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(11) **EP 1 030 140 A2**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
23.08.2000 Bulletin 2000/34

(51) Int. Cl.⁷: **F25D 23/04, A47B 57/00**

(21) Application number: **00102327.4**

(22) Date of filing: **03.02.2000**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **17.02.1999 IT MI990089 U**

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(54) **Tray of adjustable capacity for refrigerator doors**

(57) A tray for convex doors of refrigerators and the like, comprising a base element (2) and a supplementary element (3) for dividing it into compartments (4, 5), in which the base element (2) has a first wall (6) closer to the refrigerator door (6B) and of corresponding convex shape, and an opposite wall (12) on which a part (14, 15) of an supplementary element (3) can be mounted to define with said first wall a first compartment (4) and with said opposite wall (12) a second compartment (5) of smaller dimensions.

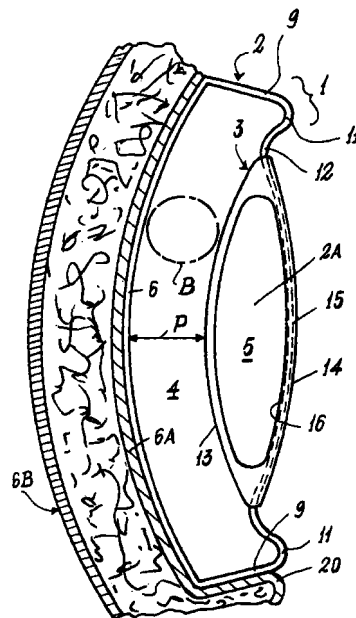


Fig. 5

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Description

[0001] This invention relates to a tray of adjustable capacity for refrigerators and the like, in accordance with the introduction to the accompanying main claim.

[0002] The current tendency with domestic refrigerators is to give their doors a convex shape. This means that the relative door liner, which defines the door on its inner side, is likewise dished in order to avoid lack of uniformity in the thickness of the insulation, which could otherwise be unacceptably insufficient towards the ends or excessive in the centre.

[0003] This convex shaping, which is mostly dictated by current aesthetic fashion, does however offer an advantage in the sense that the pockets or trays associated with the door liner can, for the same degree of projection, have a capacity (in the width direction) which is greater than that of so-called flat pockets or trays.

[0004] To utilize this feature, this invention proposes firstly that that wall of the tray base element which is closer to the door is likewise dished, on the opposing wall there being able to be mounted (and hence removable) a part of a supplementary element which with this wall defines a first containing compartment and with the other wall a second compartment.

[0005] On that side of this supplementary element which faces the convex wall of the tray which receives it, there is a corresponding convex wall.

[0006] Multi-compartment trays are known, for example from Japanese patent applications 96-275738 and 96-275326.

[0007] The first describes a tray formed from a base element which can be coupled to a bracket and is provided with a front wall. A component comprising two L-shaped parts joined together can be inserted into this element to obtain a multi-compartment tray. The second application describes a one-piece tray provided with a dividing wall which divides it into two compartments. The base wall of the two compartments is perforated to allow air circulation.

[0008] The invention will be more apparent from the detailed description given hereinafter by way of non-limiting example with reference to the accompanying drawings, on which:

Figure 1 is an exploded perspective view of the tray according to the invention;

Figure 2 is a perspective view of the tray after assembly of its elements;

Figure 3 is a cross-section on the line A-A of Figure 1;

Figure 4 is a cross-section on the line B-B of Figure 2;

Figure 5 is a view from above showing the tray associated with the convex door of a refrigerator or the like.

[0009] In the figures the reference numeral 1 indicates overall a tray for refrigerators and similar appliances in accordance with the invention. It comprises a base element 2 and a supplementary element 3 of flexible material intended to cooperate with the base element to obtain two separate variable compartments or pockets 4, 5 to hold various objects and/or products, such as bottles, tubes and the like.

[0010] The base element 2 comprises a convex rear wall 6 matching the convex shape of the door liner 6A of the door 6B of a refrigerator or the like. From the wall 6 there forwardly extend two side walls 9 connected via an arched region 11 to a front wall 12, which is also dished but in the opposite direction to that of the rear wall 6. The base element 2 has a base 2A.

