



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
04.03.2009 Bulletin 2009/10

(51) Int Cl.:
A47F 5/10 (2006.01) A47B 43/00 (2006.01)

(21) Application number: **08163129.3**

(22) Date of filing: **28.08.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

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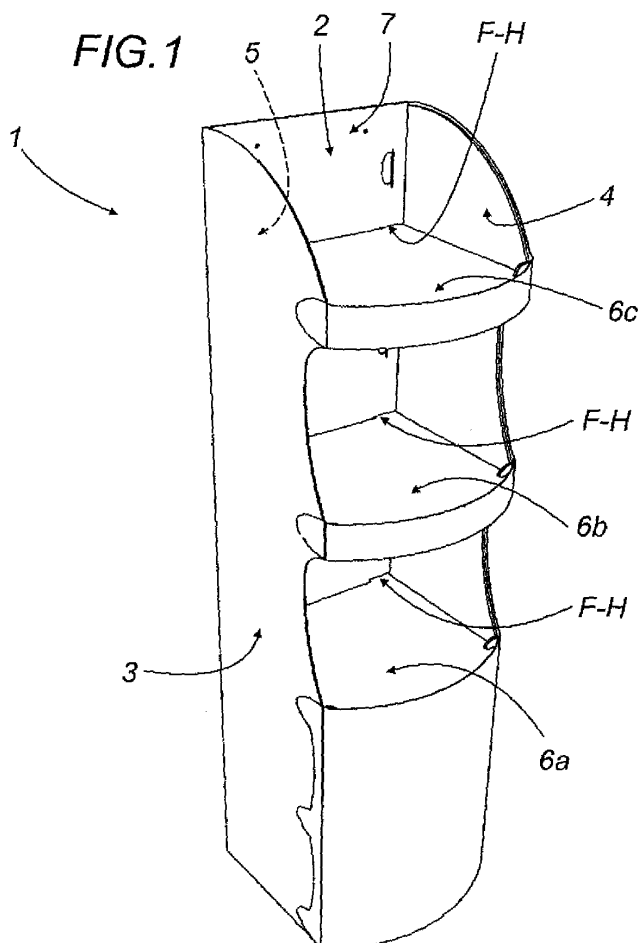
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(30) Priority: **29.08.2007 EP 07425540**

(54) **Display case**

(57) Described is a product display case (1) comprising a frame (2), made from at least one honeycomb blank,

and a cover (3) placed over at least part of the frame (2) and made from at least one sheet blank (17).



Description

[0001] This invention relates to a product display case.

[0002] It is common practice to place products on display in open, box-shaped containers having one or more display compartments from which consumers can pick the products of their choice.

[0003] These box-shaped display cases are generally made from pre-formed honeycomb blanks of cardboard or polypropylene. The blanks are first folded along pre-stressed crease lines and then glued at the parts which overlap when folded.

[0004] Honeycomb blanks made of polypropylene are usually preferred to those made of cardboard because they are equally light and economical but make better, more resistant display cases and, moreover, can be assembled by slotting the parts into each other without having to use glue.

[0005] Display cases made in this way, whether they are obtained from honeycomb blanks made of cardboard or polypropylene, have inherent disadvantages connected with the way the product shelves are fixed. Thus, to confer shelf strength and stability, the horizontal and vertical members of the display case must be joined to each other either by extensive gluing or slotting. In the case of slotting, the vertical member has a plurality of tabs protruding from its surface.

[0006] In the latter case, to provide the necessary slot stability, a part of the shelf must be allowed to protrude. This is not only decidedly unattractive but also means that the sides of the display case occupy more space and, for example, prevents two display cases from being placed side by side, flush against each other.

[0007] The aim of this invention is to provide a display case that overcomes the above mentioned disadvantages and is at once stable, inexpensive to make and easy to assemble.

[0008] Accordingly, this invention provides a product display case comprising the characteristics described in claim 1 or in any of the claims depending directly or indirectly on claim 1.

[0009] The advantages of the invention are more apparent from the detailed description which follows, with reference to the accompanying drawings which illustrate a preferred embodiment of the invention provided merely by way of example without restricting the scope of the inventive concept, and in which:

- Figure 1 is a perspective view of a preferred embodiment of the product display case according to this invention;
- Figures 2 to 5 and 7 to 9 illustrate respective blanks for making the display case of Figure 1.
- Figures 6 and 10 to 15 are different perspective views of the display case of Figure 1 during steps in its assembly;
- Figure 12a is a scaled-up view of a detail of the step illustrated in Figure 12.

[0010] The numeral 1 in Figure 1 denotes a product display case.

[0011] The display case 1 comprises a frame 2 and a cover 3 that horizontally envelops the frame 2.

[0012] In particular, the frame 2 is made from a plurality of honeycomb blanks, advantageously of a plastic material, preferably polypropylene; the cover 3 is made from one or more sheet blanks advantageously of a plastic material, again preferably polypropylene.

[0013] In the preferred embodiment illustrated in Figures 3, 4 and 5, the frame 2 basically comprises two side walls 4, 5 constituting respective vertical members, three horizontal shelves 6a, 6b, 6c and one rear wall 7.

