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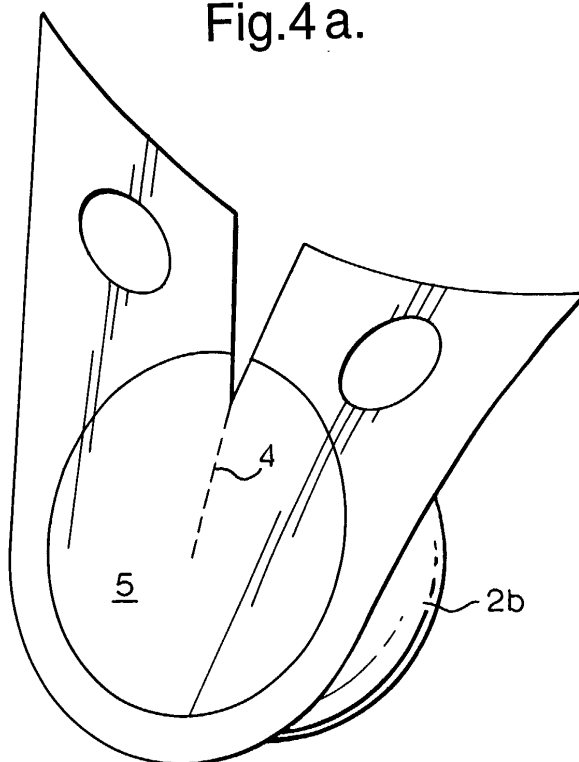
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(54) **Boil-in-bag pack for foodstuffs**

(57) The invention relates to a boil-in-bag pack for foodstuffs, comprising two boil-in-bag sheet blanks which lie one upon the other, are partially connected to one another and between which the contents are en-

closed, characterized in that two grip holes (3, 9) are provided in one end section and, when said grip holes are drawn apart from one another, the boil-in-bag pack can be opened, e.g. along a tear-open line (4) or along the seal in order to release the contents (5).

Fig.4 a.



EP 1 270 443 A2

Description

[0001] The invention relates to boil-in-bag packs for foodstuffs, in particular for dumplings.

[0002] Boil-in-bag technology is used for cooking industrially pre-prepared foodstuffs immersed in water and is frequently used for rice, deep-frozen products, ready meals and, in particular, for dumplings. Boil-in-bag sheets which are resistant to boiling water and can accommodate the contents have been specially developed for this purpose. The technology is suitable for simply heating up the contents, in which case the sheets may be water-tight, or for cooking the contents, in which case, if a reaction with the boiling water is necessary, for example for the swelling of rice, the sheets have to be water-permeable. For producing ready-to-eat dumplings, it is also possible to use boil-in-bag technology in order to turn an incohesive mass into a dumpling by a pressing operation if an increase in volume as a result of a swelling operation, with use being made of a boil-in-bag pack which is stable under expansion, builds up a pressure which subjects the mass to pressing and forming pressure.

[0003] A problem with all such boil-in-bag packs which has not been solved to a sufficient extent until now is posed by the removal of the boil-in-bag pack from the hot water and the opening of the hot boil-in-bag pack in order to release the contents. It is important for the user to be able to remove the boil-in-bag pack easily from the boiling water, and to open the pack, without burning his/her fingers.

[0004] This problem is solved according to the invention in that the contents are enclosed in the boil-in-bag pack, and two grip holes are provided in such a way that when they are drawn apart the boil-in-bag pack can be opened in order to release its contents.

[0005] In one embodiment this can be achieved according to an embodiment of the invention in that the contents are enclosed in the boil-in-bag pack and two grip holes are provided in one of the end sections and, when said grip holes are drawn apart from one another, the boil-in-bag pack can be opened along a tear-open line in order to release the contents.

[0006] In the case of a particularly preferred embodiment of the invention, the contents are enclosed eccentrically in the boil-in-bag pack and the grip holes are provided in the wider end section produced as a result.

[0007] The boil-in-bag pack is usually formed from two sheet blanks which lie one upon the other, are partially connected to one another and between which the contents are enclosed.

