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(54) Title: KIT FOR PERSONAL PREPARATION OF BEVERAGE WITH JELLY BALLS

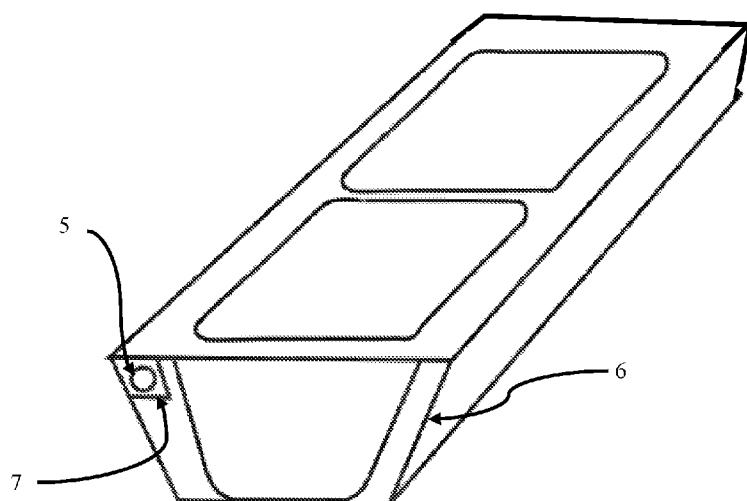


Fig. 4

(57) Abstract: The invention relates to a kit for enabling the personal preparation of a beverage with jelly balls, in particular jelly balls containing a liquid or juicy filling, in order to make the beverage as fresh as possible. The kit includes a container (1) for the beverage concentrate and a container (2) for the jelly balls in preservative brine. The containers (1, 2) are connected, preferably over adjacent rims, and preferably have perforations (3) in the connection area for easier separation. The kit may include a straw (5) and a protective shirt (6) for protection against mechanical damage.



Kit for personal preparation of beverage with jelly ballsArea of invention

The invention relates to a kit by means of which a fresh beverage with jelly balls can be prepared.

State of the art

Various types of beverages are now known, including but not limited to sparkling teas or otherwise known as bubble teas. According to the Internet Encyclopaedia, bubble tea originated in the 1980s in Taiwan.

Bubble tea is usually made by mixing fruit syrup with tea, either black tea or green tea, milk and sugar. Its name is due to its preparation, as when all the ingredients are shaken in one container, a bubble-like foam forms on the surface of the drink. Bubble tea is served cold, often with ice cubes. In addition to these basic ingredients, fruit, hibiscus flowers, rose buds, candy, chocolate, etc. may be added. However, the most popular type of bubble tea is the so-called bubble tea, to which jelly balls resembling pearls are added. Bubble tea is drunk through a thick straw, through which the jelly balls pass with the drink as it is drawn.

The jelly balls must not dissolve spontaneously in the drink, they must be soft to be consumed well and in the vast majority of cases they also contain their own filling which spills in the mouth when consumed. The gelatinous balls are usually of the consistency of jelly, and are either made from gelatine, which is made from animal gelatine, or they may be made from plant polysaccharides, which may come from seaweed or higher order plants such as tapioca.

The disadvantage of jelly balls is their tendency to dry out and thus harden. To prevent the jelly balls from drying out, they must be stored in brine. At first sight, it is suggested that the jelly beads should be stored directly in the beverage, but this is not an option, especially if the jelly beads contain a filling different from the rest of the beverage, because the ubiquitous diffusion causes the beverage to mix with the contents retained inside the jelly bead in a short time, thus turning the two originally distinct flavours into one. Therefore, it is not possible to infuse the

finished beverage with the jelly beads and then distribute it in bottles over the shelves to customers.

For the above reasons, at present, if a consumer has a taste for a beverage with jelly balls, they must purchase the beverage freshly prepared and consume it within a short period of time.

