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(54) **PORTION PACKAGE AND SEMI-FLUID PRODUCT**

PORTIONSPACKUNG UND HALBFLÜSSIGES PRODUKT

EMBALLAGE UNITAIRE ET PRODUIT SEMI-FLUIDE

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Description

[0001] The present invention relates to a portion package, in particular for a semi-fluid product such as a jelly, gel or paste, comprising a disposable tub-like container with a base and a wall which extends from said base to an upper edge, wherein the wall can be compressed over at least a part of an height thereof, and wherein the wall and the base bound a product space which extends to said upper edge. The invention also relates to such a package holding a semi-fluid product comprising one or more active constituents in a predetermined mutual ratio.

[0002] A portion package of the type described in the preamble is known from European patent application EP 0 880 455 of applicant. The portion package described therein comprises a tub-like container of a suitable plastic or aluminium with a standing wall which bounds a product space. A concertina structure is arranged in the wall whereby the container as a whole is compressible in a height direction. Formed on an upper edge of the standing wall is a pouring spout which, like the other part of the top side of the container, is covered with an aluminium foil which is adhered to the upper edge around the product space. In order to release the product from the package, the foil is pulled away at the position of the pouring spout and the normally fluid content is poured out via the pouring spout while the wall is compressed.

[0003] Although the known portion package is a breakthrough in respect of ease of use in the case of relatively thin fluid products such as coffee cream and syrup, this package with a relatively narrow pouring spout has been found to be less practical for semi-fluid products such as a gel, jelly or paste, which will not of themselves run out of the package, or hardly so. A semi-fluid state or processing of products nevertheless produces concrete advantages, and semi-fluid products therefore merit a portion package adapted thereto.

[0004] The present invention has for its object, among others, to provide a portion package of the type stated in the preamble which is particularly also suitable for a semi-fluid product.

[0005] In order to achieve the intended object, a portion package of the type indicated in the opening paragraph is **characterized in that** the upper edge comprises at least a first and a second outward directed lateral extension on either side of the product space so as to provide at least two opposite gripping surfaces, and in that the product space is closed by a foil which adheres to said upper edge, particularly comprising an aluminium foil or an optionally metalized plastic foil. Use is thus made of a compressible tub-like container which has a gripping surface on opposite sides for receiving thereon the fingers of the user who is then able to whip the content out of the product space in relatively simple manner by means of a pressure exerted on the base with the thumbs. In addition to support, the lateral extensions here also provide sufficient space for the fingers to be able to release the product from the package hygienically and with-

out contact.

[0006] The container can be per se closed or sealed in different ways to protect the content of the package from premature deterioration or contamination. According to the invention, however, the container is closed by a foil which adheres to the upper edge around the product space, and which particularly comprises an aluminium foil or an optionally metallized plastic foil. Such a foil seal allows of seamless and full integration into a process for manufacturing and filling the portion package.

[0007] The upper edge only has to provide the gripping surface at locations lying opposite each other relative to the product space to enable simple emptying of the package. A preferred embodiment of the portion package therefore has the feature according to the invention that the lateral extensions extend further outward than an adjacent part of the upper edge. Extra material is mainly used here only in the intended first and second gripping surface for a lateral extension of the upper edge, and this material is otherwise saved. Not only does this save raw material costs, a more compact whole is thus also obtained which requires less space. In a further particular embodiment thereof, a portion package according to the invention has the feature that the extensions comprise local gripping lips which extend integrally from the upper edge. The gripping lips are a purely local extension of the upper edge, but nevertheless provide a sufficient gripping surface for practical handling of the portion package.

[0008] It is noted that it is known per se from US patent application USP 2005/0127073 to provide a collapsible container with such laterally extending flanges at opposite sides of the rim of the container to be engaged by the fingers of the user. This document, however, does not describe a disposable portion package suitable for a semi-fluid product and proposes no solution whatsoever to the problem of emptying such a portion package filled with such a semi-fluid product. Instead, this known collapsible container is intended to be reused for storage of both food items and non-food items. To enable relatively simple opening of a filled portion package, a particular embodiment of the portion package according to the invention has the feature that the foil extends with a tab-like end over at least one of the first and second lateral extensions of the upper edge, and that the tab-like end of the foil is free of the lateral extension. Because the tab-like end is free of the extension, i.e. is not adhered thereto as it is around the product space, the foil can be readily grasped thereon and subsequently pulled loose from the upper edge.

[0009] A further particular embodiment of the portion package according to the invention has the feature that the foil extends with a tab-like end over at least one of the first and second lateral extensions of the upper edge and is adhered thereto, and that a break zone is arranged in the lateral extension and extends between a first and a second lateral side thereof. The foil is herein adhered over the whole surface to the upper edge of the container. The extension of the upper edge however comprises a

break zone which can be broken off a remaining part thereof relatively easily through bending. This remaining part still provides sufficient gripping surface for removal of the product from the container, while the part which is broken off provides a handgrip on which and with which the foil can be pulled off.

[0010] The wall of the container can be flexible and thereby compressible, although a particular embodiment of the portion package according to the invention has the feature that the wall of the container comprises over a part of its height a concertina structure, of which fold lines run at least substantially parallel to the upper edge. By thus arranging a concertina structure in the wall a controlled compressibility can be realized, even if the material of the wall is relatively stiff per se. This increases the possible choices in respect of suitable materials for the container, which must in some cases also meet other requirements such as a sufficient gas and/or light-tightness. A further particular embodiment of the portion package according to the invention has in this respect the feature that the container is formed integrally from a suitable plastic by thermo-forming, in particular by creating a vacuum, and more particularly that the plastic comprises an optionally multilayer foil of one or more plastics from a group of polyethylene, polypropylene, polystyrene and polyester, such as in particular polyethylene terephthalate (PET).