[0014] More specifically, the two side walls 4, 5 constituting the vertical members are made from a single honeycomb blank 8 illustrated in Figure 3, the two side walls 4, 5 in the blank 8 being connected by respective front portions 9, 10, 11 of the frame 2 itself.

[0015] When the display case 1 is assembled, the front portions 9, 10, 11 constitute means for supporting the horizontal shelves 6a, 6b, 6c at the front.

[0016] As shown in Figure 6, the front portions 9, 10 comprise a respective longitudinal part 10a, 11a that is rectangular in shape and is designed to be folded through 180° about its hinge line to increase the bending strength of the portions 10, 11 in use.

[0017] The rear wall 7 is made from the honeycomb blank of Figure 4.

[0018] The horizontal shelves 6a, 6b, 6c are made from respective honeycomb blanks, which are substantially the same as each other, illustrated in Figure 5.

[0019] The cover 3 is illustrated in Figures 2 and 9 in a front view and rear view, respectively and is designed to cover at least part of the frame 2, enveloping the latter horizontally, as illustrated clearly in Figures 1 and 2.

[0020] The cover 3 of Figures 2 and 9 derives from the assembly of different parts illustrated separately in Figure 8.

[0021] In particular, as shown in Figure 8, the cover 3 of Figures 2 and 9 is obtained from two sheet blanks 12, 13 designed to be placed over the vertical members 4 and 5, and three blanks 14, 15, 16, also in sheet form, designed to be placed over the above mentioned front portions 9, 10, 11 of the frame 2.

[0022] The blanks 14, 15, 16 have respective ends E designed to fit into matching slots A made in the blanks 12 and 13.

[0023] Figure 7 illustrates an alternative cover 3 which, unlike the one just described, is a single part made from a single blank 17.

[0024] When the required size of the cover 3 exceeds that of the plastic sheets, of polypropylene for example, normally available on the market, the cover 3 is made by assembling the separate blanks 12, 13, 14, 15, 16 of Figure 8, but when the size of the display case 1 allows, the cover 3 is made from a single blank 17.

[0025] This constructional versatility advantageously enables the display case 1 according to the invention to

be made in a wide range of sizes.

[0026] In use, the display case 1 is assembled, as illustrated in Figure 10, by first folding the vertical members 4, 5 of the frame 2 over each other and then applying respective elements 18, 19 to the front portion 11 in order to stiffen the frame 2.

[0027] Then, as shown in Figures 11 and 12, the cover 3 is fastened to the rear wall 7 by fitting the ends E' of the cover 3 into respective slots A' made in the rear wall 7.

[0028] Figure 12a is a scaled-up view of a detail of this slotting step.

[0029] In the next step of assembling the display case 1, illustrated schematically in Figure 13, the frame 2 (less the rear wall 7, which is already fastened to the cover 3) is inserted into the tubular element T composed of the cover 3 and the rear wall 7.

[0030] As illustrated in Figure 14, once the frame 2 has been inserted into the tubular element T, the vertical members 4, 5 of the frame 2 can be opened from their superposed position and placed substantially in contact with the cover 3, as shown in Figure 15.

[0031] Assembly of the display case 1 is completed by fastening the horizontal shelves 6a, 6b, 6c, as shown by way of example in Figure 6.

[0032] As shown in Figures 5 and 6, each shelf 6a, 6b, 6c has a respective end tab G designed to be folded through 90° about its hinge line to increase the bending strength of the shelves 6a, 6b, 6c in use.

[0033] When the tab G is folded, two respective protrusions F remain at the back end of each shelf 6a, 6b, 6c.

[0034] When the shelves 6a, 6b, 6c are mounted on the frame 2, the protrusions F are inserted into matching horizontal slots H made in the rear wall 7.

[0035] In the same way as just described with reference to the tab, each of the shelves 6a, 6b, 6c comprises two lateral tabs K designed to be folded through 90° about their hinge lines in order to increase the bending strength of the shelves 6a, 6b, 6c in use.

[0036] When the tabs K are folded, two respective protrusions F' remain at the back end of each shelf 6a, 6b, 6c.

[0037] When the shelves 6a, 6b, 6c are mounted on the frame 2, the protrusions F' are inserted into matching horizontal slots H' made in the rear wall 7, below the slots H.

