PACKAGING HAVING A WEAKENING AREA

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ABSTRACT

This flexible packaging (10) comprises a flexible film (14) wrapped around a product (12) to be packaged, the film (14) defining a closed space (24) containing the product (12), the film (14) having a higher tensile strength over most of its surface and a lower tensile strength over a well located partial weakening area (26), the higher tensile strength being sufficient for preventing a manual tearing and the lower tensile strength being adapted for allowing a manual tearing of the film (14).

Its partial weakening area (26) has, along all directions, a dimension which is lower than 25% of the corresponding dimension of the packaging, and the film (14) comprises a visible marking (28) locating the position of the partial weakening area (26).
PACKAGING HAVING A WEAKENING AREA

[0001] The present invention relates to a packaging comprising a flexible film wrapped around a product to be packaged, the film defining a closed space containing the product, the film having a higher tensile strength over most of its surface and a lower tensile strength in a well located partial weakening area, the higher tensile strength being sufficient for preventing a manual tearing and the lower tensile strength being adapted for allowing a manual tearing of the film.

[0002] Nowadays, many products are packaged in wrappings formed of a film folded around the product. For example, the products are solid and elongated such as chocolate bars. The product can also be in a powder or granulate form, such as sugar or salt.

[0003] In the known types of packaging, the wrapping is formed by a polymer or laminate film having specific ways of opening, e.g. tear notches or other mechanical weakening. The weakening is often at the end of the long side of the wrapping. In order to reach the content of the packaging, the film must be torn off along or at a specific area of weakening.

[0004] In a known packaging, disclosed for example in FR-2.717.449, the wrapping film has a slightly microporous transverse area which extends around the packaging. For reaching the content, the user grasps the wrapping on each side of the weakening line and draws the film until the tearing of the wrapping film. The microporous transverse area extends almost all around the packaged product.

[0005] Such a packaging is relatively easy to open since the initiation of the tearing can happen anywhere around the packaging in the weakening area.

[0006] These types of packaging are not adapted for wrapping pharmaceutical drugs. Indeed, drugs or remedies have to be adequately child resistant, thus preventing misuse by children aged between 41 and 51 months.

[0007] The object of the invention is to propose a packaging which can be opened easily while preventing the young children to be able to open the packaging.

[0008] To that end, the invention relates to a packaging according to claim 1.

[0009] According to particular embodiments, the invention has one or more of the features of the dependent claims.

[0010] The invention will better be understood upon reading of the following description, which is given solely by way of example and with reference to the drawings, in which:

[0011] FIG. 1 is a perspective view of a first embodiment of a packaging prior to opening;

[0012] FIG. 2 is a view identical to that of FIG. 1 during opening of the packaging; and

[0013] FIGS. 3 and 4 are a perspective view of another embodiment of a packaging according to the invention prior to and during opening.

[0014] FIG. 1 shows a packaging 10 for the packaging of product 12 such as a powder. For example, the product is a drug adapted to be dissolved in water. The packaging is for example a flow wrapper and more particularly a stick pack.

[0015] The packaging 10 is constituted by a generally rectangular flexible film 14 which is formed and sealed to contain the product. The flexible film 14 is formed of one or more superposed layers, as disclosed in the following.

[0016] The packaging 10 is a "flowpack" wrapping. If the packaging is long, with a relative narrow diameter in relation it is called a stick pack.

[0017] Accordingly, the film 14 is folded around the product 12 and the longitudinal edges of the film are connected together along a longitudinal sealing seam 16. Thus, the film defines a tubular pipe containing the product. A cross sealing seam 18A, 18B is provided at each end of the pipe for closing the packaging. The same principle can be adapted for 3-side or 4-side sealed sachet or pouch.

[0018] The packaging has a generally elongated shape.

[0019] The length measured between the cross sealing seams 18A, 18B is at least two times higher and, advantageously, five times higher than the diameter or width of the packaging.

