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(71) Applicant: **Cryovac, Inc.**
Duncan, S.C. 29334-0464 (US)

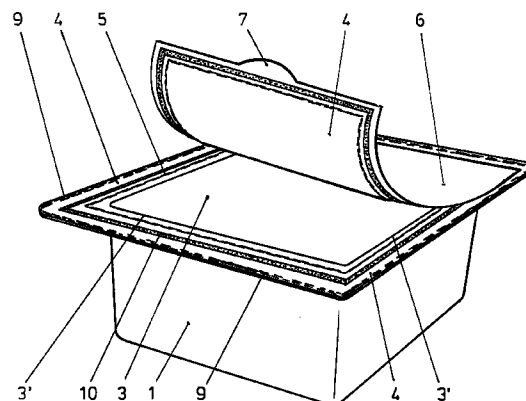
(72) Inventor: **Lorenzen, Ove**
8361 Hasselager (DK)

(74) Representative:
UEXKÜLL & STOLBERG
Patentanwälte
Beselerstrasse 4
22607 Hamburg (DE)

(54) Composite cover sheet for the re-closure of containers

(57) A sales packaging has a receiving part (1) provided with a flange portion (2) enclosing an opening portion (3) of the receiving part and an air-tight or barrier cover sheet (4,6) welded or bonded onto the flange portion. The cover sheet comprises two layers with at least the upper one (6) of air-tight or barrier material, connected by a re-sticking glue or pressure-sensitive adhesive which layers are connected along a surrounding peelable seal seam (10) with the upper layer removable from the lower layer (4) and reattachable to the lower layer. Within the area enclosed by the peelable seal seam the lower layer is provided with a breaking line (5) which is broken or torn when the upper layer is pulled off the lower layer.

Fig.1



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Description

[0001] The invention relates to a sales packaging with a product receiving part having an opening portion enclosed by a flange portion to which a barrier cover sheet is welded or bonded.

[0002] In a known packaging of this type (WO 93/00274) an intermediate layer is arranged between an air-tight or barrier film layer generally transparent and connected to the flange portion by means of a peelable seal welding, and the flange portion which intermediate layer on the one hand may be used as a label and on the other hand may be adapted for reclosing the sales packaging after removal of the barrier film layer. For this purpose a rim portion of the intermediate layer is mounted on the flange portion by means of a re-sticking glue or adhesive outside of the opening portion of the packaging and can be partially pulled off for releasing the opening portion and thereafter re-attached to the flange portion by means of the re-sticking glue or adhesive to again cover or close the opening portion.

[0003] This sales packaging fulfils most of the use requirements since the receiving part which normally consists of an air-tight or barrier material, is closed by the air-tight or barrier film layer which film layer needs not to carry information as to the contents of the packaging which after removing the film layer would be lost. When the sales packaging is brought to an open state by the user by removing the air-tight or barrier film layer then the contents of the packaging becomes accessible by simply pulling off the intermediate layer normally carrying information as to the packaging contents. Reclosing may be effected by pressing back the intermediate layer onto the flange portion wherein the information as to the packaging contents remains connected with the receiving part of the packaging.

[0004] Whereas this prior sales packaging fulfils essentially all requirements on air tightness and recloseability, it is disadvantageous in so far as it requires two separate closure layers, the barrier film layer on the one hand and the intermediate layer on the other hand, and that the barrier film layer is removed upon first opening and is then no longer required.

[0005] It is an object of the invention to improve a sales packaging so that the barrier film sheet can be used for reclosing the sales packaging.

[0006] To achieve this object a sales packaging with a receiving part having an opening portion enclosed by a flange portion to which an air-tight or barrier cover sheet is welded or bonded, is improved according to the invention in that the cover sheet comprises two layers connected with each other by means of a repositionable adhesive e.g. a re-sticking glue or adhesive or a pressure-sensitive adhesive which layers are connected along a peelable seal seam with the upper layer being removable from the lower layer and reattachable thereto wherein at least the upper layer is a barrier layer and

wherein the lower layer is provided with a breaking line within the area enclosed by the peelable seal seam which breaking line will be broken when the upper layer is pulled off the lower layer whereas the repositionable adhesive provided in the area between breaking line and peelable seal seam permits reattaching of the upper layer to the lower layer in this area.