A similar deficiency relating to the preparation of a hot beverage having a taste and consistency different from at least one other ingredient is attempted to be solved by the invention of document GB 2 480 829 A. The invention presents a capsule for a home coffee machine. Inside the capsule there are at least two ingredients, wherein one of the ingredients is water soluble and the other of the ingredients, which is not to be disturbed by the water during the preparation of the beverage, is enclosed in a water insoluble bead, wherein the fourth patent claim of the document states that the bead may be of a jelly-like substance.

The above invention contemplates that the second ingredient is of a substantially dry or stiffer nature, which does not matter if the jelly ball starts to shrink, since when the beverage is brewed the jelly ball forming the shell of the second ingredient softens again. Unfortunately, such a solution is not applicable when a liquid or juicy ingredient needs to be preserved in the jelly bead. Moreover, the invention is not suitable for jelly balls of larger diameter, roughly the size of pearls, which would clog the coffee machine.

It is an object of the invention to provide a jelly balls beverage kit for personal preparation that would enable a consumer to prepare a fresh jelly balls beverage of full and identical flavour whenever the consumer desires it, without the consumer needing any equipment other than drinking water to prepare it, and that would be capable of preserving the ingredients for preparing the jelly balls beverage for a maximum shelf life.

Summary of the invention

The set-up task is solved by using a kit for personal preparation of beverage with jelly balls formed according to the invention disclosed below.

The kit is intended for personal preparation of a beverage with jelly balls, in particular jelly balls containing a liquid or juicy filling of a different flavour from the beverage, which cannot be added to the beverage before the beverage is consumed.

The essence of the invention is that the kit comprises at least one disposable closable container for a concentrate for preparing a beverage. The container contains a concentrate which is mixed with drinking water to produce a beverage of desired sensory properties. Further, the kit comprises at least one disposable closable container for jelly balls encased in a preservative brine. The jelly balls in the preservative brine do not degrade either consistently or sensorially. At the same time, the containers are joined together in the set. The containers are coupled together in the set in a very basic embodiment in a pair of a concentrate container and a jelly ball container. If there are more pairs in the set, these pairs can also be joined together for easier transportability and storage of the entire set. The consumer breaks off the number of pairs according to the amount of beverage they intend to consume, and breaks the individual containers apart during actual preparation to make the beverage easier to prepare. Advantageously, the connection of the containers is provided with perforations to facilitate breaking off.

At present, although jelly balls drinks have been known for more than 30 years, there has not been a solution on the market such as the invention brings, which would allow one to personally prepare a fresh jelly balls drink at home, at work, at school, at the playground, etc. Until now, the beverage has only been distributed through a retailer who prepared it for immediate consumption by the consumer. Since the prepared jelly balls drink cannot be 'saved for later', so to speak, without losing the taste of the contents inside the jelly balls through diffusion, the invention is beneficial to the end consumer.

Preferably, at least one of the containers is made of a transparent material. The transparency of the containers will allow the consumer to see the contents inside, which will serve a positive selling purpose as the contents are visually appealing and may motivate the consumer to buy the beverage with jelly balls for later.

Preferably, the container for the jelly balls pickled in the preservative brine is provided with a tear-resistant, disposable, two-layer cap, wherein the first layer of the cap forms an impenetrable

barrier and the second layer of the cap forms a strainer for convenient pouring of the preservative brine from the container. The strainer for convenient pouring of the preservative brine will help the consumer to separate the jelly balls from the preservative brine, thereby not affecting the taste of the beverage being prepared. In addition, the consumer need not worry about spilling the jelly balls or spilling, for example, their hands or clothing, etc., while pouring and watching the jelly balls.

It is also advantageous if the set includes at least one straw whose diameter is larger than the diameter of the jelly balls. It has been known since the inception of the jelly balls drink that the drink is best enjoyed by the consumer when the drink and the jelly balls are simultaneously sucked through the straw, as the balls are relatively evenly sucked up with the drink, rather than just sitting at the bottom of the glass where they should be picked up with a spoon, for example, etc.

