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(54) **CONTAINER FOR FOODSTUFFS**

BEHÄLTER FÜR LEBENSMITTEL

RÉCIPIENT POUR PRODUITS ALIMENTAIRES

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(56) References cited:

**CH-A5- 673 822 ES-U- 1 012 599**  
**GB-A- 2 021 523 JP-A- H10 129 783**  
**US-A- 6 074 676 US-A1- 2009 134 179**

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## Description

### FIELD OF THE ART

[0001] The present invention refers to a container for foodstuffs such as small fruits and vegetables, for example, strawberries, cherry tomatoes, mini cucumbers, etc., and the container is comprised of a plastic or bio-plastic body, the top thereof being finished by means of a lid with a folding part for manually accessing the inside thereof and extracting said products one at the time as they are consumed.

[0002] The object of the invention is to provide the market and the public in general with a container of the aforementioned characteristics, wherein the means of industrial packaging, of partial opening and ventilation are optimised by adapting thereof to the configuration of the fingers of the user, making it possible to stack up containers full of product without compromising the means of ventilation thereof, making it possible to keep the products contained therein in optimal conditions during a longer period of time.

### BACKGROUND OF THE INVENTION

[0003] There are known plastic containers with lids, which are used for commercialising small products such as blackberries, strawberries, cherry tomatoes, raspberries, etc., wherein the container is complemented by an upper closure lid, which includes a straight hinge for partially folding the lid in order to gain access to the inside of the container.

[0004] This type of containers generally has a pyramidal-trunk configuration with a flat lid, so that the sectoral lid is pivoted along a straight line on the same plane, which defines an access to the inside of the container that is not very ergonomic.

[0005] These half-lids are also difficult to actuate since they are flush against the border or mouth of the container, so the user needs to introduce a nail between two parallel elements close to each other, a manoeuvre that can be difficult for users that have very short nails.

[0006] Another problem presented by this type of containers is that, although they comprise ventilation orifices for optimising the shelf life of the products contained therein, when these containers are stacked up, the configuration thereof severely affects and even blocks the ventilation capabilities thereof.

[0007] The document US20090134179A1 discloses a container for packaging food for transporting and selling to consumers is provided. The container includes a base having a pair of inwardly recessed pockets for capturing a pair of extending latching portions on a lid. The pair of extending latching portions has concave grooves allowing the extending latching portions to flex inwards from an initial position for insertion into the pair inwardly recessed pockets. When the pair of extending latching portions are inserted into the pair inwardly recessed pockets,

the pair of extending latching portions expand back to their initial position and protrusions within the pair of inwardly recessed pockets retain the pair of extending latching portions creating a tight fit and preventing the lid of the container from being easily disengaged from the base of the container.

[0008] The document US6074676A discloses a method for improved packing and cooling of produce by improving the flow of ventilation air to the produce, and apparatus to practice the method. According to the present invention, baskets for the packing of fruit are provided with ventilation channels disposed upon a lower surface of the basket. Vent apertures communicate between the ventilation channels and the produce stored in the baskets. After packing the baskets with produce, they are loaded into trays. The trays may be provided with tray vents which align with the ventilation channels. Alternatively, the trays may be formed without tray vents to improve some cooling regimes. In this manner, entire pallets of produce-filled baskets can be efficiently chilled by introducing a flow of cooling air into the baskets and thence through the produce packed inside. The trays and baskets are sized so as to occupy all of the surface area of a standard shipping pallet, and to minimize the movement of the baskets within the trays, and of the trays with respect to one another.

### EXPLANATION OF THE INVENTION

[0009] The container for foodstuffs described completely solves the drawback mentioned above with a simple but effective solution according with the claim 1.

[0010] In order to do so, the first main characteristic of the container of the invention is that the lid thereof is raised in relation to the mouth of the container on which it is placed, with both being circular in shape.

