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(54) CONTAINER FOR FOOD PRODUCTS

(57) The present invention regards a container (C) for foodstuffs or food products or cup-shaped packagings or jars, wherein said food products contained therein can be i) liquids, for example a beverage or milk or dairy products, ii) semi-liquids, for example yoghurt or cream or fruit smoothies, iii) solids, in form of chips, granules or powder, for example fruits, cereals or chocolate. The foodstuffs or food products may be loose, or already per se packaged in jars.

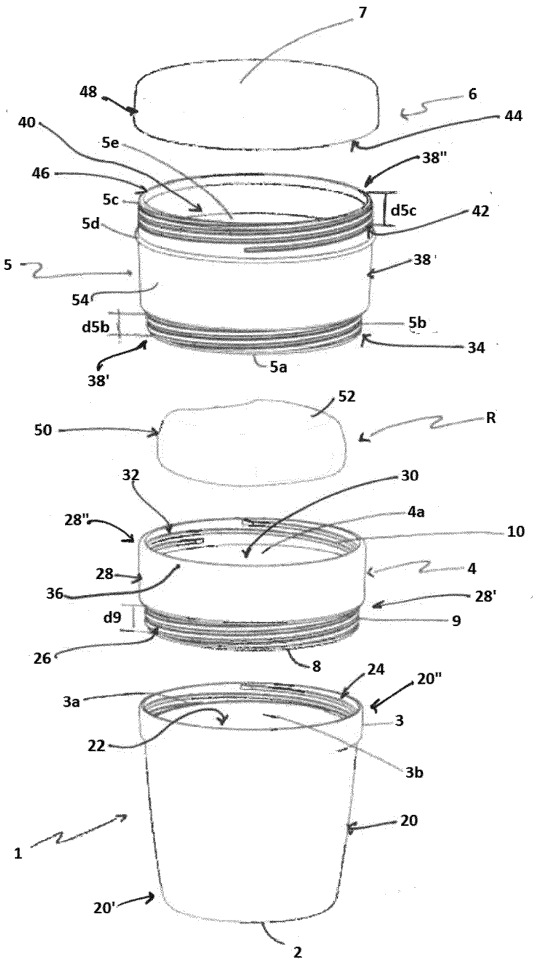

Fig. 3

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Description

[0001] The present invention regards a container for foodstuffs or food products or cup-shaped packagings or jars, wherein said food products contained therein can be i) liquids, for example a beverage or milk or dairy products, ii) semi-liquids, for example yoghurt or cream or fruit smoothies, iii) solids, in form of chips, granules or powder, for example fruits, cereals or chocolate. The foodstuffs or food products may be loose, or already per se packaged in jars.

[0002] Currently, universally known in the food packaging industry are variously shaped containers such as of the drinking-cup, cup, bottle type, or of the jar type, all of which are capable of containing one or more liquid foodstuffs, in particular dairy products, such as milk and the like, or semi-liquids, such as for example yoghurt, which is expressly referred to in the description but without being stripped of its generalness and the fact that it still comprises the equivalent forms.

[0003] In order to allow transportation as well as an easy and safe consumption of the foodstuffs such as dairy products such as cream or yoghurt and the like in jars, even away from home, it is important to prevent any damaging or, even more serious, the breaking of the jars or the covering elements thereof, such as for example made of aluminium, such to cause the spilling of the foodstuffs. Furthermore, as concerns foodstuffs perishable at given temperatures, such as for example yoghurt, cream or fresh cheese, it would be desirable to maintain and preserve at a controlled temperature so as to avoid damaging them.

[0004] Known is the use of containers, made of plastic or rigid material or equivalent semi-rigid material, that are shaped like drinking cups and provided with a closing lid. At times, a jar containing a foodstuff therein can be introduced and housed in said containers so as to protect the jar in question against the risk of breaking during transportation away from home. Alternatively, a loose foodstuff, such as yoghurt for example, can be directly introduced into said containers.

[0005] However, the type of containers mentioned above is not capable of guaranteeing the preservation of the foodstuffs in the jars at the right refrigerated temperature so as to avoid thermal shocks that could jeopardise the wholeness, freshness and unadulterated properties thereof. Same case applies even should the container contain a loose foodstuff, for example yoghurt, directly therein.

[0006] Furthermore, many containers shaped in a manner similar to a drinking-cup or the like are not capable of housing - therein combined with a first foodstuff, such as for example yoghurt - a second foodstuff, such as for example fruits or cereals, and guaranteeing the preservation of both at the correct refrigerated temperature so as to avoid thermal shocks that could jeopardise the wholeness, freshness and unadulterated properties of at least one of said first and second foodstuff.

[0007] Thus, an object of the present invention is to provide a container for foodstuffs or food products capable of overcoming the limits and drawbacks still observable in containers of the prior art mentioned above.

[0008] In particular, an object of the present invention is to provide a container for foodstuffs or food products capable of keeping said foodstuffs or food products well preserved and refrigerated, irrespective of whether loose or packaged foodstuffs or food products, for a determined relatively long period of time to allow consumption thereof away from home.

[0009] Another object of the invention is to provide a container for foodstuffs capable of containing a first foodstuff, for example yoghurt, and a second foodstuff, for example fruits or cereals, separate from each other, so that they can be well-preserved and refrigerated, irrespective of whether loose or packaged foodstuffs or food products, for a determined relatively long period, such to allow consumption thereof away from home.

[0010] A further object of the present invention is to provide a container capable of containing, maintaining and preserving liquid or semi-liquid foodstuffs to be comfortably consumed even away from home maintaining the wholeness and quality thereof intact.

[0011] The functional and structural characteristics of the present invention and the advantages thereof with respect to the prior art will be even more apparent and clear from the attached claims, and in particular upon examining the description below, with reference to the attached drawings, which show the schematisations of a preferred but non-limiting embodiment of a container for foodstuffs wherein:

- figure 1 is a perspective view of the container in question in a first operative position (or assembled position);
- figure 2 is a perspective view of the container of figure 1 provided with a spoon;
- figure 3 is a perspective view in a second operative position (or with separated parts) of the container of figure 1;
- figure 4 is a perspective view in a second operative position (or with separated parts) of the container of figure 2.

[0012] The expression foodstuffs or food products contained in the container subject of the present invention is used comprising among others i) liquid foodstuffs or food products, for example a beverage or milk or a dairy products, ii) liquid semi-liquid foodstuffs or food products, for example yoghurt or cream or fruit smoothies, iii) liquid solid foodstuffs or food products, in form of chips, granules or powder, for example fruits, cereals or chocolate.