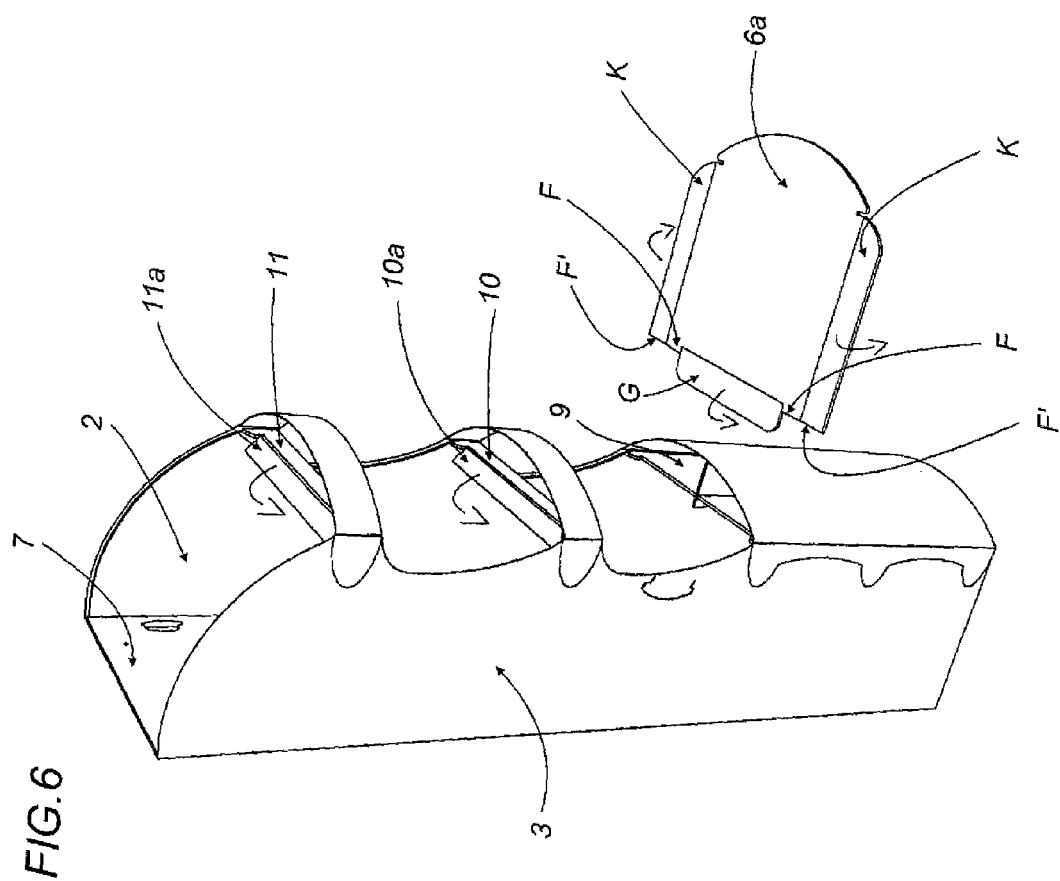
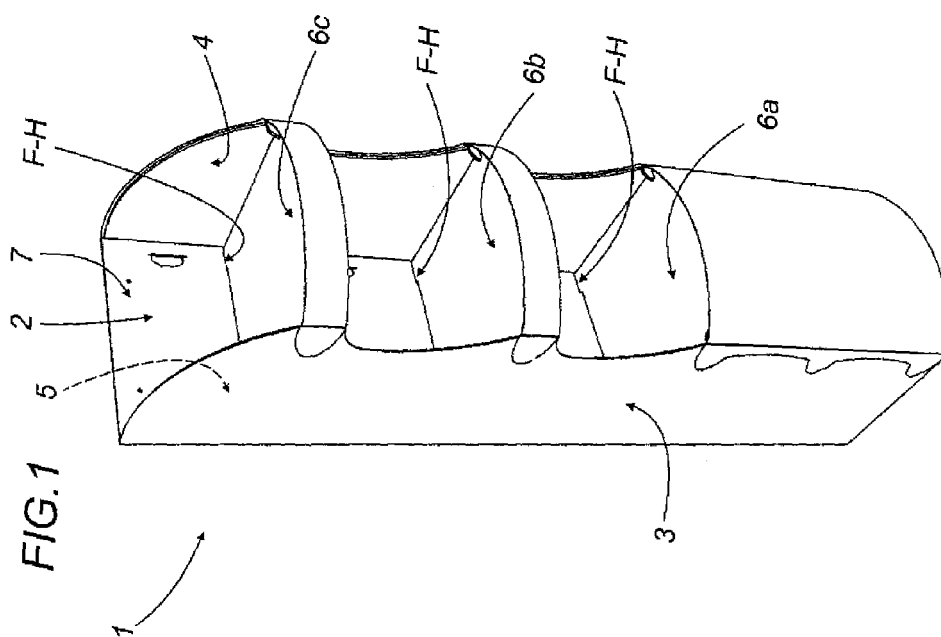
[0038] The circumferential compressive action applied by the cover 3 on the frame 2, guarantees the stability of the coupling between the protrusions F, F' and the respective slots H, H' without having to make the protrusions F, F' themselves project from the shelf and through the rear wall 7 and/or having to slot these parts together.

[0039] In other forms of the invention which are not illustrated, the cover 3 is designed to be folded onto itself, without interposing the rear wall 7.

[0040] In alternative embodiments of the invention, the frame 2 is made from honeycomb blanks of cardboard.