[0020] Advantageously, the length is in the range of 2 cm to 20 cm and the diameter or width is in the range of 5 mm to 100 mm.

[0021] The longitudinal sealing seam 16 extends for example over the back face 20 of the packaging which is opposite to a front face 22 with respect to the packaged product. The front face is in general nearly flat but depending on the filling volume could also be more round shaped.

[0022] The longitudinal sealing seam 16 and the cross sealing seams 18A, 18B are obtained by sealing or welding the film 14 as known per se. For example, the sealing is made by ultrasonic waves.

[0023] After sealing, the film 14 defines a closed space 24 in which the product is contained. The closed space 24 is gas tight.

[0024] According to the invention, a partial weakening area 26 which normally will be in register with the printed artwork, is provided in the film 14. In the weakening area, the tensile strength of the film 14 is low so that the film can be torn off if a consumer is drawing the film apart in two opposite directions in the weakening area.

[0025] Preferably, the tensile strength of the film 14 in the weakening area 26 is from 1 N/15 mm to 20 N/15 mm and, preferably, from 1 N/15 mm to 10 N/15 mm and, more preferably, from 3 N/15 mm to 8 N/15 mm.

[0026] More precisely, the strength for initiating the rupture in the weakening area is low and is advantageously in the range of 1 N to 20 N, preferably between 3 N and 8 N and more preferably around of 5 N.

[0027] Out of the weakening area 26, the film 14 has a high tensile strength which prevents the tearing of the packaging by manual action of a consumer.

[0028] The tensile strength of the film 14 out of the weakening area 26 is from 30 N/15 mm to 150 N/15 mm and, preferably, from 40 N/15 mm to 120 N/15 mm and, more preferably, from 50 N/15 mm to 100 N/15 mm.

[0029] The strength for initiating the rupture of the film 14 out of the weakening area is high and is advantageously in
the range of 20 N to 150 N, preferably between 40 N and 120 N and, more preferably, around 60 N.}

[0030] In the embodiment of FIG. 1, the weakening area 26 for example has a rectangular shape. The position of the weakening area 26 is in register with the seal location and the printing.

[0031] The partial weakening area has, along all directions, a dimension which is lower than 25% of the corresponding dimension of the packaging. In one direction, the dimension is advantageously lower than 15% of the corresponding dimension of the packaging.

[0032] In addition, the film 14 comprises a visible marking 28 locating the position of the partial weakening area 26. The marking can be incorporated in the printed artwork, e.g. Logos etc., so that only adults reading specific opening instruction can open the packaging. In that case, the visible marking is hidden in the printed artwork for a user who does not pay attention.

[0033] In the embodiment shown in FIG. 1, that marking is constituted by a weakening area which matches the printed area of the film only in position 26, where it is considered to start the tear initiation. The marking 28 extends exactly over the weakening area 26.

[0034] The partial weakening area extends advantageously over a length of 3 mm to 30 mm and a width of 3 mm to 30 mm. In general the weakening area can be of any shape or pattern, e.g. square, rectangular or round shaped. The whole of its surface is contained between the cross sealing seams 18A, 18B and far enough away from the seals. The weakening area 26 normally is located on the front face 22 which is slightly flat. More precisely, it is far enough away from the longitudinal edges linking the corresponding ends of the opposite cross sealing seams 18A, 18B of packaging where normally the tear initiation would take place.

[0035] The weakening area 26 is produced by treatment of the film constituting the film 14. Advantageously, the treatment is hidden and cannot be identified except by following the marking applied on the packaging.

[0036] The weakening treatment is advantageously applied before wrapping the film around the product.

[0037] According to a first embodiment, the weakening area 26 is produced by the application of high-energy radiation, such as a laser, by application of a laser beam over the surface of the weakening area 26, before the film 14 is wrapped. Treatment by high-energy radiation is carried out on one or more layers of the film 14, when the latter comprises more than one layer.