[0011] Thanks to this raised lid, the pivoting line of the sectoral lid can be curved in relation to the upper plane of the lid, finishing in straight cuts that form slots, with said cuts being located on the raised walls of the lid, providing an ergonomic access window that is perfectly adapted to the contour of the fingers of the hand, thus optimising space and minimising the risk of fruit accidentally coming out of the container.

[0012] According to another characteristic of the invention, a tab in the shape of a bridge is defined in correspondence with the edge of the mouth of the container in order to facilitate inserting the tip of a finger and use it to press on the lid, making it easier to open it however long the fingernails of the user may be.

[0013] The lid is coupled to the mouth of the container by means of a series of lugs that emerge from the lower edge thereof and that fit by means of elastic deformation in complementary raised depressions, with said lugs having a similar height as the depth of the boxes, and equally, these boxes are raised so that the closed lid is slightly raised, defining a gap that not only improves the ventilation thereof but also makes it easier to manually open

the lid since it is not flush against the mouth of the container.

**[0014]** The container, which has a circular section, as mentioned above, includes three recessed, slanted planes in correspondence with the edge of the lower base thereof, with an orifice in each of the planes defining means of ventilation that are not blocked regardless of whether the container is stacked on other containers of the same kind or simply placed on a flat surface.

**[0015]** Another characteristic is that the cuts along which the curved pivoting line of the lid is extended over the raised walls of the lid also define ventilation slots that improve the ventilation of the container, which also includes ventilation orifices set in depressions both on the slanted plane of the lid as well as on the body of the main lid.

**[0016]** A lower relief in the shape of an arc is defined in correspondence with the hinge of the lid, which, when the lid is folded, fits into a depression with the same configuration as the mouth of the container, making it easier to guide said manoeuvres and thus the automated filling of the containers.

**[0017]** In that regard, the body of the container has been designed so that it comprises longitudinal protrusions proximate to the mouth thereof in the shape of half a reed, as means for securing the container during the automated filling process and preventing it from rotating during said process.

**[0018]** This produces an ergonomic device adapted in a practical way to industrial packaging lines, easy to use, and with a series of characteristics that optimise the shelf life of the products contained therein.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0019]** To complete the invention described below and in order to give a better understanding of the characteristics of the invention, according to a preferred embodiment thereof, this description is accompanied by a set of drawings in which the figures described below have been represented, for purely illustrative purposes and should not be construed as limiting:

Figure 1.- Shows a perspective view of a container for foodstuffs designed according to the object of the present invention.

Figure 2.- Shows a lower perspective view of the container of the previous figure.

Figure 3.- Shows, finally, an upper lateral perspective view of the container with the lid open.

## PREFERRED EMBODIMENT OF THE INVENTION

**[0020]** In light of the drawings described above, it can be observed that the container for foodstuffs designed for storing small fruits such as strawberries, raspberries

or similar fruits, is comprised of a transparent body (1) with a circular section, equipped with a corresponding closure lid (2), with said lid being configured in a raised position above the edge or mouth (3) it is coupled on by means of tabs (9) with lugs (10) fitted into raised depressions (11) defined on complementary tabs (9") of the mouth (3) of the container. These lugs (10) have a greater length than the depth of the depressions (11) in order for the lid to be partially raised in relation to the mouth of the container during the coupling thereof, leaving a small ventilation gap that also makes it easier to fully open the lid, as well as the sectoral lid.

**[0021]** In this regard, the depressions (11), which are also raised, could have a configuration in the shape of a funnel on the upper end thereof in order to help guide the lugs (10) during the coupling thereof.

**[0022]** The lid (2) comprises a folding sector (6) by means of a curved folding line (7), with the ends thereof coinciding with respective straight cuts (15) made on the walls raising the lid, which in addition to making it possible to fold said sector, also define additional ventilation means for the container. However, these slots could disappear so the lid could be designed without the folding area, with a configuration of a single unit.