Preferably, the straw is telescopic, foldable, or with at least one section adapted to be bent in order to be more easily packed with a kit according to the invention, in particular to pack a kit with one or two pairs of containers.

Advantageously, the straw is arranged under at least one container connection. From the top, the straw is protected by the straw in the package of the container connection set, from the sides the straw is protected by the container bodies.

In order to prevent accidental breakage of the containers during improper handling, the containers are conveniently stored in a protective shirt. The protective shirt protects the kit from mechanical stress, further protects it from dirt, and facilitates transport.

Preferably, the protective shirt is provided with a pocket for storing at least one straw. The protective shirt is an ideal candidate to enclose a straw within the kit and to protect it from deformation.

The advantages of the invention include the simplicity of the whole kit, which goes hand in hand with an effect that has been lacking in the consumer market. With the invention of the kit, it is possible to drink a completely fresh and flavour-balanced beverage with jelly balls anytime

and anywhere, especially with jelly balls containing a liquid or juicy filling. The preparation of the beverage using the kit is easy, suitable even for children, in addition to being time-saving, further advantageously the kit is easy to carry and store. Last but not least, it is advantageous that the kit ensures an identical taste of the beverage every time the consumer prepares the beverage. This ensures consistency between the flavours of the beverages sold in the kiosks and between the beverages prepared directly by the consumer.

Summary of drawings

The said invention will be explained in more detail in the following illustrations, where:

- Figure 1 shows a top view of a representation of a set of eight pairs of containers,
- Figure 2 shows a top view of a representation of a set consisting of two pairs of containers,
- Figure 3 shows a side view of a representation of a set consisting of one pair of containers,
- Figure 4 shows a perspective view of a representation of a set consisting of one pair of containers.

Example of the embodiment of an invention

It is understood that the specific embodiments of the invention described and illustrated below are presented for purposes of illustration and not as a limitation of the invention to the examples provided. Those skilled in the art will find or be able to provide, using routine experimentation, a greater or lesser number of equivalents to the specific embodiments of the invention described herein.

Figure 1 shows a kit according to the invention comprising eight pairs of connected containers 1 and 2. The container 1 for concentrate to mix the beverage and the container 2 for jelly balls in the preservative brine are provided with perforations 3 in the areas of interconnection to facilitate separation as required. Containers 1 and 2 may also be joined in other ways, either by joining within a common manufacturing material or by additional complementary material such as paper and glue.

Containers 1 and 2 are covered with an unshown disposable lid made of tear film. The skilled person can design other types of lids known from packaging for other products, but the above type of lids proved to be the most advantageous in terms of price/performance during the closed trials of the invention. The containers 1 and 2 are preferably transparent, so that their contents attract the consumer simply by looking at the ingredients for the preparation of the beverage. The material for the manufacture of the containers 1 and 2 may be a food grade plastic, such as PET material.

As it was already indicated above in the text, the connection of containers 1 and 2 can be realized for example by joint wrapping in paper or plastic packaging, or by joint connection created by pressing several containers simultaneously on one semi-finished plate, by gluing, etc. It is essential that the consumer has the base pair of containers 1 and 2 available for the preparation of the beverage.

The number of containers 1 and 2 in a set according to the invention is not explicitly limited. The number of containers 1 and 2 is chosen so that the consumer can purchase the number of containers 1 and 2 according to how many jelly balls drinks he plans to personally make. The manufacturer may produce kits with one pair of containers 1 and 2, but may also produce kits with up to ten or more pairs of containers 1 and 2. Closed tests of the invention have shown that kits with two, four, and eight pairs of containers 1 and 2 have a near-ideal production cost/end price ratio.