Claims

1. A product display case comprising a frame (2) made from at least one honeycomb blank, the frame (2) comprising two vertical members (4, 5) and at least one horizontal shelf (6a, 6b, 6c), the display case being **characterized in that** it comprises a cover (3) for at least part of the frame (2) and made from at least one sheet blank, the cover (3) horizontally enveloping the vertical members (4, 5).
2. The display case according to claim 1, **characterized in that** the shelf is held by compression between the two vertical members by the perimetric compressive action applied by the cover enveloped horizontally around them.
3. The display case according to claim 1 or 2, **characterized in that** the frame comprises two side walls constituting the vertical members and a rear wall located between the vertical members.
4. The display case according to claim 3, **characterized in that** the cover has two opposite end edges, said end edges being stably fastened to the rear wall.
5. The display case according to any of the claims from 1 to 4, **characterized in that** the cover comprises two side portions and at least one removable connecting element between said side portions.
6. The display case according to any of the foregoing claims from 1 to 5, **characterized in that** the honeycomb blank is made of a plastic material.
7. The display case according to claim 6, **characterized in that** the honeycomb blank is made of polypropylene.
8. The display case according to any of the foregoing claims from 1 to 7, **characterized in that** the sheet blank is made of a plastic material.
9. The display case according to claim 8, **characterized in that** the sheet blank is made of polypropylene.



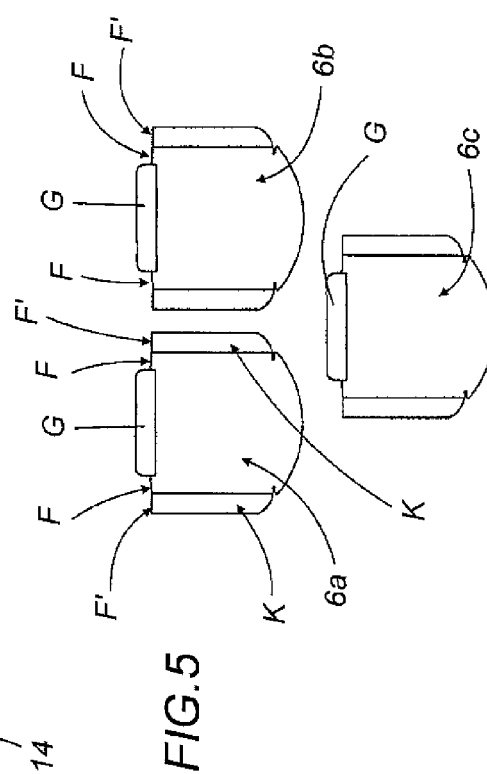
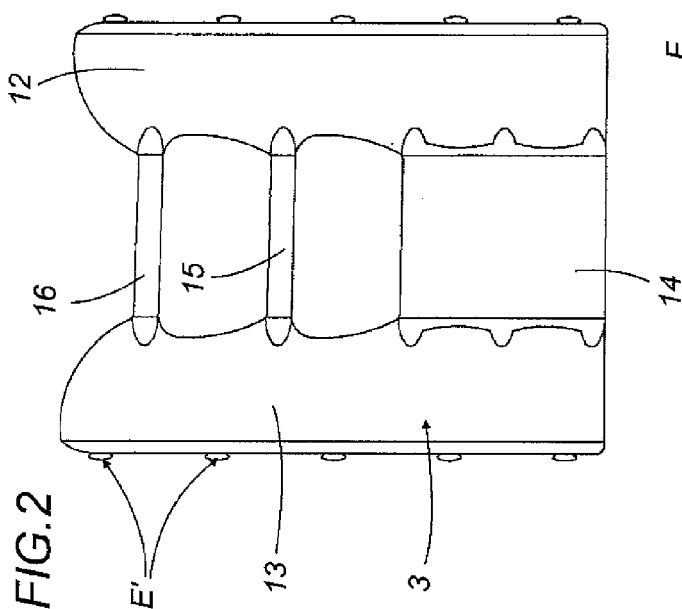
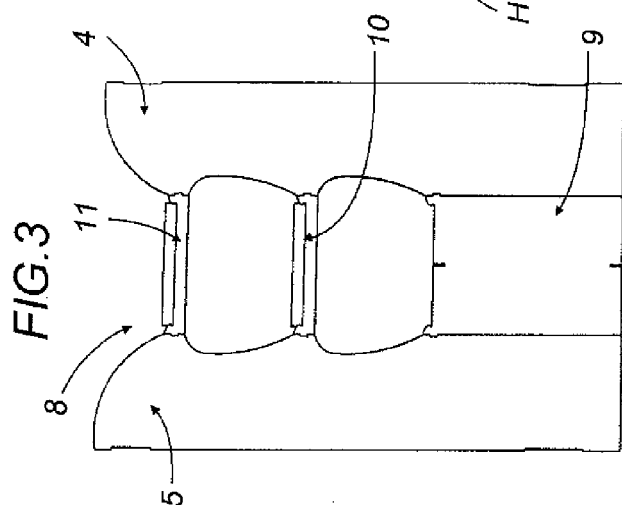
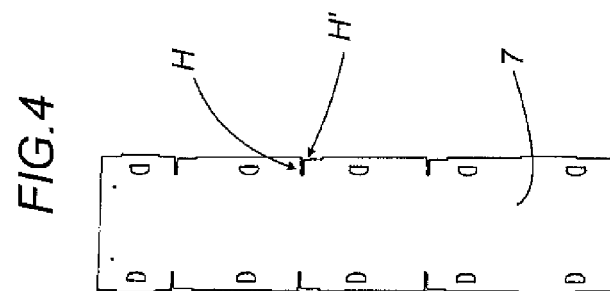


