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(54) **A composite double-layer packaging material, particularly for food products**

Zweilagiges Verbundverpackungsmaterial, insbesondere für Lebensmittel

Matériau d'emballage composite bi-couche, en particulier pour les produits alimentaires

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(73) Proprietor: **Rivoltella, Luigi**
02030 S. Giovanni Reatino, Rieti (IT)

(72) Inventor: **Rivoltella, Luigi**
02030 S. Giovanni Reatino, Rieti (IT)

(74) Representative: **Taliercio, Antonio et al**
ING. BARZANO' & ZANARDO ROMA S.p.A.
Via Piemonte, 26
00187 Roma (IT)

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US-A- 1 421 027

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Description

[0001] This invention broadly relates to packaging materials and more particularly concerns a composite, double-layer, paper based packaging material, specifically useful for packaging food products.

[0002] Even if it should be understood that no restrictive use limitation is to be derived from the following specification, the specific field of use of the packaging material according to this invention is the field of the retail sale of food products, such as bacon, fromages, meats, dairy products and like.

[0003] As it is well known, as a consequence of an already established general practice and in compliance with always more and more restrictive and binding hygienical regulations, food products offered for retail sale to public are packaged in wrappings consisting of sheets of paper based material which are wrapped around the product.

[0004] The packagings of paper based material should fulfil well established hygiene and safety requirements, so that it has been for a certain time and presently it is still general practice to use composite wrappings comprising a paper based sheet, intended not to contact the food product, together with a thin film of a plastics material complying with the legal hygiene and use safety regulations and requirements.

[0005] Such wrappings, however, have at least a deficiency. In fact, aiming at preventing, during the warping operation, which very often entails a real rolling of the paper based material together with the food product contained therein, the concerned food product from contacting the external paper based material, it is usual practice to use a second sheet of plastics material to directly cover the concerned food product, so that, even is said packaging material is to be very tightly wrapped, the concerned food product is always insulated and separated from the external paper based layer.

[0006] Even if it is certainly efficient, this approach always entails use of two materials of different kinds, with consequent problems for storage, inventory, housing compartments and like.

[0007] It is an object of this invention to improve such kind of packaging materials and to realize a composite double-layer packaging material which can be easy to manufacture, as well as easy to be stored and applied, while providing at once better performances than those offered by conventional packagings, also the most recently developed ones.

[0008] US-A-1 421 027 discloses a composite double-layer packaging material, particularly for food products, comprising a first support layer, upon which a second layer is adhered, consisting of a thin film of a material hygienically acceptable for contact with food products so as to form a double-layer sheet, said second layer having peripheral portions extending beyond of edges of the first support layer.

[0009] It is specific subject matter of this invention, therefore, a composite double-layer packaging material as above said, characterized in that

- the hygienically acceptable material of the layer is a plastic material and, in packaged condition, it completely wrappes the product,
- said first layer is of paper base material and, in packaged condition, it completely wrappes said second layer and the product wrapped therein, and further characterized in that
- said peripheral extended portions of said first support layer form one or two opposed foldable flaps.

[0010] Further details and advantages of this invention will be apparent from the following description with reference to the annexed drawings in which the preferred embodiments are shown by way of illustration and not by way of limitation.

[0011] In the drawings:

Figure 1 is a perspective view of a composite double-layer packaging sheet material, having a foldable overlayable flap,
Figure 2 is a perspective view of a composite double-layer packaging sheet material having two foldable overlapping flaps.

[0012] By referring now to Figure 1, a first embodiment of this invention comprises a base sheet 10 of paper material, upon which a thin film 11 of plastics material is applied, of a kind approved for use with food products. Said film 11 is adhered to the paper base sheet 10 by means of traditional methods and equipment.

[0013] The characterizing feature of said thin film 11, however, is that it has much larger sizes than the base sheet 10 and particularly it forms a free flap 12.

[0014] After the food product has been laid upon the double-layer portion of the packaging sheet, the so former free flap 12 is folded and laid upon the food product, in order to perform the same function as performed by a second separate sheet of plastics material according to the state of the art.

[0015] By referring to Figure 2 of the drawings, a second embodiment of this invention comprises a base sheet 10, also made of a paper material or substantially paper material, upon which a thin film 11 of plastics material is applied, of a kind approved for use with food products. Said film 11 is adhered to the paper base sheet 10, by means of traditional methods and equipment.