[0013] Forming an object of the present invention is a container C for foodstuffs or food products comprising a first cup-shaped container 1, closing means and an element 6 comprising a lid 7; said container C being characterised in

that it further comprises:

- said first cup-shaped container 1, suitable to contain a first foodstuff or food product, comprising a bottom 2 and an opening 3b;
- a second cup-shaped container 5, suitable to contain a first foodstuff or food product, comprising a bottom 5a and an opening 5e;
- at least one cup-shaped element 4, suitable to contain - therein - refrigerating means R, comprising a bottom 8 and an opening 4a, and in that
- said first cup-shaped container 1 is connected to said second cup-shaped container 5 by means of said at least one cup-shaped element 4.

[0014] Furthermore, forming an object of the present invention is a container C for foodstuffs or food products comprising a first cup-shaped container 1, closing means and an element 6 comprising a lid 7, said container C being characterised in that it further comprises:

- said first cup-shaped container 1, suitable to contain a first foodstuff or food product, comprising a bottom 2 and an opening 3b;
- a second cup-shaped container 5, suitable to contain a first foodstuff or food product, comprising a bottom 5a and an opening 5e;
- refrigerating means (R);
- at least one cup-shaped element 4, containing - therein - refrigerating means R, comprising a bottom 8 and an opening 4a, and in that
- said first cup-shaped container 1 is connected to said second cup-shaped container 5 by means of said at least one cup-shaped element 4.

[0015] According to an embodiment, the first cup-shaped container 1 comprises a first lateral wall 20 extending around a prevailing extension axis X of the container C, for example in a tubular manner or in a frustoconical manner.
Preferably, a first end portion 20' of the first lateral wall 20 is connected to the bottom 2, and a second end portion 20" of the first lateral wall 20 delimits the opening 3b.

[0016] More preferably, the first lateral wall 20 and the bottom 2 delimit a first compartment 22 for containing the first foodstuff or food product. The first containment compartment 22 is accessible through the opening 3b which thus constitutes an access opening to said first compartment 22.

[0017] In a preferred embodiment, said first cup-shaped container 1, of said container C (figures 3 and 4), is substantially tapered and provided with a bottom 2 and a collar-like reinforcement element 3 positioned at the open upper part 3b, opposite to said bottom 2, of said first cup-shaped container 1. More precisely, the collar-like reinforcement element 3 is arranged at the second end portion 20" of the first lateral wall 20. Preferably, the collar-like reinforcement element 3 is obtained by means of a material thickening at least partly made of the same material as the first lateral wall 20.
More preferably, said collar-like reinforcement element 3, of said container C, provides for closing means 3a that allow to open and close the open upper part 3b of said first cup-shaped container 1 with the bottom 8 of said cup-shaped element 4.

[0018] According to an embodiment, the first cup-shaped container 1 and the cup-shaped element 4 comprise first complementary coupling means 24, 26 configured for connecting said first cup-shaped container 1 and said cup-shaped element 4 in a releasable manner.
Thus, when the first cup-shaped container 1 and the cup-shaped element 4 are connected to each other by means of first complementary coupling means 24, 26, the bottom 8 of the cup-shaped element constitutes a closing of the opening 3b, and thus of the first containment compartment 22. On the other hand, when the first complementary coupling means 24, 26 are uncoupled, and the bottom 8 of the cup-shaped element 4 is removed from the first cup-shaped container 1, the first containment compartment 22 is accessible through the opening 3b.
Preferably, the first complementary coupling means 24, 26 comprise complementary threadings arranged on the first cup-shaped container 1 and on the cup-shaped element 4. More preferably, the complementary threadings are arranged at the collar-like reinforcement element 3 and at the bottom 8 of the cup-shaped element 4. Even more preferably, the complementary threadings are arranged at the collar-like reinforcement element 3 and externally with respect to the bottom 8 of the cup-shaped element 4.
It should be observed that, in this description, the expression "internal" is used to indicate a threading facing, or oriented, towards the prevailing extension axis X of the container C. On the other hand, the expression "external" is used to indicate a threading facing, or oriented, towards the external of the container C.

[0019] According to an embodiment, the cup-shaped container 4 comprises a second lateral wall 28 extending around the prevailing extension axis X of the container C, for example in a tubular manner or in a frustoconical manner.

Given that the first cup-shaped container 1, the cup-shaped element 4 and the second cup-shaped container 5 are preferably connected to each other in a mutually coaxial manner, the prevailing extension axis X of the container C is shared by the first cup-shaped container 1, the cup-shaped element 4 and the second cup-shaped container 5. Hence, unless specified otherwise, the expressions "axial" or "radial" will always refer to the prevailing extension axis X.

[0020] Preferably, a first end portion 28' of the second lateral wall 28 is connected to the bottom 8, and a second end portion 28" of the second lateral wall 28 delimits the opening 4a of the cup-shaped element 4.

More preferably, the second lateral wall 28 and the bottom 8 delimit a second compartment 30 for containing the refrigerating means R, in which the refrigerating means R are received. The second containment compartment 30 is accessible through the opening 4a which thus constitutes an access opening to said compartment 30. By way of example, the refrigerating means R comprise an amount of cooled and/or frozen liquid or, preferably, a refrigerating cartridge 50 (so-called ice-packs, or gel-packs).

By way of example, a refrigerating cartridge 50 could comprise a cartridge casing 52 (for example made of rigid or flexible material) containing a refrigerating liquid, for example water, ethylene glycols or the mixtures thereof.

[0021] Said cup-shaped element 4 is substantially tapered with a hollow frustoconical or hollow truncated cylinder shape. Preferably, said cup-shaped element 4, of said container C, provides for closing means 9, 10 that allow to open and close the open upper part 4a of said at least one cup-like element 4 with the bottom 5a of said second cup-shaped container 5.

[0022] According to an embodiment, the cup-shaped element 4 and the second cup-shaped container 5 comprise second complementary coupling means 32, 34 configured for connecting said first cup-shaped element 4 and said second cup-shaped container 5 in a releasable manner.

Thus, when the first cup-shaped element 4 and the cup-shaped container 5 are connected to each other by means of second complementary coupling means 32, 34, the bottom 5a of the second cup-shaped container 5 constitutes a closing of the opening 4a, and thus of the second containment compartment 30. On the other hand, when the second complementary coupling means 32, 34 are uncoupled, and the bottom 5a of the second cup-shaped container 5 is removed from the cup-shaped element 4, the second containment compartment 30 is accessible through the opening 4a.

[0023] Preferably, the second complementary coupling means 32, 34 comprise complementary threadings arranged on the cup-shaped element 4 and on the cup-shaped container 5. More preferably, the complementary threadings are arranged at a free edge 36 of the second lateral wall 28 and of the bottom 5a of the second cup-shaped container 5. Even more preferably, the complementary threadings are arranged internally with respect to the free edge 36 of the second lateral wall 28 and externally with respect to the bottom 5a of the second cup-shaped container 5.