FIG.7

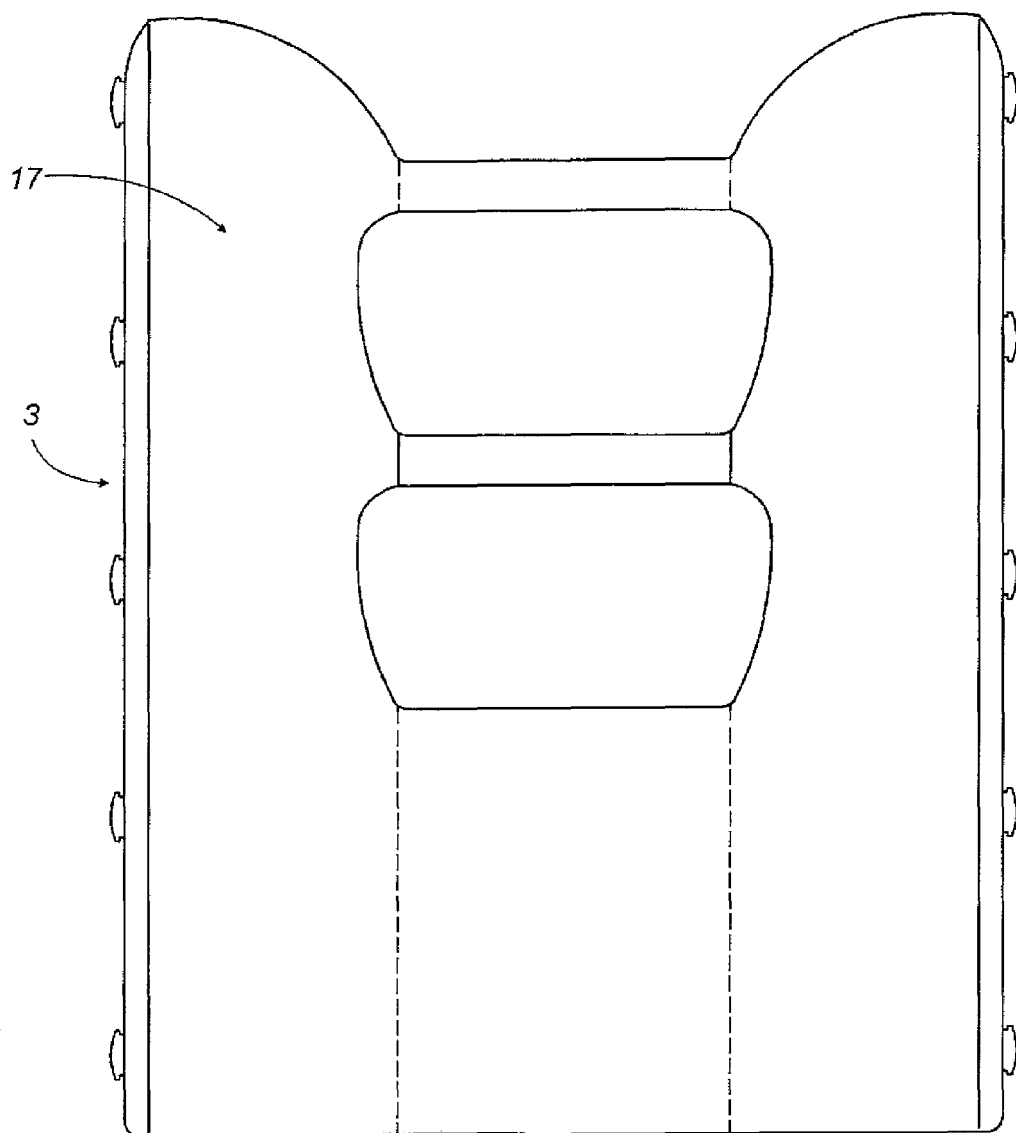


FIG. 8

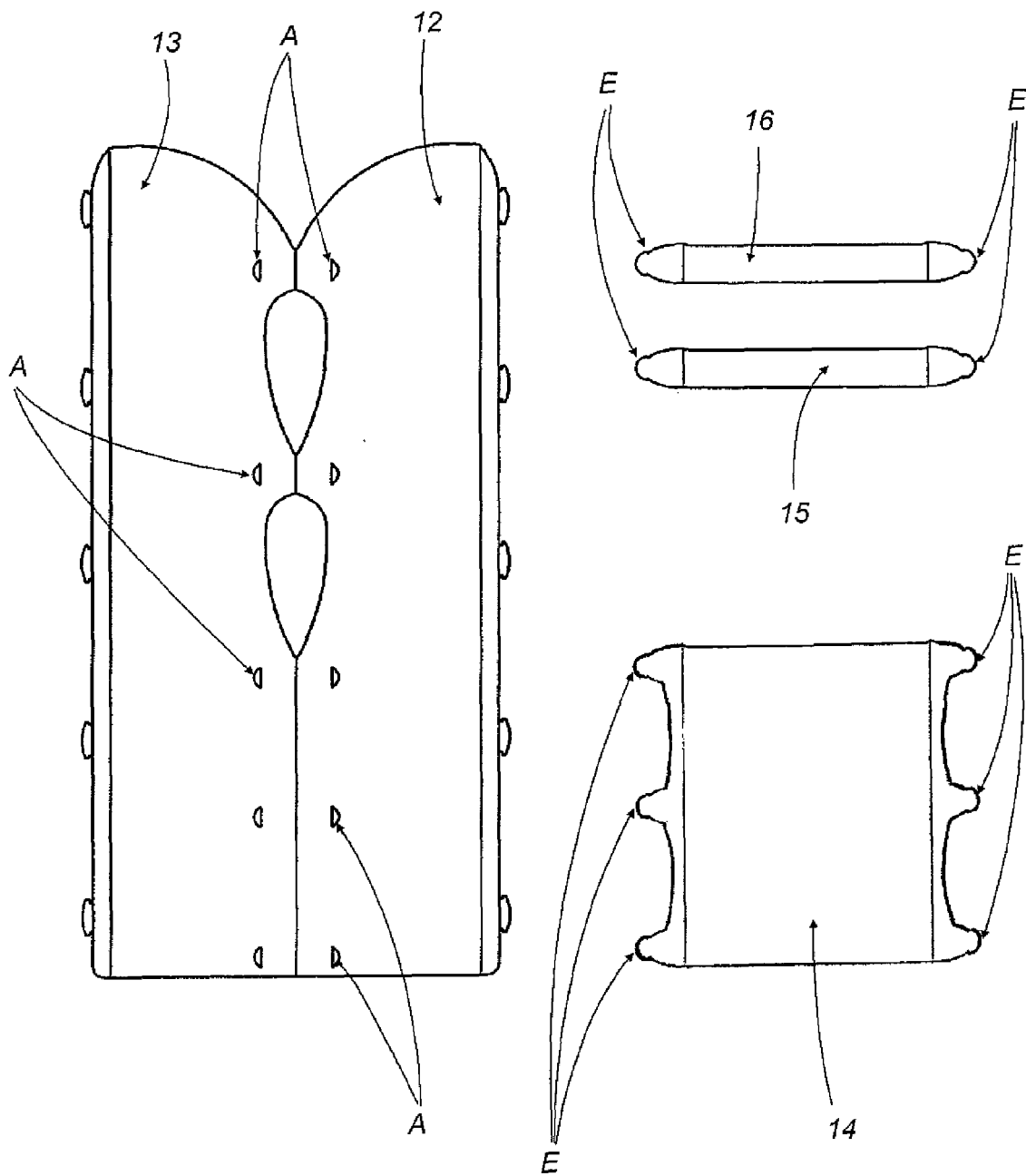


