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(54) **A DEVICE FOR KEEPING FOODSTUFFS COOL**

VORRICHTUNG ZUM KALTHALTEN VON SPEISEN

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(73) Proprietor:
Folcker-Sundell, Birgitta
161 52 Bromma (SE)

(72) Inventor:
Folcker-Sundell, Birgitta
161 52 Bromma (SE)

(74) Representative: **Waldinger, Ake**
Roslinvägen 41
168 51 Bromma (SE)

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Description

[0001] The present invention relates to a device for keeping food and beverages cool by means of an openable container containing a removable freeze pack or similar cooling member attached to the inside of the ceiling of the container by an attachment means.

[0002] Devices of this kind are most useful when serving food and beverages outdoors, saving the user the trouble of carrying it back and forth between a patio and an indoor refrigerator in order to prevent the food and beverages from becoming heated by a warm environment and/or by solar radiation.

[0003] A salad bowl of this type is known from the US patent specification 3 605 433 having a circular bottom bowl portion covered by a circular lid, the lid of the bowl having a refrigerant containing compartment detachably suspended from the inner ceiling portion of said bowl. The bottom bowl is very deep and the goods is difficult to attain and to grasp and, accordingly, the goods has to be lifted out and back such that it easily becomes heated. Moreover the bowl must be made of untransparent material to prevent the goods from being heated by solar radiation which makes it difficult to inspect the content of the bowl.

[0004] Similar devices have been known for a long time, as shown for instance by the Swedish patent specification No. 40 191 published in 1914. This patent specification discloses a cylindrical outer container having a central, cylindrical ice container with a lid in the upper part of the container, and a ring shaped space with an open top around the ice container, in which inner containers in the shape of sector shaped bowls are freely placed side-by-side and removable one-by-one through a sector shaped opening in a rotatable lid covering the space. The drawback of this and similar devices is mainly that the goods is difficult to attain and difficult to grasp. Moreover, the coolant occupies an essential part of the space in the outer container.

[0005] Another type of cool-keeping devices is known from FR 806996 and EP 0 236 873 disclosing containers provided with a removable top portion having double walls forming a closed space in the top portion, which can be filled with water. The water can be cold from the beginning or can be chilled in a refrigerator before use. This is an impractical device that has a bad cooling effect and that also is complicated to make clean.

[0006] Also DE 1 920 119 discloses double-walled containers with closed spaces, in which a cold storage medium is enclosed for cooling a specific object with a shape to which the inner walls of the containers are adapted. It is also shown, that it is possible to place a separate freeze pack in a compartment in the bottom portion of the container, which permits chilling of the freeze pack separately. Hence, in this case it is not necessary to place all the container in a refrigerator or home-freezer to be cooled. This position on the bottom of the container, however, has proved to be completely

ineffective because the upper portion of the object does not become cooled but on the contrary is heated by the lid portion of the container being heated by a warm environment or by sun radiation hitting the lid.

[0007] A fundamentally more effective device is shown in EP 0 329 844 disclosing a pile of containers provided with freeze packs positioned in lid compartments and bottom compartments. This solution gives rise to a comparatively good cooling effect, but only the freeze pack of the uppermost container of the pile of containers is acting directly. From practical point of view each container considered separately, for example the uppermost, is difficult to handle as well as energy consuming. To reach an object, which is invisible in the container, the user has to lift off the lid from the container and to lift the object up from the cup-shaped base bowl of the container. If both hands have to be used it is necessary to lay down the lid beside the container for a moment and for this and other reasons one runs a risk for the lid being lifted off from the container for a considerable time if the container contains a number of different objects to pick out from. During this time the freeze pack rapidly is warmed, especially if the lid is left with the freeze pack turned upwards for preventing condensate from wetting the table.

[0008] The object of the invention is to achieve a device of the kind mentioned by way of introduction, that is extremely uncomplicated to use and that avoids the above-mentioned drawbacks. This is achieved, according to the invention, in that the device has obtained the characterizing features stated in the attached claim 1.

[0009] The device according to the invention is characterized mainly in that the container comprises an essentially plane base part and a cup-shaped hood with the opening facing downward and with side walls, reaching all the way down to the plane base part of the container which hood is separate from the base and intended to be placed on it. This design has the obvious advantage that the objects - the food - becomes totally exposed when the hood is removed and placed beside the container, and also the important advantage that the freeze pack attached to the ceiling still is protected by the hood against unnecessary loss of cooling effect even if it should take some time till the hood is put back on the base part. Due to the fact that a means of attachment is positioned in the ceiling of the hood for removable attachment of the freeze pack, which suitably is of the standard type available in the market, it is easy, when necessary, to replace a used freeze pack with a fresh frozen freeze pack. Moreover, as stated in claim 1 the hood is provided with a ceiling portion and an integral main portion of the side walls all made of transparent, and preferably light reflecting material, and the rest of the side walls made of a transparent material. Hence, it is possible to turn the container such, that solar radiation is prevented from reaching the inner of the container, but it is still possible to look into the container "from behind". In order to facilitate the turning of the

container, for instance to follow the movement of the sun, the base part is suitably provided with a foot plate, in relation to which the base part of the container is rotatably journaled.