[0024] Said second cup-shaped container 5 is substantially tapered with a hollow frustoconical or hollow truncated cylinder shape. Preferably, said closing means 3a, 9, 10, 5b, 5c are represented by a threading which allows the mutual sealing between said first cup-shaped container 1, said at least one cup-shaped element 4, said second cup-shaped container 5 and said cup-shaped element 6 comprising the lid 7 to obtain a closed container C.

[0025] According to an embodiment, the second cup-shaped container 5 comprises a third lateral wall 38 extending around the prevailing extension axis X of the container C, for example in a tubular manner or in a frustoconical manner. Preferably, a first end portion 38' of the third lateral wall 38 is connected to the bottom 5a, and a second end portion 38" of the third lateral wall 38 delimits the opening 5e of the second cup-shaped container 5. More preferably, the third lateral wall 38 and the bottom 5a delimit a third compartment 40 for containing the second foodstuff or food product. The third containment compartment 40 is accessible through the opening 5e which thus constitutes an access opening to said compartment 40.

[0026] According to an embodiment, the second cup-shaped container 5 and the element 6 comprising the lid 7 comprise third complementary coupling means 42, 44 configured for connecting said second cup-shaped container 5 and said element 6 in a releasable manner.

Thus, when the second cup-shaped container 5 and the element 6 are connected to each other by means of third complementary coupling means 42, 44, the lid 7 of the element 6 constitutes a closing of the opening 5e, and thus of the third containment compartment 40. On the other hand, when the third complementary coupling means 42, 44 are uncoupled, and the lid 7 of the element 6 is removed from the second cup-shaped container 5, the third containment compartment 40 is accessible through the opening 5e.

Preferably, the third complementary coupling means 42, 44 comprise complementary threadings arranged on the second cup-shaped container 5 and on the element 6. More preferably, the complementary threadings are arranged at a free edge 46 of the third lateral wall 38 and of a tubular lip 48 of the element 6. Even more preferably, the complementary threadings are arranged externally with respect to the free edge 46 of the third lateral wall 38 and internally with respect to the tubular lip 48 of the element 6. According to an even more preferred embodiment, the tubular lip 48 of the element 6 is connected to the lid 7, and it extends perpendicularly with respect to said lid.

[0027] Preferably, said at least one cup-shaped element 4, of said container C, is substantially frustoconical or truncated-cylinder-shaped and it has closing means at the two ends 9, 10 and an interspace 4a (or second containment compartment 30) capable of housing or housing said refrigerating means R represented by an amount of liquid suitable

to be cooled and/or frozen, or, preferably, a refrigerating cartridge 50 (so-called ice-packs, or gel packs), so as to allow to maintain for a determined period of time at a correct temperature to preserve said first foodstuff or food product contained in said first cup-shaped container 1 and said second foodstuff or food product contained in said second cup-shaped container 5. Basically, the container C of the present invention allows to consume - away from home - foodstuffs such as for example yoghurt, cream, fresh cheese and fruits previously preserved in a refrigerator in that the preservation temperature thereof is maintained even outside the refrigerator for a period of time sufficient to allow consumption thereof even away from home, thanks to the presence of refrigerating means R interposed between said first cup-shaped container 1 and said second cup-shaped container 5.

[0028] The refrigerating means R are in thermal contact with the first cup-shaped container 1 and with the second cup-shaped container 5 so as to remove heat from said first cup-shaped container 1 and from said second cup-shaped container 5.

In other words, the refrigerating means R constitute a *"cold reserve"* available for the first cup-shaped container 1 and for the second cup-shaped container 5 so that the first containment compartment 22 and the third containment compartment 40 can remain in a refrigerated condition as long as possible, even after the container C is placed at a non-refrigerated or non-cooled temperature.

[0029] According to a preferred embodiment, the bottom 8 of the cup-shaped element 4 and the bottom 5a of the second cup-shaped container 5 are thermally permeable to heat flows FC exiting from the first cup-shaped container 1 and from the second cup-shaped container 5, and entering into the cup-shaped element 4. By way of example, the heat flows FC are schematised using dashed arrows in figure 1 or in figure 2. It should be observed that the number of such arrows and/or the length of each arrow do not indicate a greater or smaller amount of heat transferred from the first containment compartment 22 with respect to the third containment compartment 40.

Thus, the bottom 8 of the cup-shaped element 4 and the bottom 5a of the second cup-shaped container 5 consist of one or more thermally non-insulating material/s (for example a non-thermal-insulating polymeric material, or a metallic material), and thus they allow the heat coming from the first containment compartment 22 and from the third containment compartment 40 to reach the cup-shaped element 4 (in which the refrigerating means R are received), due to the temperature gradients between the second containment compartment 30 and the first containment compartment 22, and between the second containment compartment 30 and the third containment compartment 40.

[0030] In the description, the expression "non-thermal-insulating" is used to indicate a polymeric material capable of conducting at least part of the heat of the first containment compartment 22 and of the third containment compartment 40. Preferably, a non-thermal-insulating polymeric material could have an appropriate thickness (for example a thin thickness), such not to stop the heat flows FC discussed previously, and/or it could be a polymeric material loaded with thermal-conductive substances, preferably metallic, more preferably metallic powders.

[0031] According to a preferred embodiment, the refrigerating means R are arranged and/or fixed spaced from the second lateral wall 28 of the cup-shaped element 4, so as to determine a thermal insulation interstice with such second lateral wall 28.

By way of example, the refrigerating means R could be fixed (for example glued or locked mechanically) to the bottom 8 of the cup-shaped element 4.

By way of further example, the refrigerating means R could be kept spaced from the second lateral wall 28 of the cup-shaped element 4 using centring means (for example one or more radial centring fins), extending between the refrigerating means R and the second lateral wall 28 to hold said refrigerating means R in a substantially central position of the second containment compartment 30.

[0032] Preferably, said closing means 3a, of said container C, preferably consist of a threading for example positioned inside said collar-like reinforcement element 3. Preferably, said closing means 9 of said container C, preferably consist of a threading and they are positioned in a first end of said element 4; preferably, they consist of a threading positioned outside said element 4.

Preferably, said closing means 10 of said container C, preferably consist of a threading and they are positioned in a second end of said element 4; preferably, they consist of a threading positioned inside said element 4.

Preferably, said closing means 5b of said container C, preferably consist of a threading and they are positioned in a first end of said second cup-shaped container 5; preferably, they consist of a threading positioned outside said second container 5.

Preferably, said closing means 5c of said container C, preferably consist of a threading and they are positioned in a second end of said second cup-shaped container 5; preferably, they consist of a threading positioned outside said second container 5. Preferably, said second cup-shaped container 5 of said container C - by means of said closing means 5c - is capable of receiving the element 6 comprising the lid 7 and closing means.