[0011] The supplementary element 3 of flexible material has a convex rear wall 13 the height of which is approximately equal to that of the front wall 12 of the base element 2. The supplementary element 3 also has an arched front side 14 of lesser height provided with a groove 15 by which it is mounted on the front wall 12 of the base element 2. The side 14 has the same convexity as the front wall 12 and defines with the rear wall 13 an approximately elliptical aperture 16 giving access to the compartment 5 (this compartment being defined essentially by the rear wall 13 of the supplementary element 3 and the front wall 12 of the base element 2).

[0012] Advantageously, by a suitable choice of convexity the compartment or pocket 4 resulting from the combination can have a width P suitable for receiving and stably retaining bottles B either of normal size (75-100 cl) or of greater size (150-200 cl). At the same time the compartment 5 can house 33 cl cans and small 20-50 cl bottles or other containers such as tubes or small jars.

[0013] The tray of the invention is supported on the door liner by usual coupling means provided for example on the side walls 9 and on the projecting sides 20 of the door liner 6A.

Claims

1. A tray for convex doors of refrigerators and the like, comprising a base element (2) and a supplementary element (3) for dividing it into compartments (4, 5), characterised in that the base element (2) has a first wall (6) closer to the refrigerator door (6B) and of corresponding convex shape, and an opposite wall (12) on which a part (14, 15) of a supplementary element (3) can be mounted to define with said first wall a first compartment (4) and with said opposite wall (12) a second compartment (5) of smaller dimensions.
2. A tray as claimed in claim 1, wherein said supplementary element (3) is of flexible material and is shaped in such a manner as to enable bottles and other containers of various dimensions to be stably

housed.

3. A tray as claimed in claim 1, wherein said mountable part (14, 15) forms a side of said supplementary element. 5
4. A tray as claimed in the preceding claims, wherein said side is connected to a wall (13), said wall (13) defining with the opposite wall (12) of the base element (2) said second compartment (5), the access 10 to which is via an aperture (16) defined by said wall (13) and by said side.
5. A tray as claimed in the preceding claims, wherein said opposite wall (12) of the base element (2) is 15 dished outwards, the side of the supplementary element (3) being correspondingly dished and provided with a groove (15) by which it is mounted on said opposite wall (12). 20

