



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 354 541 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
22.10.2003 Bulletin 2003/43

(51) Int Cl.7: **A47G 19/22**

(21) Application number: **02447067.6**

(22) Date of filing: **15.04.2002**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

(71) Applicant: **Van de Sompel, Kristof Johan Georges**
9000 Gent (BE)

(72) Inventor: **Van de Sompel, Kristof Johan Georges**
9000 Gent (BE)

(54) **Receptacle for serving cold liquids and consumable ice simultaneously**

(57) Receptacle for serving cold liquids and ice simultaneously, comprising a first part (1) containing an opening (4) through which a liquid can be inserted and removed; a second part (2) that has an opening (5)

through which a cooling substance can be inserted or removed; a heat conducting wall (3); and wherein the said first part (1) and said second part (2) are separated by the said heat conducting wall (3).

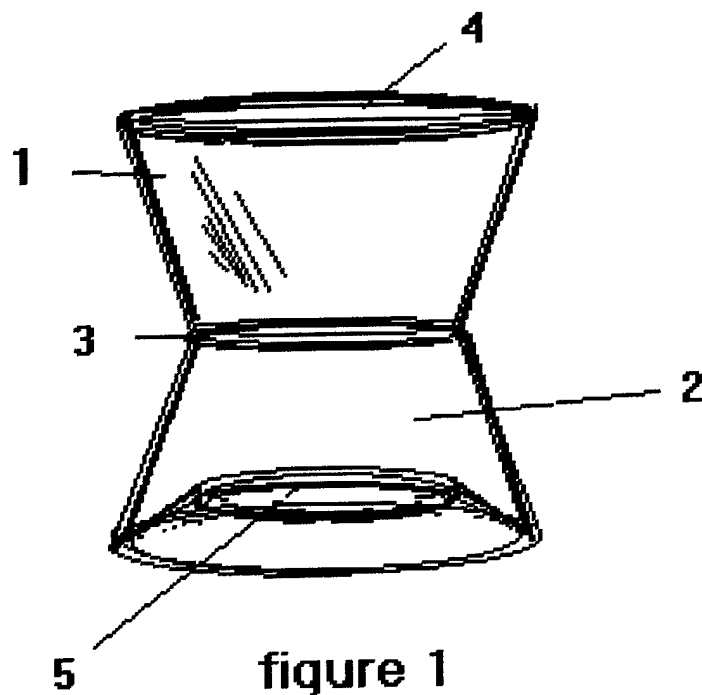


figure 1

EP 1 354 541 A1

Description

[0001] The Invention pertains to receptacles, and, more particularly to receptacles for serving cold liquids and ice simultaneously without mixture of the two components.

[0002] The invention consists of a first part, containing an opening in which a liquid can be served, and a second part in which ice can be temporarily stored.

The two parts are separated by a thin wall, which is heat conducting. This formation has the ability of cooling a liquid in one part by ice stored in the second part, without mixture of the two components. This mixture would result in taste and quality diminishment for both components.

[0003] This invention provides a liquid, spirits such as eau-de-vis, ,jenever, vodka and the like ,in particular, to be served cold and maintain its cool temperature during consumption, due to the heat-conducting ability of the consumable ice ,stored in the other part of the receptacle. The consuming ice, such as sorbet or soft ice, is, due to the formation of the receptacle, to be consumed after consumption of the liquid.

[0004] There are a number of liquids that are to be consumed very cold. Therefore several inventions have found solutions for preserving the cold temperature. For example, users certificates are known to us where the cold temperature has been preserved by constructing a closed part in which the cooling element is stored permanently. The disadvantage of this construction is that it is relatively expensive to produce.

A second disadvantage is to be found in the fact that a lot of pressure, due to the expansion of the cooling liquid when freezing, is put on the wall of the receptacle. This can cause cracks in the receptacle.

[0005] Above all, these receptacles need to be stored some time in a freezing atmosphere. In many cases this can create a storage problem.

[0006] Finally these solutions are not suited for an intensive use, due to the time period they need to be stored in a freezing temperature.

[0007] Others have created receptacles characterising a lid on the cooling part, which is also relatively expensive, and for small glasses not easy to handle. Additionally can it create a problem in cleaning and wiping some parts of the cooling reservoir. Moreover, it is a more complex solution and therefore not suited as a consuming article.

[0008] This invention has the purpose of creating a receptacle that is easy to manufacture. The invention contains two open reservoirs .Open reservoirs are certainly easier to produce then closed reservoirs. Besides is it not necessary to fill one reservoir with cooling liquid during fabrication. That is because with open reservoirs the substance can be brought in and removed instantly. Open reservoirs are less liable to created tensions characteristic to expanding substances while being cooled down.

These two reservoirs are separated by a common wall. This wall is preferably relatively thin. Creating a thin wall is advantageous for maximising the conducting of temperature between the two substances. Another characteristic of the receptacle according to the invention is that the two reservoirs are symmetrical, the earlier mentioned wall functioning as the centre line.