[0033] With reference to the attached figures, a container suitable to contain at least one foodstuff, in particular a first and a second foodstuff equal to or different from each other, contained in two environments or interspaces or containment compartments separated from each other, is indicated in its entirety with C. A first environment or interspace is delimited by the bottom 2 and by the opening 3b of said first cup-shaped container 1 in an non-assembled open position, while a

second environment or interspace is delimited by the bottom 5a and by the opening 5e of said second cup-shaped container 5 in an non-assembled open position (figures 3 and 4). In an assembled closed position, a first environment or interspace is delimited by the bottom 2 and by the bottom 8 of said removable cup-shaped element 4, while a second environment or interspace is delimited by the bottom 5a and by the removable element 6 comprising the lid 7 (figures 1 and 2).

A third environment or interspace is delimited by the bottom 8 and by the opening 4a of said cup-shaped element 4 in non-assembled open position. In assembled closed position with the refrigerating means R, a third environment or interspace is delimited by the bottom 8 and by the bottom 5a of said second removable cup-shaped container 5 (figures 3 and 4).

[0034] The foodstuffs may particularly but not limitedly selected from among dairy products, irrespective of whether they are in liquid form, such as for example milk or similar beverages, or in form of semi-liquids and/or paste, for example yoghurt, whether loose or packaged in drinking cups, jars or the like.

The container C, subject of the present invention, is capable of maintaining the sealing between the various environments or interspaces of the containers 1, 4 and 5 so as to prevent the spilling of the foodstuffs contained therein and preserve the quality of the foodstuffs or food products contained in said first and second container 1, 5. The element 6 comprising a lid 7 and closing means (not indicated) allows to keep the sealing of said second cup-shaped container 5 sealed too.

[0035] The container C is made of food grade plastic material, paper or cardboard. The container C, in the assembled operative form, is of the type shaped like a cylindrical or conical cup closed by a removable lid 7 (figure 1 and figure 2).

The container C provides for s first substantially tapered cup-shaped container 1, for example a hollow truncated cone or truncated cylinder, and provided with a flat bottom 2 and a collar-like reinforcement element 3 positioned in the upper part of said cup-shaped container 1 which allows to removably house and engage, preferably by means of a threading (3a, 9, figure 3 and figure 4) a cup-shaped element 4.

[0036] The cup-shaped element 4 preferably has the same outer diameter as the collar 3 so as not to have any protuberance and give continuity and a substantially cylindrical shape to the container C, thanks to the elements 4 and 5 (figure 1 and figure 2).

A second cup-shaped container 5 is removably housed and engaged, preferably by means of a threading (10, 5b, figure 3 and figure 4) positioned above the cup-shaped element 4.

[0037] Said second cup-shaped container 5 preferably has the same outer diameter as the cup-shaped element 4 so as not to have any protuberance and give continuity and a substantially cylindrical shape to the container C.

[0038] Lastly, an upper portion 6 provided with a lid 7 for opening/closing the element 5 and thus the container C is present above said second cup-shaped container 5.

[0039] As illustrated in figures 3 and 4, said first cup-shaped container 1 has a collar 3 preferably positioned externally. The upper part of said cup-shaped container 1 has - therein at the collar 3 - a threading 3a for allowing to open and close said first cup-shaped container 1 by means of said element 4 through a threading 9. In closing position, the internal volume of the cup-shaped container 1 is delimited by the bottom 2 and - in the upper part - by the bottom 8.

[0040] The cup-shaped element 4 may have a substantially conical or cylindrical cup shape and it may have a bottom 8 from which it extends upwards, or downwards (according to the orientation shown in figure 3 or in figure 4), a threaded portion 9 with variable height d9.

[0041] The threaded portion 9 allows to open and close, by means of a screwing and unscrewing mechanism, said first cup-shaped container 1 by means of said cup-shaped element 4.

[0042] The element 4 is substantially shaped to form a hollow truncated cylinder with determined thickness (indicated with d in figures 3 and 4), so as to define - therein - an interspace 4a: such interspace 4a can be capable of sealingly housing an amount of liquid suitable to be cooled and frozen, or, preferably, a refrigerating cartridge 50 (so-called ice-packs, or gel-packs), so as to allow to maintain for a determined period of time at a correct temperature to preserve the liquid or semi-liquid dairy foodstuffs present in the container C, in particular both in the cup-shaped container 1 and in the cup-shaped container 5.

[0043] Said foodstuffs, of various nature, can be loose or packaged in a jar or another type of packaging; by way of example, there may be a first foodstuff, for example yoghurt, contained in said first cup-shaped container 1 and a second foodstuff, for example fruits or cereals, contained in said second cup-shaped container 5.

[0044] The second cup-shaped container 5 is shaped to substantially form a cylindrical cup and it has a bottom 5a from which it extends upwards, or downwards (according to the orientation of figure 3 or of figure 4), a first threaded portion 5b with variable height d5b and a second threaded portion 5c with variable height d5c, opposite to said first.

[0045] The threaded portion 5b allows to open and close (screw and unscrew) said second cup-shaped container 5 on said cup-shaped element 4. Whereas, the threaded portion 5c allows to open and close (screw and unscrew) said second cup-shaped container 5 on the element 6 comprising the lid 7.

[0046] The second cup-shaped container 5 preferably has a collar-like element 5d (figures 3 and 4) extending outwards (in particular in a radial direction) and it is positioned at a position lower than said threading 5c so as to receive the element 6 when it is screwed onto the cup-shaped container 5. Basically, said collar-like element 5d represents an end-

stop during the screwing of the element 6 so as to guarantee the sealing and prevent the spilling of the element contained in said second container 5. Furthermore, this also allows to keep the temperature and the quality of the foodstuff unaltered.

[0047] According to an embodiment, the third lateral wall 38 of the second cup-shaped container 5 comprises a collar-like element 5d, extending annularly externally from an outer surface 54 of said third lateral wall 38, and lying abutting against the element 6 comprising the lid 7 to obtain a sealed closing of the third containment compartment 40. Preferably, the collar-like element 5d lies abutting against the tubular lip 48 to obtain said sealed closing of the third containment compartment 40.

[0048] The container C provides for a first and a second container 1, 5 (figures 3 and 4) suitable to contain a first and a second foodstuff or food product which may be equal to or different from each other. Said first and second container are kept separate from each other by inserting at least one element 4. Should there be two or three elements 4, the latter will be capable of being screwed and unscrewed with respect to each other to obtain a multiple element. Each element 4, part of the latter multiple element, defines an interspace 4a therein. Said interspace 4a houses or it can be capable of housing the refrigerating means R such as an amount of liquid suitable to be cooled and frozen, or, preferably, a refrigerating cartridge 50 for each interspace 4a present the element 4 (the cartridge R is also referred to by the term ice-pack or ice-gel), so as to allow to maintain for a determined period of time a correct temperature for preserving liquid or semi-liquid dairy foodstuffs present in the container C, in particular both in the cup-shaped container 1 and in the cup-shaped container 5.

