



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**23.05.2001 Bulletin 2001/21**

(51) Int Cl.7: **B65D 65/10**, B65D 75/26,  
B65D 75/40

(21) Application number: **00203864.4**

(22) Date of filing: **06.11.2000**

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

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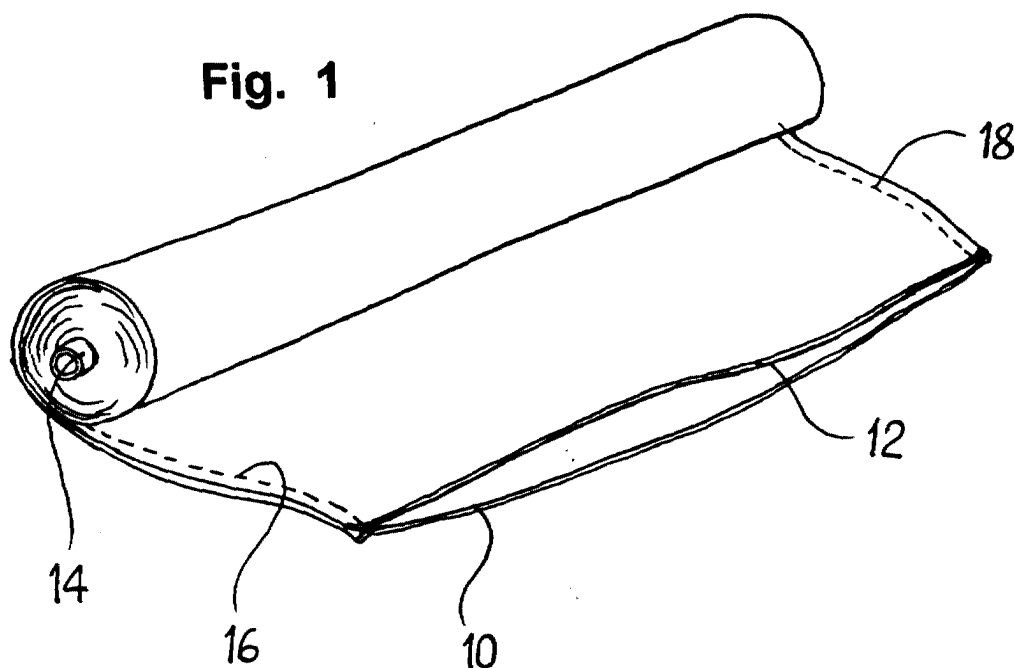
(30) Priority: **16.11.1999 IT TO990202 U**

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(54) **Food wrapping material for home use**

(57) A ribbon, which is wound in a roll, comprises two superimposed polyethylene sheets (10, 12) that are bonded together along their longitudinal edges (16, 18). Each of the sheets comprises two or three co-extruded layers (10a, 10b, 10c, 12a, 12b, 12c), of which the ex-

ternal layers (10a, 12a) are made tacky by means of an additive to the polyethylene. In use, a piece of ribbon is cut, the object to be wrapped is inserted between the sheets, and the margins are folded over each other and they adhere to each other.



## Description

**[0001]** This invention is concerned with a wrapping material for food, such as meat, cheese, vegetables, etc., for home use.

**[0002]** Thin-film plastic material (PVC in the past, but mostly polyethylene nowadays) is widely used in home kitchens for wrapping up food to be kept, say before placing the food in a refrigerator, in order both to prevent evaporation and to insulate the food from the environment, so that it is not polluted by dirt, bacteria, etc. The film of plastic material is marketed in rolls of ribbons having a length of several tens of meters. The user will cut a terminal desired length from the roll, depending on the amount of food that is to be wrapped.

**[0003]** Such wrapping material is certainly useful and is widely used, but it is not easy to handle and it does not give rise to a reliable envelope. As an alternative, bags of plastic material are available in commerce, particularly intended for chilling, which are easier in handling and more reliable in protection. However, bags are considerably more expensive than a single film, and, moreover, they have to be provided in a number of sizes, depending on the amount of food to be packed.

**[0004]** The object of the invention is now to provide a food wrapping material that is safer in protection and easier in handling than a single polyethylene film, while being less expensive and more versatile than a bag.

**[0005]** The invention achieves the above and other objects and advantages, such as will appear from the following disclosure, by providing a food wrapping sheet material for home use, having the features recited in claim 1.

**[0006]** The dependent claims recite further features within the scope of the invention. The invention will be further disclosed below, with reference to a preferred embodiment, shown by way of non-limiting example in the attached drawing, wherein:

Fig. 1 is a perspective view of a roll of sheet material according to the invention;

Fig. 2 is an greatly enlarged view of a detail of Fig. 1;

Fig. 3 is a perspective view of a piece of sheet material according to the invention, containing a portion of food;

Fig. 4 is a view in cross-section made along line IV-IV of Fig. 3; and

Fig. 5 is a view similar to Fig. 4, in a later step in the handling of the material.

