Blister packs which are normally provided by the pharmaceutical companies comprise different doses of pharmaceutical products on a common substrate, each one enclosed in a respective bubble. For optimum control thereof, particularly in hospital pharmacies, those blister packs are cut and separated individually, in order to produce blister packs of unitary doses, for example, by means of one of the systems described in EP1560756 or EP2603435 of the same Applicant.

Packagings in unitary doses are very convenient for the automation of the prescriptions in the hospital sector and constitute a substantial improvement of ensuring that the patients take the correct pharmaceuticals, in the quantities and forms prescribed. However, as a result of the small dimensions thereof and the substantial quantities of products in unitary doses to be controlled, the automated control systems have to provide for particular arrangements for ensuring storage and movement which are easy, simple, verified and secure.

There are known various systems for storing and dispensing products in unitary doses, which are used in a particularly expedient and advantageous manner in the hospital sector. One of those systems, which has been developed by the present Applicant and is described in EP1346929, comprises a store which is produced so as to automatically control the quantities of pharmaceuticals stored, requests for supply and expiry dates of each pharmaceutical stored.

In the system of the prior art described in EP1346929, the pharmaceuticals are packaged in unitary doses, and each pack is placed inside a packet on which there are printed indications relating to the specific pharmaceutical, such as,

and the joining of the flap 13 to the main portion 12 is carried out by ultrasonic welding. The ultrasonic welding prevents generalized heating of the material and therefore does not affect the characteristics of the product in a unitary dose, which is particularly advantageous in the case of a pharmaceutical. Ultrasonic welding is further convenient with respect to the adhesive bonding because it does not supply additional material. In some cases, in accordance with the rigidity of the material of the card 11 and the particular fold carried out in order to bring the flap 13 onto the main portion 12, it is not necessary to fix the edge along the folding line X.

It is possible to form a hole 30 in the main portion 12 of the card 11, which is advantageous for suspending the support 10 for a product for unitary doses, for example, in the hook type store described in EP1346929 by the same Applicant.

In the main portion 12 of the card 11, for example, in the zone of the face 12a thereof left free by the flap 13 and/or on the other face 12b opposite the face to which the flap 13 is fixed, it is possible to fit indications 31 for identifying the product in a unitary dose. The indications 31 may be fitted by writing directly on the main portion 12, for example, by means of printing or engraving, or other known means, or by fixing to the main portion 12 a label or other pre-printed element. The indications 31 may also be stored on an RFID tag or other similar elements intended to be fixed to the main portion 12 of the card 11. The indications 31 may be depicted in any known manner, both in a clear state and by means of a bar code, a QR code or the like.

There is retained between the main portion 12 and the flap 13 of the card 11 a blister pack 14 of a product in a unitary

CLAIMS

1. An installation for producing a support for a product in a unitary dose, comprising

- at least one supply member of at least one material web (60, 60'),
- a cutting apparatus (72) which can be controlled in order to obtain from the at least one material web (60, 60') a support card (11, 11') having a main portion (12), in which there is formed a main opening (20), and a foldable flap (13) on the main portion (12), in which there is formed a secondary opening (22) or a notch or a pre-cut which is centred in a symmetrically equidistant manner from the centre of the main opening (12) with respect to a folding line (X-X) of the flap (13) on the main portion,
- movement members for receiving the packaging (14, 14') of a product (P, S) in a unitary dose in the main opening (20) in the main portion (12) of the card (11) so that a portion (16, 16') thereof projects from the main opening (20) and a peripheral edge (17) thereof is supported on the main portion (12) of the card (11),
- folding members for folding the flap (13) along the folding line (X-X) until it is brought to the main portion (12) so as to enclose at least a portion of the peripheral edge (17) between the flap (13) and the main portion (12) of the card (11), and
- a fixing apparatus for fixing the flap (13) to the main portion (12) of the card (11).

2. An installation according to claim 1, comprising a rotary table (74) which is provided to present in sequence the support cards (11, 11') from the cutting apparatus (72) to operating stations which are arranged around the circumference of the rotary table (74).

3. An installation according to claim 2, wherein the operating stations comprise a card deposit station, an indication fitting station (78), a connection station (80) comprising the movement members, a folding station (84) comprising the folding members, a joining station (86) comprising the fixing apparatus and a card removal station (90).

4. An installation according to any one of claims 1 to 3, wherein the cutting apparatus can be controlled in order to form in the flap (13) a secondary opening (22) which is identical to the main opening (20).

5. An installation according to any one of claims 1 to 3, wherein the cutting apparatus can be controlled in order to extend the main opening (20) at the flap (13) so as to form the same slot with the secondary opening.

6. An installation according to any one of the preceding claims, wherein the flap (13) is fixed to the main portion (12) at least at three sides.

7. An installation according to any one of the preceding claims, wherein the flap (13) is fixed to the main portion by means of joining without any material being supplied.

8. An installation according to any one of the preceding claims, comprising one or more supply members for supplying at least two material webs (60, 60') of different widths so as to obtain respective cards (11, 11') having different dimensions.

9. A method for producing a support for a product in a unitary dose by means of an installation according to any one of the preceding claims, comprising the steps of:
- controlling the at least one supply member for supplying at least one material web to the cutting apparatus;
- controlling the cutting apparatus in order to obtain from the at least one material web a support card (11) with a main portion (12) in which there is formed a main opening (20) and a flap (13) which can be folded on the main portion (12) in which there is formed a secondary opening (22) or a notch or a pre-cut which is centred so as to be symmetrically equidistant from the centre of the main opening (12) with respect to a folding line (X-X) of the flap (13) on the main portion;
- controlling the movement members in order to receive the packaging (14, 14') of a product (P, S) in a unitary dose in the main opening (20) in the main portion (12) of the card (11) so that a portion (16, 16') thereof is discharged from the main opening (20) and a peripheral edge (17) thereof is supported on the main portion (12) of the card (11);
- controlling the folding members in order to fold the flap (13) along the folding line (X-X) until it is brought to the main portion (12) so as to enclose at least a portion of the peripheral edge (17) between the flap (13) and the main portion (12) of the card (11); and
- controlling the fixing apparatus in order to fix the flap (13) to the main portion (12) of the card (11).

10. A method according to claim 9, wherein one or more supply members supply at least two material webs (60, 60') having different widths in order to obtain respective cards (11, 11') having different dimensions.