[0010] The invention is explained in more detail in the following with reference to the attached drawing, which by way of example diagrammatically discloses an embodiment of the invention. Figure 1 is a perspective view of the device, Figure 2 is a cross sectional view of the same device, Figure 3 is a partial view of the freeze pack shown in Fig.2 seen from below, and Figure 4 is a perspective view of a freeze pack provided with a means of attachment.

[0011] The device shown in Fig.1 and Fig.2 comprises an essentially plain base part 1 in the shape of a circular tray with a low edge directed upward, and an upper part 2 in the shape of a semi- spherical hood with the opening facing downward. The top portion 3 or ceiling of the hood 2 and the major part of its side walls 4 consist of a nontransparent material with a surface reflecting solar radiation 5. Only a minor part 6 of the side walls consists of a transparent material. The inner side of the ceiling 3 of the hood is provided with a freeze pack 7 of a standard type that is removably attached to the ceiling.

[0012] The purpose of dividing the side walls of the hood in a large untransparent portion 4 and a small transparent portion 6 is partly to prevent solar radiation from penetrating the walls and warming the objects 8 in the device, partly to enable looking into the device, making it unnecessary to lift the hood from the base portion for that purpose. Hence the objects, the food, is prevented from being unnecessarily exposed to a warm environment. Accordingly, the transparent part 6 always should be positioned on the shady side of the hood, and, hence, the base part 1 is for practical reasons rotatably mounted on a foot tray 10 by means of a centre pivot 11 and balls 12, that are arranged to roll in a circular path 13.

[0013] As illustrated by Fig.2 the freeze pack 7 is placed resting on two shelf edges 14 shaped at the under side of the ceiling 3 of the hood. The freeze pack 7 is rectangular, as shown in Fig.3, with the end portions resting on the shelf edges 14. The width of the freeze pack is smaller than the distance between shelf edges 14, and by turning the freeze pack by 90° the freeze pack can be lifted down between the shelf edges and possibly be replaced by a fresh, frozen freeze pack when the first one has lost its cooling effect.

[0014] As an alternative the freeze pack 7 may be provided with a VELCRO® type hook and loop fastening tape 15, as shown in Fig.4, and attached to a corresponding VELCRO-type tape 16, that is fixed by cement and/or riveted to the under side of the ceiling 3 of the hood. The freeze pack is attached by being slightly pushed against the Velcro tape 16, as indicated by an arrow 17 in Fig.4.

[0015] The invention is of course not limited to the embodiment shown and described here but can be

modified in different ways within the scope of the inventive idea defined by the claims. Hence, the shape of the hood 2 can be varied in many ways, for example have a plane ceiling and possibly plane side walls. Further, the freeze pack 7 can of course have another shape and possibly be attached in another way. In some cases it may be suitable to have more freeze packs attached to the inside of parts of the ceiling adjoining the side walls of the hood.

[0016] Freeze packs in any shapes are available in provision shops and are intended for being cooled in a freezer, which can be found in almost every home and makes the device according to the invention easy to handle.

Claims

1. Device for keeping food and beverages (8) cool by means of an openable container containing a removable freeze pack (7) or similar cooling member attached to the inside of the ceiling of the container by an attachment means (14), **characterized** in that the container comprises an essentially plane base part (1) and a cup-shaped hood (2) with the opening facing downward and with side walls (4, 6) reaching all the way down to the plane base part (1) of the container, which hood (2) is separate from the base and intended to be placed on it, and is provided with a ceiling portion (3) and an integral main portion of the side walls (4) all made of untransparent material, preferably light reflecting material, and the rest of the side walls (6) made of transparent material.
2. Device according to claim 1, **characterized** in that the upper portion (3) of the hood is provided with a space limited by two opposite shelves (14) located with an interspace permitting the introduction of the freeze pack (7) in the space above the shelves (14) and supporting the freeze pack with two opposite edge portions resting on the shelves.
3. Device according to claim 2, **characterized** in that the freeze pack (7) has a length essentially larger than the interspace between the shelves (14) and dimensioned such, that the freeze pack after insertion into the space above the shelves can be turned by 90° for hooking-up the freeze pack with the end portions supported by the shelves (14).
4. Device according to claim 1, **characterized** in that the means for attachment comprises a hook and loop fastening tape (16) fixed to the ceiling (3) of the hood and cooperating with a corresponding tape (15) fixed to the freeze pack (7).
5. Device according to any of claims 1-4, **characterized** in that the base part (1) is provided with a foot

tray (10) on which the base part (1) is rotatably jour-
nalled.

