counteracting means consist of at least one projection (25) provided centrally on the base (10) and cooperating with the underlying surface (19) of the pan (11).
7. A container base as claimed in claim 1, characterised in that said counteracting means consist of a pair of projections (18) on the base (10), which cooperate with the underlying surface (19) of the pan (11), said pair of projections (18) being provided at those corners of the base (10) opposite the side comprising the section (13).
8. A container base as claimed in claim 1, characterised by comprising a second elastically yieldable vertical section or wall (26) in a position opposite said at least one vertical section (13).

Fig.1

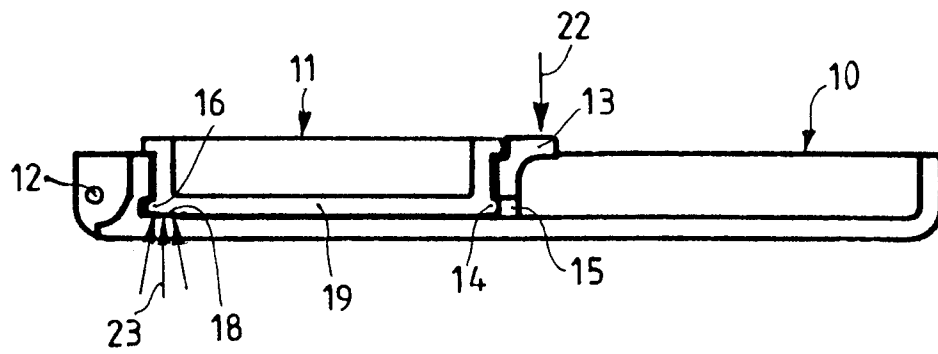


Fig.2

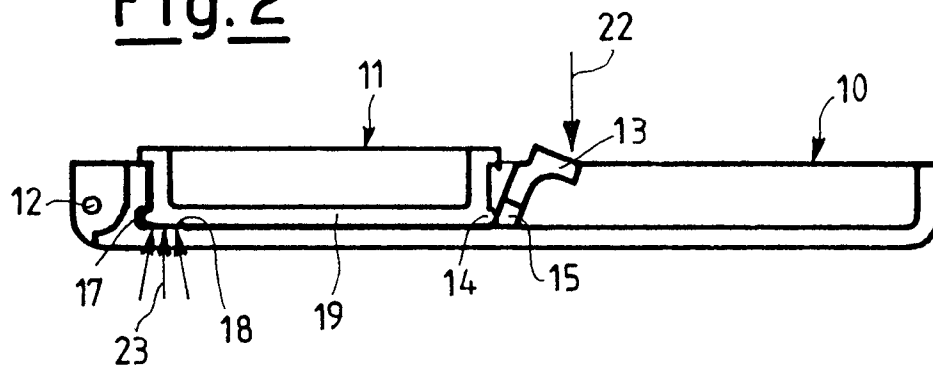


Fig.3

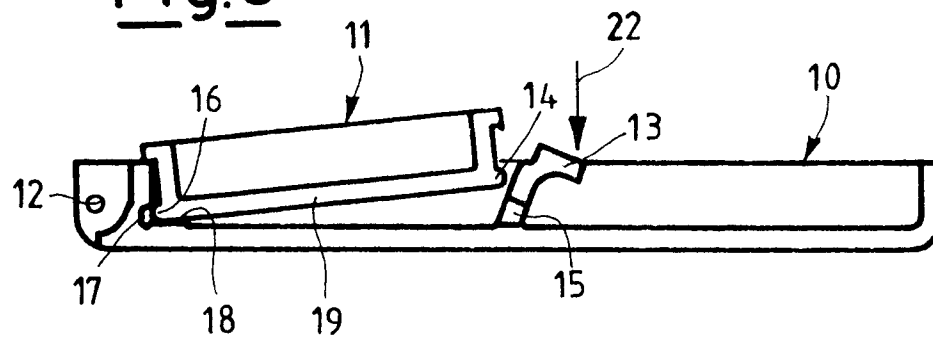


Fig.4

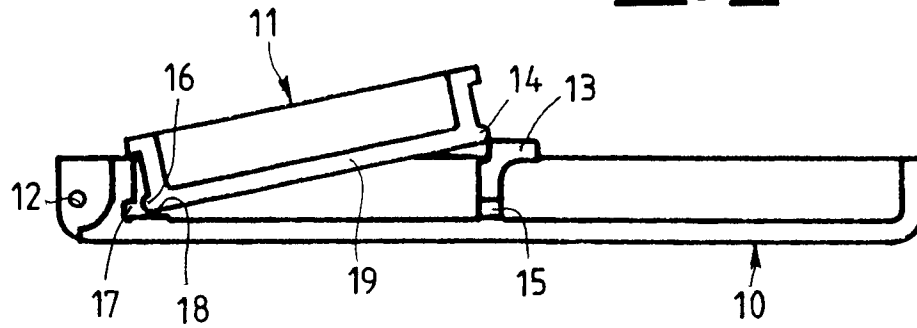


Fig.5

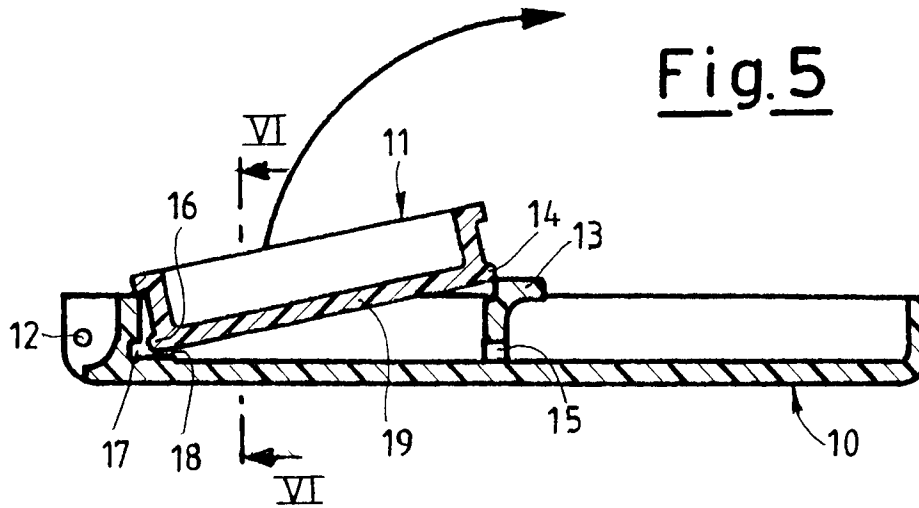


Fig.6

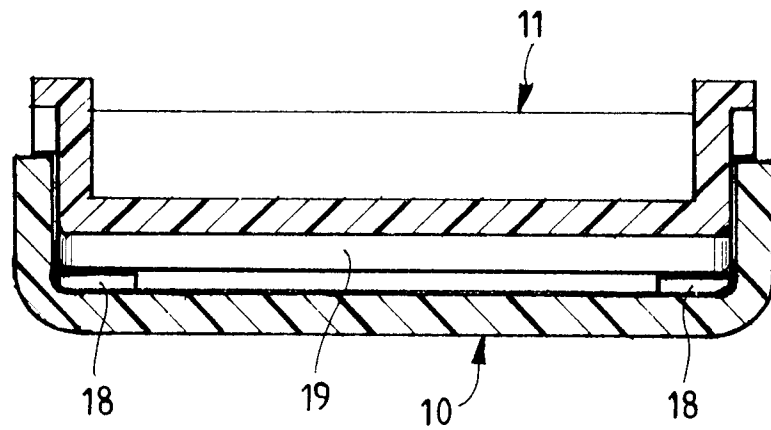


Fig.7

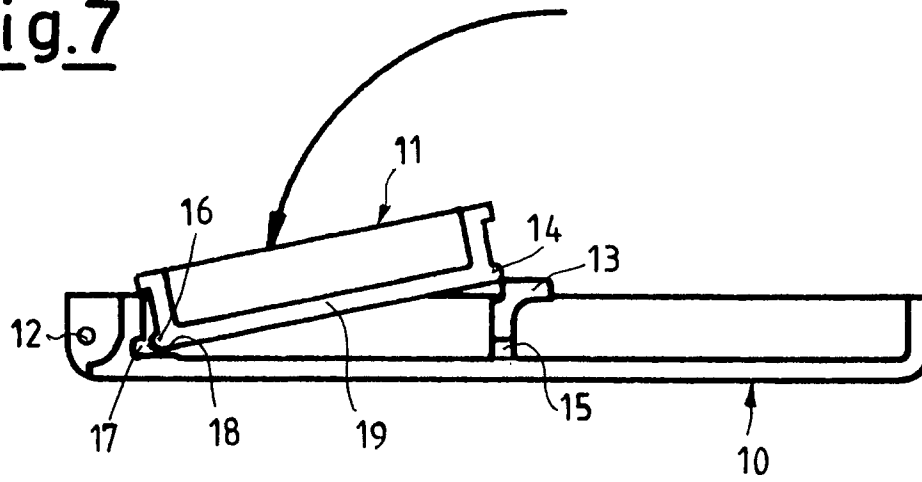


Fig.8

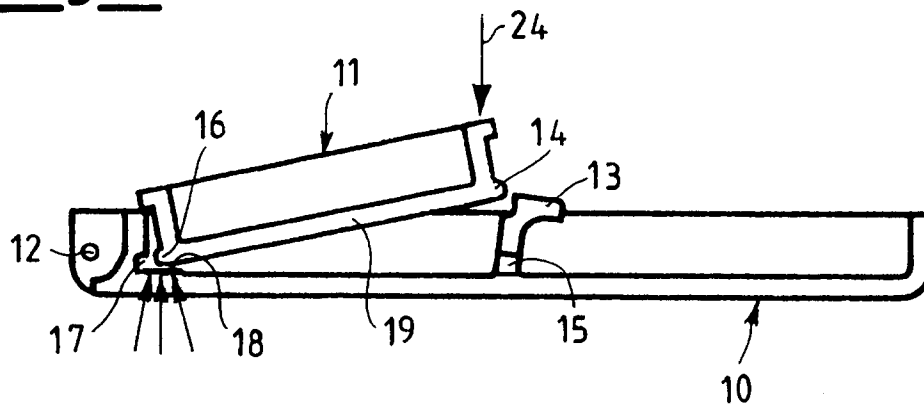


Fig.9

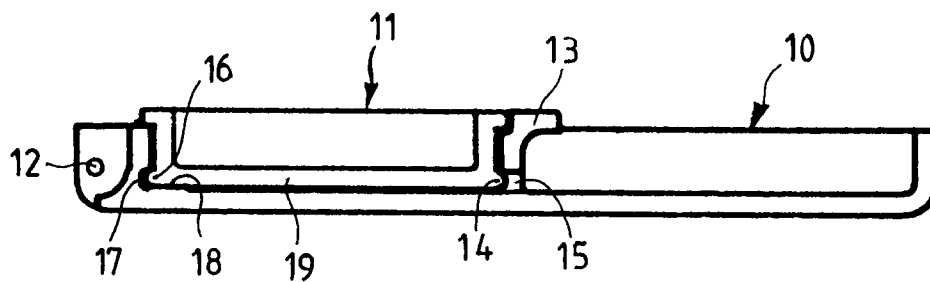


Fig.10

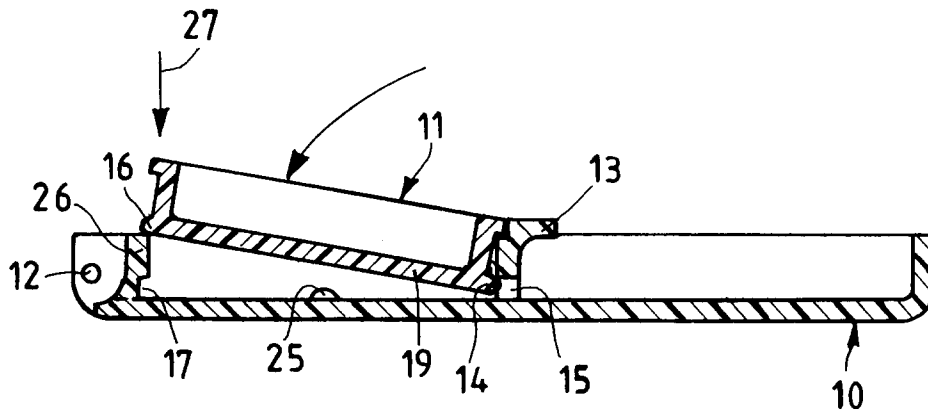
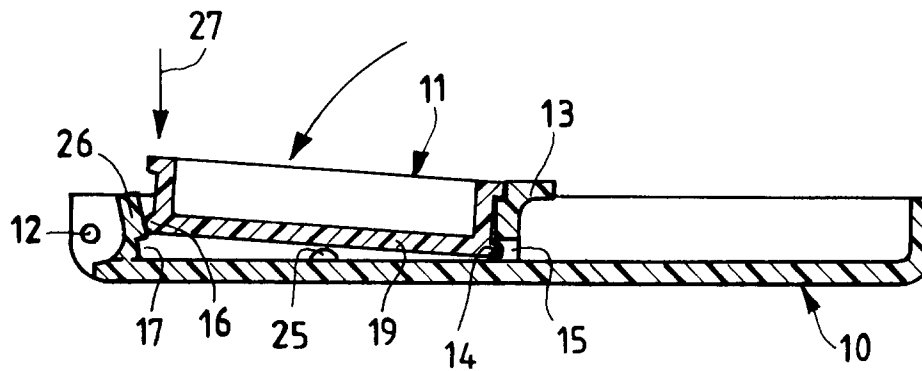


Fig.11





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EUROPEAN SEARCH REPORT

Application Number
EP 96 20 0778

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	FR-A-2 585 935 (L'OREAL) * page 11, line 27 - page 12, line 28 *	1,5	A45D40/22
Y	FR-A-2 691 339 (PARFUMS GIVENCHY) * page 3, line 4 - line 7 *	1,5	
A	EP-A-0 574 107 (RISDON CORPORATION) * the whole document *	1	
A	US-A-5 092 354 (PACELLI) * the whole document *	1	
A	EP-A-0 519 482 (AG HEVCO) * the whole document *	1	
A	EP-A-0 607 973 (TECHPACK LAFFON) * the whole document *	1	
A	GB-A-2 156 784 (SHORE PLASTICS INC.)		
A	DE-A-18 12 915 (ROSBACH)		TECHNICAL FIELDS SEARCHED (Int.Cl.6) A45D A45C B44D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 3 July 1996	Examiner Riegel, R
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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