FIG.9

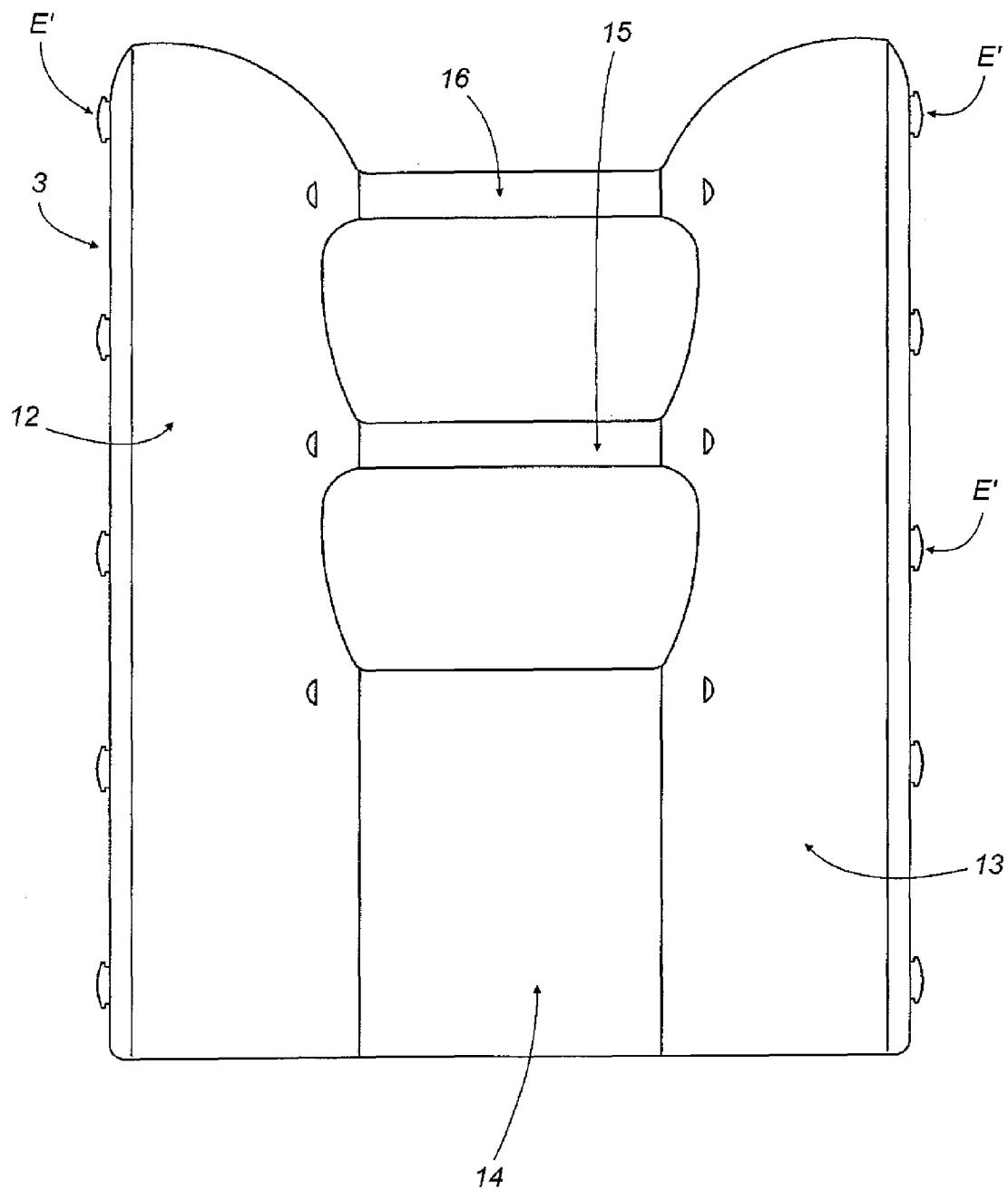


FIG.14

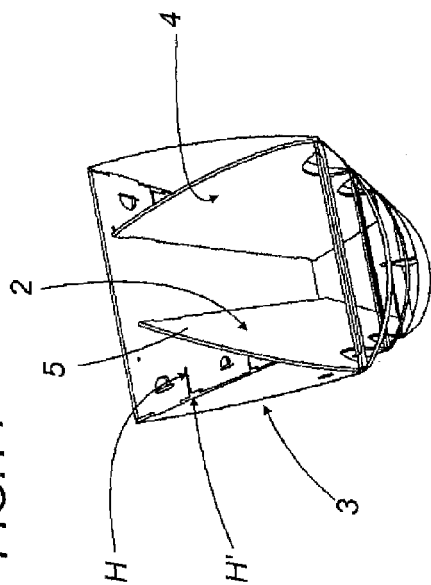


FIG.15