[0007] In the sales packaging according to the invention having a receiving part which may be cup-like shaped or may e.g. consist of a flexible, not dimensional stable receiving part like a flexible film, air-tight closing is effected by co-operation of the upper and the lower layer of the cover sheet wherein the lower layer is secured to the flange portion. The upper layer is connected to the lower layer on the one hand by a peelable welding seal or the like and on the other hand by bonding by means of a repositionable adhesive in the area within this peelable welding seal so that upon opening for the first time the upper layer is separated from the lower layer along the peelable welding seal or seal seam whereas in addition upon opening and reclosing a separation and a reconnection of upper and lower layer will occur in the area of the repositionable adhesive. Upon this first separation of upper layer and lower layer the latter is torn apart along the breaking line which may be formed by a perforation, so that the portion of the lower layer located within the breaking line is pulled off together with the upper layer to thereby release the opening portion of the receiving part. Reclosing can be effected by urging back the cover layer onto the flange portion so that the portion of the upper layer located outside of the breaking line and not covered by the lower layer is releasably bonded back onto the flange portion.

[0008] The upper layer of the cover sheet may be connected with its lower layer after the latter has been attached to the flange portion of the receiving part, in particular if the receiving part consists of a cup-shaped element. However, it is also possible to prefabricate a web of upper and lower layer wherein the upper layer is preferably forming labels, and to then connect sections of this web forming cover sheets to successive receiving parts, in particular if the receiving parts consist of flexible film. In this case the upper layer and the lower layer forming the cover sheet may be of the same size so that the lower layer is completely covered by the upper layer.

[0009] Preferably the lower layer is connected with the flange portion along an endless welding seam whereas the peelable seal seam is located in the area between the endless welding seam and the opening portion of the receiving part.

[0010] To ensure that upon opening the sales packaging the upper layer with the part of the lower layer sticking thereon is not removed completely from the flange portion which would make it difficult to reclose the packaging, the breaking line may extend only along part of the opening portion. In such case the ends of the breaking line form a "stop" against complete removal of the cover sheet from the flange portion.

[0011] The upper layer may carry printed information and thereby form a label which remains connected to the sales packaging for the entire period of use.

[0012] Opening of the sales packaging is facilitated when the rim of the upper layer is provided with a grip portion or flap located completely outside of the area of the peelable seal seam. By gripping this grip portion or flap the upper layer can be pulled off without difficulties. When the upper layer and the lower layer are of the same size and polygonally, in particular rectangular or squarely shaped the grip portion or flap may be formed by a corner portion of the upper layer.

[0013] In the following the invention is described in more detail with reference to the drawings.

Figure 1 is a perspective view of a partially opened sales packaging.

Figure 2 is a plane view on the closed sales packaging of Figure 1.

Figure 3 is a schematic exploded view of the sales packaging of Figures 1 and 2.

Figure 4 shows in a view corresponding to Figure 2 another embodiment of the invention.

Figure 5 shows in a view corresponding to Figure 3 the embodiment of Figure 4.

[0014] The sales packaging shown in Figures 1 and 3 has a cup-shaped receiving part 1 with an outwardly directed flange 2 at its upper rim 3' enclosing the opening 3. Generally the receiving part 1 consists of moulded, air-tight or barrier plastic film. However, it may e.g. be in the form of a flexible film with the goods to be packed positioned on its middle portion.

[0015] On the outer rim area of the flange 2 of the filled receiving part 1 an air-tight or barrier cover sheet is secured by means of a welding seam 9. The squarely shaped cover sheet consists of a lower layer 4 and an upper layer 6 with at least the upper layer 6 but preferably both layers formed by air-tight or barrier material. The upper layer 6 which is slightly smaller than the lower layer 4, may form a printed label.

[0016] The outer rim portion of the upper layer 6 is releasably connected with the lower layer 4 through a surrounding or endless peelable seal or welding seam 10. At one side the outer rim portion of the upper layer 6 is provided with an outwardly projecting gripping portion or flap 7 which projects outwardly beyond the peelable seal seam 10. In the area within the surrounding or endless peelable seal seam 10 upper layer 6 and lower layer 4 are connected by means of a layer of a repositionable adhesive e.g. a re-sticking glue or a pressure-sensitive adhesive i.e. an adhesive which permits separating of the layers and reconnection thereof by pressing the layers together.