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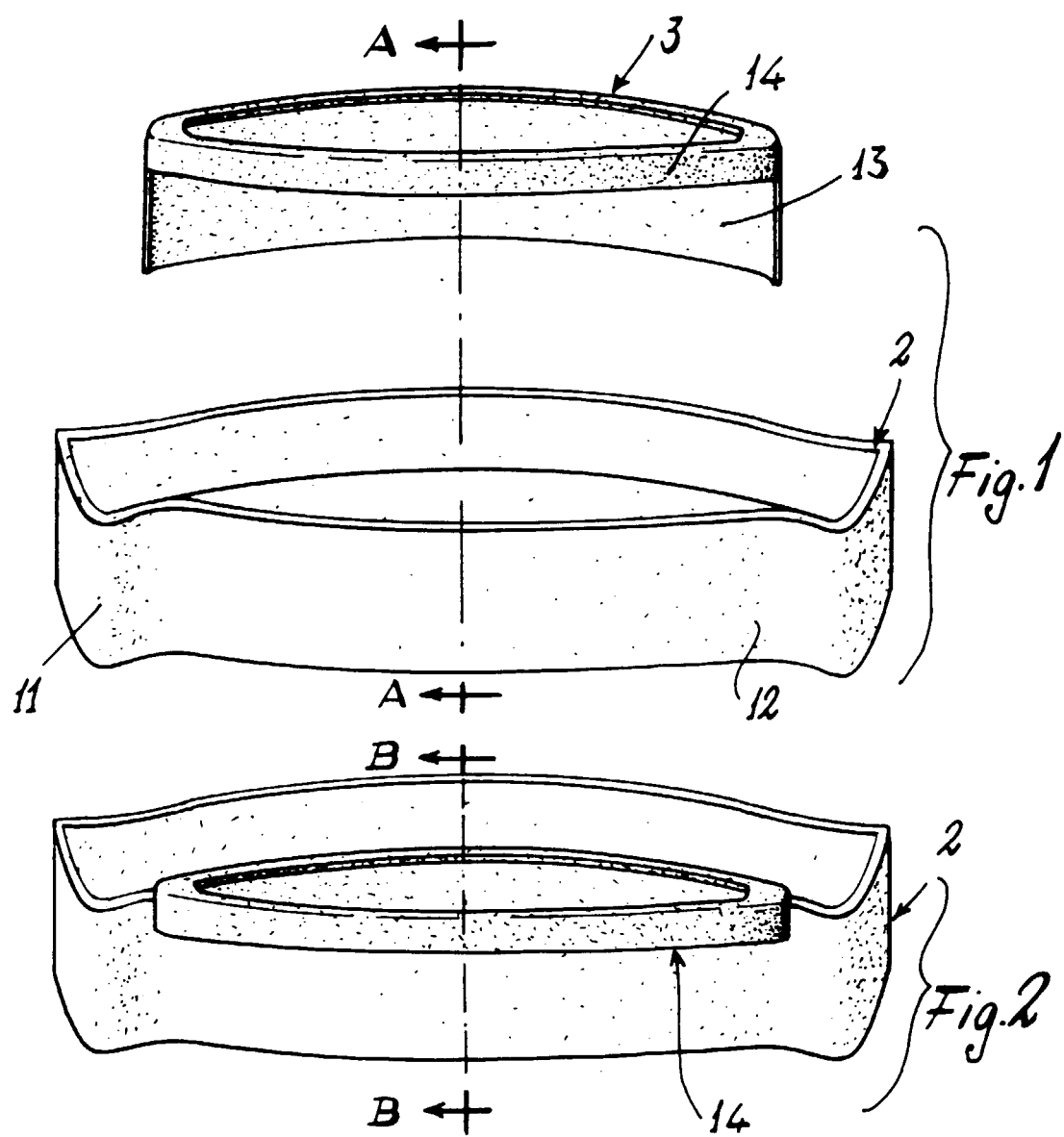
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