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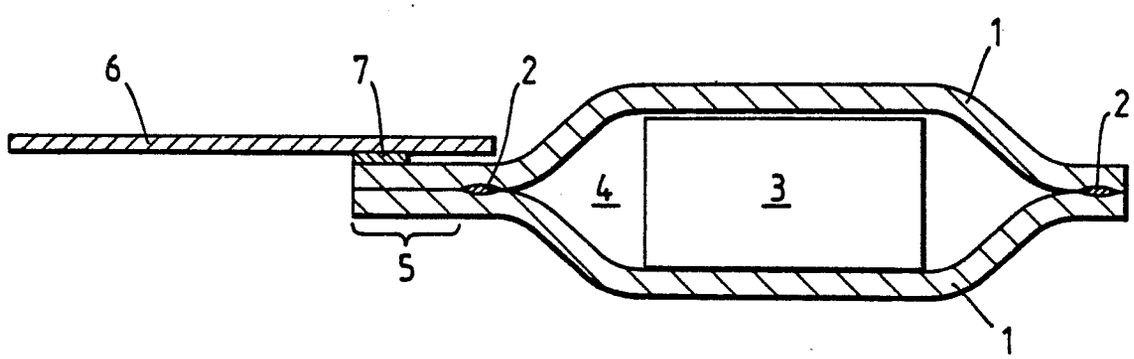
(54) **Flexible container.**

(57) A flexible container consists of two superimposed heat-sealed layers of flexible sheet material which can easily be peeled open, has along one side an extended area of the sheet material in which a header card is attached to the extremity of one of the extended flexible sheets.

Fig. 1.



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FLEXIBLE CONTAINER

The present invention relates to a flexible container consisting of two superimposed layers of flexible sheet material, heat-sealed around the periphery of a material-containing space between the two layers of sheet material.

The problem with flexible containers or packages of this type is that, when two layers of identical sheet material are used to form the container or package, the initiating or starting of the opening of said container is difficult, due to the flexible nature of the container and the peel strength of the sealed area. Usually the container cannot efficiently be opened without tearing the package or having to use a tool, i.e. a pair of scissors, which is inconvenient for the consumer.

We have found that, by providing a header card, which has been connected to the surface of one of the layers of flexible sheet material of the container, which is made to extend beyond the sealed area (seen from the material-containing space between the layers outwards), a peel-off tool is provided which enables an easy opening of the flexible container.

The invention is particularly applicable to bag-like containers or pouches containing a consumable material like, for example, a meat or cheese product.

According to one aspect of the invention, a flexible container or package consists of two superimposed layers of flexible sheet material, heat-sealed around the periphery of a material-containing space between the layers, the peel strength of the sealed area being such that the two layers of sealed flexible sheet material can readily be peeled open, characterized in that along one side of the container the two superimposed layers of flexible material are extended beyond the heat-sealed area and a header card is connected to the surface of one of the extended layers of flexible sheet material at the extremity of the extended layer of flexible sheet material.

Preferably, the header card is connected with the outer surface of one of the extended layers of flexible sheet material e.g. by means of an adhesive, which is applied to the said outer surface at the extremity of the extended layer of flexible sheet material.

Apart from being a simple peel-off tool, the header card can conveniently be used for advertisement, price indication and the like, and, if the header card is provided with an opening, the package or container can easily be presented to the consumer by hanging the packs in rows in the shop.

By a flexible sheet material is understood throughout this specification and the attached claims, a single layer of a flexible plastic material or a flexible laminate material, comprising a heat-sealable resin film as the inner layer or face. The heat-sealable resin film is selected in such a way that, if the two layers of flexible sheet material are brought face to face and the layers bearing a heat-sealable resin on their inner surfaces are sealed together around the periphery of the material-containing space between the two layers, a seal is provided which can readily be peeled open to gain access to the interior of the flexible container or package. It is important for both top and bottom sheet material to have compatible sealing surfaces. In sealing the sheet material together at least one surface needs to have the easy peel characteristics.

The heat-sealable resin may, for example, be chosen such that the two superimposed layers of flexible material have inner layers prepared from polyolefin films prepared from different olefin compositions, like described in British Patent Specification 1,168,541.

According to another aspect of the invention, the method of making a flexible container or package comprises bringing two layers of flexible sheet material face to face, at least one of the said layers bearing a heat-sealable resin on its inner surface and at least one being easily peelable after sealing, placing a product between said layers, forming a sealed are a joining said layers and surrounding said product in such a way that, along one side of the container or package, the said layers of flexible sheet material extend beyond the heat-sealed area, and connecting a header card to the surface of one of said extended layers, the connection being made at the extremity of the said extended layer.

Preferably, in this method at least one of the two layers of flexible sheet material is thermoformed before it is brought face to face with the other layer of flexible material and heat-sealed.

It has been found important, in connection with the ease of opening the flexible container or package, that the header card is connected with preferably the outer surface of one of the extended layers of flexible material at the extremity of the said extended layer of flexible sheet material. To this purpose, the adhesive material, connecting the header card with the outer surface of one of the extended layers of flexible sheet material, is applied at the extremity of the said extended layer of flexible sheet material.

In opening the flexible container or package, the consumer with the one hand takes the header card, folds it over the pack and pulls it in the direction of the sealed area enclosing the packaged product, whilst gripping with the other hand e.g. a corner of the other extended layer of flexible material opposite the extruded layer to which the header card has been attached, and in this way the seal is readily peeled open to gain access to the interior of the container or package.
If the other extruded layer does not automatically come free from the layer to which the header card has been attached, the stiffness of this latter layer allows the other extended layer to come free, allowing the consumer to grip it.

