

(11) **EP 3 257 775 A1**

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

20.12.2017 Bulletin 2017/51

(51) Int Cl.:

B65D 21/02 (2006.01)

B65D 25/32 (2006.01)

(21) Application number: 17380016.0

(22) Date of filing: 14.06.2017

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

Designated Validation States:

MA MD

(30) Priority: 15.06.2016 ES 201600423

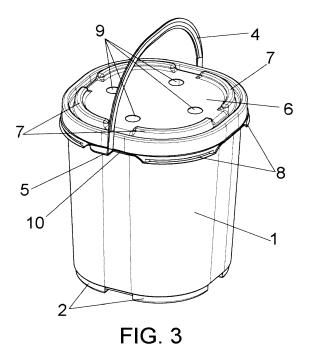
14.04.2017 ES 201700331

- (71) Applicant: Envases de Plasticos Vargas, S. L. 26550 Rincon de Soto (La Rioja) (ES)
- (72) Inventor: Vargas Escalada, Armando José 26550 Rincon DE Soto (La Rioja) (ES)
- (74) Representative: Gonzalez Palmero, Fé Calle Sagasta, 4 28004 Madrid (ES)

(54) **CONTAINER FOR FOOD STUFFS**

(57) The container is comprised of a thermoformed body (1) with an inverted pyramidal-tapered configuration and rounded edges, with the body of the container comprising an upper outer skirt (3) and lower exterior protrusions (2) on the base thereof, as well as a folding handle (4) that emerges from the skirt of the mouth, shaped as a single-piece, with a folding line (5) on the ends thereof that comprises the folding means for said handle when it is operational/inactive. The container is complemented by a lid (6-6') with the same configuration

as the outline of the mouth of the container, with said lid comprising skirt (8) that can be coupled to the skirt (3) of said container, and with said skirts (8) defining respective arched bridges (10) between them. In an alternative embodiment, the lid (6') is coupled to the inner surface of the mouth of the container (1') by means of a rib (14) that can be fitted into a slot (17) of said mouth, so that the lid does not protrude from the sides of the container, minimising the space occupied by the containers when they are stored.



EP 3 257 775 A1

OBJECT OF THE INVENTION

[0001] The present invention refers to a container for foodstuffs, and, more specifically, to a small container designed for an edible product, such as cherry tomatoes or any other fruit, vegetable or perishable product that requires a container with ventilation so that it does not deteriorate quickly, or for any other non-perishable product

1

[0002] The object of the invention is to provide the market and the public in general with a container for commercialising and selling foodstuffs kept in perfect condition, and wherein the container comprises a lid and a folding handle for carrying it.

[0003] Additional, it is also the object of the invention that when the lid is coupled on the container, it forms a single item without protruding from the perimeter of the mouth of the container.

BACKGROUND OF THE INVENTION

[0004] Although there are containers for small, perishable products, these containers have the drawback that in some cases the design of the lid thereof prevents them from having handles, or, alternatively, the way said handle is designed results in structural complications for the container, which by consequence has negative repercussions on costs, adding complementary components such as handles that increase production costs.

[0005] All these known containers are formed by plastic injection moulding, which entails a higher manufacturing cost since it requires a higher amount of raw material to create the container.

[0006] This type of containers also have problems keeping the products contained therein fresh, due to their poor ventilation.

[0007] At the same time, and in relation to the lids of this type of containers, the lids are coupled on the outer perimeter of the mouth of the container, which results in the lid always protruding from said mouth, such that space is clearly wasted when storing full containers, precisely due to the lid protruding from the container, in addition to having to skilfully handle the lid when opening and removing it from the container, with the ensuing problems and issues this means for the user.

DESCRIPTION OF THE INVENTION

[0008] The container for foodstuffs described completely solves the drawback mentioned above thanks to its simple but extremely effective structure.