[0008] In a second embodiment, in case of the boil-in-bag is formed as in the above paragraph, the tear holes may also be arranged such that upon tearing, the bag opens in such a way that the two sheets are at least partially separated from each other, to release the content. To achieve this, both sheets will have a grip hole, facilitating tearing the sheets from each other. Preferably,

the tear holes are formed by one (preferably circular) perforation extending through both sheets. This overcomes the difficult "peeling apart" of the two layers as is now often needed.

[0009] The subject matter of the invention is thus a boil-in-bag pack for foodstuffs, in particular for use for dumplings, comprising two boil-in-bag sheet blanks which lie one upon the other, are partially connected to one another and between which the contents are enclosed, the contents preferably being enclosed eccentrically in the boil-in-bag pack, and two grip holes being provided in one of the end sections, in the wider end section in the case of eccentric positioning, and, for the first embodiment as described above, when said grip holes are drawn apart from one another, it being possible for the boil-in-bag pack to be opened along a tear-open line in order to release the contents. For the second embodiment as described above, when said grip holes are drawn apart from one another, it being possible for the boil-in-bag pack to be opened along the seal area of the two sheets or a tear-open line in order to release the contents.

[0010] This design has the advantages

- that, on account of the grip holes, the boil-in-bag pack can easily be removed from the boiling water, for example, using a fork or possibly even just using one's fingers,
- on account of the eccentric positioning of the contents, the boil-in-bag pack tends to position itself in the boiling water with the grip holes upwards, with the result that the contents are surrounded by the boiling water over the entire surface area, whereas the end section which is free of contents and contains the grip holes stands upright and usually even projects out of the boiling water, with the result that the grip holes can easily be gripped even using one's fingers,
- that simply by virtue of the grip holes being drawn apart from one another, for example using two forks or using one's fingers, the boil-in-bag pack can be opened, with only a very small amount of force being applied, along a tear-open line (or along the seal area of the two sheets) without the dumpling being adversely affected or pieces of dumpling being left behind in the bag,
- the grip holes making it possible for the boil-in-bag pack to be gripped securely without any risk of slipping.

[0011] The boil-in-bag pack is expediently formed from two sheets which are located one upon the other and are partially sealed to one another or connected to one another in some other way. An expedient configuration provides a bottom sheet in which mostly U-shape

spaces for accommodating the contents are formed by thermoforming, the bottom sheet then being covered by a flat cover sheet.

[0012] It may be expedient to select sheets which retain a certain level of rigidity even at boiling temperature, in order to make full use of the advantages of the invention.

[0013] Production and trade of the boil-in-bag packs may be made easier by a plurality of boil-in-bag packs being combined to form a type of boil-in-bag-pack strip in which a plurality of boil-in-bag packs are arranged one behind the other with continuous sheets. Separating lines in the sheets make it possible for the user to separate the boil-in-bag packs before they are placed in the boiling water. A tear-open line may be formed by a weakening line or perforations in the cover sheet or in both sheets. In case of the intention of opening along the seal area of the sheets (i.e. opening by partly separating the two sheets) the seal area may feature areas with weaker or no seal to facilitate opening along the seal area.

[0014] The cover sheet and the bottom sheet are at least partially connected to one another, expediently by sealing. A sealing seam is preferably provided at least at the borders of the boil-in-bag pack and around the space intended for the contents.

[0015] The size of the boil-in-bag pack may be adapted for the respective purpose. An expedient boil-in-bag pack for use for dumplings has a length of approximately 10 cm and a width of approximately 7 cm. The spherical opening for the contents has a diameter of expediently 5-6 cm, with the result that approximately 2.5-4 cm remain for the wider end section. The grip holes may have a diameter of approximately 2-2.5 cm. The U-shape space in the bottom sheet for accommodating a dumpling may have a depth of approximately 5 cm, with the result that the dumpling possibly projects somewhat beyond the surface which is covered by the cover sheet, so that, rather than resting in a totally planar manner thereon, the cover sheet may bulge somewhat.

[0016] The grip holes may be in the form of true perforations in which part of the sheet matter is taken or left out, thus providing a hole, or there may be part of a perforation such that the sheet material is still present, but such that e.g. fingers or a fork can protrude such that the holes are formed, by pushing-away the sheet material.