[0017] Somewhat outside of the edge 3' of the opening 3 of the receiving part 1 but within the area enclosed by the peelable seal seam 10 a breaking line 5 is formed in the lower layer 4 which breaking line may e.g. consist of a perforation. The breaking line 5 extends, as can be recognized in Figure 2, along three edges 3' of the opening 3 and has its ends at a fourth edge thereof. The resistance of the breaking line 5 against tearing is adjusted so that it is smaller than the bonding connection between the upper layer 6 and the lower layer 4 caused by the repositionable adhesive.

[0018] To open the packaging closed air tightly by the surrounding or endless welding seam 9 between flange 2 and lower layer 4 the user grips the gripping portion or flap 7 and pulls off the upper layer 6 from the lower layer 4 as indicated in Figure 1 wherein the peelable seal seam 10 is separated and also a breaking or tearing of the lower layer 4 along the breaking line 5 occurs. During this process the upper layer 6 in the area between peelable seal seam 10 and breaking line 5 is pulled off the layer of repositionable adhesive provided on the lower layer 4 whereas the part of the lower layer 4 located within the breaking line 5 remains bonded to the upper layer 6 due to the repositionable adhesive. As can be recognized pulling off the upper layer 6 from the lower layer 4 to the ends of the breaking line 5 occurs without extensive resistance whereas upon reaching the ends of the breaking line 5 the user feels a higher resistance which causes him to terminate the opening movement.

[0019] The packaging can be reclosed after opening by pushing back the upper layer 6 onto the area between peelable welding seam 10 and now broken breaking line 5 which area is provided with the repositionable adhesive. The contents of the packaging is protected against contact with the repositionable adhesive since the area of the upper layer 6 covering the opening 3 is covered by the part of the lower layer 4 which is located within the breaking line 5 and is bonded to the upper layer 6.

[0020] In the embodiment of Figures 4 and 5 parts and elements corresponding to the parts and elements in the embodiment of Figures 1 to 3 have been designated with the same reference numerals but increased by "100". Therefore most of these parts and elements are not described again but can be understood as to structure and function from the description of the embodiment of Figures 1 to 3.

[0021] Different from the embodiment of Figures 1 to 3 in the sales packaging of Figures 4 and 5 the upper layer 106 is of the same size and shape as the lower layer 104 and is connected to the lower layer 104 through a surrounding peelable seal or welding seam 110 that is located adjacent to the circumferential rim of both the lower layer 104 and the upper layer 106. The peelable seal seam 110 is located directly above the endless welding seam 109 which connects the lower layer 104 to the flange 102 of the receiving part 101,

and is separated from the welding seam 109 by the lower layer 106. However, in Figure 4 it can be recognized that in the lower right hand corner the peelable welding seam 110 is inwardly offset from the circumferential rim of both the lower layer 104 and the upper layer 106 so that a triangular flap 109 is formed by the upper layer 106 which is not bonded to the lower layer 104 and can therefore be gripped by the user to pull off the upper layer 106 from the lower layer 104.

[0022] As in the embodiment of Figures 1 to 3 in the area surrounded by the peelable seal seam 110 a layer of repositionable adhesive is provided between the lower layer 106 and the upper layer 104 so that opening and reclosing of the packaging of Figures 4 and 5 can be effected in the same way as described in connection with the embodiment of Figures 1 to 3.