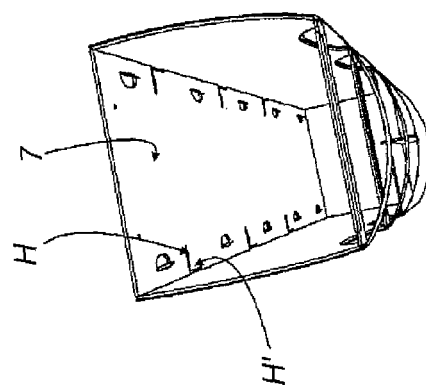


FIG.10

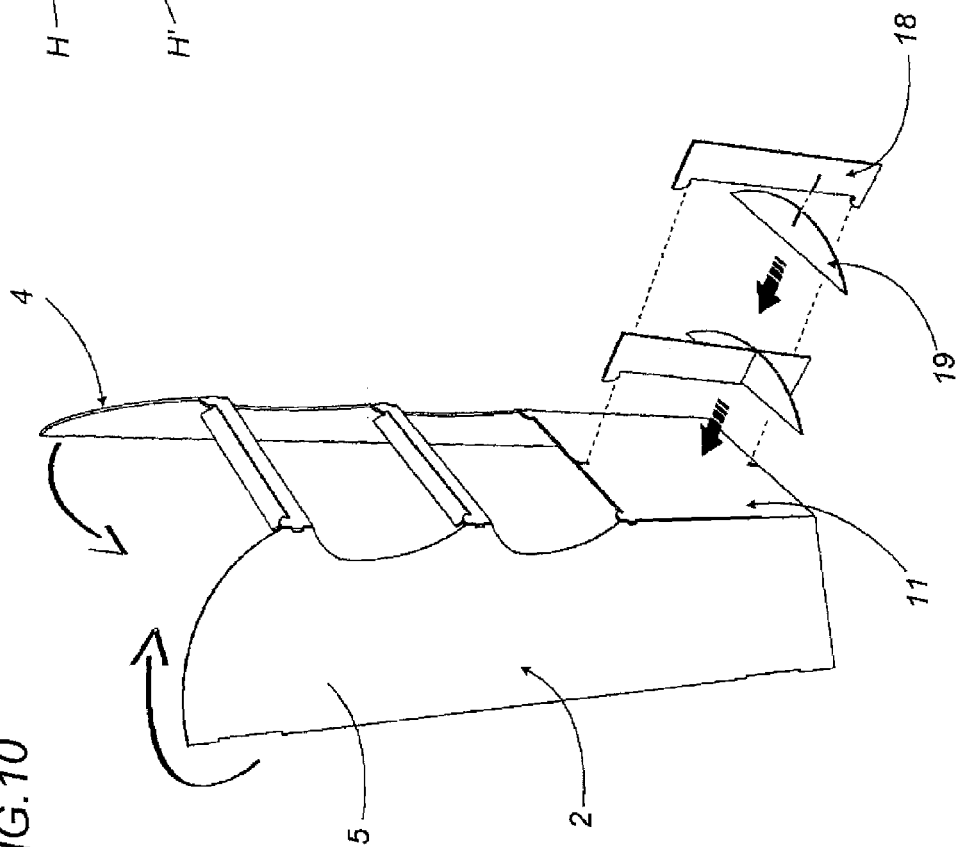


FIG.11