[0009] Another characteristic of the invention is the presence of an avowed rim on the inner side of the reservoir that is meant to be filled with the cooling substance. This rim prevents the cooling substance to fall out of the glass while melting. Besides that does the rim provide a gutter for the melting ice. This prevents dripping while drinking the liquid from the other reservoir. Once the liquid in the first part is entirely consumed, the receptacle is to be turned upside down. After doing so, the second reservoir, if containing consumable ice , can be emptied by the consumer using a little spoon.

The invention will now be explained in detail illustrated by the designs which function here as examples. The illustration contains :

figure 1 which is a design according to the invention;
figure 2 that magnifies part of the avowed rim, located at the inner part of the second reservoir;
figure 3 illustrating a analogue design according to the invention.

In the illustration, analogue or identical elements carry the same number. The following description will be concentrated on a drinking glass. It is obvious that other consumable articles like dairy-produces, sweets or other substances that need to be served cold, are related to the invention.

A receptacle according to the invention and as shown in the illustration contains a first 1 and second 2 part, separated by a common wall 3. The object is preferably made out of glass, because this is an appropriate material for fabricating drinking glasses, nevertheless other materials such as plastic, porcelain, paper are also suitable. The receptacle can be made out of clear, dull or coloured glass.

[0010] The first part 1 is draft for the temporarily storage of consumable liquid. Therefore the first part has an opening 4 through which the liquid can be poured in . The opening has a rim on which the consumer puts his lips when consuming the liquid.

[0011] The second part 2 is designed for the temporarily storage of consumable ice, such as sorbet or ice cream, or any other substance that has the ability of cooling a liquid or any other consumable substance present in the first reservoir.

The first and second part are separated by a wall 3. This wall can be made out of the same material as the rest of the receptacle, or out of any other material that can easily conduct heat. The two parts are then combined through this wall. The wall is preferably not too thick. A thick wall would diminish the heat conduction ability.

This results in a formation by which the first reservoir is to be refrigerated by the substance in the second reservoir without the chance of mixture of those two components.

The second reservoir has an opening through which the cooling substance can be brought in.

An avowed rim 6 fabricated at the opening of the second reservoir prevents the substance located in this second part to fall out when it starts melting. The rim is proportional to the glass in such a way that the cooling substance can not fall out of the glass when it starts melting, but can easily be reached by a spoon for consumption. The rim has an oblique surface 7 in such a way that it acts as a gutter that prevents the melting water located in the second reservoir from dripping out. This can occur while turning slightly the receptacle for better consuming of the liquid in the first reservoir. The fabrication of a rim results in an open reservoir that can be easily cleaned and wiped.

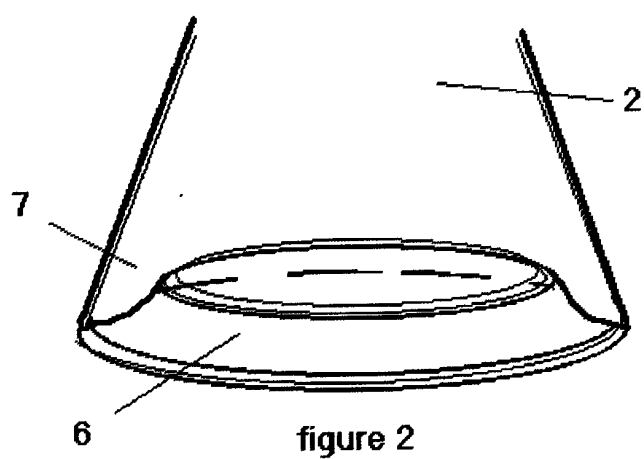
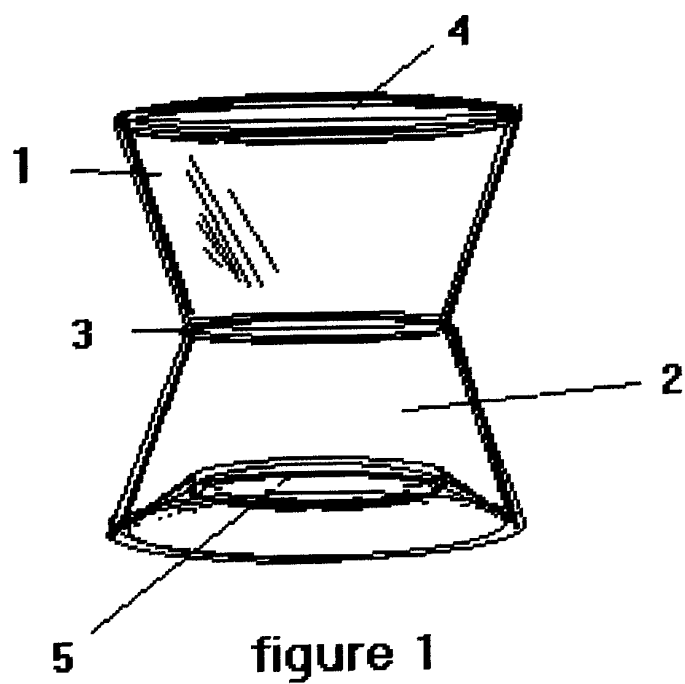
When using the receptacle according to the invention, the second reservoir will be filled using the opening 5 with cooling substance such as ice. After doing so the receptacle is turned upside down. The opening 4 which can now be reached, is used for the filling of the first reservoir with any suitable liquid. The liquid immediately starts refrigerating and preserves its coolness while consuming. This is due to the heat conducting ability between the two components through the wall of the receptacle. After the content of the first reservoir has been consumed, the object can be turned upside down. The consuming cooling substance which is still in the second reservoir, can now be consumed by using the opening 5. For doing so a little spoon such as a tea spoon can be used. Instead of filling the second reservoir with consumable ice substance, it can also be filled with any liquid and then temporarily stored in a freezing device to form ice.