[0009] In order to do so, the container that is the invention is manufactured by means of thermoforming and comprises a handle that is articulated on the ends thereof by means of respective hinges or folding lines in order to be folded or unfolded depending on how the container

is going to be used or stored, thus behaving as a single-piece item together with the body of the container itself. [0010] The mouth of the container comprises a skirt for coupling and securing the corresponding lid, with the lid comprising a depression over most of its surface, that is, it defines an essentially flat base below the perimeter edge of the lid, wherein four equidistant ribs are located, and the bottom of the container comprises ridges complementary to the concentric protrusions of the lid in order to create a type of tongue and groove connection when stacking them up, making said stacks extremely stable, and defining between bottoms and lids of the stacked containers a horizontal space that lets the air flow between them.

[0011] The lid is coupled to the mouth of the container by means of four fins corresponding to their corners, between which grooves in the shape of bridges are defined facilitating the coupling of the lid. Similarly, these bridges protect the start of the handle of the container, allowing it to be operated.

[0012] In addition, both the lid and the bottom or base of the container comprise orifices in order to let the air flow into the product stored in stacked containers. These orifices coincide in order to let air flow along the vertical line when containers are stacked up.

[0013] The design of the handle and the configuration of the lid allow the handle to go from a resting position to the operational position without interfering with the closed lid, as well as allowing the lid to be opened comfortably and easily.

[0014] Finally, the container has a slight pyramidal-tapered configuration, with clearly rounded edges, and an almost circular outline that is optimal for keeping perishable products such as tomatoes and others.

[0015] It should also be highlighted that the lid is symmetrical in relation to the two diametric axes, allowing it to be coupled on the container in any position.

[0016] According to an embodiment, the lid comprises an outer skirt that is finished off with a narrow perimeter wing, which is practically a lattice, so that said skirt is in turn provided with a perimeter rib designed to fit into a slot designed for said purpose on the inner outline of the mouth of the container itself, thus managing to close or couple the lid on the container so that the rib of the skirt of the lid is fitted in the slot of the mouth of the container, coupling and holding both elements together, with the particularity that the outer perimeter wing of the skirt of the lid ends up resting on the flat upper edge of the hard mouth of the container, coupling them together without the lid protruding from the outline of the container and keeping it flush against it.

[0017] Another characteristic of this lid is that the lateral surface thereof comprises one, two or four fittings with grooved surfaces designed to help the fingertips of the user to grip and pull the lid when removing it from the container itself.

[0018] In this way, when the lid is coupled on the container closing it completely, it forms a single-piece or unit

40

45

wherein the lid is flush against the upper edge of the mouth of the container, it does not protrude from it, and it makes the assembly of the container and the lid coupled on it appear like a single piece.

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:

Figures 1 a and 1 b show respective perspective views of a container for perishable foodstuffs designed according to the object of the present invention without the corresponding lid, and with the handle both in the operational and resting positions.

Figure 2 shows a perspective view of the inner side of the lid of the container of figure 1.

Figure 3 shows the same container as figure 1 but with the lid mounted and coupled on the container. Figure 4 shows an upper plan view of the container represented in the previous figure.

Figure 5 shows a detailed crosswise section of the container of the area where the lid is coupled to the main body of the container.

Figure 6 shows an upper plan view of an embodiment of the lid of the container.

Figure 7 shows a cross-sectional view according to the section A-A of the lid represented in the previous figure.

Figure 8 shows a representation based on a general upper perspective of the lid shown in the previous figures.

Figure 9 shows a detail of the coupling between the lid of the invention and the mouth of the container, closing the container completely, the mouth of said container including additional characteristics to the ones shown in figures 1 to 5 in order to match this alternative embodiment of the lid.

PREFERRED EMBODIMENT OF THE INVENTION.

[0020] As shown in the drawings above, the container for perishable foodstuffs that is the object of the invention is comprised of a body (1) created by means of thermoforming, with an inverted pyramidal-tapered configuration, and very rounded edges.

[0021] Said body (1) has protrusions (2) on the base thereof and an outer skirt (3) on the mouth thereof, also including a handle (4), the ends of which have folding lines (5) that define hinges for folding said handle (4) in relation to the skirt (3) they emerge from, made as a single-piece, allowing said handle (4) to be in an inactive or resting position as shown in figure 4, or in an operational

position as shown on figures 1 and 3. Said handle does not represent a hindrance when it is in the inactive position.

[0022] The handle (4) comprises a lower longitudinal reinforcement rib (11).