The kit shown in Figure 2 includes two pairs of containers 1 and 2. One of the containers 2 shows a disposable closure 8, which is formed by two layers. The first layer forms an impenetrable barrier, while the second layer forms a strainer 4 for seamlessly pouring the preservative brine from the container 2. A consumer tears off the first layer of the cap 8, pours or consumes the preservative brine through the strainer 4, then pulls off the layer of the strainer 4, and dispenses the jelly-like balls into the prepared beverage of concentrate and drinking water. The disposable cap 8 may be of plastic or metal foil, such as in the case of yogurt, etc.

Figure 3 shows a kit according to the invention with only one pair of containers 1 and 2. As can be seen from the figure 3, the set includes a simple straw 5 which is fixed under the joined edges

of the containers 1 and 2. The straw 5 may be glued or otherwise fixed to the containers 1 and 2. It is also possible for the containers 1 and 2, when paired, to have a shaped depression into which the straw 5 fits. The straw 5 may be collapsible, or telescopic, or have at least one flexible section, but it is important that the straw 5 has a diameter greater than the diameter of the jelly balls.

Figure 4 shows a kit according to the invention comprising one pair of containers 1 and 2 and a straw 5. The containers 1 and 2 are disposed inside a protective shirt 6. The protective shirt 6 includes at least one pocket 7 for inserting the straw 5. The protective shirt 6 may be made of paper, which is an economical solution, or plastic, or a combination of both materials. The protective shirt 6 may be used for one pair of containers 1 and 2, ideally for two or four pairs of containers 1 and 2, but also for several pairs at the same time.

The consumer prepares the beverage with jelly balls by pouring the concentrate from 1 into his container (glass, bottle, cup, etc.) and diluting it with drinking water. In the case of bubble tea, this is tea syrup. The consumer then opens the container 2 from which he pours the preservative brine through the strainer 4 and then pours the jelly balls into his beverage container. The jelly balls are alginate, have a diameter size ranging from 2 to 10 mm, and are filled with, for example, fruit juice of a characteristically different taste to the beverage. Subsequently, the consumer takes a straw 5 with which to draw the beverage into the mouth.

The set can also include a container for consuming a personally prepared beverage. The beverage consumption container may be designed for limited use according to the number of pairs of containers 1 and 2 in the set, or may be refillable.

For example, a drink can be a combination of two fruit flavours, or sweet and sour flavours, etc. The great advantage of the kit is that if the consumer adheres to the prescribed amount of water, he will always prepare a drink with identical characteristics as if he had received it from a specialist retailer. The guaranteed identity of the beverage will please the consumer, especially if the consumer has tasted the beverage somewhere, e.g. at a festival, and then desires to consume it on his own terms, e.g. at home in the living room, or at school, or at the sports ground.

In the case of adult consumers, the drink may also be alcoholic. The alcohol may either be in jelly balls, or the jelly balls may contain a delicacy that completely changes the flavour of an otherwise familiar alcoholic beverage. For example, a gin and tonic.

Last but not least, a possible example for one skilled in the art of the claimed invention is one in which the invention does not directly involve the preparation of a beverage, but rather the preparation of a foodstuff for which both a topping and special flavours from jelly balls can be used to flavour the foodstuff. Such a foodstuff may be, for example, a vegetable salad which is covered with yoghurt and the jelly balls contain, for example, seasoned minced meat, broth, or extracts of spices and vinegar.

Industrial applicability

The kit for personal preparation of beverage with jelly balls finds its application in the food and hospitality industry.

Overview of relationship tags

- 1 beverage concentrate container
- 2 container for jelly balls in preservative brine
- 3 perforations
- 4 strainer
- 5 straw
- 6 protective shirt
- 7 straw pocket
- 8 two-layer cap