**[0023]** In order to make it easier to open the sectoral lid, the mouth (3) has been designed with a concave curved part defining a tab (8) where a user can easily place a finger in order to press on the free edge of said sectoral lid, thus folding said lid up in order to gain access to the foodstuffs contained therein.

**[0024]** Three slanted recesses (4) with their respective ventilation orifices (5) are defined in correspondence with the perimeter edge of the base of the container.

**[0025]** Similarly, depressed, and slanted sectors (12) with ventilation orifices (13) are defined on the lid (2), which will not be blocked when the containers are stacked up.

**[0026]** In this regard, both the lid and the base of the container will comprise stabilising reliefs (14-14') that make it easier to stack up containers in a stable way.

**[0027]** As detailed above, a lower relief in the shape of an arc (17) is defined in correspondence with the hinge (16) of the lid, which, when the lid is folded, fits into a depression (18) with the same configuration as the mouth of the container, facilitating the placement thereof in order to perfectly fit the lugs (10) into the depressions (11) thereof, thus improving the automated process of filling the containers.

**[0028]** Similarly, the body of the container comprises longitudinal protrusions proximate to the mouth thereof in the shape of half a reed (19), as means for preventing the container from turning during the automated process of filling the container.

## Claims

1. Container for foodstuffs, comprising a transparent

- body (1) with a circular section, equipped with a corresponding closure lid (2), with said lid (2) being configured in a raised position above the edge or mouth (3) it is coupled on by means of tabs (9) with lugs (10) fitted into depressions (11) defined on complementary tabs (9') of the mouth (3) of the container, **characterised in that** the closure lid (2) comprises a folding (6) sector by means of a curved folding line (7), with the ends thereof coinciding with respective straight cuts (15) made on the walls raising the closure lid (2); and wherein a lower relief in the shape of an arc (17) is defined in correspondence with the hinge (16) of the lid (2), which, when the lid (2) is folded, fits into a depression (18) with the same configuration as the mouth (3) of the container
2. Container for foodstuffs, according to claim 1, **characterised in that** the mouth (3) comprises a tab (8) for manually opening the sector of the lid defined by the curved folding line (7).
  3. Container for foodstuffs, according to claim 1, **characterised in that** three slanted recesses (4) with their respective ventilation orifices (5) are defined in correspondence with the perimeter edge of the base of the container.
  4. Container for foodstuffs, according to claim 1, **characterised in that** the raised lid (2) comprises slanted and depressed sectors (12) with ventilation orifices (13).
  5. Container for foodstuffs, according to claim 1, **characterised in that** both the lid and the base of the container comprises stabilising reliefs (14-14') for stacking up containers in a stable way.
  6. Container for foodstuffs, according to claim 1, **characterised in that** the lugs (10) have a similar length as the depth of the raised depressions (11) so that, when the lid is closed, the lid is partially raised in relation to the mouth of the container.
  7. Container for foodstuffs, according to claims 1 and 6, **characterised in that** the depressions (11) have a configuration in the shape of a funnel on the upper end thereof, as means for guiding the lugs (10) during the coupling thereof.
  8. Container for foodstuffs, according to claim 1, **characterised in that** the body of the container comprises longitudinal protrusions proximate to the mouth thereof in the shape of half a reed (19), as means for preventing the container from turning during the automated process of filling the container.