[0016] The characterizing feature of said thin film 11, however, is that it has much larger than the base sheet 10 and particularly it forms two free and opposed flaps 13 and 14. After the food product has been laid open the double-layer portion of the packaging sheet, the so formed opposed flaps 13 and 14 are folded and laid upon the food product, in order to perform the same function as performed by a second separate sheet of plastics

material according to the state of the art. Upon folding, said flaps 13 and 14 can only be intermediately juxtaposed, but they can also slightly overlap to one another in intermediate area, so as to increase the coverage effect upon the food product.

[0017] In a further not shown embodiment, that can be easily apparent to those skilled in the art from the above description, said thin film 11 can also form one or more additional flaps orthogonal to flaps 13 and 14, in order to wrap the food product not only at two lateral sides, but also at the other two remaining opposite sides.

[0018] As above mentioned, the adhesion between the base sheet and the thin plastics material film overposed thereupon can be effected by means of any desired method and equipment, but anyway it is suggested that the adhesion be not extended to the whole contact surface, so as to leave a not adherent peripheral edge designed to aid folding of the upper flap or flaps.

[0019] The preferred embodiments have been heretofore described, it should be expressly understood that those skilled in the art can make further changes and modifications to the details and to the material compositions, as well as to the thicknesses and the shapes, without departing from the scope of this invention as defined in the annexed claims.

Claims

1. A composite double-layer packaging material, particularly for food products, comprising a first support layer (10), upon which a second layer (11) is adhered, consisting of a thin film of a material hygienically acceptable for contact with food products so as to form a double-layer sheet, said second layer has sizes larger than the sizes of the first support layer (10), **characterized in that**

   - the hygienically acceptable material of the layer (11) is a plastic material,
   - said first layer (10) is of paper base material,

   and further **characterized in that**

   - said larger sizes of said second support layer (11) form one or two opposed foldable flaps (12; 13, 14), and the adhesion between the base support layer (10) and the overlaid film (11) is extended to less than their whole contact surface, in order to leave a not adherent peripheral edge to aid folding the upper flap (s) .

2. A composite packaging material according to claim 1, **characterized in that** the film of hygienically acceptable material (11) forms two opposed side flaps (13,14).

3. A composite packaging material according to claim 2, **characterized in that** said two opposed flaps (13,14), after having been folded upon said food product, are intermediately juxtaposed.

4. A composite packaging material according to claim 2, **characterized in that** said two opposed flaps (13,14), after having been folded upon said food product, slightly overlap to one another in the intermediate area.

5. A composite packaging material according to claim 1, **characterized in that** said film of hygienically acceptable material forms four orthogonal opposed flaps, cross foldable upon said food product, with or without mutual overlap.

Patentansprüche

1. Doppelschicht-Verbundverpackungsmaterial, insbesondere für Lebensmittelprodukte, umfassend eine erste Trägerschicht (10), auf der eine zweite Schicht (11) haftet, bestehend aus einer Dünnfolie eines Materials, das für den Kontakt mit Lebensmittelprodukten hygienisch annehmbar ist, um so einen Doppelschicht-Bogen zu bilden, wobei die zweite Schicht größere Abmessungen als die Abmessungen der ersten Trägerschicht (10) aufweist, **dadurch gekennzeichnet, dass**

   - das hygienisch annehmbare Material der Schicht (11) ein Kunststoffmaterial ist,
   - die erste Schicht (10) aus einem Papiergrundmaterial besteht,

   und ferner **dadurch gekennzeichnet, dass**

   - die größeren Abmessungen der zweiten Trägerschicht (11) eine oder zwei gegenüberliegende faltbare Klappe(n) (12; 13, 14) bilden und sich die Haftung zwischen der Grundträgerschicht (10) und der darüber gelegten Folie (11) über weniger als ihre gesamte Kontaktoberfläche erstreckt, um einen nicht haftenden peripheren Rand zur Erleichterung des Faltens der oberen Klappe(n) zu lassen.

2. Verbundverpackungsmaterial nach Anspruch 1, **dadurch gekennzeichnet, dass** die Folie aus hygienisch annehmbaren Material (11) zwei gegenüberliegende Seitenklappen (13, 14) bildet.

3. Verbundverpackungsmaterial nach Anspruch 2, **dadurch gekennzeichnet, dass** die beiden gegenüberliegenden Klappen (13, 14), nachdem sie auf das Lebensmittelprodukt gefaltet wurden, im Zwischenbereich nebeneinander liegen.

4. Verbundverpackungsmaterial nach Anspruch 2, **dadurch gekennzeichnet, dass** die beiden gegenüberliegenden Klappen (13, 14), nachdem sie auf das Lebensmittelprodukt gefaltet wurden, leicht miteinander im Zwischenbereich überlappen.