[0038] According to another embodiment, the weakening area 26 is formed by a mechanical weakening of the film which extends over the surface of the weakening area 26. That mechanical treatment is carried out on one or more layers of the film when the latter comprises more than one layer.

[0039] According to a first example of mechanical treatment, a microporous weakening is provided in order to form the weakening area 26. Such a microporous area of a film is obtained, for example, by passing the film between two rollers and one of which rollers has been rendered abrasive over the surface to produce an area of weakening. Such a treatment is described, for example, in document FR-2.717.449.

[0040] According to a second example, the mechanical weakening is formed by cutting the thickness of one or more layers of the film when the latter comprises more than one layer. The cuts are formed by a matrix of cutting elements applied in the area 26. During treatment, the film is pressed between the matrix and a support, as is known per se.

[0041] According to yet another example, the weakening area 26 is obtained by an area of micro-perforations which do not pass through the film but drastically decrease the tensile strength of the film in the treated area. These micro-perforations may penetrate only through one of the layers when the film comprises a plurality of layers.

[0042] According to a first embodiment, the film 14 is monolayer and is formed by a base film of polymer. Accordingly, the film 14 is a single-material film. In order to seal the film on itself, the film of polymer is advantageously coated on its inner surface with a sealing material which is applied, for example, by extrusion coating, co-extrusion or by means of a soluble coating which may be applied during the application of printing inks to the base film.

[0043] The base film is preferably formed by a bi-oriented polymer film, which may be co-extruded. That film comprises, for example, polypropylene (OPP), polyester (PET) or polyamide (OPA). The thickness of the base film is generally from 5 to 100 microns and preferably from 12 microns to 50 microns.

[0044] The sealing material is chosen in order to permit fused bonding. Typically, the thickness of the sealing material is from 10 microns to 40 microns, the amount of sealing material like a lacquer deposited being from 1 g/m² to 12 g/m².

[0045] In that case, the weakening is formed in the base layer.

[0046] According to a second embodiment, the film 14 is formed by two laminated layers. Accordingly, the film comprises a base layer formed of a polymer which is associated, along its inner face with a sealing layer of polymer, in order to permit fused bonding.

[0047] The base layer and the sealing layer are bonded with one another by means of lamination with an adhesive or by resin extrusion.

[0048] The base layer is advantageously formed of a bi-oriented polymer film. However, it may also be a cast film. The polymer forming the base layer is preferably polyester (PET), polyamide (OPA) or polypropylene (OPP).

[0049] The sealing layer for example is polyethylene (PE), which optionally may be blended with other polymers or co-extruded in admixture or non-oriented co-extruded with other polymers, e.g. polyester (PET)/polyethylene (PE), polyamide (OPA)/polyethylene (PE) or polypropylene (OPP)/polyethylene (PE). As a variation, the sealing layer is formed of polypropylene (PP), preferably cast polypropylene, homopolymers or copolymers, e.g. polyester (PET)/ polypropylene (PP), polyamide (OPA)/polypropylene (PP) or polypropylene (OPP)/polyethylene (PP).
According to another variant, the sealing layer is constituted by amorphous polyester to co-polyester (PETG), e.g. polyester (PET)/polyester (PETG), polyamide (OPA)/polyester (PETG) or polypropylene (OPP)/polyester (PETG).

In another embodiment, the base layer is paper if laminated with a sealing layer comprising of a sealable bi-oriented polymer film, e.g. Paper/polyester (PET), Paper/polyamide (OPA) or Paper/polypropylene (OPP).

When the film is a laminate of two layers, the inner layer is advantageously sealable.

In the embodiment, where the film is formed by two layers, the weakening is affecting the outer layer and optionally the inner layer which may partially be treated or weakened as well.

According to a particular embodiment, the outer layer is weakened by treatment with high energy radiation, while the inner layer is weakened by mechanical treatment such as a microporous weakening, or vice versa. In addition, the same mechanical or high-energy radiation treatment is carried out on both layers.