[0011] In a further aspect of the invention it is the object to provide a portion package from which not only a fluid or semi-fluid product easily evacuates but which itself also releases easily from a mould. For this purpose a portion package of the type stated in the preamble has the feature according to the invention that the wall widens over at least a part of the height thereof in a direction from the base to the upper edge. The widening progression of the wall, and thereby of the product space, facilitates a simple evacuation of a product received therein, particularly in the case of a semi-fluid product wherein a mutual adhesion with the wall is limited to a minimum, as well as a problem-free release of the package itself from a mould with which the package has been formed.

[0012] In a particular embodiment the portion package herein has the feature according to the invention that the wall widens stepwise over at least the part of the height in the direction from the base to the upper edge. Such a stepwise progression enhances the above described release of the package from a mould, but moreover provides a particularly attractive appearance. In a further particular embodiment the portion package according to the invention is herein **characterized in that** wall parts extending substantially in the direction from the base to the upper edge are alternated by wall parts which are oriented substantially transversely thereof.

[0013] A further enhancement of the release from a mould is achieved with a further particular embodiment of the portion pack according to the invention, which is characterized for this purpose in that wall parts extending substantially in the direction from the base to the upper

edge are alternated by wall parts which form an acute angle therewith.

[0014] Owing to the present invention it is possible to package a fluid, and in particular also a semi-fluid product in a portion package in a particularly efficient and relatively inexpensive manner without losing practical convenience of use and while remaining capable of industrial application. A further embodiment of the portion package according to the invention is **characterized in that** it contains a semi-fluid product of which the active constituents are processed in a predetermined dosage at least substantially homogeneously into a jelly, gel or paste to form an at least practically form-retaining body.

[0015] The homogeneous processing of the active constituents into a form-retaining jelly results in a particularly attractive product form. The semi-fluid form herein ensures a rapid and homogenous distribution of the active constituents in addition to an optimal moisture regulation therein, which improves the effect. With a view hereto a preferred embodiment of the semi-fluid product according to the invention has the feature that the jelly, gel or paste is soluble in water, optionally at increased temperature.

[0016] The invention will now be further elucidated on the basis of a number of exemplary embodiments and an accompanying drawing. In the drawing:

figures 1A-1C show a first exemplary embodiment of a portion package according to the invention in respectively top, side and perspective view;

figure 2 shows a portion package and a semi-fluid product according to the invention during use;

figure 3 shows successively a top view and perspective view of a second exemplary embodiment of a portion package according to the invention;

figure 4 shows successively a top view and perspective view of a third exemplary embodiment of a portion package according to the invention;

figure 5 shows successively a top view and perspective view of a fourth exemplary embodiment of a portion package according to the invention;

figure 6 shows successively a top view and perspective view of a fifth exemplary embodiment of a portion package according to the invention;

figure 7 shows successively a top view and perspective view of a sixth exemplary embodiment of a portion package according to the invention;

figure 8 shows successively a top view and perspective view of a seventh exemplary embodiment of a portion package according to the invention;

figures 9A-C show a side view of a number of embodiment variants of the above stated exemplary embodiments of a portion package according to the invention; and

figures 10A-C show respectively a front and side view of a number of embodiment variants of a portion package according to a further aspect of the invention in successive states.

[0017] The figures are otherwise purely schematic and not drawn to scale. For the sake of clarity some dimensions in particular are exaggerated to a greater or lesser extent. Corresponding parts are designated in the figures with the same reference numeral.

[0018] Figures 1A-1C show an exemplary embodiment of a portion package for a gelatinous product according to the invention. The package comprises a tub-like container 1 which is formed integrally from a suitable, optionally multilayer plastic foil by deep-drawing or vacuum-forming or other form of thermo-forming. In this case use is made of polyethylene terephthalate (PET) as a basic material for the container, but polyethylene, polypropylene, polystyrene and other polyesters are also materials which can be used.

[0019] Container 1 comprises a base 2 from which extends a standing wall 3 with an at least almost flat upper edge 4. Arranged in wall 3 is a concertina structure, see figure 1B, with fold lines 5 which run parallel to the upper edge. Wall 3 can hereby be compressed in controlled manner in height direction to enable a content of the container to be forced easily therefrom at a later time. Base 2 and wall 3 bound a product space 6 intended for filling with a gelatinous product. For this purpose product space 6 is wholly open inside upper edge 4 but hermetically covered with a foil 7, which is adhered all round product space 6 on upper edge 4. In this example a metallized plastic foil is used for the foil, although a single-layer metal foil or plastic foil are also suitable for this purpose. Figure 1A shows the container successively in a closed and an open or opened state, while figure 1C shows a perspective view of the finished product in a closed and filled state.

[0020] In order to enable release of the content of the container therefrom if desired, upper edge 4 comprises a first extension 11 and a second extension 12 on either side of product space 6 which are directed outward and lie directly opposite each other. These are parts which extend integrally from upper edge 4 and thus require no extra manufacturing step. In order to save raw material and space, the extension is provided only locally in the sense that it extends further outward than an adjacent part 13 of upper edge 4. The extensions thus form local gripping lips or flaps 11,12 by which the package can be grasped so as to provide a gripping surface during removal of the content. This is shown schematically in figure 2.