**[0007]** With reference to Fig. 1, the sheet material according to the invention comprises two films or sheets of polyethylene ribbon, 10 and 12, which are superimposed to each other and wound around a cardboard

core 14 to form a roll. The longitudinal edges of both films 10 and 12 are bonded together, preferably by heat sealing, over the entire length of the wound ribbons, as shown at 16, 18.

**[0008]** Having now reference to Fig. 2, which shows a greatly enlarged fragment of the material of Fig. 1, each of the polyethylene sheets 10, 12 is made of three co-extruded layers, 10a, 10b, 10c and 12a, 12b, 12c, respectively.

**[0009]** According to the invention, layers 10a and 12a, which are external to the two-film ribbon, are made from tacky polyethylene, preferably made tacky by a suitable additive, as known in the art. A suitable product is, e.g., a material marketed by Polimeri Europa s.r.l., at Milan, that is identified with product code FFD0.

**[0010]** On the other hand, layers 10c and 12c, which are contiguous in the sandwich structure of the composite sheet material, are preferably made of a polyethylene containing a slip agent or antiblocking agent, such that the polyethylene is made slippery. An example of a suitable material is a product sold under the commercial name Antiblock 13806 PE, as marketed by Henkel S.p.A., at Campi Bisenzio (Firenze).

**[0011]** Finally, middle layers 10b and 12b are extruded from conventional polyethylene, or from a polyethylene containing additives to improve its elastic properties, also as known in the art.

**[0012]** The mode of use of the material will now be described with reference to Figs. 3, 4 and 5. The user who wishes to wrap a portion of food, such as a fish, will unwind and cut a piece of material from the roll, e.g. a piece having a length about three times the size of the object to be wrapped, and inserts the object between the two bonded sheets, the insertion being made easy by the internal slipperiness of the two sheets forming the material. As it can be seen on Fig. 5, the free margins are then folded on top of each other, and they will adhere to each other because of the properties explained above. The envelope is therefore substantially sealed, though it can be easily opened.

**[0013]** It should be understood that several changes can be made to the preferred embodiment as disclosed above. For instance, the internal slipperiness of the double-sheet material, though useful, is not indispensable to achieve the advantages of the invention. The same is true for the middle layer in the multilayer sheet. The polyethylene film might itself be replaced with a film made of different synthetic materials, such as polystyrene or polypropylene. Finally, although superimposing two ribbons and bonding their longitudinal edges is at present the mode of manufacture which is considered most efficient, the same usefulness of the finished product could be achieved by folding a single, double-wide sheet longitudinally, and bonding it along one side only.

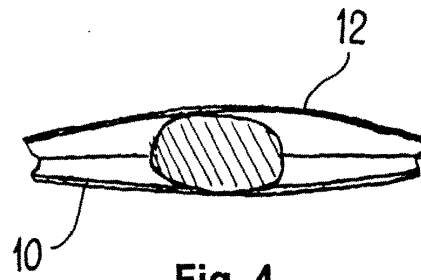
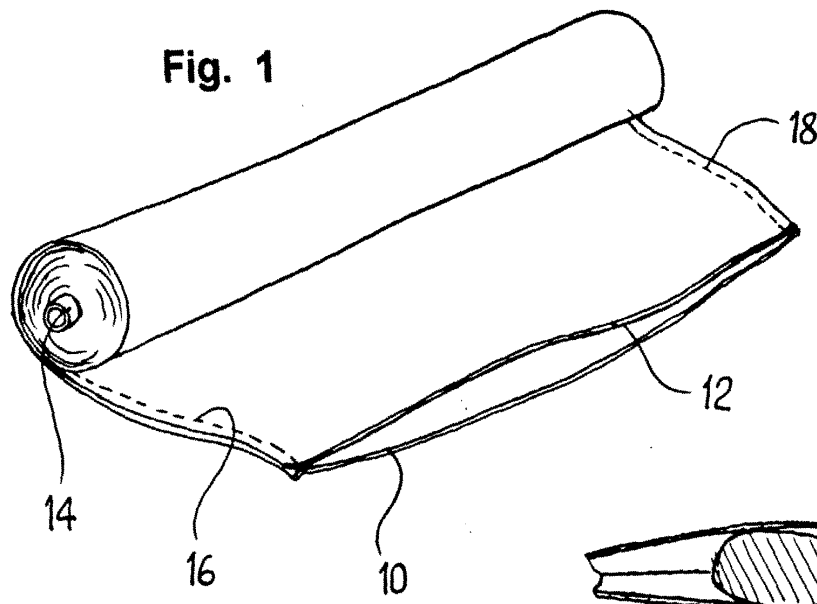
## Claims