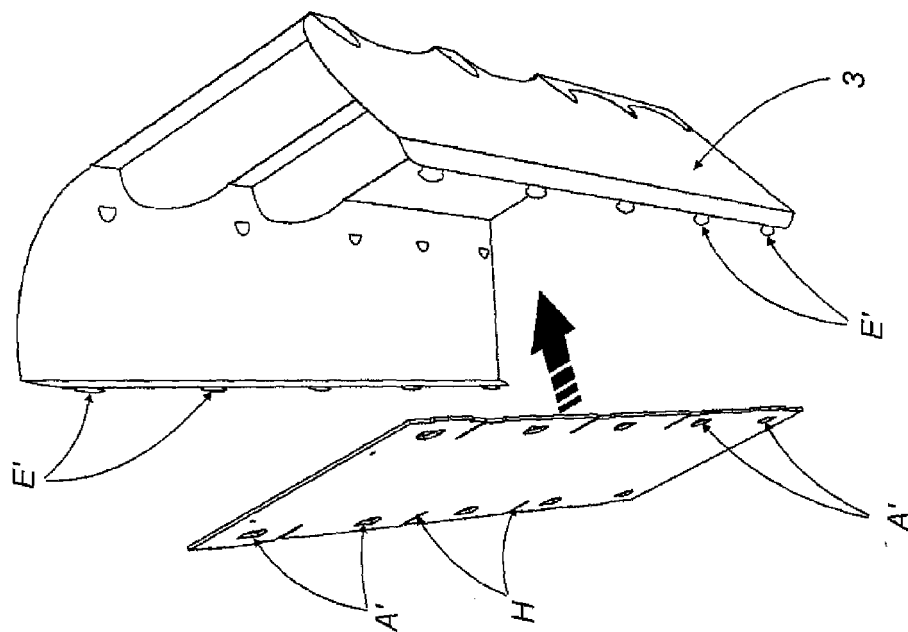


FIG.12

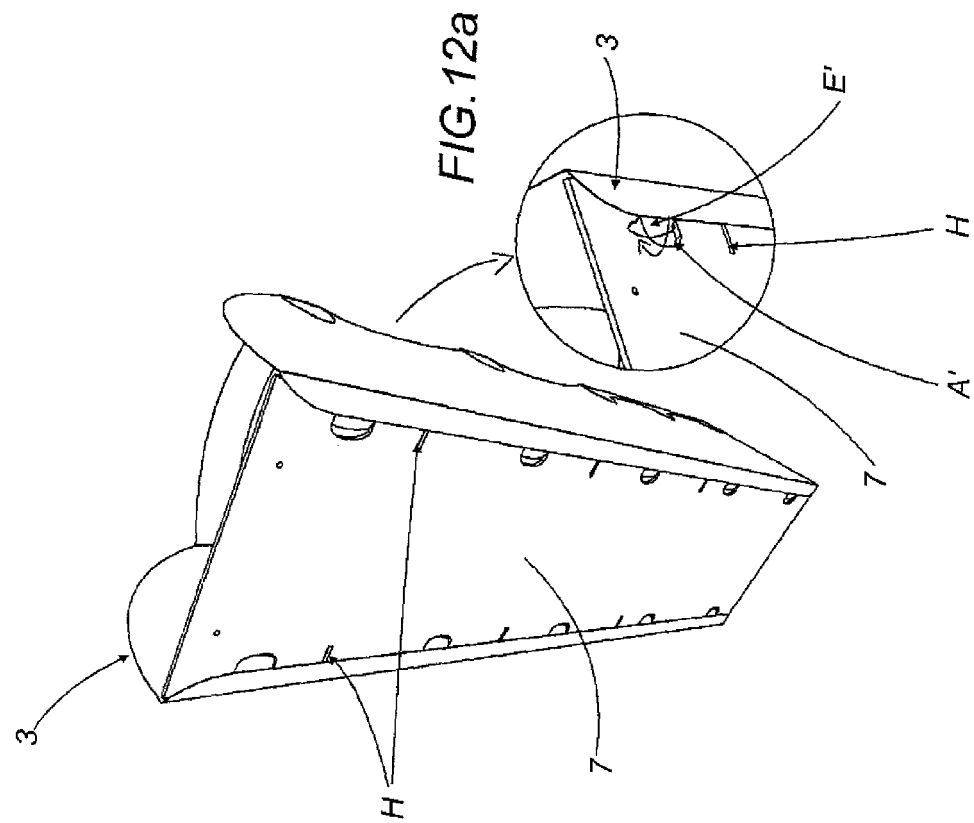


FIG.13