[0021] Once foil 7 has been removed, the package is taken hold of in the manner shown in figure 2 and a light pressure is exerted on base 2 with the thumbs. Located in the product space in this example is a semi-fluid product according to the invention which in this case comprises a measured portion quantity of sauce powder in a form-retaining jelly. Use is made in this example of a sauce mixture of active constituents in a predetermined mutual ratio, which mixture has been processed in a jelly soluble in hot water into a form-retaining body 20 which comes integrally out of the package. Wall 3 of the container widens slightly from base 2 toward upper edge 4, as can be seen in figure 1B, which enhances release of the product from the package.

[0022] The jelly then dissolves exceptionally quickly and homogeneously in a cup 30 of hot water into a tasty sauce which can be used immediately. Instead of being used for a food product such as a sauce, the semi-fluid product according to the invention is also suitable for processing of other types of active constituents in a form-retaining gel, jelly or paste body, such as for instance pharmaceuticals and cleaning agents. Owing to the cohesive structure of body 20, no product residues are here left in the packaging, or hardly any, which results in an increased efficiency and results in a reduced environmental impact in the case of relatively aggressive or toxic products.

[0023] In order to facilitate removal of foil 7, the foil extends over gripping lips 11,12 and the foil is adhered thereto over the whole surface. Arranged in at least one of lips 11,12 is a break zone 14, see figure 1A, which extends over a full length between two lateral sides 15,16. By bending and breaking off the relevant lip 11 along the break zone a tab-like end 17 of foil 7 can be gripped by the broken part of lip 11 and then removed from upper edge 4 therewith. Use can optionally be made of a foil which only adheres to the lip as far as such a tab-like end 17, wherein outer end 17 itself is thus free and can therefore serve as handgrip for removing the foil as a whole.

[0024] Figures 3-5 show respectively a second, third and fourth exemplary embodiment of a portion package according to the invention, in each case in a closed and open top view as well as a perspective view. These exemplary embodiments generally correspond with that of figures 1A-1C in the sense that the materials and construction used are at least similar, apart from the specific form of the lateral extension 11,12 on upper edge 4 of the container. These are however in all cases locally formed lips or ears providing a gripping surface as in the first exemplary embodiment.

[0025] 4 of the container. These are however in all cases locally formed lips or ears providing a gripping surface as in the first exemplary embodiment.

[0026] Figures 6-8 show respectively a fifth, sixth and seventh exemplary embodiment of a portion package according to the invention, in each case in a closed and open top view as well as a perspective view. These exemplary embodiments also generally correspond with that of figure 1A-1C in the sense that the materials and construction used are at least similar, apart from the specific form of the lateral extension 11,12 on upper edge 4

of the container. In contrast to the foregoing exemplary embodiments, the extension of upper edge 4 is more clearly present in these exemplary embodiments, whereby the upper surface of the package has a more uniform progression.

[0027] Figures 9A-9C show a number of embodiment variants which can be applied in the above described exemplary embodiments, wherein the concertina structure of wall 3 is varied in addition to a variation in height h , length l , depth d and release angle α of wall 3 relative to base 2. This release angle is expressed in a slightly widening progression of wall 3 over at least a part of its height h , and enhances release of the package itself from a mould in which the package has been formed, in addition to a facilitated evacuation of a product received in the portion package.

[0028] In addition to having a continuous widening as in the embodiments of figures 9A-C, the wall of the container can also widen in stepwise manner over at least a part of its height. This is the case in the exemplary embodiments of a compressible portion package as shown in figures 10A-10C. The figures show the package in all cases in a front and side view in the original state (top) and in a partly compressed state (bottom).

[0029] In these cases the package also comprises a tub-like container 1 with a base 2 from which a wall 3 extends all round with an at least practically flat upper edge 4. Wall 3 is profiled and can thereby be compressed in controlled manner in order to enhance evacuation of the content of the packaging therefrom. A product space 6 enclosed by wall 3 is closed by means of a foil 7 of aluminium or an optionally metallized plastic. Foil 7 is fused with upper edge 4 for this purpose. A pouring spout or the like can optionally be formed on upper edge 4 in order to enhance controlled pouring of a fluid content, which pouring spout is in that case likewise closed by means of the foil and left clear when foil 7 is torn away.

[0030] In these embodiments the wall 3 widens in stepwise manner, roughly according to a release angle α (see figure 10C), in a direction from base 2 to upper edge 4 of the container, and herein comprises wall parts 31 which extend substantially in the wall direction and which are alternated by wall parts 32 which are oriented either at least almost transversely thereof and/or parallel to base 2, see figure 10A, or form an angle P therewith, see figures 10B and 10C. Particularly in the latter case an exceptionally good release from a mould can be achieved, in addition to an excellent compressibility of the package as a whole, as is shown in the figures.

[0031] Although the invention has been further elucidated with reference to only a few exemplary embodiments, it will be apparent that the invention is by no means limited thereto. On the contrary, many other variations and embodiments are possible within the scope of the invention as defined by the appended claims, both in respect of the portion package and of the semi-fluid product for advantageously packaging therein.

