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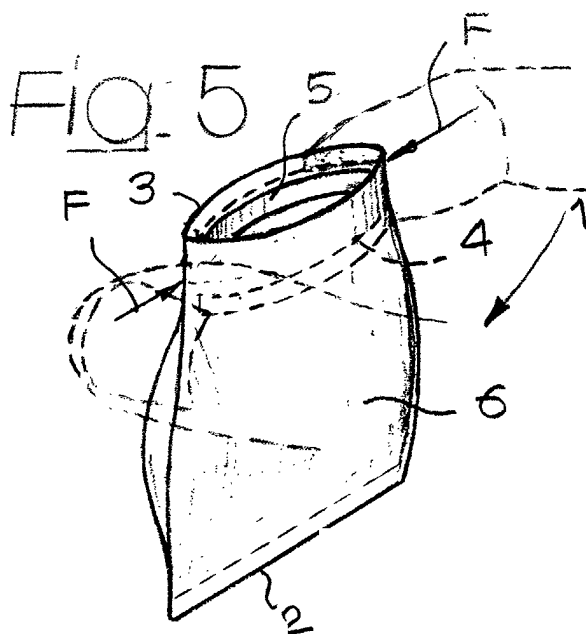
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(54) **Single-dose packaging for foodstuff in granules, powder and the like, particularly for sugar**

(57) A single-dose pack for foodstuff products in granular form, powder form, semi-dense or liquid form, particularly for sugar, comprising a sealed flexible bag

(1) having an openable side (3), which is pre-arranged for being opened with two fingers of a single hand of the user.



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Description

[0001] The present invention relates to single-dose packs for foodstuff products in granular form, in powder form, in semi-dense or even in liquid form. More in particular, the invention regards a single-dose pack for example for sugar, of the type normally available in bars and similar establishments provided along with hot beverages, such as coffee, tea and cappuccino.

[0002] Traditionally single-dose packs of the above sort consist of a sealed flexible bag having an openable side. The bag, whether it is made of paper or of plastic material, in order to be opened on its openable side, requires the user to exert a tearing action. The said action is awkward and inconvenient, in that normally the user has to use both of his hands.

[0003] With a view to overcoming the above-mentioned drawback, the subject of the invention is a single-dose pack of the type defined at the beginning of this description, essentially characterized in that the aforesaid openable side is pre-arranged for being opened with two fingers of a single hand of the user.

[0004] In a first embodiment of the invention, there are applied to the walls of the bag, in a position parallel and immediately underneath the aforesaid openable side, two bands which can be elastically devaricated following upon the application of a peak load at the respective ends by said two fingers of the user, so as to bring about tear opening of the aforesaid openable side.

[0005] In a second embodiment of the invention, for closing the aforesaid openable side there is provided an adhesive band, which joins the walls of said bag, set parallel to and immediately underneath said openable side, and which has at least one face with low adhesiveness, which can be slidably peeled off from the respective wall of the bag by the action of said two fingers of the user.

[0006] Of course, also possible, in the context of the present invention, are further embodiments designed to achieve the same purpose and the same effects using the same innovative concept.

[0007] The invention will now be described in detail with reference to the attached drawings, which are provided purely by way of non-limiting example and in which:

- Figure 1 is a schematic side elevation of a single-dose pack according to the invention;
- Figure 2 is a perspective view of Figure 1;
- Figure 3 is a view similar to that of Figure 1, which exemplifies the mode of opening of the pack;
- Figure 4 is a longitudinal, cross-sectional view according to the line IV-IV of Figure 3;
- Figure 5 is a perspective view of Figure 3;
- Figure 6 is a partial, longitudinal, cross-sectional view at an enlarged scale, which illustrates a variant of the single-dose pack according to the invention, and

- Figures 7 and 8 are two schematic views which exemplify the mode of opening the bag according to the variant of Figure 6.