By way of variation, the film is formed of a two-layer laminated film formed, for example, of polyester (PET)/polypropylene (OPP), polyester (PET)/polyester (PET), polyester (PET)/polyamide (OPA), aluminium/polyester (PET), aluminium/oriented polypropylene (OPP) or aluminium/polyamide (OPA). Before mentioned structures are sealable at least on one of the two sides. If both sides are sealable, pouches formed therefrom provide a longitudinal lap seal.

For example, the film is made of an outer layer of aluminum having a thickness between 6 μm and 45 μm and preferably about 15 μm which is laminated with an inner polyester (PET) layer having a thickness between 3 μm and 36 μm and preferably about 5 μm. An adhesive layer is arranged between the aluminum layer and the polyester layer.

Printing is arranged on the outer face of the aluminium layer and a sealable layer consisting of, e.g. cold or heat seal lacquers, is provided on the polyester layer. The weakening is formed in the polyester layer.

According to another embodiment, the film is made of an outer layer of polyester (PET) having thickness of 12 μm, which is laminated with the inner aluminium layer having a thickness of 15 μm. An adhesive layer is arranged between the polyester layer and the aluminium layer. Printings are provided advantageously on the polyester layer. A cold seal layer, or a varnish, or a coating is provided on the aluminum layer.

Polyethylene layers are advantageously laminated or coated by thin gauged co-extrusions.

According to yet another embodiment, the film comprises of three layers, of which the two outside layers are defined according to a film formed of two layers as mentioned above and the third intermediate layer being interposed between the two outside layers.

The intermediate layer is formed, for example, of an aluminium foil from 6 μm to 30 μm and preferably from 7 μm to 15 μm. The aluminium can be hard or annealed foil.

Accordingly, the film is formed, for example, of polyester (PET)/aluminium/polypropylene (PP) or of polyester (PET)/aluminium/polyethylene (PE) or of polyester (PET)/aluminium/polyester (PET) or of polyamide (OPA)/aluminium/polypropylene (PP) or of polyamide (OPA)/aluminium/polyethylene (PE) or of polypropylene (OPP)/aluminium/polyethylene (PE) or of polypropylene (OPP)/aluminium/polypropylene (PP) or of polypropylene (OPP)/aluminium/polypropylene (OPP).

By way of variation, the intermediate layer is a bi-oriented mono or co-extruded, transparent or pigmented film, for example oriented polyamide (OPA), oriented polypropylene (OPP) or oriented polyester (PET). Optionally the oriented films are metallised or ceramic coated if oxygen, water vapour or light protection is requested.

When the film comprises of three layers, the intermediate layer is advantageously weakened by treatment with high energy radiation along the weakening line in case it is a bi-oriented polymer, e.g. polyester (PET)/polyamide (OPA)/polypropylene (PP), polyester (PET)/polyamide (OPA)/polyethylene (PE), polyester (PET)/polypropylene (OPP)/polyamide (OPA), polyester (PET)/polypropylene (OPP)/polyethylene (PE), polyester (PET)/polypropylene (PP), polyester (PET)/polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyamide (OPA)/polypropylene (OPP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PE), polypropylene (OPP)/polyamide (OPA), polypropylene (OPP)/polyethylene (PE), polypropylene (OPP)/polypropylene (PP), polypropylene (OPP)/polyethylene (PE), polypropylene (OPP)/polypropylene (PP), polyethylene (PE), polypropylene (OPP)/polyethylene (PE), polypropylene (OPP)/polyethylene (PP), polyamide (OPA)/polyethylene (PE), polypropylene (OPP)/polyethylene (PE), polypropylene (OPP)/polyethylene (PP), polyamide (OPA)/polyethylene (PE), polypropylene (OPP)/polyethylene (PE), polypropylene (OPP)/polyethylene (PP), polyamide (OPA)/polyethylene (PE), polypropylene (OPP)/polyethylene (PE).