[0017] The invention will be explained in more detail with reference to the following drawings.

[0018] Figure 1a shows a side view of a preferred boil-in-bag pack according to the invention. Rather than having to be precisely rectangular, the sheet sections may be designed to be, for example, concave and convex at the top and bottom, respectively. The contents (5) are arranged eccentrically, and this results in a wider top end section in which the grip holes (3) are arranged. The tear-open line (4) is located between the grip holes, not necessarily in the centre.

[0019] Figure 2a (cross-section of figure 1a) shows

the U-shape space which is produced by virtue of the bottom sheet (2b) being thermoformed, is intended for accommodating the contents (5) and is covered by the cover sheet (2a).

[0020] Figure 1b shows a side view of an alternative boil-in-bag pack according to the invention. The sheet sections may be designed to be, for example, concave and convex at the top and bottom, respectively, as is shown, but they may also be rectangular. Although not essential, the contents (5) may be arranged eccentrically, and this results in a wider top end section in which the grip holes (9: two grip holes extending through both sheets) are arranged. Tearing-open will be along the joints or seals of the two sheets.

[0021] Figure 2b (cross-section of figure 1b) shows the U-shape space which is produced by virtue of the bottom sheet (8b) being thermoformed, is intended for accommodating the contents (5) and is covered by the cover sheet (8a). In section 7 two grip holes (9, in fig. 1b) may be arranged, extending through both sheets 8a and 8b.

[0022] Figure 3a shows a boil-in-bag-pack strip in the case of which a plurality of boil-in-bag packs (1) are arranged one behind the other with continuous sheets (2a) and (2b), separating lines (6) being provided in the sheets in order to separate the boil-in-bag packs. The tear-open lines (4) must always start from the separating line (6), and expediently extend to some way beyond the centre of the contents.

[0023] Figure 3b shows a boil-in-bag-pack strip in the case of which a plurality of boil-in-bag packs (1) are arranged one behind the other with continuous sheets (8a) and (8b), separating lines (6) being provided in the sheets in order to separate the boil-in-bag packs, and grip holes (9) extending through sheets 8a and 8b.

[0024] Figure 4a shows a single boil-in-bag pack during opening by virtue of the grip holes (3) being drawn apart from one another (in the arrow direction), this resulting in opening taking place along the tear-open line (4).

[0025] Figure 4b shows a single boil-in-bag pack during opening by virtue of the grip holes (9) being drawn apart from one another (in the arrow direction), this resulting in opening taking place along the seal.

[0026] It is expedient, in order to facilitate the opening, for a small tear, not necessarily a cut, to be provided beforehand on the tear-open line (4). Perforations provide a suitable tear-open line if water-tight packaging is not necessary.

Claims

1. Boil-in-bag pack for foodstuffs, comprising two boil-in-bag sheet blanks which lie one upon the other, are partially connected to one another and between which the contents are enclosed, **characterized in that** two grip holes (3) are provided in one end sec-

tion and, when said grip holes are drawn apart from one another, the boil-in-bag pack can be opened in order to release the contents (5).

claims for use for dumplings.

