

Description

[0001] The present invention relates to a device for obtaining containers made of ice, for liquids, particularly for drinking beverages.

[0002] Currently, the use of devices for forming containers made of ice is limited to the manufacture of hollow cups which can be used as glasses and have, on their bottom side, which lies opposite the opening, a surface on which it is possible to anchor a handle.

[0003] Such handle is rigidly coupled to the cup by way of protrusions, which are internally provided with teeth for anchoring to the ice.

[0004] The main drawback of these devices is that they produce containers not easy to be used.

[0005] Said containers have the disadvantage that the water that has melted during use, due to ambient heat, drips: said water, by flowing along said handle, wets the hand that holds the container or the surface on which said containers rest.

[0006] Other conventional containers are, for example, cups made of glass, ceramic, metal or other material for drinking beverages.

[0007] The drawback suffered by these cups is that during the consumption of chilled beverages, such as for example liqueurs to be drunk at low temperatures, they do not prevent liquid heating, caused by the environment. It is in fact often necessary to place into the cup one or more ice cubes in order to maintain the liquid at low temperature, by utilizing the latent melting heat that is required by ice to melt.

[0008] Furthermore, during use of these conventional cups, particularly if made of glass or metal, a further drawback often arises due to the chilling of the hand that holds the cup.

[0009] The aim of the present invention is therefore to solve the above problems, eliminating the drawbacks of the prior art by providing a device which allows to obtain containers made of ice, for liquids, particularly for drinking chilled beverages, which do not wet the user's fingers or the surface on which the containers rest.

[0010] Within the scope of this aim, an important object is to provide a device for producing containers which allow to drink the beverage always at the optimum temperature, avoiding the rapid heating of the liquid.

[0011] Another important object is to provide a device for producing containers which do not chill the fingers of the user while drinking.

[0012] Another object is to provide a device which is structurally simple and has low manufacturing costs.

[0013] These and other objects which will become better apparent hereinafter are achieved by a device for obtaining containers made of ice, for liquids, characterized in that it is constituted by a hollow body which has a closed lower end from which a projection protrudes axially and internally, said hollow body being closeable, at its upper end, by way of a lid, which can in turn be closed by way of a partition with inclined walls and pro-

vided with at least one protrusion which protrudes toward said projection.

[0014] Further characteristics and advantages of the invention will become better apparent from the detailed description of a particular embodiment thereof, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a side view of a cross-section of the device according to the invention;

Figure 2 is a perspective view of a container obtained by using the device according to the invention;

Figure 3 is a perspective view of a device for simultaneously preparing a plurality of containers.

[0015] With reference to the figures, 1 designates a device for obtaining containers for liquids which is constituted by waterproof material, such as for example plastics.

[0016] Said device has a hollow body 2 which is preferably axially elongated and whose lower end, designated by the reference numeral 3, is closed.

[0017] A projection, designated by the reference numeral 4, protrudes axially and internally from said end, and its lateral surface is preferably shaped so as to taper toward the opposite end; it preferably has a frustum-like, prism-like, truncated-pyramid shape or, even, a cylindrical shape.

[0018] Said hollow body 2 acts as a container for an appropriate amount of liquid, preferably water, designated by the reference numeral 5, and is open at the upper end, designated by the reference numeral 6, which can be closed by means of a lid 7.

[0019] Said lid 7 is constituted by a bottom 8, which is advantageously of a form other than convex, and by a lateral surface, designated by the reference numeral 9, which is adapted to be arranged coaxially and externally with respect to the upper end 6, so as to connect to each other said lid 7 and said hollow body 2.

[0020] Said bottom 8 and said lateral surface 9 form a first reservoir, designated by the reference numeral 10, which is proportionate to the volume of said hollow body 2, so as to be large enough to collect the water that has melted after the use of the container.

[0021] Said lid 7 can in turn be closed by means of a partition, designated by the reference numeral 11, which is detachable and can be interposed between said lid 7 and said hollow body 2, advantageously by connection between a seat, designated by the reference numeral 12 and formed on the lower edge of said lid 7, and a complementarily shaped annular ridge 13 which protrudes above said partition 11.

[0022] Said partition 11 has walls which are inclined in a direction away from said projection 4 so as to form, after the solidification of said water 5, a second reservoir, designated by the reference numeral 14, which is delimited by said partition 11 and by the solidified sur-

face of said water 5.

[0023] The solidification of the water produces, once the hollow body 2 has been turned over, a container made of ice, designated by the reference numeral 15 in Figure 2.

[0024] Said second reservoir 14 is used to collect the water produced by the melting of the container 15 made of ice, conveying said water into said first reservoir 10 through one or more ducts, designated by the reference numeral 16, formed in said partition 11.

[0025] Said partition 11 is provided with a protrusion, designated by the reference numeral 17, which protrudes toward said projection 4 and constitutes a grip element for said container 15 made of ice which has formed due to cooling.

[0026] In said protrusion 17, the lateral walls preferably have a shape which diverges toward said projection 4, so as to prevent separation of said protrusion 17 from said container 14, made of ice, during extraction from said hollow body 2.