[0023] The body (1) is complemented by a closing lid (6) comprising a depression over most of the surface of said lid (6), with four concentric protrusions (7) on said depression placed at equidistant angles, which are complementary to the protrusions (2) at the bottom of the container so that when two containers are stacked up said protrusions (2) on the base are coupled to the protrusions (7) of the lid, providing stability to the assembly. [0024] It has also been considered that the lid (6) also comprises skirts (8) that have the same width as the protrusions (7), the skirts (8) of which emerge from the lower edge of said lid (6), defining between them a series of arched bridges (10), skirts (8) defining means for attaching to the inner edge of the skirt (3) corresponding to the body (1) of the container, so that the lid (6) is perfectly mounted and coupled on said container, and allowing the handle (4) to be folded and unfolded without interfering with the lid thanks to the bridges between the skirt (8). The lid and the body are closed together partially along the perimeter, that is, not around the entire perimeter of the skirt (3) of the body (1).

[0025] Finally, both the bottom or base of the body (1) and the lid (6) comprise orifices (9) located in identical positions so that they face each other when the containers are stacked up, allowing for optimal ventilation of the product stored in the container.

[0026] This configuration of the bottom of the container defines a type of crosspiece that determines a setback plane in relation to the legs or ribs for stacking up the containers, creating a space between the stacks in order to allow the air to flow into the container not only from under the container or the lid but also horizontally between the space defined between the lid and the bottom of the stacked containers.

40 **[0027]** According to an embodiment of the lid (6') shown in figures 6 to 9, said lid comprises an outer skirt (12) finished off with a flat exterior wing (13), with the particularity that the skirt (12) comprises a rib (14), naturally on the perimeter.

[0028] Additionally, the lid (6') described comprises one or more fittings (15) with grooves (16) on the lateral surfaces thereof, designed for the reasons detailed below.

[0029] The lid (6') thus designed is intended to be coupled on the mouth of the container (1') so that when said coupling takes place, the perimeter rib (14) of the lid is attached to a slot (17) designed for such purpose on the inner surface of the mouth of the container (1'), as shown in figure 9, with the particularity that the wing (13) of the lid rests on the upper edge (18) of the container (1'), therefore, the lid is flush against the mouth of the container without protruding from it and forming a single-piece or assembly in which the wing (13) stops and rests

10

15

20

40

45

against the upper edge (18) of the container (1') and the skirt (12) of the lid (6') housed inside the mouth of the container, all of which has been designed so that, in order to remove the lid (6') from the container (1') when they are coupled together, it is only necessary to use the fingers to pull the lid (6') by resting them on the fittings (15), and where the grooves (16) are designed so that the fingers do not slip, allowing them to pull and remove the lid (6') from the container (1') by means of elastic deformation of said lid.

[0030] Finally, the container (1') is designed for storing and keeping preferably perishable foodstuffs and products, and since they need adequate ventilation, the lid (6') comprises orifices (9) in order to help said ventilation.

Claims

- 1. Container for foodstuffs, characterised in that it is comprised of a thermoformed body (1) with an inverted pyramidal-tapered configuration and rounded edges, with the particularity that the body of the container comprises an upper outer skirt (3) and lower exterior protrusions (2) on the base thereof, as well as a folding handle (4) that emerges from the skirt of the mouth, shaped as a single-piece, with a folding line (5) on the ends thereof that defines the folding means for said handle when it is operational/inactive, with said container being complemented by a lid (6-6') with the same configuration as the outline of the mouth of the container, with said lid comprising skirts (8) that can be coupled to the skirt (3) of said container, and with said skirts (8) defining respective arched bridges (10) between them, also comprising protrusions (7) complementary to the protrusions on the bottom of the container in order to define stable means for stacking up containers, with the lid (6-6') and the bottom of the container also comprising ventilation orifices (9) that face each other when the containers are stacked up.
- Container for foodstuffs, according to claim 1, characterised in that the handle (4) comprises a lower longitudinal reinforcement rib.
- 3. Container for foodstuffs, according to claim 1, characterised in that the means for stacking containers defined between the lid and the bottom of said containers have specific dimensions so that when the containers are stacked up, a horizontal space or chamber is defined between the bottom of the container placed above and the lid of the container placed below allowing for the air to flow freely.
- 4. Container for foodstuffs, according to claim 1, characterised in that it is preferably applicable to containers for perishable foodstuffs, such as vegetables, fruits and other products, characterised in that the

lid (6') has an outer skirt (12) finished off with a perimeter wing (13), with said skirt comprising a rib (14) under the perimeter wing (13), and said rib can be fitted into a slot (17) designed for said purpose on the inner surface of the mouth of the container (1'), with said perimeter wing of the lid resting flush against the upper edge of the mouth of the container.