## Patentansprüche

1. Behälter für Lebensmittelprodukte, der einen transparenten Körper (1) mit kreisförmigem Querschnitt umfasst, der mit einem entsprechenden Verschlussdeckel (2) ausgerüstet ist, wobei der Deckel (2) in einer erhabenen Position über der Kante oder der Öffnung (3) ausgebildet ist, an die er mittels Laschen (9) mit Ansätzen (10) gekoppelt ist, die in Vertiefungen (11) eingepasst sind, die auf dazu passenden Laschen (9') der Öffnung (3) des Behälters definiert sind, **dadurch gekennzeichnet, dass** der Verschlussdeckel (2) einen Klappbereich (6) mittels einer gekrümmten Klapplinie (7) umfasst, wobei die Enden davon mit jeweiligen geradlinigen Einschnitten (15) zusammenfallen, die an den hochstehenden Wänden des Verschlussdeckels (2) angebracht sind; und wobei ein unteres Relief in Form eines Bogens (17) in Übereinstimmung mit dem Scharnier (16) des Deckels (2) definiert ist, das, wenn der Deckel (2) zugeklappt ist, in eine Vertiefung (18) mit der gleichen Konfiguration wie die Öffnung (3) des Behälters passt.
2. Behälter für Lebensmittelprodukte gemäß Anspruch 1, **dadurch gekennzeichnet, dass** die Öffnung (3) eine Lasche (8) zum manuellen Öffnen des durch die gekrümmte Klapplinie (7) definierten Deckelbereiches umfasst.
3. Behälter für Lebensmittelprodukte gemäß Anspruch 1, **dadurch gekennzeichnet, dass** drei schräge Aussparungen (4) mit ihren jeweiligen Belüftungslöchern (5) in Übereinstimmung mit der Umfangskante des Bodens des Behälters definiert sind.
4. Behälter für Lebensmittelprodukte gemäß Anspruch 1, **dadurch gekennzeichnet, dass** der hochstehende Deckel (2) schräge und vertiefte Bereiche (12) mit Belüftungslöchern (13) umfasst.
5. Behälter für Lebensmittelprodukte gemäß Anspruch 1, **dadurch gekennzeichnet, dass** sowohl der Deckel als auch der Boden des Behälters stabilisierende Reliefs (14-14') zum stabilen Aufstapeln der Behälter umfassen.
6. Behälter für Lebensmittelprodukte gemäß Anspruch 1, **dadurch gekennzeichnet, dass** die Ansätze (10) eine ähnliche Länge wie die Tiefe der hochstehenden Vertiefungen (11) aufweisen, so dass der Deckel bei geschlossenem Deckel in Bezug auf die Öffnung des Behälters teilweise hochsteht.
7. Behälter für Lebensmittelprodukte gemäß Anspruch 1 und 6, **dadurch gekennzeichnet, dass** die Vertiefungen (11) an ihrem oberen Ende eine trichterförmige Konfiguration aufweisen, als Mittel zur Füh-

rung der Ansätze (10) beim Kuppeln davon.

8. Behälter für Lebensmittelprodukte gemäß Anspruch 1, **dadurch gekennzeichnet, dass** der Körper des Behälters in der Nähe seiner Öffnung langgestreckte Vorsprünge in Form eines Halbrohrs (19) umfasst, als Mittel zum Verhindern des Drehens des Behälters während des automatisierten Vorgangs des Füllens des Behälters.

## Revendications

1. Récipient pour produits alimentaires, comprenant un corps transparent (1) avec une section circulaire, équipé du couvercle de fermeture correspondant (2) à ce couvercle (2) étant configuré avec une position surélevée au-dessus du bord ou ouverture (3) sur lequel il est couplé par des pattes (9) avec des languettes (10) introduites dans les rainures (11) définies sur des pattes supplémentaires (9) de l'ouverture (3) du récipient, **caractérisé par le fait que** le couvercle de fermeture (2) comprend une section pliante (6) par une ligne de pliage courbée (7) dont les extrémités coïncident avec leurs découpes droites respectives (15) réalisées sur les parois montantes du couvercle de fermeture (2) ; et où un relief inférieur de la forme d'un arc (17) est défini pour correspondre avec la charnière (16) du couvercle (2) qui, lorsque le couvercle (2) est plié, entre dans la rainure (18) selon la même configuration que l'ouverture (3) du récipient.
2. Récipient pour produits alimentaires, selon la revendication 1, **caractérisé par** l'ouverture (3) comprenant une patte (8) pour ouvrir manuellement la section du couvercle définie par la ligne (7) de pliage courbée.
3. Récipient pour produits alimentaires, selon la revendication 1, **caractérisé par** trois encoches inclinées (4) avec leurs orifices de ventilation respectifs (5) définis pour correspondre avec le bord périphérique de la base du récipient.
4. Récipient pour produits alimentaires, selon la revendication 1, **caractérisé par le fait que** le bord surélevé (2) comprend des sections inclinées et renfoncées (12) avec des orifices de ventilation (13).
5. Récipient pour produits alimentaires, selon la revendication 1, **caractérisé par le fait que** le couvercle et la base du récipient comprennent des reliefs de stabilisation (14-14') pour empiler les récipients de manière stable.
6. Récipient pour produits alimentaires, selon la revendication 1, **caractérisé par le fait que** les languettes