[0027] Operation is therefore as follows: with reference to Figure 1, the device 1, composed of a hollow body 2, a lid 7, and a partition 11, is initially arranged so that its hollow body is open and the partition is associated with said lid, as shown in Figure 3.

[0028] After filling said hollow body 2 up to a preset level with water or other appropriate liquids or drinkable mixtures, said hollow body is closed by means of the assembly constituted by the partition and the lid.

[0029] Then the device 1 is arranged in a place, at a low temperature, for example in a freezer, enough to cause the phase transition from water to ice.

[0030] Once this has occurred, at the intended time it is possible to extract from said hollow body 2 the partition-lid assembly with which the container 15 made of ice, is associated by virtue of at least one protrusion 17.

[0031] Once it has been turned over, said object thus obtained and shown in Figure 2, constitutes a container made of ice, for liquids, in which said partition-lid assembly performs the dual function of drip reservoir and grip for using said container 15 made of ice.

[0032] The cavity formed by the corresponding projection 4 can be used to contain liquids, particularly chilled beverages to be consumed at low temperature.

[0033] During use, the ambient temperature at which said container 15 made of ice is placed causes its gradually melting.

[0034] The water that has melted, initially flows into the second reservoir 14 and then, through the ducts 16, into a first reservoir 10 formed inside said lid 7.

[0035] In this manner, the user can drink the chosen beverage without wetting his fingers with the melted water and without chilling his fingers, since the material of which said lid 7 is made is preferably a good heat insulator, for example plastics.

[0036] Once said container 15 made of ice has melted completely, the partition 11 is removed from the container 7 and emptied of the water that it has col-

lected.

[0037] It has thus been observed that the invention has achieved the intended aim and objects, a device for obtaining containers for liquids having been provided which can be used simply and inexpensively, particularly for chilled beverages, and keeps said beverages at low temperature without wetting or chilling the fingers of the user.

[0038] The invention is of course susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0039] Thus, for example, as shown in Figure 3, it is possible to use a device for simultaneously producing a plurality of containers made of ice.

[0040] Moreover, for example, the lateral surface of the hollow body 2 can be other than cylindrical and can therefore assume any geometric shape.

[0041] The materials used and the dimensions that constitute the individual components of the invention may of course be more pertinent according to specific requirements.

[0042] The disclosures in Italian Patent Application No. TV99A000112 from which this application claims priority are incorporated herein by reference.

[0043] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A device for obtaining ice containers for liquids, characterized in that it is constituted by a hollow body (2) which has a closed lower end (3) from which a projection (4) protrudes axially and internally, said hollow body (2) being closeable, at its upper end (6), by way of a lid (7), which can in turn be closed by way of a partition (11) with inclined walls and provided with at least one protrusion (17) which protrudes toward said projection (4).
2. The device according to claim 1, characterized in that it is advantageously constituted by components made of impermeable materials, preferably plastics.
3. The device according to claims 1 and 2, characterized in that said projection (4) has a lateral surface which is preferably shaped so as to taper toward said upper end (6).
4. The device according to claims 1 and 3, characterized in that said projection (4) is preferably frustum-like or prism-like or truncated pyramid-like or cylindrical in configuration.

5. The device according to claims 1 and 4, characterized in that said hollow body (2) acts as a container for an appropriate amount of liquid, preferably water, which can be introduced through said upper end (6). 5

6. The device according to claims 1 and 5, characterized in that said lid (7) is constituted by a bottom (8) which has a form other than convex, and by a lateral surface (9) which is adapted to be arranged coaxially and externally to said upper end (6) of said hollow body (2), so as to connect to each other said lid (7) and said hollow body (2). 10

7. The device according to claims 1 and 6, characterized in that said bottom (8) and said lateral surface (9) form a first reservoir (10) which is proportionate to the volume of said hollow body (2) so as to be large enough to collect the water that melts during and after use of the container. 15
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8. The device according to claims 1 and 7, characterized in that said partition (11) is removable and can be interposed between said lid (7) and said hollow body (2), advantageously by way of the connection between a seat (12), formed in the lower edge of said lid (7), and a complementarily shaped annular ridge (13) which protrudes above said partition (11). 25
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9. The device according to claims 1 and 8, characterized in that said partition (11), by having walls which are inclined away from said projection (4), forms, after the water (5) has solidified, a second reservoir (14) which is delimited by said partition (11) and by the upper surface of the ice that has formed. 35

10. The device according to claims 1 and 9, characterized in that it provides, once turned over, after the water (5) has solidified, and said hollow body (2) has been removed from said lid (7), a container made of ice. 40

11. The device according to claims 1 and 10, characterized in that said second reservoir (14), used to collect the water (5) that melts away from said container made of ice, conveys said water (5) into said first reservoir (10) through one or more ducts (16) formed in said partition. 45
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12. The device according to claims 1 and 11, characterized in that said protrusion (17), by protruding from said partition (11), constitutes a grip element for said container made of ice. 55

13. The device according to claims 1 and 12, characterized in that the lateral walls of said protrusion (17) preferably diverge toward said projection (4), so as to prevent separation of said protrusion (17) from said container made of ice upon extraction from said hollow body (2).