5. Container for foodstuffs, according to claim 4, characterised in that the lid (6') comprises one or more fittings (15) with grooves (16) on the lateral surfaces thereof, which are designed to help the fingertips of the user to grip, pull and remove the lid from the container.

4

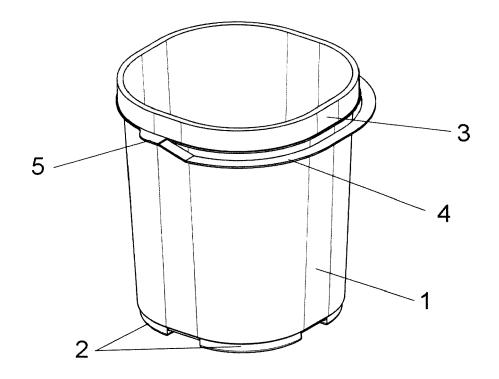
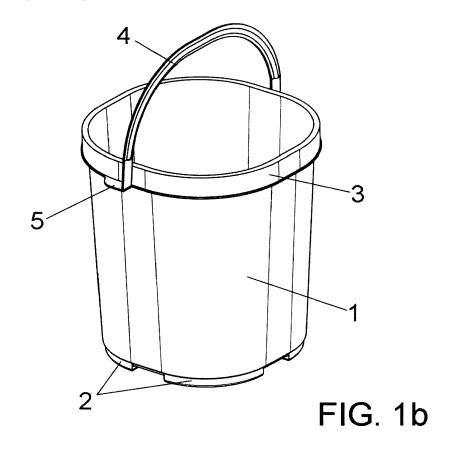