[0049] In another embodiment of the present invention, the container C (figure 4) has the element 4 provided with a tightening element 11 consisting of a first element 11a and a second element 11b spaced from each other sufficiently to allow to removably house and tighten a fork-like, a knife-like or spoon-like element 12 (figure 4) for facilitating the mixing of the foodstuffs together besides the consumption thereof away from home. Basically, the foodstuff in said second cup-shaped container 5, such as for example cereals or fruits or chocolate, can be poured and mixed with the foodstuff contained in said first cup-shaped container 1, such as for example yoghurt, cream or fresh cheese, thanks to the presence of the fork-like, a knife-like or spoon-like element 12. The presence of the refrigerating means R allows to preserve and maintain the temperature at controlled values and, thus, so as to be able to eat and enjoy said foodstuffs even away from home.

[0050] En preferred embodiments of the present invention are outlined below:

E1. A container C for foodstuffs or food products comprising a first cup-shaped container 1, closing means and an element 6 comprising a lid 7, characterised in that said container C further comprises:

- said first cup-shaped container 1, suitable to contain a first foodstuff or food product, comprising a bottom 2 and an opening 3b;
- a second cup-shaped container 5, suitable to contain a first foodstuff or food product, comprising a bottom 5a and an opening 5e;
- refrigerating means (R);
- at least one cup-shaped element 4, containing - therein - refrigerating means R, comprising a bottom 8 and an opening 4a, and in that
- said first cup-shaped container 1 is connected to said second cup-shaped container 5 by means of said at least one cup-shaped element 4:

wherein said refrigerating means R are at thermal contact with the first cup-shaped container 1 and with the second cup-shaped container 5 so as to remove heat from said first cup-shaped container 1 and from said second cup-shaped container 5.

E2. The container C according to E1, wherein the bottom 8 of the cup-shaped element 4 and the bottom 5a of the second cup-shaped container 5 are thermally permeable to heat flows exiting from the first cup-shaped container 1 and from the second cup-shaped container 5, and entering into the cup-shaped element 4.

E3. The container C according to E1 or E2, wherein the bottom 8 of the cup-shaped element 4 and the bottom 5a of the second cup-shaped container 5 are made of one or more thermally non-insulating materials.

E4. The container C according to any one of E1-E3, characterised in that said first cup-shaped container 1 is substantially tapered and provided with a bottom 2 and with a collar-like reinforcement element 3 positioned in the open upper part 3b, opposite to said bottom 2, of said first cup-shaped container 1, and in that said collar-like reinforcement element 3 provides for closing means 3a which allow to open and close the open upper part 3b of said first cup-shaped container 1 with the bottom 8 of said cup-shaped element 4.

E5. The container C according to any one of E1-E4, characterised in that said at least one cup-shaped element 4 is substantially shaped to form a hollow truncated-cylinder and it has closing means at the two ends 9, 10 and an interspace 4a or a second containment compartment 30 capable of housing said refrigerating means R represented by an amount of liquid suitable to be cooled and frozen, or, preferably, a refrigerating cartridge (so-called ice-packs, or gel packs), so as to allow to maintain for a determined period of time at a correct temperature to preserve said first foodstuff or food product contained in said first cup-shaped container 1 and said second foodstuff or food product contained in said second cup-shaped container 5.

E6. The container C according to any one of E1-E5, wherein the refrigerating means R are arranged and/or fixed spaced from a second lateral wall 28 of the cup-shaped element 4, so as to determine a thermal insulation interstice with said second lateral wall 28.

E7. The container C according to any one of E1-E6, characterised in that said closing means 3a preferably consist of a threading positioned inside said collar-like reinforcement element 3.

E8. The container C according to any one of E1-E7, characterised in that said closing means 9 preferably consist of a threading and they are positioned in a first end of said element 4; preferably, they are represented by a threading positioned outside said element 4.

E9. The container C according to any one of E1-E8, characterised in that said closing means 10 preferably consist of a threading and they are positioned in a second end of said element 4; preferably, they are represented by a threading positioned inside said element 4.

E10. The container C according to any one of E1-E9, characterised in that said closing means 5b preferably consist of a threading and they are positioned in a first end of said second cup-shaped container 5; preferably, they are represented by a threading positioned outside said second container 5.

E11. The container C according to any one of E1-E10, characterised in that said closing means 5c preferably consist of a threading and they are positioned in a second end of said second cup-shaped container 5; preferably, they are represented by a threading positioned outside said second container 5.

E12. The container C according to any one of E1-E11, characterised in that said second cup-shaped container 5 - by means of said closing means 5c - is capable of receiving the element 6 comprising the lid 7 and closing means.

LIST OF REFERENCE NUMBERS

1	first cup-shaped container	22	first containment compartment of the first cup-shaped container
2	bottom of the first cup-shaped container		
3	collar-like reinforcement element	24,26	first complementary coupling means
3a	closing means	28	second lateral wall
3b	opening or open upper part of the first cup-shaped container	28’	first end portion of the second lateral wall
4	cup-shaped element	28"	second end portion of the second lateral wall
4a	opening of the cup-shaped element		
5	second cup-shaped container	30	second containment compartment of the cup-shaped element
5a	bottom of the second cup-shaped container		
		32, 34	second complementary coupling means
5b	closing means or threaded portion	36	free edge of the second lateral wall
5c	closing means or threaded portion	38	third lateral wall of the second cup-shaped container
5d	collar-like element		
5e	opening of the second cup-shaped container	40	third containment compartment
		42, 44	third complementary coupling means
6	element	46	free edge of the third lateral wall
7	lid	48	tubular lip of the element comprising the lid
8	bottom of the cup-shaped element		
9	closing means	50	refrigerating cartridge

(continued)

10	closing means	52	cartridge casing
11	tightening element	54	outer surface of the third lateral wall
11a	first element of the tightening element	C	container
11b	second element of the tightening element	d5b	height (axial) of the first threaded portion 5b
12	fork-like, a knife-like or spoon-like element	d5c	height (axial) of the first threaded portion 5c
20	first lateral wall of the first cup-shaped container	d9	height (axial) of the threaded portion 9
		FC	heat flow (dashed line)
20'	first end portion of the first lateral wall	R	refrigerating means
20"	second end portion of the first lateral wall	X	prevailing extension axis of the container

Claims

1. A container (C) for foodstuffs or food products comprising a first cup-shaped container (1), closing means and an element (6) comprising a lid (7), **characterised in that** said container (C) further comprises:

- said first cup-shaped container (1), suitable to contain a first foodstuff or food product, comprising a bottom (2) and an opening (3b);
- a second cup-shaped container (5), suitable to contain a second foodstuff or food product, comprising a bottom (5a) and an opening (5e);
- refrigerating means (R);
- at least one cup-shaped element (4), containing refrigerating means (R) therein, comprising a bottom (8) and an opening (4a), and **in that**:
- said first cup-shaped container (1) is connected to said second cup-shaped container (5) by means of said at least one cup-shaped element (4):

wherein said refrigerating means (R) are in thermal contact with the first cup-shaped container (1) and with the second cup-shaped container (5) so as to remove heat from said first cup-shaped container (1) and from said second cup-shaped container (5).