[0008] With initial reference to Figures 1 and 2, a single-dose pack for foodstuff products P (Figure 4) in granular form or in powder form (such as, for example, sugar, salt, pepper and the like), and also for liquid or semi-dense substances (mayonnaise, sauces, or the like), consists of a flexible bag 1 of a generally quadrangular shape, closed in a sealed way along its four sides. The bag may be made of any suitable material, for example of paper or of a thermoplastic material. In the latter case, sealing is performed, for example, by heat-sealing along the four sides of the bag, or else, in the case where the bag is made up of lengths of a continuous, tubular ribbon, by heat-sealing along its bottom side 2 and top side 3, or else using any other sealing technique.

[0009] The top side 3 is openable to enable the product P contained in the bag 1 to come out. The invention envisages that said opening can be performed simply with two fingers of one hand of the user, so as to leave his other hand free. In an embodiment of the invention (illustrated in Figures 1 to 5), this is obtained by the application of two flexible and elastic bands 4, 5 to the walls 6, 7 of the bag 1, in a position parallel and immediately underneath the openable side 3. The two bands 4, 5 can consist, for example, of thin strips or laminas of high-flexibility plastic material, fixed to the internal surfaces (or also to the external surfaces) of the walls 6, 7. The arrangement is such that, when a peak load is applied at the ends of the two bands or laminas 4, 5, to exert a pressure with two fingers (thumb and forefinger) of the user's hand in the directions indicated by the arrows F in Figures 3 and 5, the said laminas 4, 5 are deflected i.e., they warp, divaricating elastically, in the manner represented in Figures 4 and 5. To obtain this divarication the tear opening is produced on the top side 3 of the bag 1, and the product P contained therein can be poured out simply by turning the bag upside down using the same pair of fingers that brought about opening.

[0010] It is possible to achieve the same effect using, instead of the elastically divaricable bands 4, 5, equivalent systems such as the one represented in the variant of Figures 6 to 8. According to said variant, in which parts that are identical or similar to the ones already described are designated by the same reference numbers, the top side 3 of the bag 1 is sealed by an adhesive band 8, which joins the walls 6, 7 internally in a position parallel to and immediately underneath the top side 3.

[0011] The band 8 is conveniently a bi-adhesive band, with at least one face with low adhesiveness, which can be slidably peeled off from the respective wall 6, or else 7, by the action of the two fingers of the user's hand, as is illustrated in Figures 7 and 8. In practice, after inserting the side 3 of the bag 1 between the thumb and the forefinger, the relative sliding between the two fingers

produces ungluing of the band 8 from at least one of the walls 6, 7 of the bag 1 and the consequent at least partial opening of the side 3, so enabling the product P contained therein to come out.

[0012] Of course, the details of construction and embodiments may vary amply with respect to what is described and illustrated herein, without thereby departing from the scope of the present invention. Hence, even though the foregoing description refers to the two specific examples of embodiment represented in the attached drawings, a large number of alternative variants may be envisaged by a person skilled in the branch, all falling within the scope of the invention, provided that they are suitable for enabling opening of the pack simply with the use of two fingers of one hand of the user. For instance, opening may be performed at a vertex or edge of the pack, or else in an area corresponding to a window made on a face of the pack, or else by complete or partial separation of a marginal strip of the pack.

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Claims

1. Single-dose pack for foodstuff products (P) in granular form, in powder form, semi-dense or liquid form, particularly sugar, comprising a sealed flexible bag (1) having at least one openable side (3), **characterized in that** said openable side (3) is prearranged for being opened with two fingers of a single hand of the user.
2. The pack according to Claim 1, **characterized in that** applied to the walls (6, 7) of said bag are, in a position parallel to and immediately underneath said openable side (3), two bands (4, 5) which can be elastically devaricated following upon the application of a peak load (F) at the respective ends by said two fingers of the user, so as to cause tear opening of said openable side (3).
3. The pack according to Claim 1, **characterized in that** for closing said openable side (3) there is provided a bi-adhesive band (8) which joins the walls (6, 7) of said bag (1) in a position parallel to and immediately underneath said openable side (3) and has at least one face with low adhesiveness, which can be slidingly peeled off from the respective wall (6, 7) of the bag (1) by the action of said two fingers of the hand of the user.
4. The pack substantially as described and illustrated and for the purposes specified herein.

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