FIG. 1a



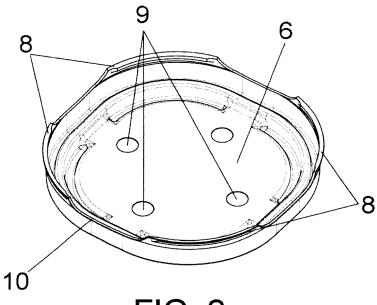


FIG. 2

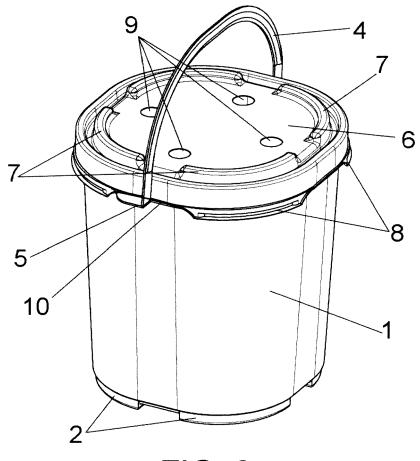


FIG. 3

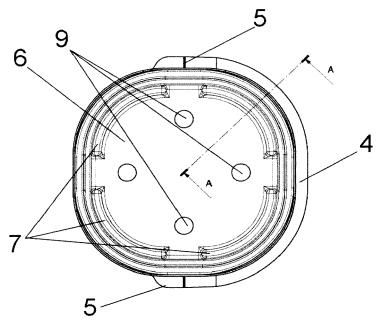


FIG. 4

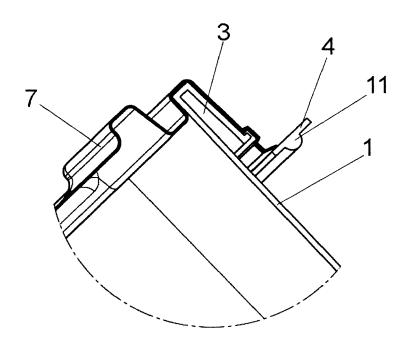
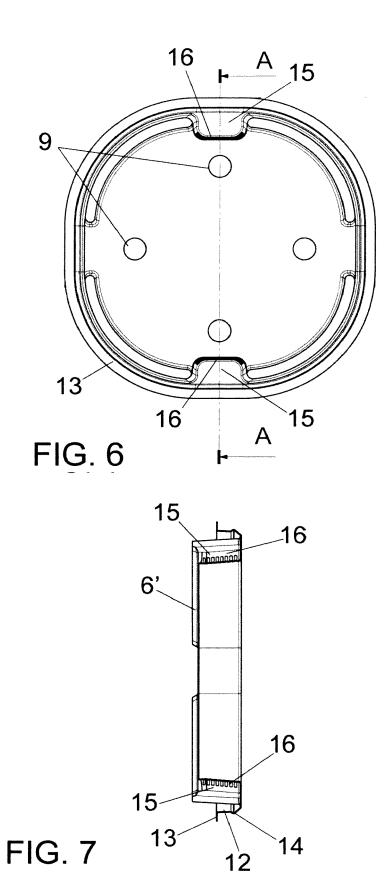


FIG. 5



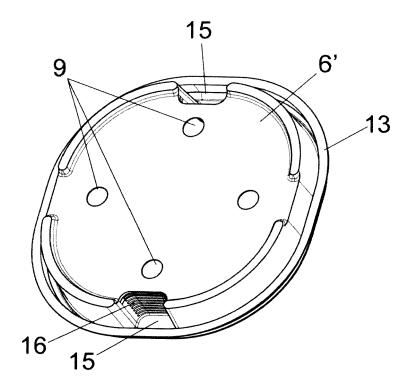


FIG. 8

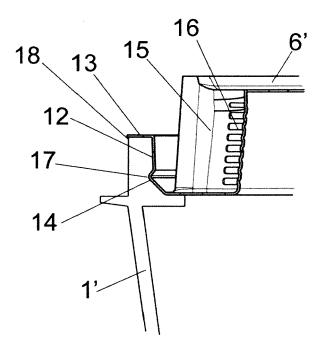


FIG. 9



EUROPEAN SEARCH REPORT

Application Number EP 17 38 0016

5

		DOCUMENTS CONSID			
	Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relev to clai	
10	Y	US 2003/232112 A1 (ET AL) 18 December * paragraphs [0139] 25-30 *	2003 (2003-12-18)		INV. B65D21/02 B65D25/32
15	Υ	WO 00/69737 A1 (PAC 23 November 2000 (2 * page 10, lines 19	2000-11-23)	1,2,4	1,5
20	A	US 2006/243735 A1 (AL) 2 November 2006 * figures *		ET 1	
25	Y	US 3 968 879 A (LUC AL) 13 July 1976 (1 * column 3, line 7 figures *	1976-07-13)		
	Y	US 2 867 351 A (MAC 6 January 1959 (195 * column 2, lines 7	(59-01-06)	1	TECHNICAL FIELDS SEARCHED (IPC)
30					B65D
35					
40					
45					
1					
50 §			Date of completion of the		Examiner
(P040	<u> </u>	The Hague ATEGORY OF CITED DOCUMENTS	2 October 20		Fournier, Jacques
50 (10070a) 88 80 8051 MBO3 Odd	X : parl Y : parl door A : teol O : nor P : inte	g the invention t published on, or eation usons family, corresponding			

EP 3 257 775 A1

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 17 38 0016

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-10-2017

	Patent document ed in search report		Publication date		Patent family member(s)		Publication date
US	2003232112	A1	18-12-2003	CA US	2431807 2003232112		17-12-20 18-12-20
WO	0069737	A1	23-11-2000	AU CA US US WO	4707800 2334506 6257401 6349847 0069737	A1 B1 B1	05-12-20 23-11-20 10-07-20 26-02-20 23-11-20
US	2006243735	A1	02-11-2006	BR CN US	PI0601471 1861488 2006243735	A A1	26-12-20 15-11-20 02-11-20
US	3968879	Α	13-07-1976	GB HK US	1484282 65281 3968879	A A	01-09-19 08-01-19 13-07-19
US	2867351	Α	06-01-1959	NONE			

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82