2. Boil-in-bag pack according to claim 1, **characterized in that** the opening occurs along a tear-open line (4). 5
3. Boil-in-bag pack according to Claim 1-2, **characterized in that** the contents (5) are enclosed eccentrically in the boil-in-bag pack (1) and the grip holes (3) are provided in the wider end section. 10
4. Boil-in-bag pack according to Claim 1-3, **characterized in that** a space for accommodating the contents (5) is formed in the bottom sheet (2b) by thermoforming, and the bottom sheet (2b) is covered by a flat cover sheet (2a). 15
5. Boil-in-bag pack according to claim 1-4, **characterized in that** a plurality of boil-in-bag packs (1) are arranged one behind the other with continuous sheets (2a, 2b), separating lines (6) being provided in the sheets (2a, 2b) in order to separate the boil-in-bag packs (1). 20
25
6. Boil-in-bag pack for foodstuffs, comprising two boil-in-bag sheet blanks which lie one upon the other, are partially connected to one another and between which the contents are enclosed, **characterized in that** two grip holes (9) are provided in one end section and, when said grip holes are drawn apart from one another, the boil-in-bag pack can be opened in order to release the contents (5). 30
35
7. Boil-in-bag pack according to claim 6, **characterized in that** the opening occurs along the seal area of the two sheets or a tear-open line.
8. Boil-in-bag pack according to Claim 6-7, **characterized in that** the contents (5) are enclosed eccentrically in the boil-in-bag pack (1) and the grip holes (9) are provided in the wider end section. 40
9. Boil-in-bag pack according to Claim 6-8, **characterized in that** a space for accommodating the contents (5) is formed in the bottom sheet (8b) by thermoforming, and the bottom sheet (8b) is covered by a flat cover sheet (8a). 45
50
10. Boil-in-bag pack according to claim 6-9, **characterized in that** a plurality of boil-in-bag packs (1) are arranged one behind the other with continuous sheets (8a, 8b), separating lines (6) being provided in the sheets (8a, 8b) in order to separate the boil-in-bag packs (1). 55
11. Boil-in-bag pack according to one of the preceding

Fig.1b.

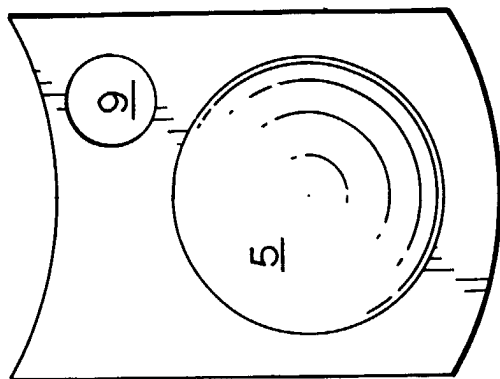


Fig.2b.

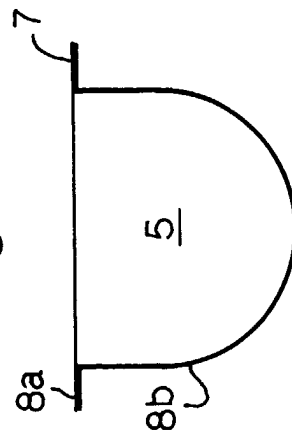


Fig.1a.

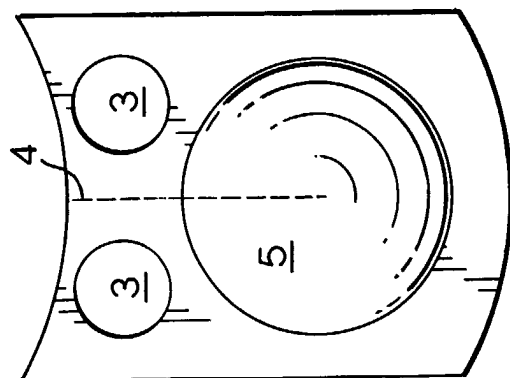


Fig.2a.

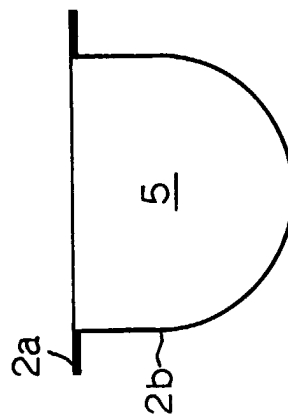


Fig.3.