Claims

1. Portion package, in particular for a semi-fluid product such as a jelly, gel or paste, comprising a disposable tub-like container (1) with a base (2) and a wall (3) which extends from said base to an upper edge (4), wherein the wall can be compressed over at least a part of an height thereof, wherein the wall and the base bound a product space (6) which extends to said upper edge, and wherein the product space is closed with a foil (7) which adheres to said upper edge, said foil comprising an aluminium foil or an optionally metallized plastic foil, **characterized in that** the upper edge comprises at least a first outward directed lateral extension (11) and a second outward directed lateral extension (12) on either side of the product space so as to provide at least two opposite gripping surfaces.
2. Portion package as claimed in claim 1, **characterized in that** the lateral extensions extend further outward than an adjacent part (13) of the upper edge.
3. Portion package as claimed in claim 2, **characterized in that** the extensions comprise local gripping lips which extend integrally from the upper edge.
4. Portion package as claimed in one or more of the preceding claims, **characterized in that** the foil extends with a tab-like end (17) over at least one of the first and second lateral extensions of the upper edge, and that the tab-like end of the foil is free of the lateral extension.
5. Portion package as claimed in one or more of the preceding claims, **characterized in that** the foil extends with a tab-like end over at least one of the first and second lateral extensions of the upper edge and is adhered thereto, and that a break zone (14) is arranged in the lateral extension and extends between a first and a second lateral side (15,16) thereof.
6. Portion package as claimed in one or more of the preceding claims, **characterized in that** the wall (3) of the container comprises over a part of its height a concertina structure, of which fold lines (5) run at least substantially parallel to the upper edge (4).
7. Portion package as claimed in one or more of the preceding claims, **characterized in that** the container is formed integrally from a suitable plastic by thermo-forming, in particular by creating a vacuum.
8. Portion package as claimed in claim 7, **characterized in that** the plastic comprises an optionally multilayer foil (7) of one or more plastics from a group of polyethylene, polypropylene, polystyrene and pol-

yester, such as in particular polyethylene terephthalate (PET).

9. Portion package as claimed in one or more of the preceding claims, **characterized in that** the wall (3) widens over at least a part of the height thereof in a direction from the base (2) to the upper edge (4). 5
10. Portion package as claimed in claim 9, **characterized in that** the wall (3) widens stepwise over at least the part of the height in the direction from the base (2) to the upper edge (4). 10
11. Portion package as claimed in claim 10, **characterized in that** wall parts extending substantially in the direction from the base (2) to the upper edge (4) are alternated by wall parts which are oriented substantially transversely thereof. 15
12. Portion package as claimed in claim 10, **characterized in that** wall parts extending substantially in the direction from the base (2) to the upper edge (4) are alternated by wall parts which form an acute angle therewith. 20
13. Portion package as claimed in anyone of the preceding claims **characterized by** containing a semi-fluid product comprising one or more active constituents in a predetermined mutual ratio, in which the active constituents are processed in a predetermined dosage at least substantially homogeneously into a jelly, gel or paste to form an at least practically form-retaining body. 25
14. Portion package as claimed in claim 13, **characterized in that** the jelly, gel or paste is soluble in water, optionally at increased temperature. 30

Patentansprüche

1. Portionspackung, insbesondere für ein halbflüssiges Produkt wie z.B. ein Gelee, Gel oder eine Paste, mit einem wannenartigen Einwegbehälter (1) mit einer Basis (2) und einer Wand (3), die sich von der Basis zu einem oberen Rand (4) erstreckt, wobei die Wand in zumindest einem Teil ihrer Höhe stauchbar ist, wobei die Wand und die Basis einen Produktraum (6) einbinden, der sich zum oberen Rand erstreckt, und wobei der Produktraum mit einer Folie (7) geschlossen ist, die am oberen Rand anhaftet, wobei die Folie eine Aluminiumfolie oder eine wahlweise metallisierte Kunststoffolie aufweist, **dadurch gekennzeichnet, dass** der obere Rand zumindest eine erste nach außen gerichtete seitliche Erweiterung (11) und eine zweite nach außen gerichtete seitliche Erweiterung (12) an beiden Seiten des Produktraums aufweist, um zumindest zwei ge- 35

genüberliegende Greifflächen bereitzustellen.

2. Portionspackung nach Anspruch 1, **dadurch gekennzeichnet, dass** sich die seitlichen Erweiterungen weiter als ein benachbarter Teil (13) des oberen Randes nach außen erstrecken. 40
3. Portionspackung nach Anspruch 2, **dadurch gekennzeichnet, dass** die Erweiterungen lokale Griffrippen aufweisen, die sich einstückig vom oberen Rand aus erstrecken. 45
4. Portionspackung nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** sich die Folie mit einem laschenartigen Ende (17) über zumindest eine der ersten oder zweiten seitlichen Erweiterung des oberen Randes erstreckt, und dass das laschenartige Ende der Folie von der seitlichen Erweiterung frei ist. 50
5. Portionspackung nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** sich die Folie mit einem laschenartigen Ende über zumindest eine der ersten oder zweiten seitlichen Erweiterung des oberen Randes erstreckt und daran festgehalten ist, und dass in der seitlichen Erweiterung ein Bruchbereich (14) angeordnet ist, der sich zwischen einer ersten und einer zweiten seitlichen Seite (15, 16) davon erstreckt. 55
6. Portionspackung nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Wand (3) des Behälters auf einem Teil ihrer Höhe eine Faltstruktur aufweist, bei der Falzlinien (5) zumindest im Wesentlichen parallel zum oberen Rand (4) verlaufen. 60
7. Portionspackung nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Behälter einstückig aus einem geeigneten Kunststoff mittels Thermoformen, insbesondere mittels Erzeugen eines Vakuums, gebildet ist. 65
8. Portionspackung nach Anspruch 7, **dadurch gekennzeichnet, dass** der Kunststoff eine wahlweise mehrlagige Folie (7) eines Kunststoffs oder mehrerer Kunststoffe aus einer Gruppe von Polyethylen, Polypropylen, Polystyrol und Polyester, wie z.B. insbesondere Polyethylenterephthalat (PET), aufweist. 70
9. Portionspackung nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** sich die Wand (3) über zumindest einen Teil ihrer Höhe in eine Richtung von der Basis (2) zum oberen Rand (4) aufweitet. 75
10. Portionspackung nach Anspruch 9, **dadurch ge-** 80

kennzeichnet, dass sich die Wand (3) stufenweise über zumindest einen Teil ihrer Höhe in der Richtung von der Basis (2) zum oberen Rand (4) aufweitet.