According to another variant, the film is formed of three layers and is composed, for example, of polyester (PET)/polypropylene (PP)/polyamide (OPA), polyester (PET)/polyethylene (PE)/polyamide (OPA), polyester (PET)/polypropylene (PP)/polyamide (OPA), polyester (PET)/polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PE), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PE), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polypropylene (PP), polyamide (OPA)/polyethylene (PP), polyamide (OPA)/polyam
the film breaks in the weakening area 26. Especially, the free ends are drawn along a direction perpendicular to the plane of the weakening plane 26.

[0068] Thanks to the initiated cut in the weakening area 26, the packaging is then easily broken apart and separated.

[0069] The packaging allows a clear and easy way of opening by hand without any additional tools and an easy access to the product.

[0070] Due to the particular tensile strength of the film over the weakening area, the force necessary to pop up one end of the packaging is low enough to enable an easy manual opening in the weakening area but the film is strong enough to prevent an opening of the packaging out of the weakening area.

[0071] Thus, a child who is not aware of the particular location of the weakening area will not be able to open the packaging. In addition, since the weakening area has a very small extent with respect to the overall surface of the packaging, the initial tearing of the film in the weakening area is very difficult and unlikely for a child who has not skilled hands.

[0072] Other embodiments of the invention are shown on FIGS. 3 and 4.

[0073] In these figures, the same references as in FIGS. 1 and 2 are used for designating corresponding or similar parts.

[0074] In this embodiment, the weakening area 26 is for example made of a straight line extending over the front 22. The short line 26 extends transversely, which means parallel to a cross sealing seam 18A, 18B.

[0075] The length of the weakening line is in the range of 2-8 mm. The line 26 is identified by a marking extending over the line or around. In a particular embodiment, the packaging is fully printed except at the weakening line.

[0076] Advantageously, the weakening line is made by the application of a high-energy radiation such as a laser.

[0077] As shown on FIG. 4, the opening of the packaging is obtained as in the previous embodiment by drawing away the film in opposite direction from each side of the weakening line 26.

1. Flexible packaging (10) comprising a flexible film (14) wrapped around a product (12) to be packaged, the film (14) defining a closed space (24) containing the product (12), the film (14) having a higher tensile strength over most of its surface and a lower tensile strength over a well located partial weakening area (26), the higher tensile strength being sufficient for preventing a manual tearing and the lower tensile strength being adapted for allowing a manual tearing of the film (14), characterized in that the partial weakening area (26) has, along all directions, a dimension which is lower than 25% of the corresponding dimension of the packaging, and that the film (14) comprises a visible marking (28) locating the position of the partial weakening area (26).

2. Flexible packaging according to claim 1, characterized in that the partial weakening area (26) has a first dimension which is lower than 25% of the corresponding dimension of the packaging (10) and a second dimension perpendicular to the first dimension and which is lower than 15% of the corresponding dimension of the packaging.

3. Flexible packaging according to claim 1, characterized in that the visible marking (28) extends in register over the partial weakening area (26).

4. Flexible packaging according to claim 1, characterized in that the tensile strength of the film (14) in the weakening area (26) is from 1 N/15 mm to 20 N/15 mm.

5. Flexible packaging according to claim 4, characterized in that the tensile strength of the film (14) in the partial weakening area (26) is from 3 N/15 mm to 8 N/15 mm.

6. Flexible packaging according to claim 1, characterized in that the tensile strength of the film (14) out of the partial weakening area (26) is from 30 N/15 mm to 150 N/15 mm.

7. Flexible packaging according to claim 6, characterized in that the tensile strength of the film (14) out of the partial weakening area (26) is from 50 N/15 mm to 100 N/15 mm.

8. Flexible packaging according to claim 1, characterized in that the maximal dimension of the partial weakening area (26) is between 3 mm and 30 mm.

9. Flexible packaging according to claim 1, characterized in that the longitudinal edges of the film (14) are sealed along a longitudinal sealing seam (16) and the package comprises a cross sealing seam (18A, 18B) at each end, and in that a partial weakening area (26) is arranged between both ends of the package.