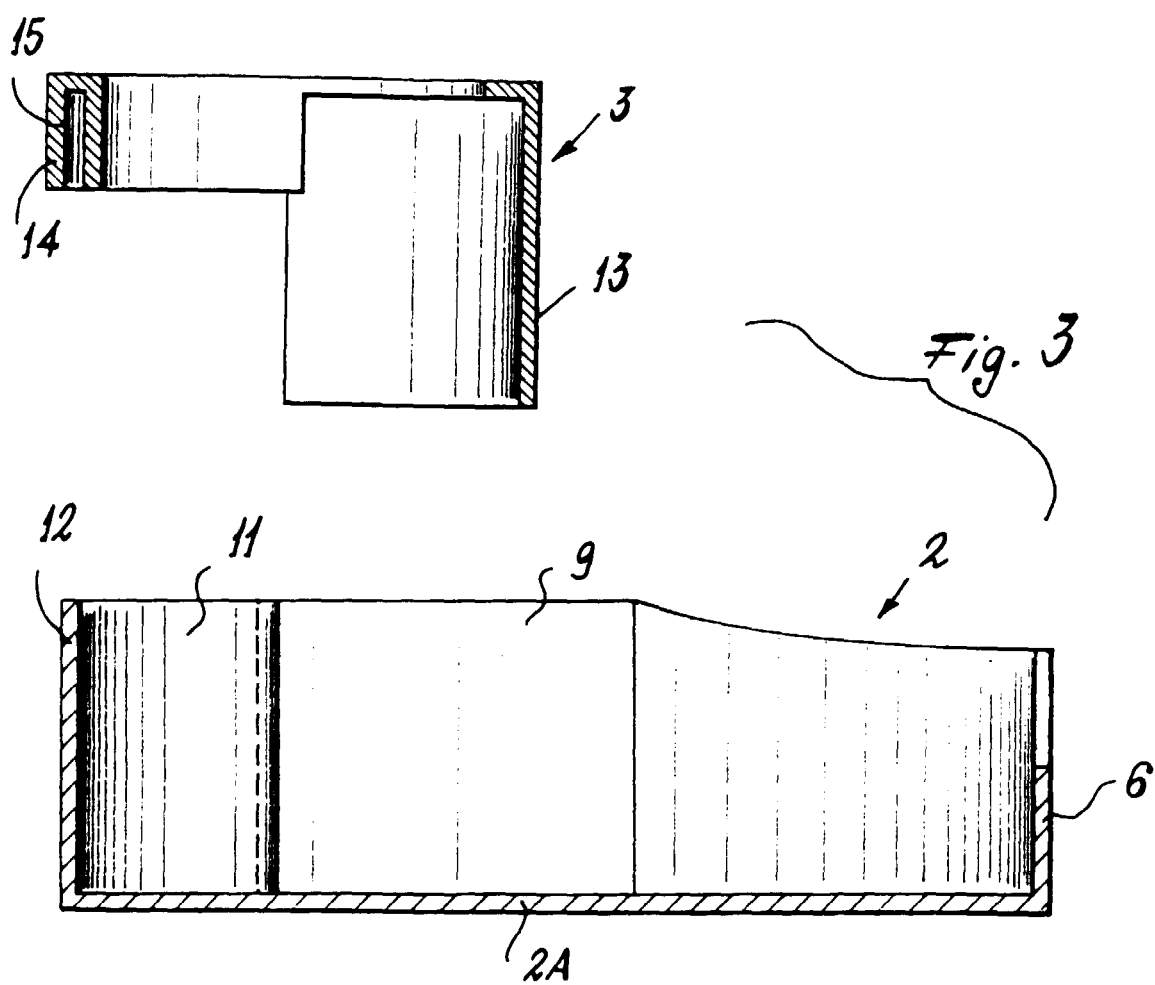
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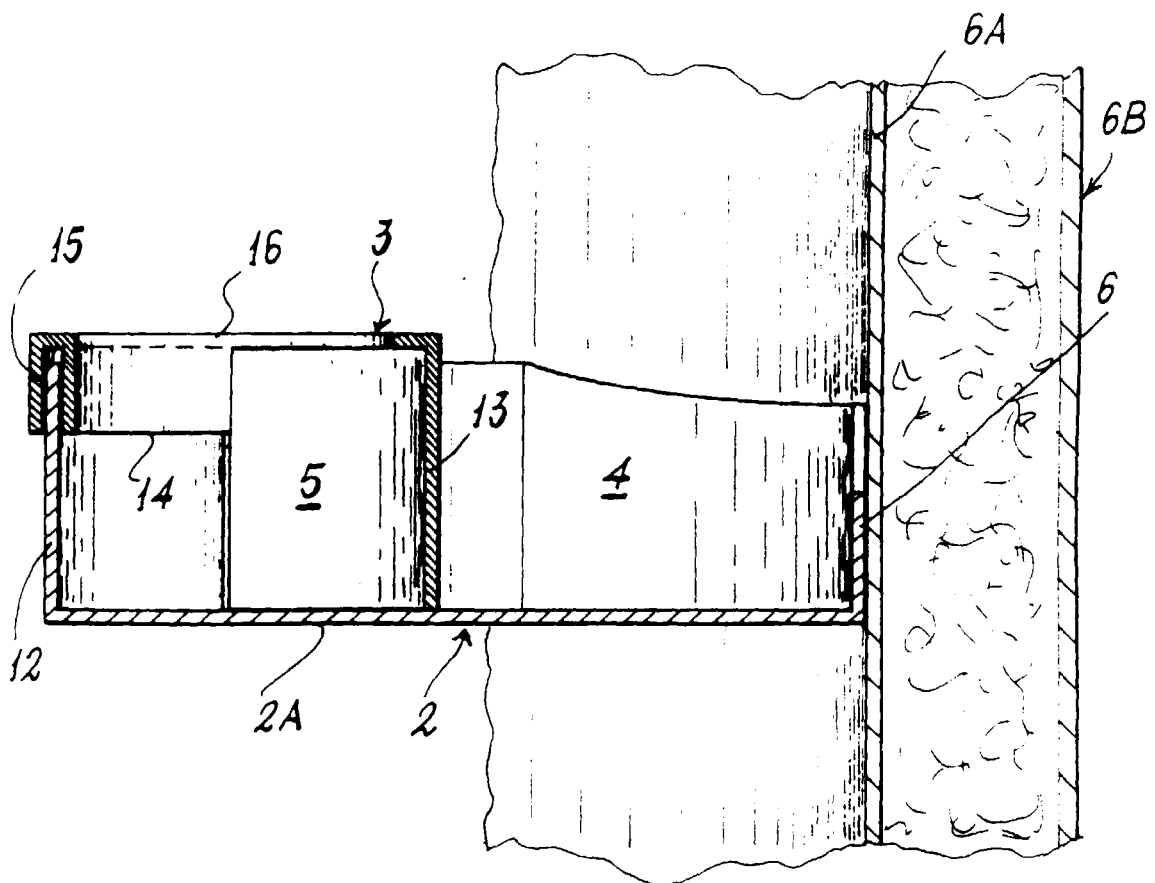