11. Portionspackung nach Anspruch 10, **dadurch gekennzeichnet, dass** sich Wandteile im Wesentlichen in der Richtung von der Basis (2) zum oberen Rand (4) erstrecken und sich mit Wandteilen abwechseln, die im Wesentlichen quer dazu orientiert sind. 5
12. Portionspackung nach Anspruch 10, **dadurch gekennzeichnet, dass** sich Wandteile im Wesentlichen in der Richtung von der Basis (2) zum oberen Rand (4) erstrecken und sich mit Wandteilen abwechseln, die damit einen spitzen Winkel bilden. 10
13. Portionspackung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** ein halbflüssiges Produkt enthalten ist, das einen oder mehrere Aktivbestandteile in einem vorbestimmten Verhältnis zueinander aufweist, wobei die Aktivbestandteile in einer vorbestimmten Dosierung zumindest im Wesentlichen homogen zu einem Gelee, Gel oder einer Paste verarbeitet sind, um einen zumindest praktisch formbeständigen Körper zu bilden. 20
14. Portionspackung nach Anspruch 13, **dadurch gekennzeichnet, dass** das Gelee, Gel oder die Paste wasserlöslich ist, wahlweise bei erhöhter Temperatur. 25

Revendications

1. Emballage de portion, en particulier pour un produit semi-fluide tel qu'une gelée, du gel ou une pâte, comprenant un récipient en forme de tube jetable (1) avec une base (2) et une paroi (3) qui s'étend à partir de ladite base jusqu'à un bord supérieur (4), dans lequel la paroi peut être comprimée sur au moins une partie de sa hauteur, dans lequel la paroi et la base délimitent un espace de produit (6) qui s'étend jusqu'audit bord supérieur, et dans lequel l'espace de produit est fermé avec une feuille (7) qui adhère sur ledit bord supérieur, ladite feuille comprenant une feuille d'aluminium ou une feuille en plastique facultativement métallisée, **caractérisé en ce que** le bord supérieur comprend au moins une première extension latérale (11) dirigée vers l'extérieur et une deuxième extension latérale (12) dirigée vers l'extérieur, de chaque côté de l'espace de produit afin de fournir au moins deux surfaces de préhension opposées. 30
2. Emballage de portion selon la revendication 1, **caractérisé en ce que** les extensions latérales s'étendent davantage vers l'extérieur qu'une partie (13) 35

adjacente du bord supérieur.

3. Emballage de portion selon la revendication 2, **caractérisé en ce que** les extensions comprennent des lèvres de préhension locales qui s'étendent de manière solidaire à partir du bord supérieur. 40
4. Emballage de portion selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** la feuille s'étend avec une extrémité en forme de languette (17) sur au moins l'une des première et deuxième extensions latérales du bord supérieur, et **en ce que** l'extrémité en forme de languette de la feuille est dépourvue de l'extension latérale. 45
5. Emballage de portion selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** la feuille s'étend avec une extrémité en forme de languette sur au moins l'une des première et deuxième extensions latérales du bord supérieur et y est fixée, et **en ce que** une zone de rupture (14) est agencée dans l'extension latérale et s'étend entre son premier côté latéral et son deuxième côté latéral (15, 16). 50
6. Emballage de portion selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** la paroi (3) du récipient comprend sur une partie de sa hauteur, une structure d'accordéon dont les lignes de pliage (5) s'étendent au moins de manière sensiblement parallèle par rapport au bord supérieur (4). 55
7. Emballage de portion selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** le récipient est formé de manière solidaire à partir d'un plastique approprié par thermoformage, en particulier en créant un vide. 60
8. Emballage de portion selon la revendication 7, **caractérisé en ce que** le plastique comprend une feuille facultativement à plusieurs couches (7) d'un ou de plusieurs plastiques choisis dans le groupe du polyéthylène, du polypropylène, du polystyrène et du polyester, comme en particulier le polyéthylène téréphtalate (PET). 65
9. Emballage de portion selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** la paroi (3) s'élargit sur au moins une partie de sa hauteur dans une direction allant de la base (2) jusqu'au bord supérieur (4). 70
10. Emballage de portion selon la revendication 9, **caractérisé en ce que** la paroi (3) s'élargit progressivement sur au moins une partie de la hauteur dans la direction allant de la base (2) jusqu'au bord supérieur (4). 75

11. Emballage de portion selon la revendication 10, **caractérisé en ce que** les parties de paroi s'étendant sensiblement dans la direction allant de la base (2) jusqu'au bord supérieur (4) sont alternées par des parties de paroi qui sont orientées de manière sensiblement transversale par rapport à ces dernières. 5
12. Emballage de portion selon la revendication 10, **caractérisé en ce que** les parties de paroi s'étendant sensiblement dans la direction allant de la base (2) jusqu'au bord supérieur (4) sont alternées par des parties de paroi qui forment un angle aigu avec ces dernières. 10
13. Emballage de portion selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'il** contient un produit semi-fluide comprenant un ou plusieurs constituants actifs dans un rapport mutuel prédéterminé, dans lequel les constituants actifs sont traités avec un dosage prédéterminé de manière au moins sensiblement homogène, en gelée, en gel ou en pâte afin de former un corps au moins pratiquement à mémoire de forme. 15 20
14. Emballage de portion selon la revendication 13, **caractérisé en ce que** la gelée, le gel ou la pâte est soluble dans l'eau, facultativement à la température élevée. 25