PATENT CLAIMS

1. A kit for personal preparation of beverage with jelly balls, in particular jelly balls containing a liquid or juicy filling of a different flavour from the beverage, **characterizing in that** comprising at least one disposable container (1) for the concentrate for the preparation of the beverage and at least one disposable container (2) for the jelly balls pickled in the preservative brine, the containers (1, 2) being disassembleable joined together.
2. The kit according to claim 1, **characterizing in that** at least one of the containers (1, 2) is made of a transparent material.
3. The kit according to claim 1 or 2, **characterizing in that** the container (2) for the jelly beads pickled in the preservative brine is provided with a tear-resistant two-layer disposable closure (8), wherein the first layer of the closure forms an impenetrable barrier and the second layer of the closure forms a strainer (4) for conveniently pouring the preservative brine from the container (2).
4. The kit according to any one of claims 1 to 3, **characterizing in that** the connection of the containers (1, 2) is provided with at least one perforation (3) to allow easy separation
5. The kit according to any one of claims 1 to 4, **characterizing in that** it comprises at least one straw (5) having a diameter greater than the diameter of the jelly balls.
6. The kit of claim 5, **characterizing in that** the straw (5) is telescopic, foldable, or has at least one section adapted to be bent.
7. The kit according to claim 5 or 6, **characterizing in that** the straw (5) is arranged below the connection of the containers (1, 2).
8. The kit according to any one of claims 1 to 7, **characterizing in that** the containers (1, 2) are contained in a protective shirt (6).

9. The kit according to claim 8, **characterizing in that** the protective shirt (6) is provided with a pocket (7) for storing at least one straw (5).
10. The kit according to any one of claims 1 to 9, **characterizing in that** the kit comprises a container for consuming a personally prepared beverage.