Fig. 4

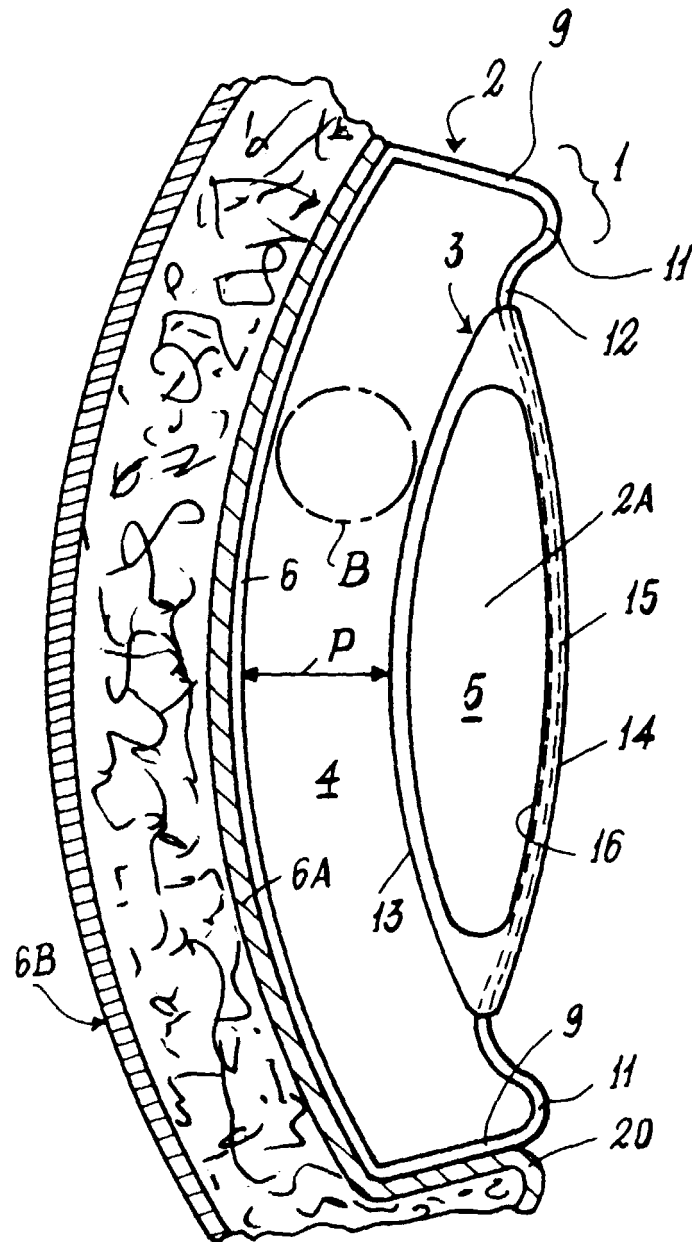


Fig. 5