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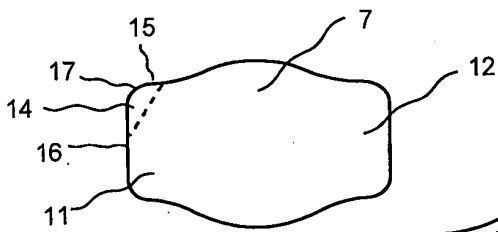


Fig. 1A

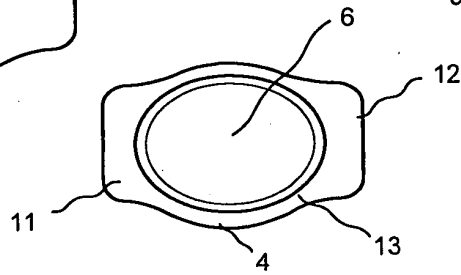


Fig. 1B

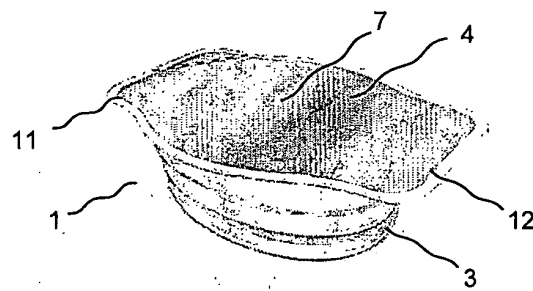
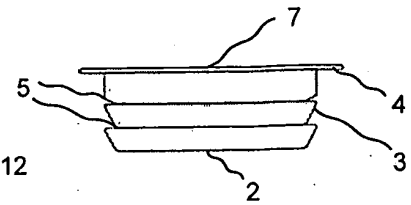


Fig. 1C

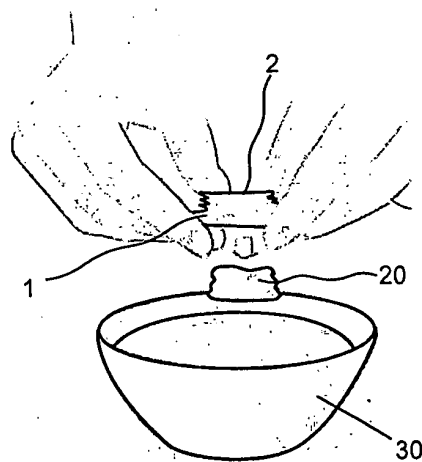


Fig. 2

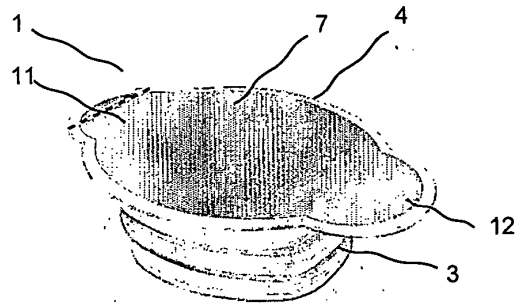
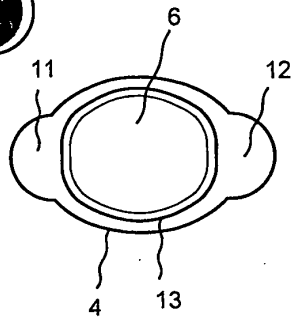
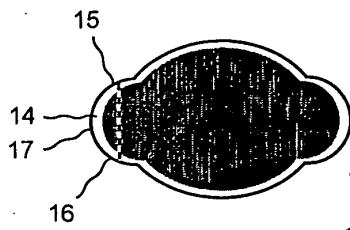


Fig.3

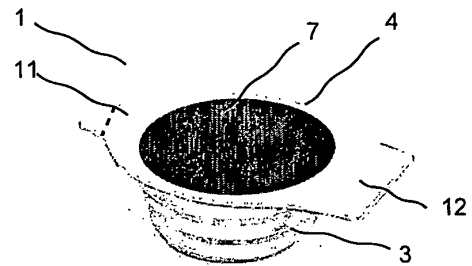
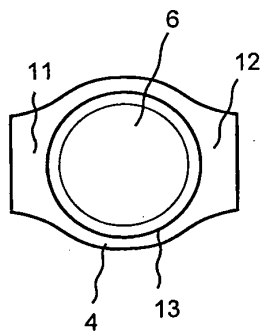
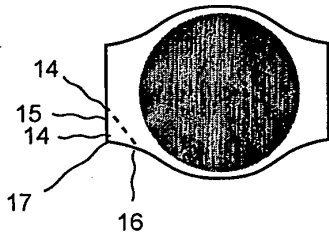


Fig.4

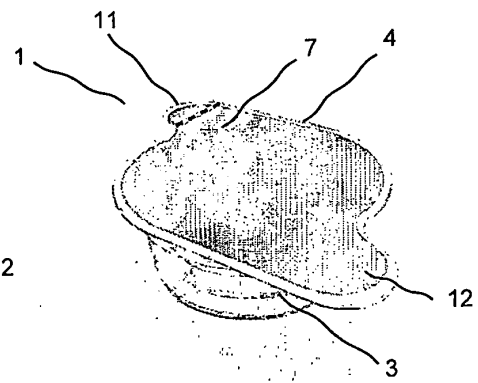
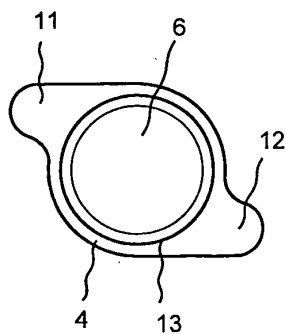
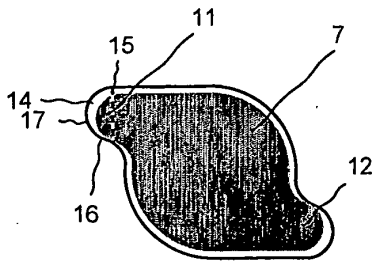