Patentansprüche

1. Vorrichtung zum Kühlhalten von Essen und Getränken (8) mittels eines offenen Behältnisses, das einen an der Innenseite der Decke des Behältnisses mit Hilfe von Befestigungsmitteln (14) angebrachten, entfernbaren Gefrierpack (7) oder ein ähnliches Kühlelement enthält, **dadurch gekennzeichnet**, daß das Behältnis einen im wesentlichen flachen Bodenteil (1) und eine tassenförmige Haube (2) mit nach unten weisender Öffnung und mit Seitenwänden (4, 6) aufweist, die vollständig bis zu dem Bodenteil (1) des Behältnisses reichen, wobei die Haube (2) getrennt von dem Boden auf diesen aufsetzbar ist und einen Deckenabschnitt (3) und einen angeformten Hauptabschnitt (4) der Seitenwände aufweist, die beide aus undurchsichtigem Material, vorzugsweise lichtreflektierendem Material hergestellt sind, und der Rest der Seitenwände (6) aus einem transparenten Material gefertigt ist.
2. Vorrichtung nach Anspruch 1, **dadurch gekennzeichnet**, daß der obere Bereich (3) der Haube einen Raum aufweist, der durch zwei gegenüberliegende, mit Zwischenabstand angeordnete Platten (14) begrenzt ist, die das Einführen des Gefrierpacks (7) in den Raum oberhalb der Platten (14) erlauben und den mit zwei entgegengesetzt liegenden Kantenbereichen auf den Platten ruhenden Gefrierpack halten.
3. Vorrichtung nach Anspruch 2, **dadurch gekennzeichnet**, daß der Gefrierpack (7) eine wesentlich größere Länge als der Zwischenraum zwischen den Platten (14) besitzt und so dimensioniert ist, daß er nach dem Einfügen in den Raum über den Platten zum Einhaken des mit den Endbereichen durch die Platte (14) gehaltenen Gefrierpacks um 90° drehbar ist.
4. Vorrichtung nach Anspruch 1, **dadurch gekennzeichnet**, daß die Befestigungsmittel ein Befestigungsband (16) mit Haken und Schlaufen aufweisen, das an der Decke (3) der Haube befestigt ist und mit einem entsprechenden Band (15) zusammenwirkt, das an dem Gefrierpack (7) angebracht ist.
5. Vorrichtung nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet**, daß das Bodenteil (1) mit einer Fußplatte (10) versehen ist, auf welcher es drehbar gelagert ist.

Revendications

1. Dispositif pour garder froids des aliments et des boissons (8) par l'intermédiaire d'un conteneur pouvant être ouvert contenant un bloc gelé amovible (7) ou élément de refroidissement similaire fixé à l'intérieur du plafond du conteneur par des moyens de fixation (14), caractérisé en ce que le conteneur comporte une partie de base (1) pratiquement plane et un capot (2) en forme de coupelle, ayant son ouverture dirigée vers le bas et ayant des parois latérales (4, 6) parcourant tout le chemin vers le bas jusqu'à la partie de base plane (1) du conteneur, lequel capot (2) est séparé de la base et est prévu pour être placé sur celle-ci, et est muni d'une partie de plafond (3) et d'une partie principale (4) des parois latérales venue de matière, toutes constituées d'un matériau non-transparent, de préférence un matériau réfléchissant la lumière, et le reste (6) des parois latérales étant constitué d'un matériau transparent.
2. Dispositif selon la revendication 1, caractérisé en ce que la partie supérieure (3) du capot est munie d'un espace limité par deux étagères opposées (14) positionnées en ayant un espace intermédiaire permettant l'introduction du bloc gelé (7) dans l'espace situé au-dessus des étagères (14) et supportant le bloc gelé ayant ses deux parties de bord opposées en appui sur les étagères.
3. Dispositif selon la revendication 2, caractérisé en ce que le bloc gelé (7) a une longueur nettement plus grande que l'espace intermédiaire existant entre les étagères (14) et est dimensionné de telle sorte que le bloc gelé après insertion dans l'espace situé au-dessus des étagères peut être tourné de 90° pour accrocher le bloc gelé, les parties d'extrémité étant supportées par les étagères (14).
4. Dispositif selon la revendication 1, caractérisé en ce que les moyens de fixation comportent une bande de fixation à crochets et boucles (16) fixée sur le plafond (3) du capot et coopérant avec une bande correspondante (15) fixée sur le bloc gelé (7).
5. Dispositif selon l'une quelconque des revendications 1 à 4, caractérisé en ce que la partie de base (1) est munie d'un plateau de support (10) sur lequel la partie de base (1) est tourillonnée de manière rotative.