Because of the open construction of the second reservoir, the cooling substance can expand while forming ice without causing negative tension on the wall of the receptacle. During the filling of the second reservoir with the cooling liquid, it is preferable to leave an open space between the liquid and the rim of the receptacle while filling, as to avoid causing negative tensions as mentioned above. An indication mark can be engraved for preventing overfilling.

A receptacle as shown in figure 1 contains two cones attached head to head. It is preferable that the two reservoirs have approximately the same size, this benefits the stability of the receptacle and is beneficial to the proportional amount of liquid that has to be cooled by the same amount of cooling substance. Moreover are similar symmetrical objects easier to manufacture. Finally, cylindrical and conical forms have the property of coping with tensions due to expanding substances by canalising them upwards.

Claims

1. Receptacle for serving cold liquids and ice simultaneously, comprising a first part containing an opening through which a liquid can be inserted and removed; a second part that has an opening through which a cooling substance can be inserted or removed; a heat conducting wall ;and wherein the said first part and said second part are separated by the said heat conducting wall.
2. Receptacle according to claim 1 wherein the said second part has an avowed rim preventing the inserted said cooling substance of evacuating premature the said second part.
3. Receptacle according to claims 1 and 2 wherein the said two parts are of about the same size.
4. Receptacle according to claims 1 to 3 wherein the said receptacle is made out of glass.
5. Receptacle according to claims 1 to 4 wherein the said second part has a conical shape in such way that its smaller base is attached to the said wall.
6. Receptacle according to claims 1 to 4 wherein the said second part has a cylindrical shape.
7. Receptacle according to claims 1 to 6 wherein the said first part can be inserted with any consumable substance and the said second part can be filled with any cooling or consumable substance



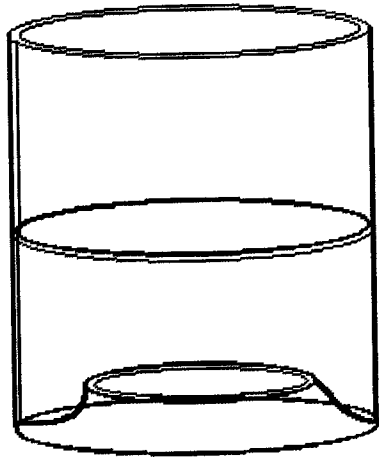


figure 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 44 7067

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 91 09 541 U (STAISS) 27 February 1992 (1992-02-27) * the whole document *	1-7	A47G19/22
X	US 2 187 558 A (KUSHIMA JAMES I) 16 January 1940 (1940-01-16) * page 1, column 1, line 33 - column 2, line 40; figures *	1,3-7	
X	DE 296 09 115 U (KRAUS ERWIN) 1 August 1996 (1996-08-01) * page 1 - page 2; figures 1-5,8-10 *	1,3-7	
X	GB 2 134 374 A (NASSIRI MOTLAGH ALI) 15 August 1984 (1984-08-15) * page 1, line 83 - page 2, line 6; figures *	1,4-7	
X	FR 1 026 130 A (BABANY ALBERT) 23 April 1953 (1953-04-23) * the whole document *	1,4-7	
X	FR 1 311 985 A (SYNERGIE PUBLICITE ET PROPAGAN) 14 December 1962 (1962-12-14) * the whole document *	1,4,5,7	A47G B65D F25D
X	US 817 123 A (KRAKAUER) * the whole document *	1,2,4,7	
X	CH 235 733 A (GLASHUETTENWERKE VORM J SCHREI) 31 December 1944 (1944-12-31) * the whole document *	1,2,4,7	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18 September 2002	Examiner Vistisen, L
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)

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

EP 02 44 7067

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.

18-09-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 9109541	U	27-02-1992	DE 9109541 U1	27-02-1992
US 2187558	A	16-01-1940	NONE	
DE 29609115	U	01-08-1996	DE 29609115 U1	01-08-1996
GB 2134374	A	15-08-1984	NONE	
FR 1026130	A	23-04-1953	NONE	
FR 1311985	A	14-12-1962	NONE	
US 817123	A		NONE	
CH 235733	A	31-12-1944	NONE	

EPO FORM P0489

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