Fig.5

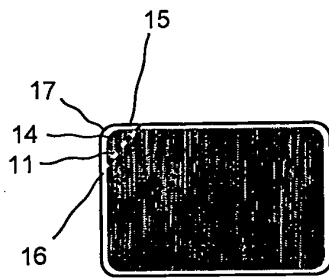


Fig. 6

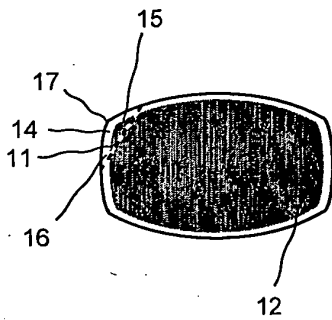
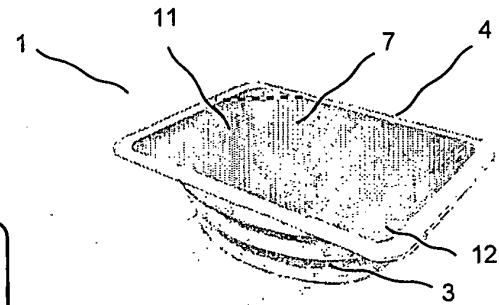
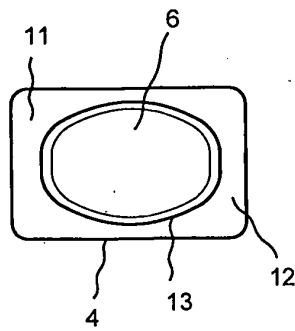


Fig. 7

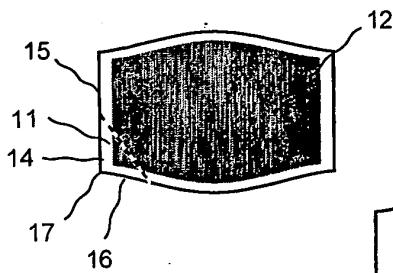
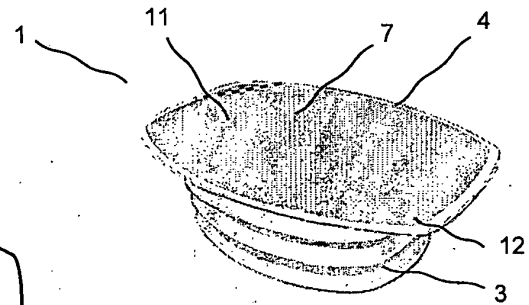
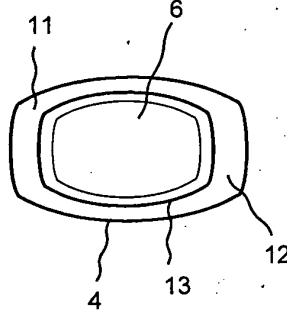
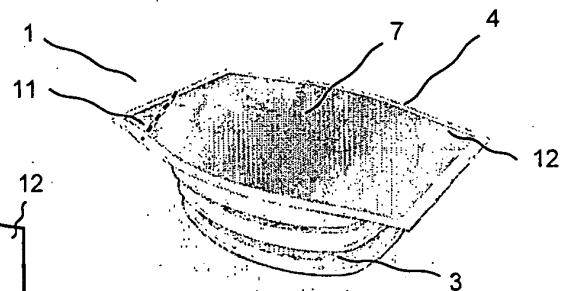
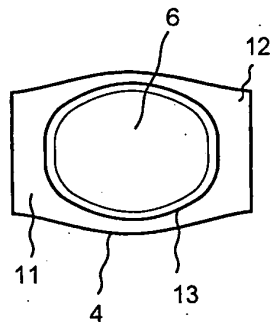


Fig. 8



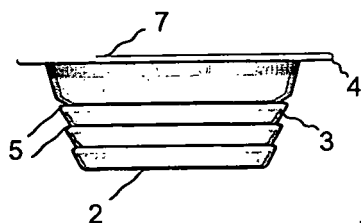


Fig. 9A

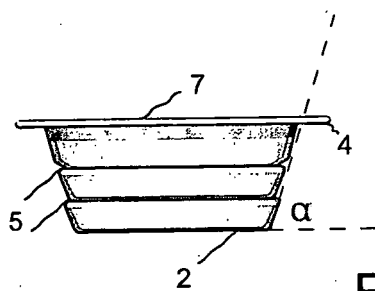
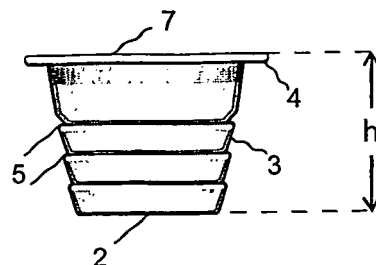