(10) ont une longueur similaires à la profondeur des rainures surélevées (11) pour que, lorsque le couvercle est fermé, le couvercle soit partiellement surélevé par rapport à l'ouverture du récipient.

7. Récipient pour produits alimentaires, selon les revendications 1 et 6, **caractérisé par** les rainures (11) en forme d'entonnoir en haut pour guider les languettes (10) pendant le couplage.
8. Récipient pour produits alimentaires, selon la revendication 1, **caractérisé par le fait que** le corps du récipient comprend des saillies longitudinales près de l'ouverture en forme de demi-roseau (19) pour éviter que le récipient ne se retourne pendant le processus automatique de remplissage du récipient.

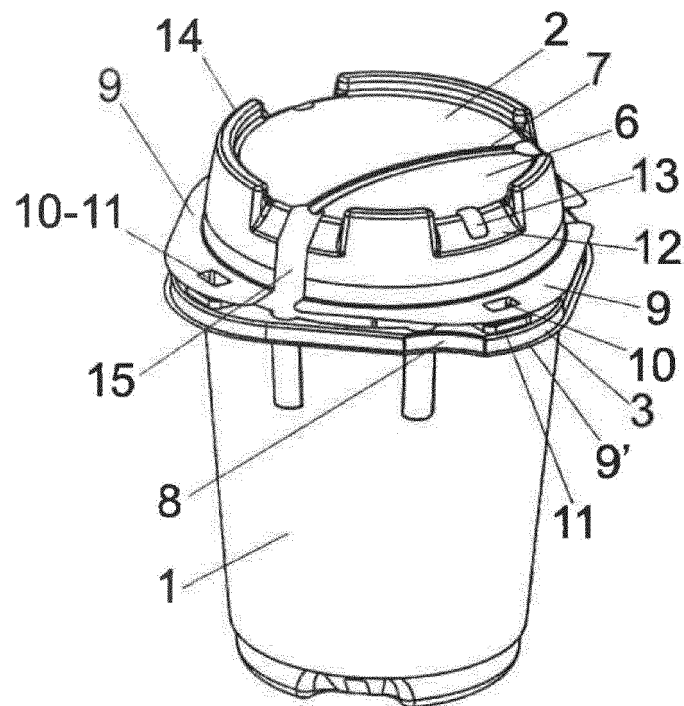


FIG. 1

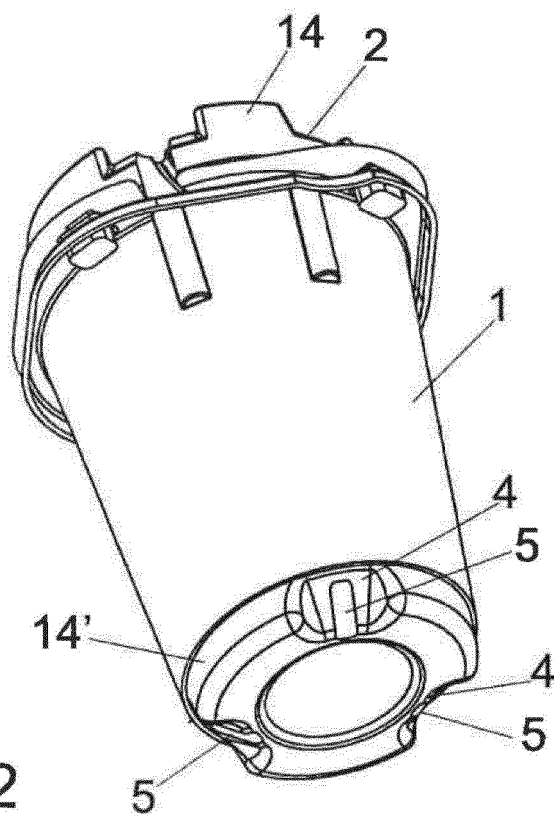


FIG. 2

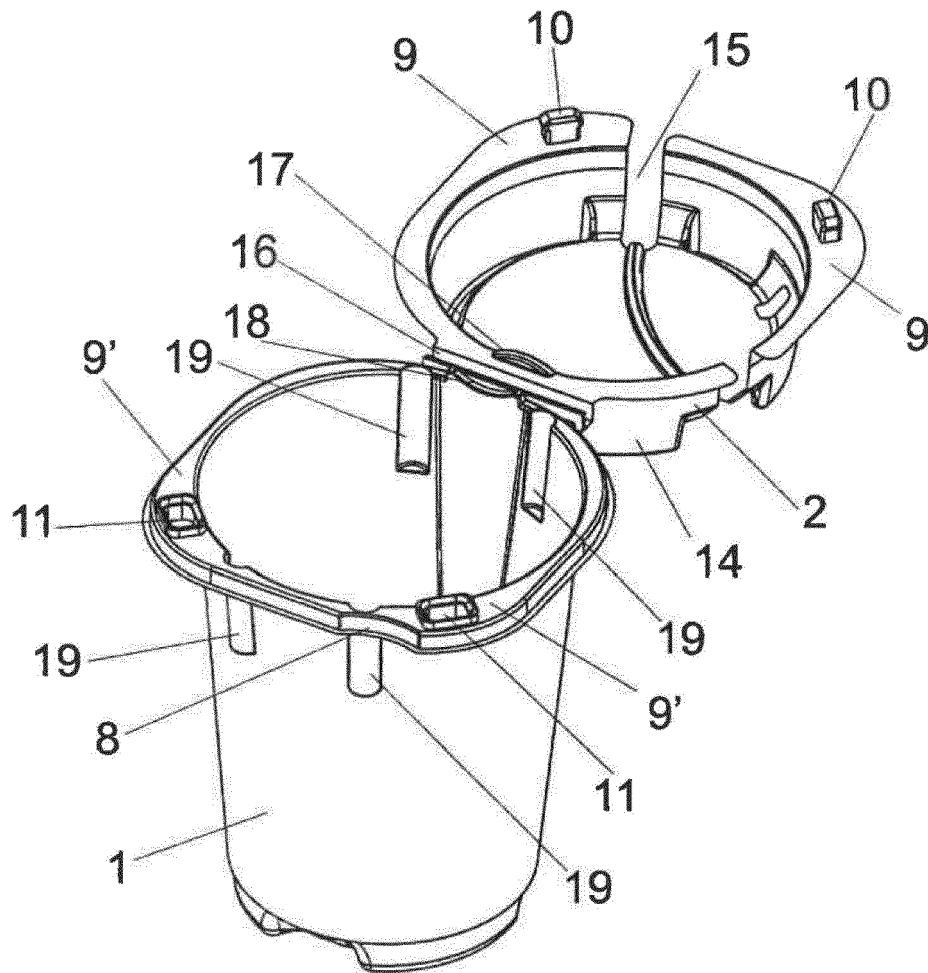


FIG. 3

**REFERENCES CITED IN THE DESCRIPTION**

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**Patent documents cited in the description**

- US 20090134179 A1 [0007]
- US 6074676 A [0008]