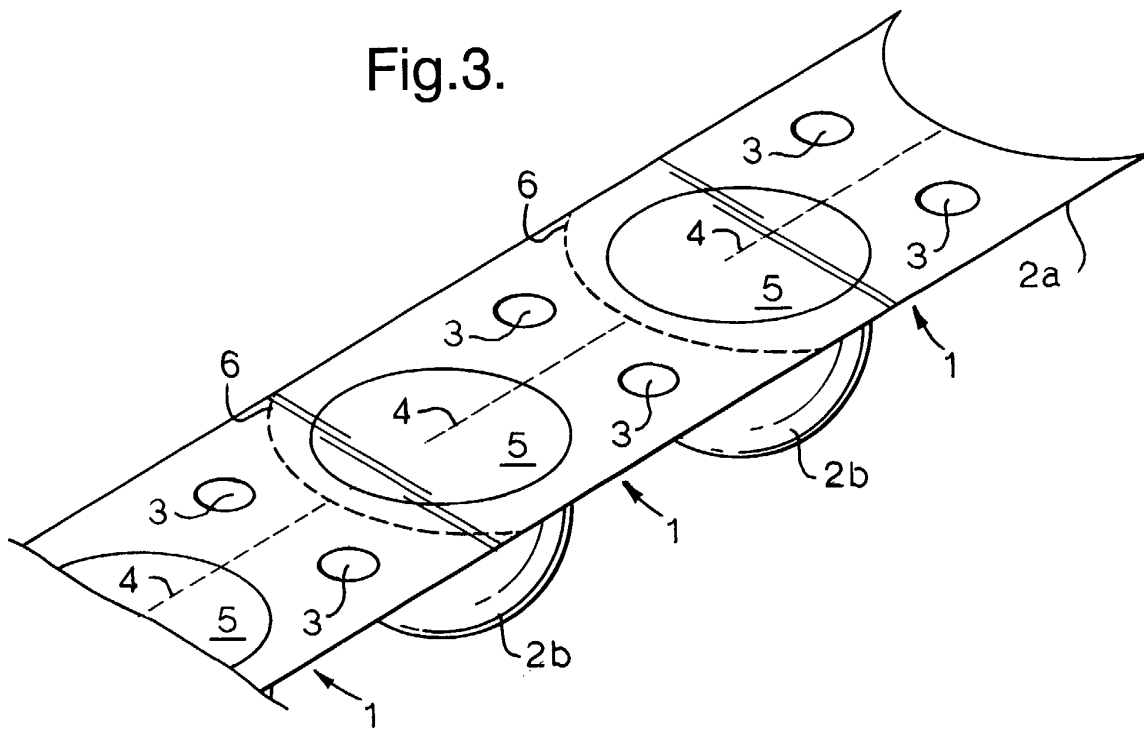


Fig.4 a.

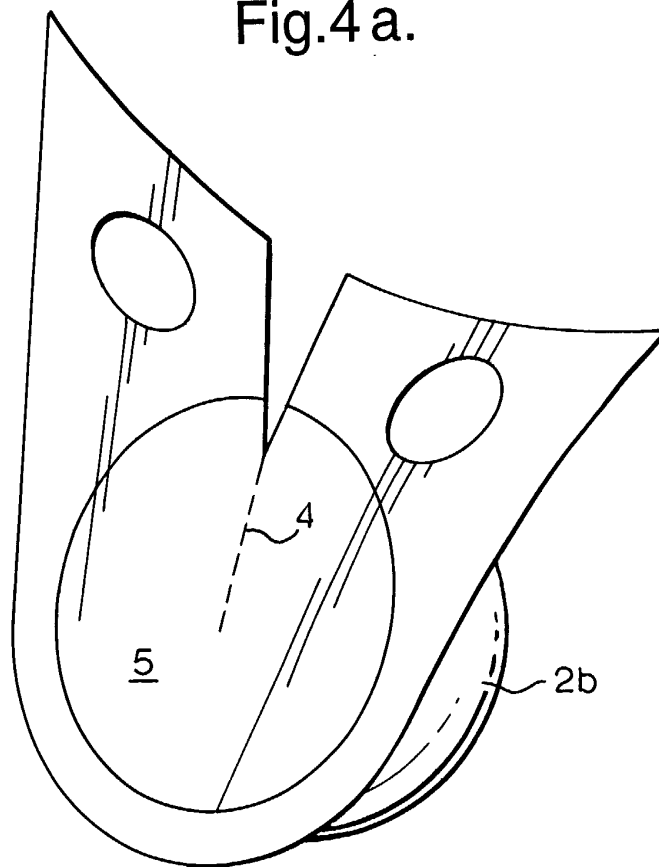


Fig.4 b.