Fig. 9B

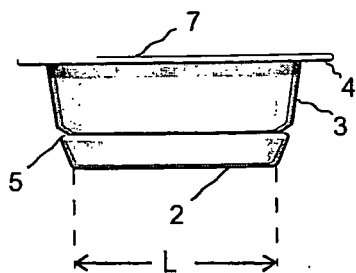
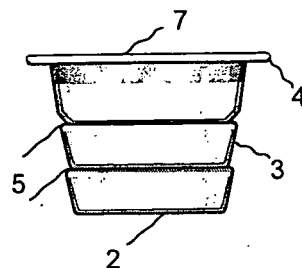
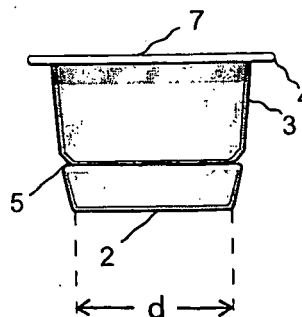
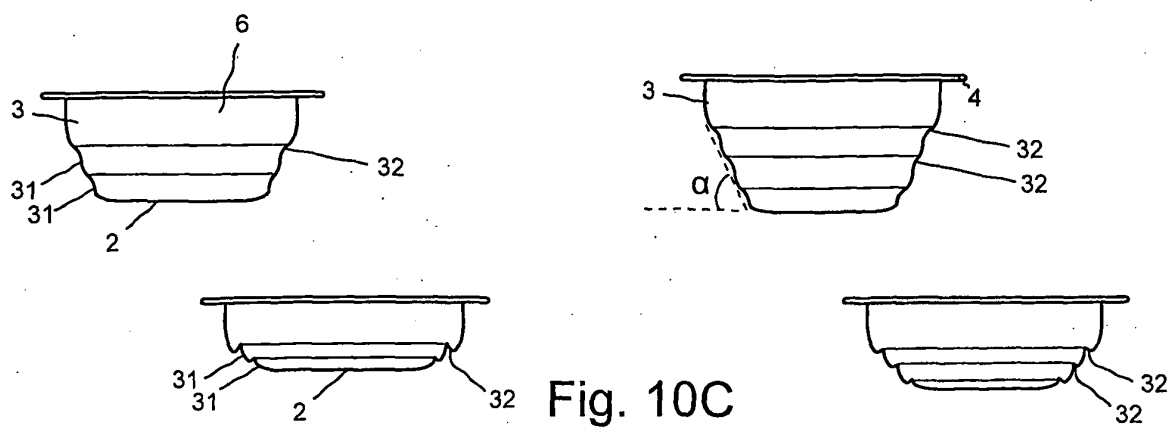
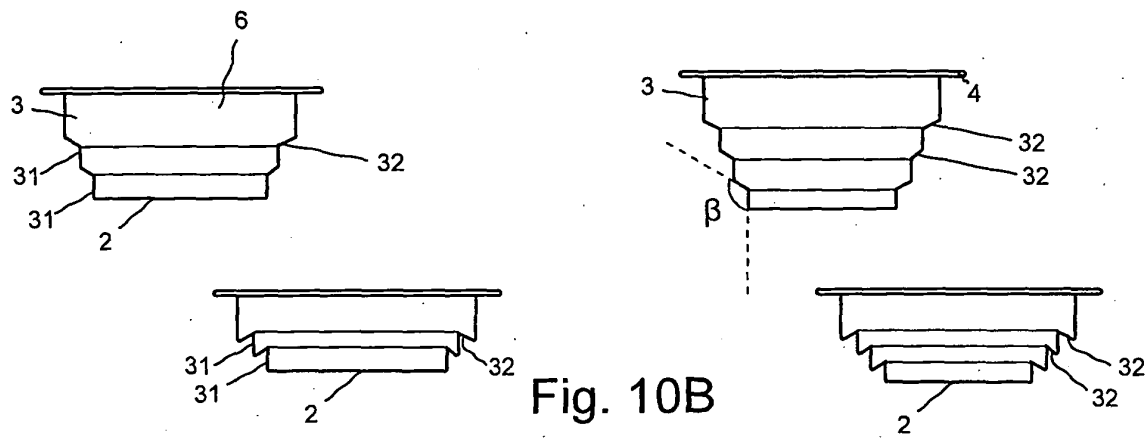
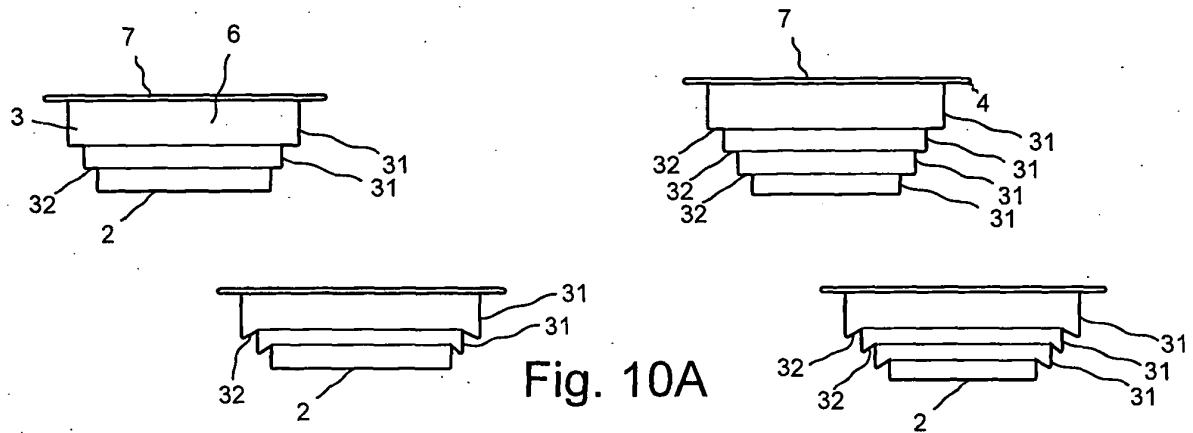


Fig. 9C





REFERENCES CITED IN THE DESCRIPTION

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