Claims

1. Sales packaging with a receiving part (1; 101) having a surrounding flange portion (2; 102) enclosing an opening portion (3; 103) of the receiving part (1; 101) onto which flange portion (2; 102) an airtight or barrier cover sheet (4, 6; 104, 106) is welded or bonded, **characterized in** that the cover sheet (4, 6; 104, 106) comprises two layers connected by means of repositionable adhesive which layers (4, 6; 104, 106) are connected along an at least partially surrounding, peelable seal seam (10; 110) with the upper layer (6; 106) removable from and reattachable to the lower layer (4; 104) wherein at least the upper layer (6; 106) is a barrier layer and wherein the lower layer (4; 104) is provided with a breaking line (5; 105) within the area enclosed by the peelable seal seam (10; 110) which breaking line (5; 105) is broken or torn when the upper layer (6; 106) is pulled off the lower layer (4; 104), whereas the repositionable adhesive in the area between breaking line (5; 105) and peelable seal seam (10; 110) permits reattaching of the upper layer (6; 106) to the lower layer (4; 104) in this area.
2. Sales packaging according to claim 1, **characterized in** that both the upper layer (6; 106) and the lower layer (4; 104) are formed by air-tight or barrier material.
3. Sales packaging according to claim 1 or 2, **characterized in** that the cover sheet (4, 6; 104, 106) has polygonal shape.
4. Sales packaging according to one of claims 1 to 3, **characterized in** that the upper layer (106) and the lower layer (104) are of the same size.
5. Sales packaging according to one claims 1 to 4, **characterized in** that the lower layer (4; 104) is secured to the flange portion (2; 102) along a surrounding welding seam (9; 109)
6. Sales packaging according to claim 5, **characterized in** that the peelable seal seam (10) is located in the area between surrounding welding seam (9) and opening portion (3) of the receiving part (1).
7. Sales packaging according to claim 5, **characterized in** that at least most of the peelable seal seam (109) is located in the same area as the surrounding welding seam (109).
8. Sales packaging according to one of claims 1 to 7, **characterized in** that the breaking line (5; 105) extends along part of the opening portion (3; 103) only.
9. Sales packaging according to one of claims 1 to 6, **characterized in** that the upper layer (6; 106) forms a printed label.
10. Sales packaging according to one of claims 1 to 9, **characterized in** that at the rim of the upper layer (6; 106) a gripping portion (7; 107) is provided which is located outside of the area of the peelable seal seam (10; 110).