2. The container (C) according to claim 1, wherein the bottom (8) of the cup-shaped element (4) and the bottom (5a) of the second cup-shaped container (5) are thermally permeable to heat flows exiting from the first cup-shaped container (1) and from the second cup-shaped container (5), and entering into the cup-shaped element (4).

3. The container (C) according to any one of the preceding claims, wherein the bottom (8) of the cup-shaped element (4) and the bottom (5a) of the second cup-shaped container (5) are made of one or more thermally non-insulating materials.

4. The container (C) according to any one of the preceding claims, **characterised in that** said first cup-shaped container (1) is substantially tapered and provided with a bottom (2) and with a collar-like reinforcement element (3) positioned in the open upper part (3b), opposite to said bottom (2), of said first cup-shaped container (1), and **in that** said collar-like reinforcement element (3) provides for closing means (3a) which allow to open and close the open upper part (3b) of said first cup-shaped container (1) with the bottom (8) of said cup-shaped element (4).

5. The container (C) according to any one of the preceding claims, **characterised in that** said at least one cup-shaped element (4) is substantially truncated-cylinder-shaped and it has closing means at the two ends (9, 10) and an interspace (4a) or a second containment compartment (30) housing said refrigerating means (R) represented by an amount of liquid suitable to be cooled and frozen, or, preferably, a refrigerating cartridge (so-called ice-packs, or gel packs), so as to allow to maintain for a determined period of time at a correct temperature to preserve said first foodstuff or food product contained in said first cup-shaped container (1) and said second foodstuff or food product contained in said second cup-shaped container (5).

6. The container (C) according to any one of the preceding claims, wherein the refrigerating means (R) are arranged and/or fixed spaced from a second lateral wall (28) of the cup-shaped element (4), so as to determine a thermal insulation interstice with said second lateral wall (28).

7. The container (C) according to any one of the preceding claims, **characterised in that** said closing means (3a) preferably consist of a threading positioned inside said collar-like reinforcement element (3).

8. The container (C) according to any one of the preceding claims, **characterised in that** said closing means (9) preferably consist of a threading and are positioned in a first end of said element (4); preferably, are represented by a threading positioned outside said element (4).

9. The container (C) according to any one of the preceding claims, **characterised in that** said closing means (10) preferably consist of a threading and are positioned in a second end of said element (4); preferably, are represented by a threading positioned inside said element (4).

10. The container (C) according to any one of the preceding claims, **characterised in that** said closing means (5b) preferably consist of a threading and they are positioned in a first end of said second cup-shaped container(5); preferably, they are represented by a threading positioned outside said second container (5).

11. The container (C) according to any one of the preceding claims, **characterised in that** said closing means (5c) preferably consist of a threading and are positioned in a second end of said second cup-shaped container (5); preferably, they are represented by a threading positioned outside said second container (5).

12. The container (C) according to any one of the preceding claims, **characterised in that** said second cup-shaped container (5) - by means of said closing means (5c) - is capable of receiving the element (6) comprising the lid (7) and closing means.