5. Verbundverpackungsmaterial nach Anspruch 1, **dadurch gekennzeichnet, dass** die Folie des hygienisch annehmbaren Materials vier senkrecht gegenüberliegende Klappen bildet, die kreuzweise auf das Lebensmittelprodukt faltbar sind, mit oder ohne gegenseitige(r) Überlappung.

Revendications

1. Matériau d'emballage composite à deux couches, en particulier pour des produits alimentaires, comprenant une première couche de support (10) sur laquelle adhère une deuxième couche (11), constitué d'un film mince d'un matériau qui, du point de vue hygiénique, convient au contact avec des produits alimentaires afin de former une feuille à deux couches, ladite deuxième couche ayant des dimensions plus grandes que celles de la première couche de support (10), **caractérisé en ce que** :

   - le matériau qui convient du point de vue hygiénique, constitutif de la couche (11), est une matière plastique,
   - ladite première couche (10) est constituée d'un matériau de base en papier,

   et **caractérisé, en outre, en ce que** :

   - lesdites dimensions plus grandes de ladite deuxième couche de support (11) forment un ou deux rabat(s) (12 ; 13, 14) pliable(s) opposés, et l'adhérence entre la couche de support de base (10) et le film (11) est prévue sur une surface inférieure à leur surface totale de contact, de manière à laisser un bord périphérique sans adhérence afin de contribuer au pliage du (des) rabat(s) supérieur(s).

2. Matériau d'emballage composite selon la revendication 1, **caractérisé en ce que** le film de matériau qui convient du point de vue hygiénique (11) forme deux rabats latéraux opposés (13, 14).

3. Matériau d'emballage composite selon la revendication 1, **caractérisé en ce que** lesdits deux rabats opposés (13, 14) sont juxtaposés de manière intermédiaire après avoir été pliés sur ledit produit alimentaire.

4. Matériau d'emballage composite selon la revendication 2, **caractérisé en ce que** lesdits deux rabats opposés (13, 14) se chevauchent l'un l'autre dans la zone intermédiaire, après avoir été pliés sur ledit produit alimentaire.

5. Matériau d'emballage composite selon la revendication 1, **caractérisé en ce que** ledit film de matériau qui convient du point de vue hygiénique forme quatre rabats orthogonaux opposés, pliables de manière croisée sur ledit produit alimentaire, qui se chevauchent ou ne se chevauchent pas l'un l'autre.