Fig.1

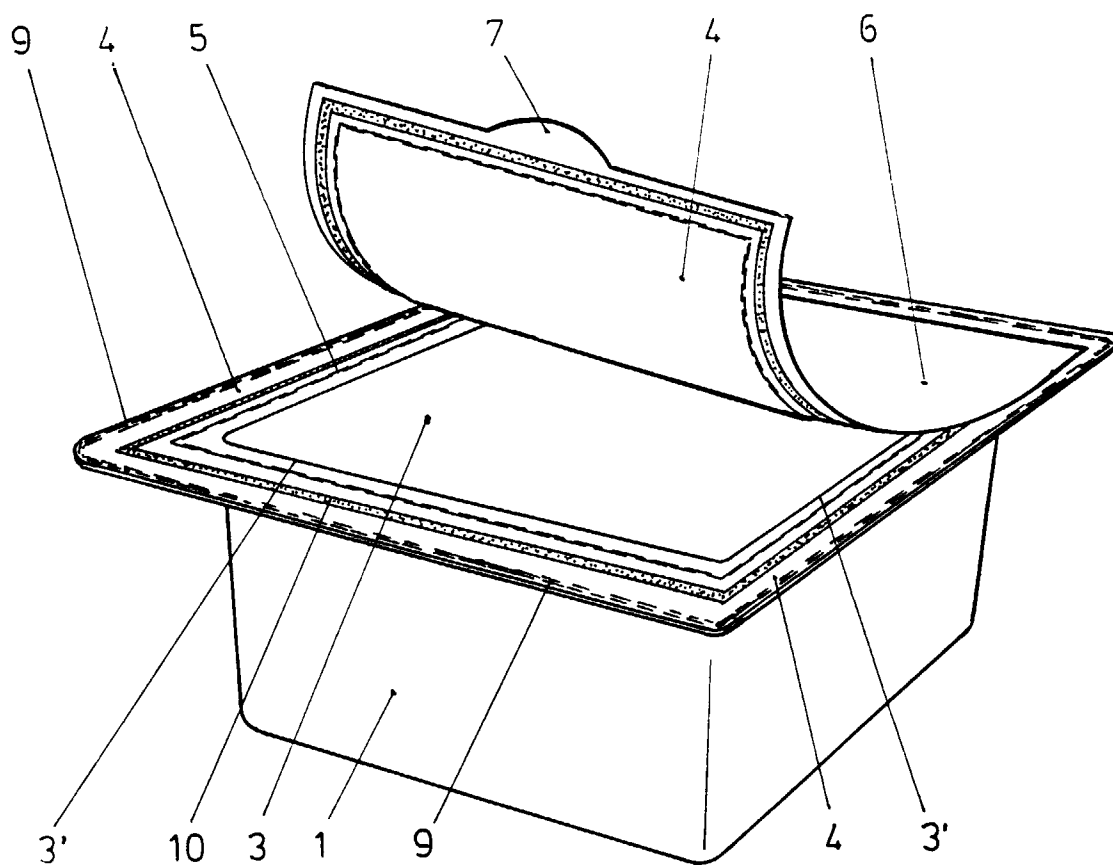


Fig. 2