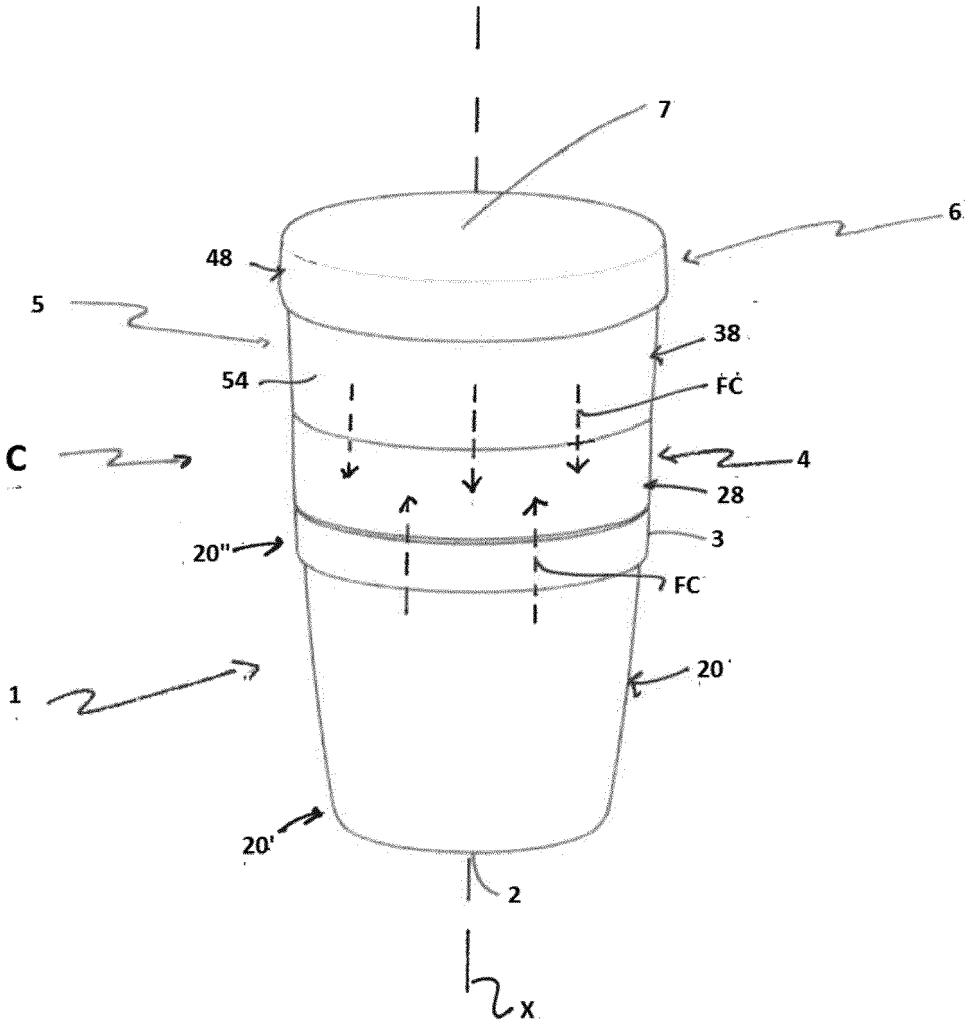

Fig. 1

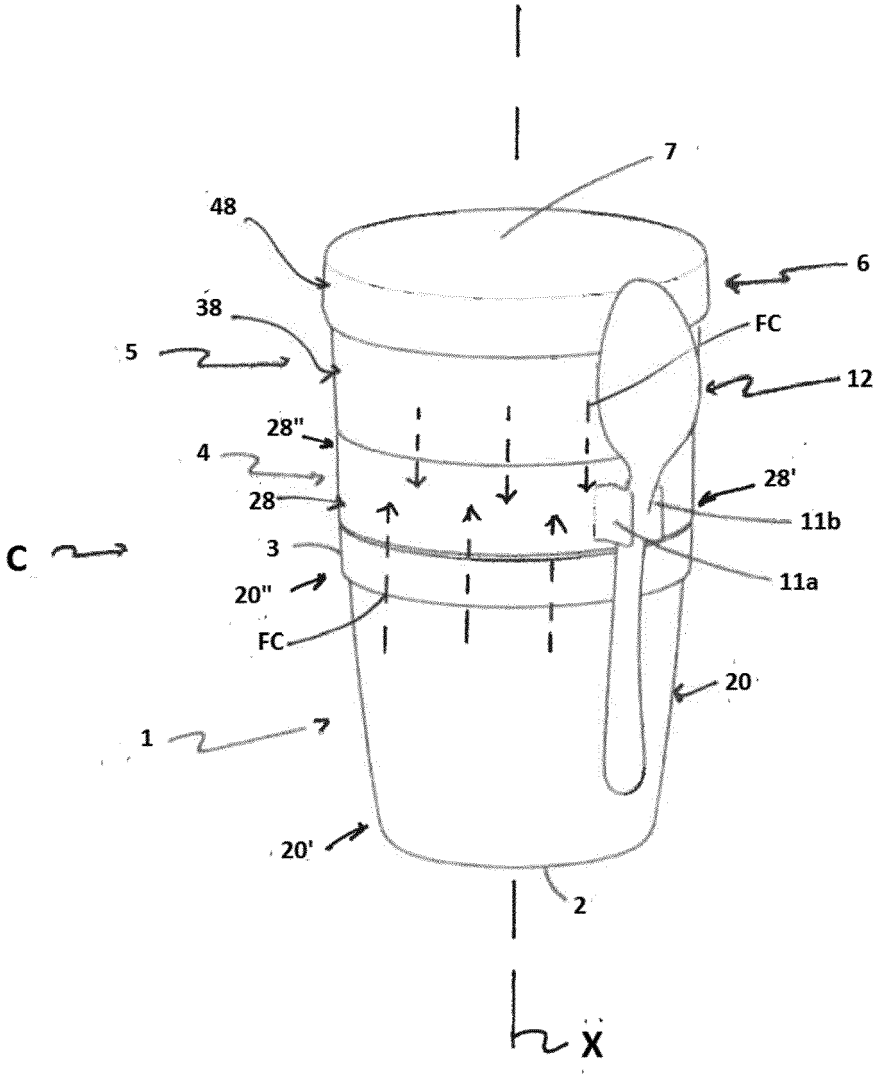

Fig. 2

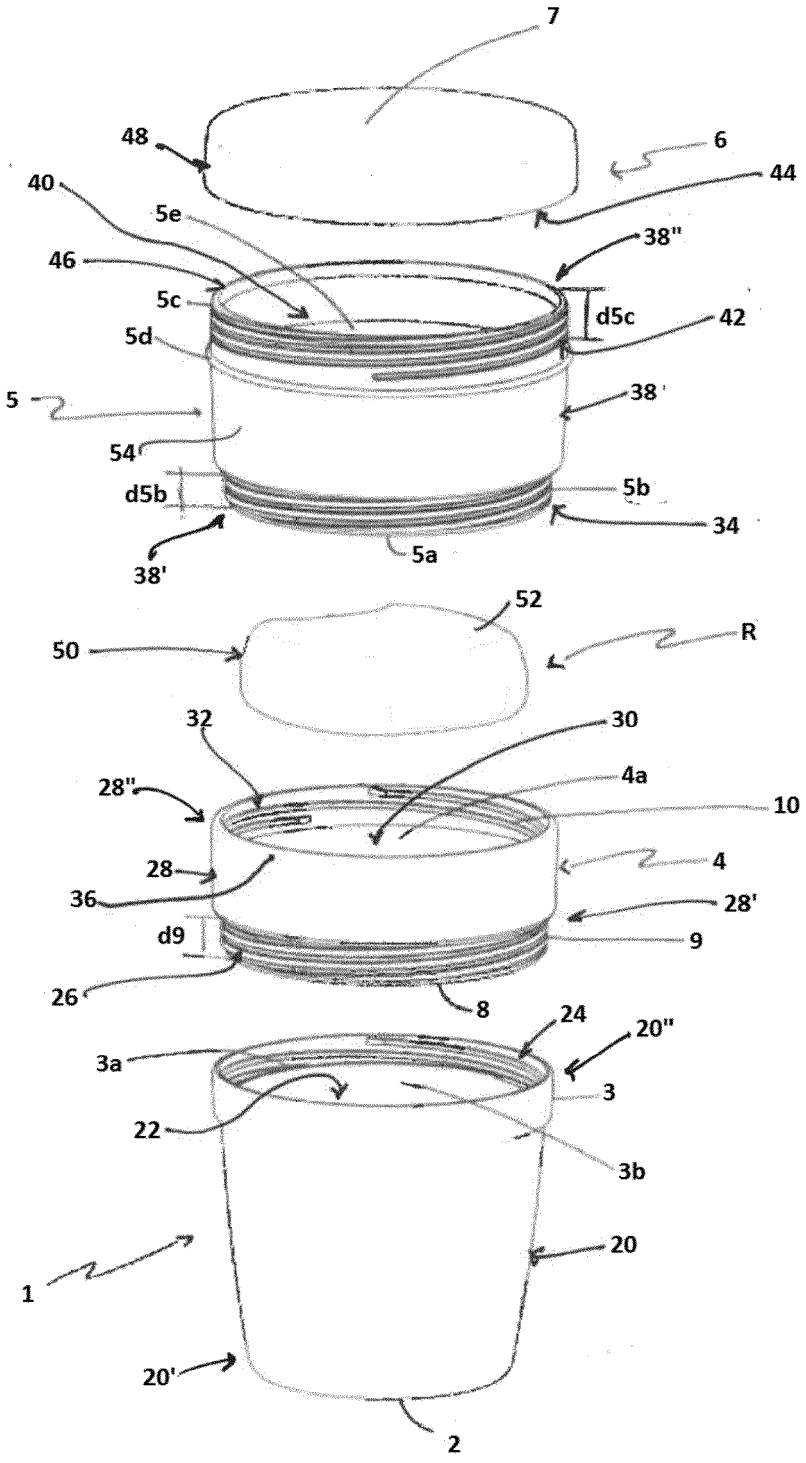
7
48
6
44
40
5e
38"
46
5c
d5c
42
5d
5
38'
54
d5b
5b
34
38'
5a
52
50
R
32
30
28"
4a
10
28
4
36
28'
d9
9
26
8
24
20"
3a
3
22
3b
20
1
20'
2