The invention will now be described on the hand of the drawings, in which Fig. 1 is a section through a pouch-type package according to the invention and Fig. 2 is a perspective view of a package or container according to the invention before opening.

Referring to the drawings, in Fig. 1 a pouch has been formed from two layers of flexible sheet material 1 (which may be the same or different material for the upper and the lower layer, respectively), which have been sealed together in the seal areas 2, forming a space 4 containing product 3. The two layers of flexible sheet material extend over the area 5 beyond the heat-seal area 2. A header card 6 has been connected to (in this case) the outer surface of the upper layer of flexible sheet material 1 by means of e.g. an adhesive layer 7, which has been applied to the extremity of the outer surface of the said extending layer of flexible sheet material.

In opening the package, the consumer with the one hand takes the header card 6, folds it over into the direction of the product-containing space 4, with the other hand grips the lower extended layer of flexible material and then pulls the header card in the direction of the right-hand seal area 2. In this way, the seal 2 is readily peeled open and the product 3 can be taken out of the package or container.

In Fig. 2, in the perspective view of a package according to the invention, it can clearly be seen that the adhesive layer 7 has been applied to the extremity of the outer surface of the upper extending layer of flexible sheet material. The header card 6 has been provided with an opening 8 to enable the package to be hung in rows. The connection of the header card with the extremity of one of the layers of the flexible sheet material can be effected in any suitable way, e.g. by using adhesive or a hot melt.

The flexible sheet material can be selected thus that the package is fully opaque or fully transparent or one side is opaque and one side is transparent. The heat-sealing can be carried out in a manner known per se.

Instead of sealing the two layers of flexible sheet material together around the periphery of the space 4 containing the product 3, there can be provided compartments containing different products, provided that the seals used in this arrangement are all peelable. Preferably, if the package or the container contains consumable goods, these are vacuum-sealed.

Claims

1. Flexible container consisting of two superimposed layers of flexible sheet material, heat-sealed around the periphery of a material-containing space between the layers, the peel strength of the sealed area being such that the two layers of sealed flexible sheet material can readily be peeled open, characterized in that, along one side of the container, the two superimposed layers of flexible sheet material are extended beyond the heat-sealed area and a header card is connected to the surface of one of the extended layers of flexible sheet material at the extremity of the extended layer of flexible sheet material.

2. Flexible container according to Claim 1, characterized in that the header card is connected with the outer surface of one of the extended layers of flexible sheet material by means of an adhesi .

3. Flexible container according to Claim I or 2, characterized in that the container is a bag-like container or pouch.

4. Flexible container according to any one of the preceding Claims, characterized in that the header card is provided with an opening.

5. Flexible thermoformed vacuum pouch consisting of two superimposed layers of the same flexible sheet material, of which at least one has been thermoformed, heat-sealed around the periphery of a consumable-material-containing space between the layers, the peel strength of the sealed area being such that the two layers of sealed flexible sheet material can easily be peeled open, characterized in that, along one side of the container, the two superimposed layers of flexible sheet material are extended beyond the heat-sealed area and a header card is connected by means of an adhesive to the outer surface of one of the extended layers of flexible sheet material at the extremity of the extended layer of flexible sheet material.

6. Flexible container, substantially as hereinbefore described with reference to the drawings.

7. Method of making a flexible container or package, which comprises bringing two layers of flexible sheet material face to face, at least one of the said layers bearing a heat-sealable resin on its inner surface and at least one being easily peelable after sealing, placing a product between said layers, forming a sealed area joining said layers and surrounding said product in such a way that, along one side of the container, the said layers of flexible sheet material extend beyond the heat-sealed area, and connecting a header card to the surface of one of said extended layers, the connection being made at the extremity of the said extended layer.

8. Method of making a flexible container or package according to Claim 7, wherein at least one of the two layers of flexible sheet material is thermoformed before it is brought face to face with the other layer of flexible material.

9. Method of making a flexible container or package substantially as hereinbefore described.

Fig.1.

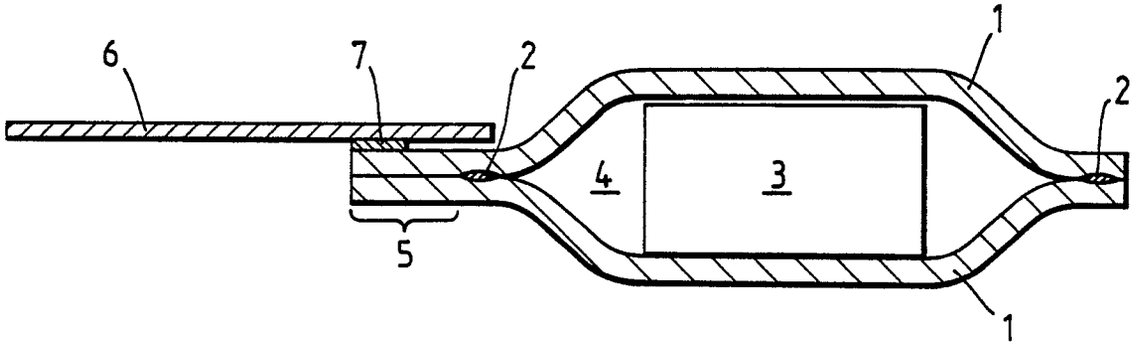

Fig.2.