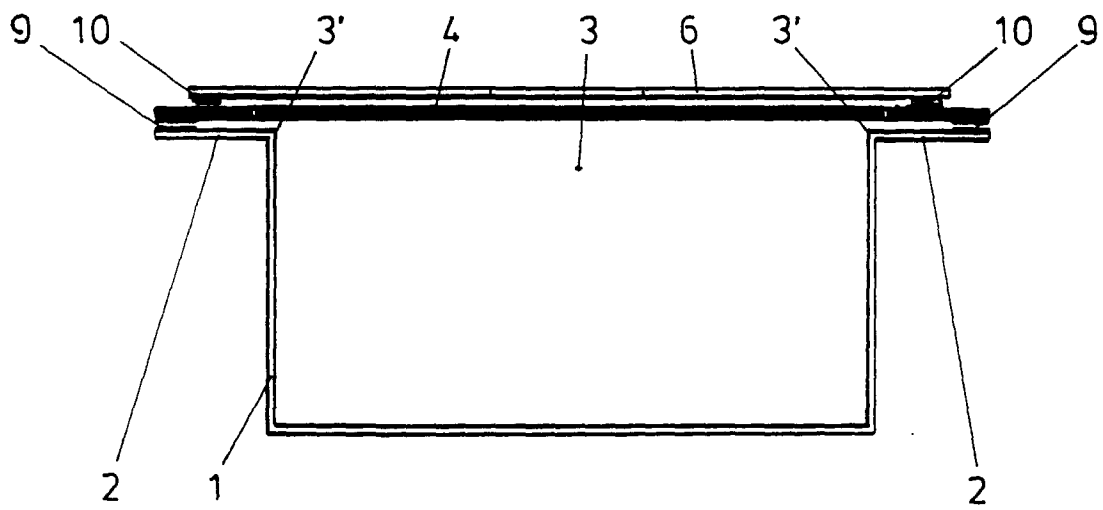
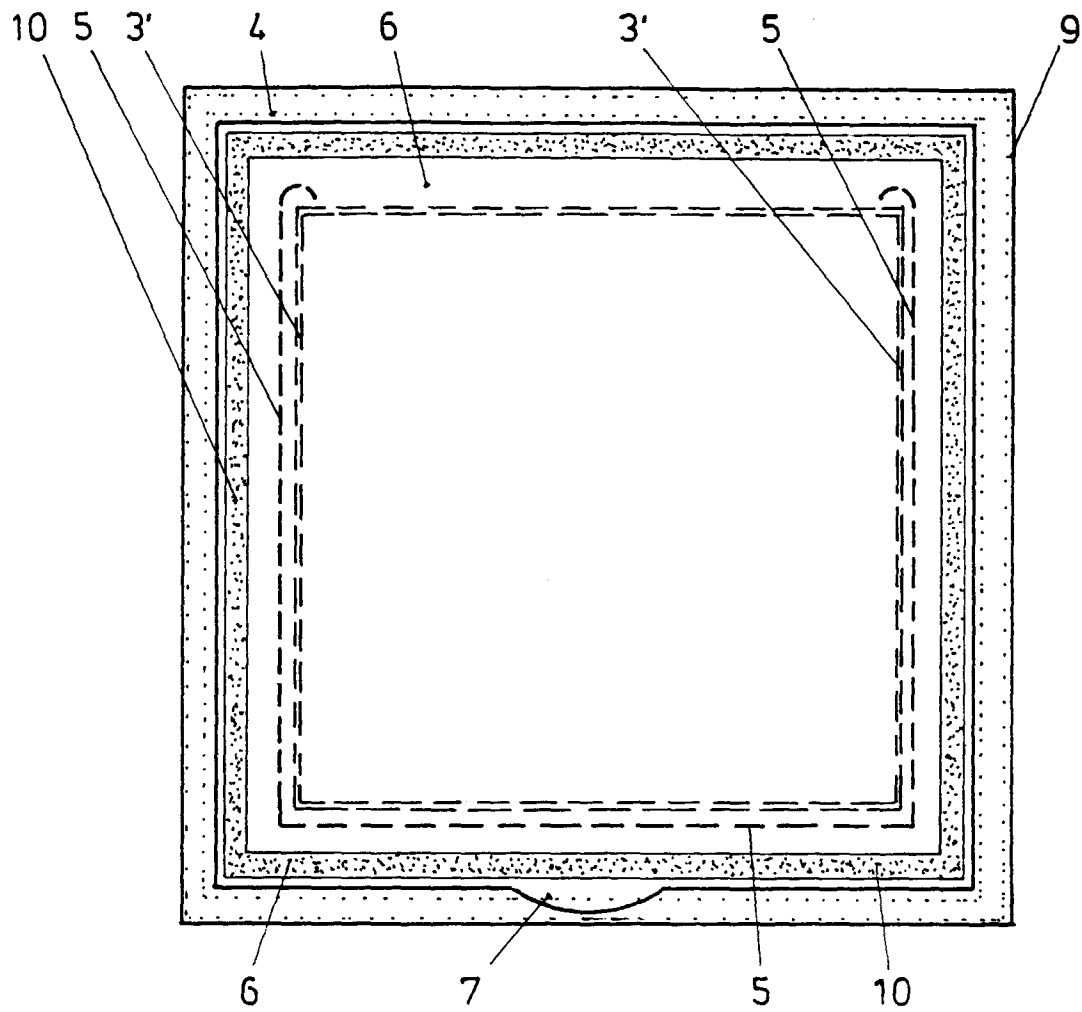