Fig. 3

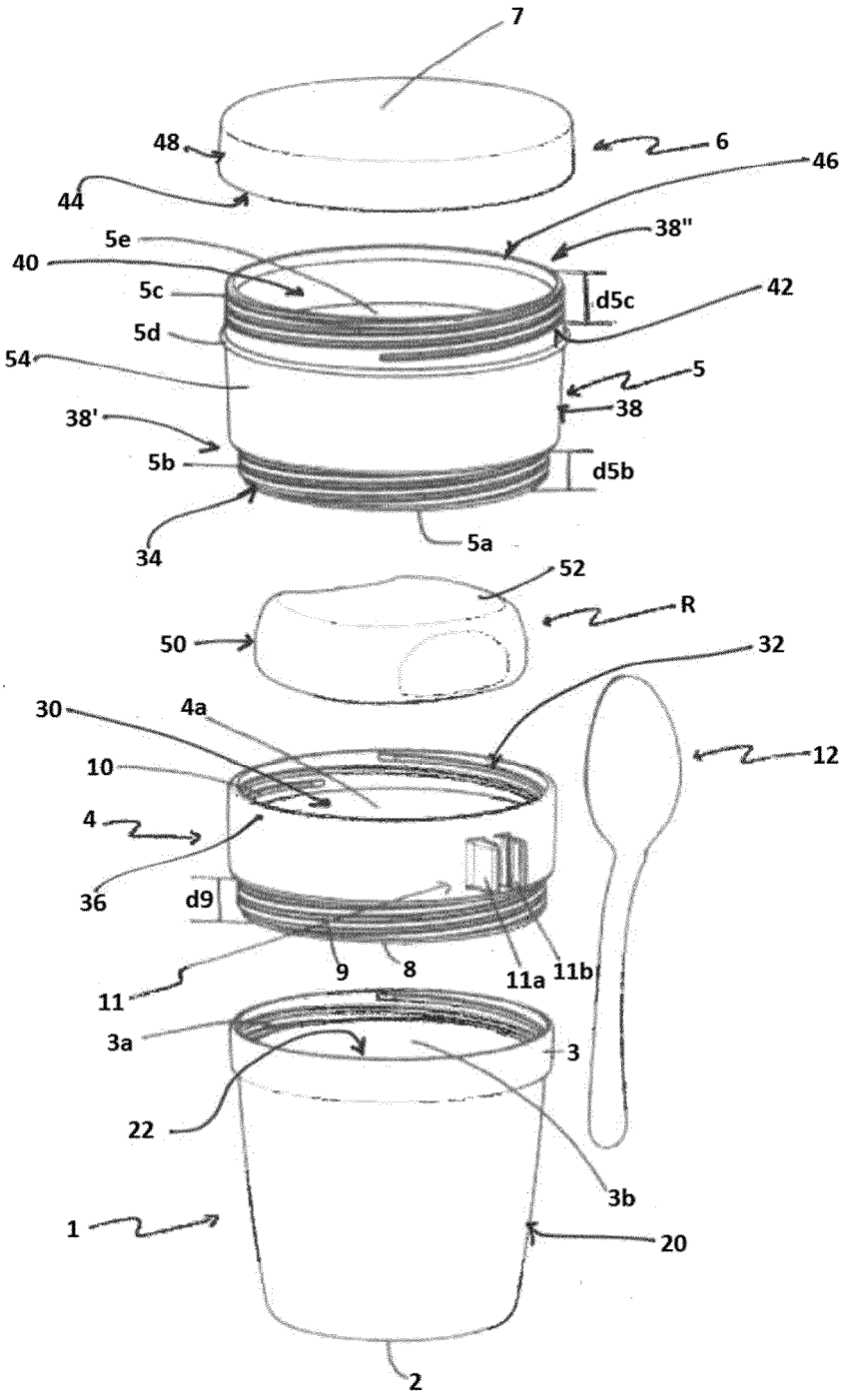
7
48
6
46
44
38"
5e
40
5c
d5c
42
5d
54
5
38
38'
5b
d5b
34
5a
52
R
50
32
30
4a
12
10
4
36
d9
9
8
11a
11b
11
3a
3
22
3b
1
20
2

Fig. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 19 19 0333

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2013/111726 A1 (KRIEGER GLENN D [US]) 9 May 2013 (2013-05-09) * paragraphs [0009] - [0057] * * figures 1-15 *	1-12	INV. B65D21/02 B65D51/24
X	KR 200 453 465 Y1 (DOO H K) 6 May 2011 (2011-05-06) * paragraphs [0001] - [0025] * * figures 2,3,4 *	1-12	
X	GB 2 389 835 A (PARR ROSEMARY [GB]) 24 December 2003 (2003-12-24) * page 1 * * figures 1/3-3/3 *	1-3,5, 7-12	
A	DE 203 09 533 U1 (FISCHER WILLIBALD [DE]; SCHMIDBAUER RITA [DE]) 4 September 2003 (2003-09-04) * pages 1-5 * * figure 1 *	1-12	
A	WO 2012/075567 A1 (SULJAK JOE [CA]; KERR JEFF) 14 June 2012 (2012-06-14) * figure 8 *	1-12	TECHNICAL FIELDS SEARCHED (IPC) B65D
A	US 2008/149634 A1 (OSBORNE MORTISSA [US]) 26 June 2008 (2008-06-26) * paragraphs [0001] - [0036] * * figure 13 *	1-12	
A	US 2014/238949 A1 (PATEL JIGNESH [US]) 28 August 2014 (2014-08-28) * paragraph [0075] * * page 6 *	1-12	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	7 November 2019	Duc, Emmanuel

CATEGORY OF CITED DOCUMENTS

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07-11-2019

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2013111726 A1	09-05-2013	NONE	
KR 200453465 Y1	06-05-2011	NONE	
GB 2389835 A	24-12-2003	NONE	
DE 20309533 U1	04-09-2003	NONE	
WO 2012075567 A1	14-06-2012	US 2013270264 A1 WO 2012075567 A1	17-10-2013 14-06-2012
US 2008149634 A1	26-06-2008	US 2008149634 A1 WO 2009114481 A2	26-06-2008 17-09-2009
US 2014238949 A1	28-08-2014	US 2014238949 A1 US 2015239600 A1	28-08-2014 27-08-2015

EPO FORM P0459

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