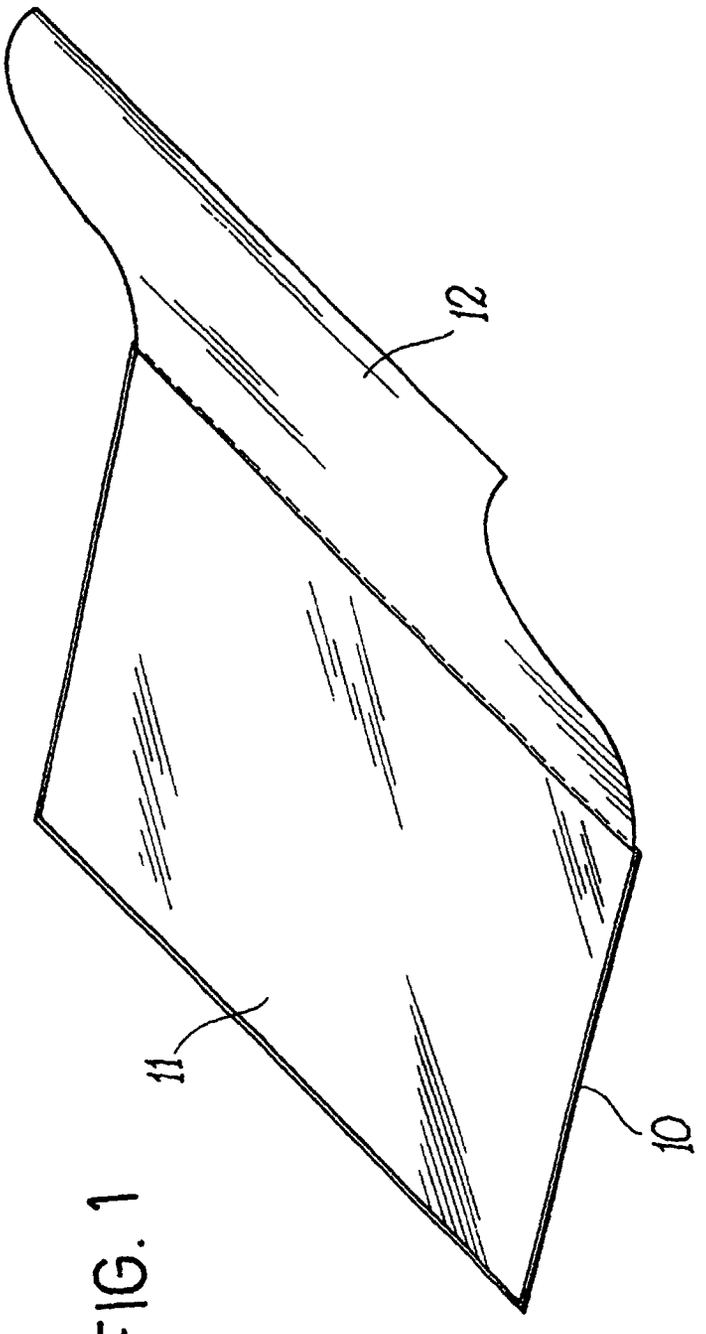


FIG. 1

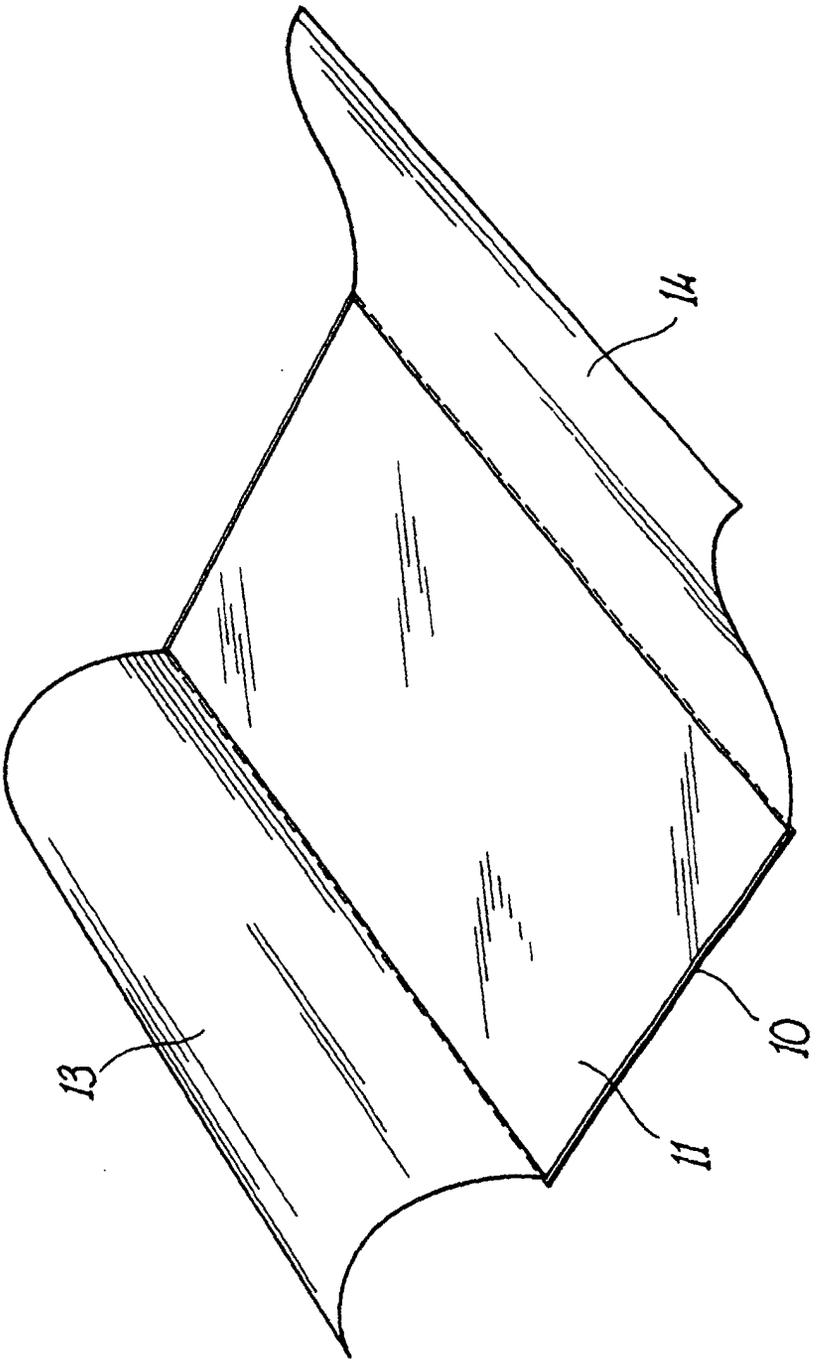


FIG. 2