Fig. 3

Fig. 4

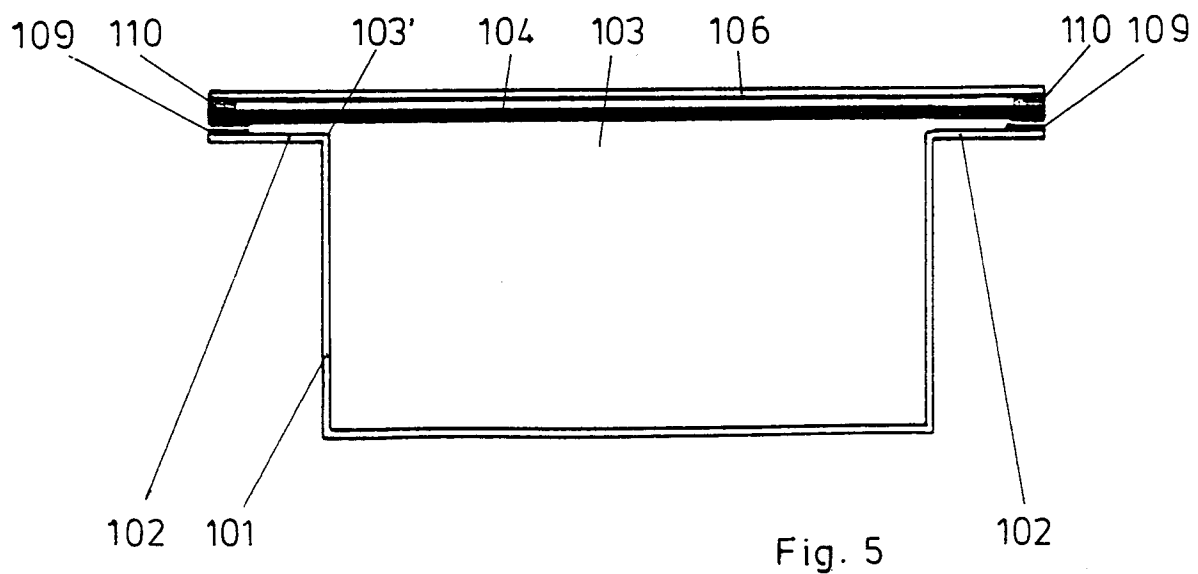
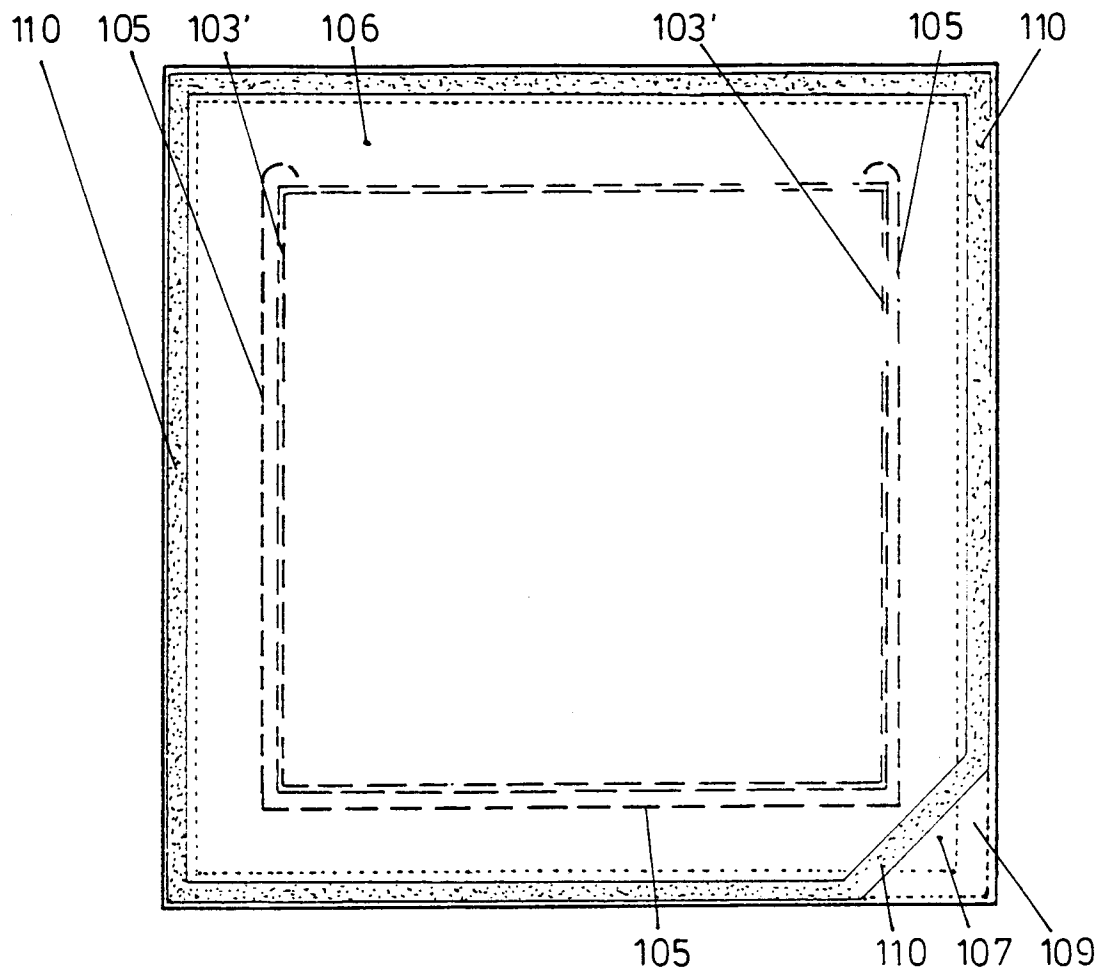


Fig. 5



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EUROPEAN SEARCH REPORT

Application Number
EP 97 25 0293

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)
X	EP 0 661 154 A (SAFTA) * the whole document * ----	1,3-5, 7-10	B65D77/20
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
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Place of search		Date of completion of the search	Examiner
THE HAGUE		13 February 1998	Gino, C
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 25 0293

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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