10. Flexible packaging according to claim 9, characterized in that the length of the packaging measured between both cross sealing seams (18A, 18B) is higher than two times the diameter or width of the package.

11. Flexible packaging according to claim 9, characterized in that the partial weakening area (26) extends out of the longitudinal and cross sealing seams (16, 18A, 18B).

12. Flexible packaging according to claim 1, characterized in that the package includes a generally flat main face (22) and the partial weakening area (26) extends only over the generally flat main face (22) of the package.

13. Flexible packaging according to claim 1, characterized in that the film (14) has, in the partial weakening area (26), at least one mechanical weakening treatment on at least one layer of the film.

14. Flexible packaging according to claim 13, characterized in that said mechanical weakening treatment comprises a microporous weakening.

15. Flexible packaging according to claim 13, characterized in that said mechanical weakening treatment comprises partially cutting or puncturing of at least one layer of the film (14) with the aid of a matrix of blades in the weakening area (26).

16. Flexible packaging according to claim 1, characterized in that the film (14) has, in the weakening area (26), a weakening treatment by high-energy radiation along at least one layer of the film.

17. Flexible packaging according to claim 1, characterized in that the film (14) comprises at least two laminated layers, the first layer having undergone mechanical weakening treatment in the weakening area (26), the second layer having undergone weakening treatment by means of high-energy radiation in the weakening area (26).

18. Flexible packaging according to claim 1, characterized in that the film (14) is a film or complex in which the combination of layers is selected from the group consisting of polyester (PET)/polyethylene (PE), polyamide (OPA)/polyethylene (PE), polypropylene (OPP)/polyethylene (PE),
polyester (PET)/polypropylene (PP), polyamide (OPA)/
polypropylene (PP), polyamide (OPA)/polypropylene
(PP), polyester (PET)/polyester (PETG), polyamide (OPA)/
polyester (PETG), polypropylene (OPP)/polyester (PETG),
Paper/polyester (PET), Paper/polyamide (OPA), Paper/
polypropylene (OPP), polyester (PET)/polypropylene
(PP), polyester (PET)/polyester (PETG), polyester (PET)/
polyamide (OPA), aluminium/polyester (PET), aluminium/
polypropylene (OPP), aluminium/polyamide (OPA), poly-
esther (PET)/aluminium/polypropylene (PP), polyester
(PET)/aluminium/polyethylene (PE), polyester (PET)/alu-
mium/polyester (PET), polyamide (OPA)/aluminium/
polypropylene (PP), polyamide (OPA)/aluminium/polyeth-
ylene (PE), polypropylene (OPP)/aluminium/polyethylene
(PE), polypropylene (OPP)/aluminium/polypropylene
(PP), polypropylene (OPP)/aluminium/polyethylene (PE),
polyester (PET)/polyamide (OPA)/polypropylene (PP),
polyester (PET)/polyamide (OPA)/polyethylene (PE),
polyester (PET)/polypropylene (OPP)/polypropylene (PP),
polyester (PET)/polypropylene (OPP)/polyethylene (PE),
polyester (PET)/polypropylene (OPP)/polyethylene (PP),
polyester (PET)/polypropylene (OPP)/polyethylene
(PE), polypropylene (OPP)/polyethylene (PP), polyamide
(PP)/polyethylene (PE), polyamide (OPA)/polyethylene
(PE), polyamide (OPA)/polypropylene (OPP), polyamide
(PP)/polyethylene. The packaging is characterized by the
enclosure of a drug in the space of the packaging.

19. Flexible packaging according to claim 17, charac-
terized in that the film (14) is made of an aluminium
layer having a thickness between 6 µm and 45 µm and an
oriented polymer layer, e.g. PET, OPP, OPA having a thickness
between 3 µm and 36 µm.

20. Flexible packaging according to claim 1, charac-
terized in that a drug is enclosed in the space of the packaging.