1. A food-wrapping sheet material for home use, characterized in that it comprises a ribbon wound in a roll and comprising two superimposed sheets (10, 12) of a flexible, synthetic material which are bonded to each other along the longitudinal edges (16, 18) of the ribbon. 5
2. The sheet material of claim 1, characterized in that the two superimposed sheets are heat-sealed along their longitudinal edges. 10
3. The sheet material of claim 1, characterized in that the two sheets are of a single piece along one of their longitudinal edges and are bonded along their opposite edges. 15
4. The sheet material of claim 3, characterized in that the two sheets comprise a single sheet folded around a central longitudinal axis of the ribbon. 20
5. The sheet material of one of claims 1 to 4, characterized in that the material of the sheets is polyethylene. 25
6. The sheet material of claim 5, characterized in that said sheets comprise each at least two co-extruded layers of polyethylene, and in that the polyethylene in the external layers (10a, 12a) is tacky. 30
7. The sheet material of claim 6, characterized in that the polyethylene of the external layers (10a, 12a) is made tacky by incorporating an additive to its mass. 35
8. The sheet material of claim 6 or 7, characterized in that the polyethylene of the facing layers (10c, 12c) is made slippery by incorporating an additive to it.
9. The sheet material of one of claims 6 to 8, characterized in that each of said two sheets further comprises a third co-extruded layer (10b, 12b), which is interposed between said two layers. 40
10. The sheet material of claim 9, characterized in that the polyethylene in said third layer incorporates an additive to improve its elastic properties. 45

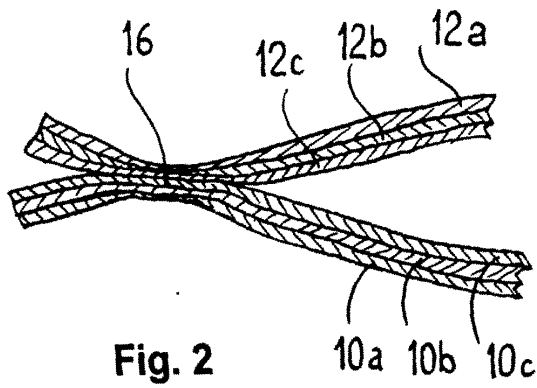
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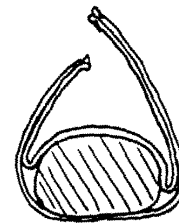
**Fig. 1**



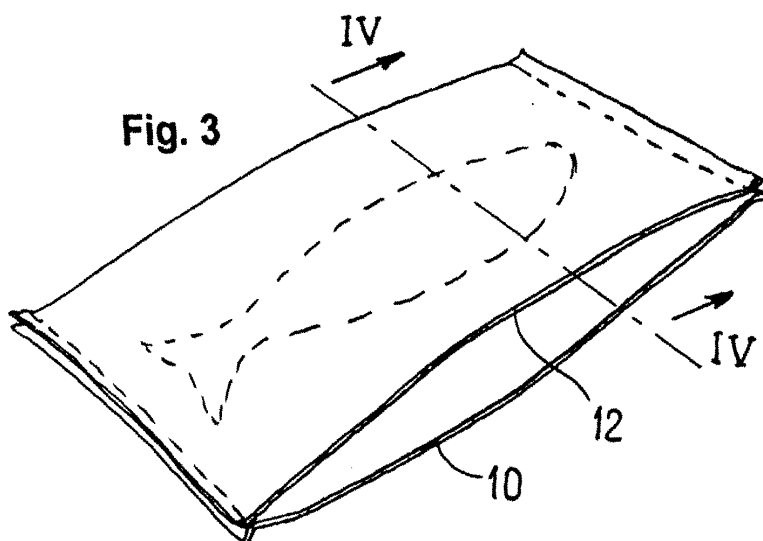
**Fig. 4**



**Fig. 2**



**Fig. 5**



**Fig. 3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 20 3864

| 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.7) |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | FR 2 775 252 A (PAPIERS PAVIOT)<br>27 August 1999 (1999-08-27)<br>* page 3, line 36 - page 5, line 2 *<br>* page 5, line 25 - line 35 *<br>* page 6, line 35 - page 7, line 9;<br>figures 1-3 * | 1-5                              | B65D65/10<br>B65D75/26<br>B65D75/40          |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | US 3 193 181 A (KONJEVICH)<br>6 July 1965 (1965-07-06)                                                                                                                                          |                                  |                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                 |                                  | TECHNICAL FIELDS SEARCHED (Int.Cl.7)         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                 |                                  | B65D                                         |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                 |                                  |                                              |
| Place of search                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                 | Date of completion of the search | Examiner                                     |
| THE HAGUE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                 | 19 February 2001                 | Martens, L                                   |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                 |                                  |                                              |

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 20 3864

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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19-02-2001

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