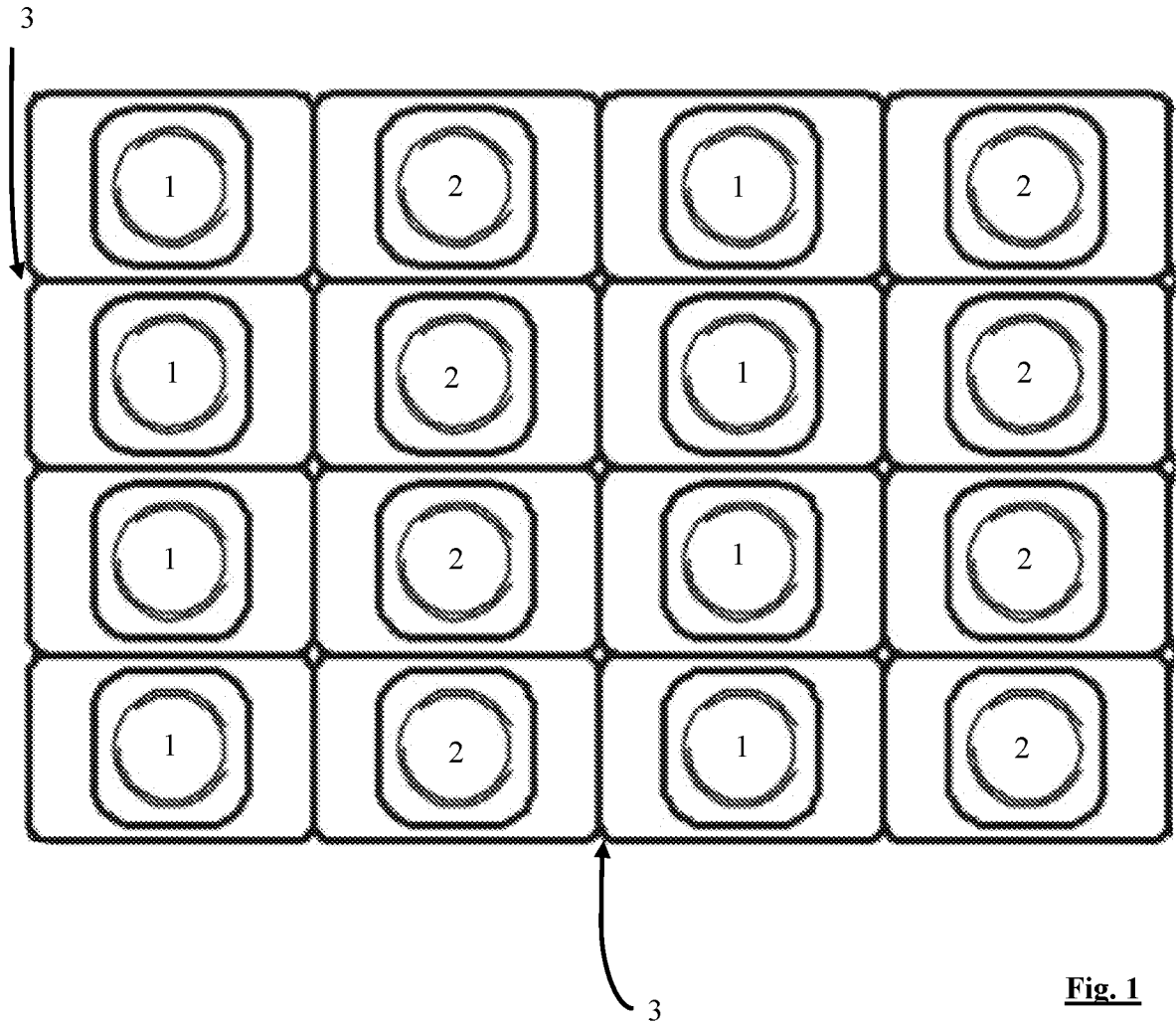


Fig. 1

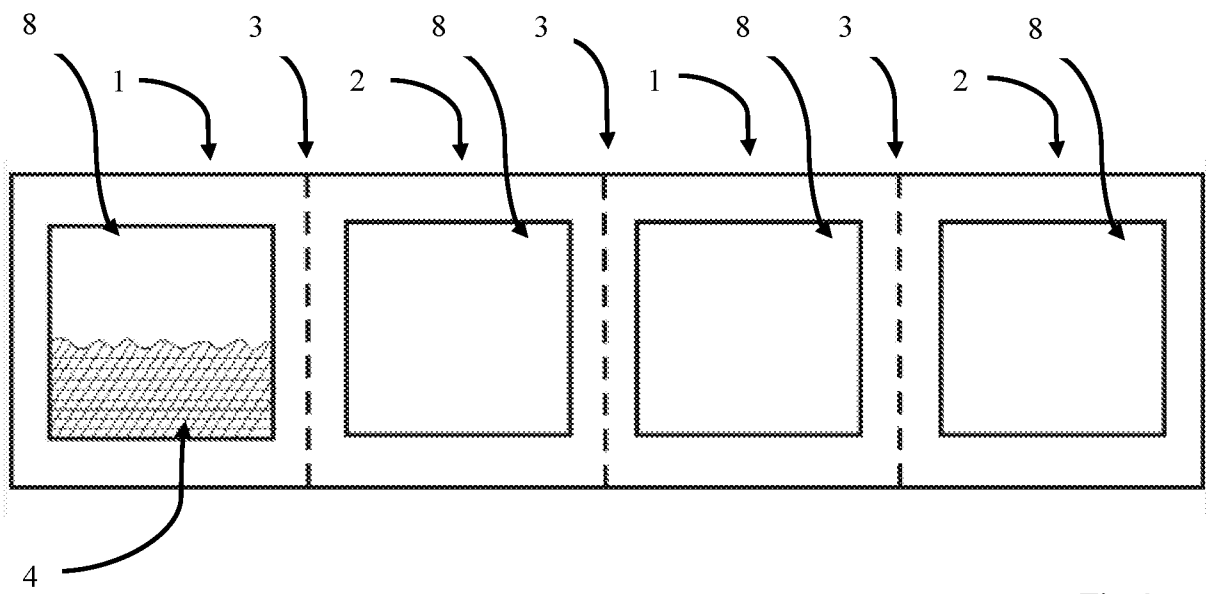


Fig. 2

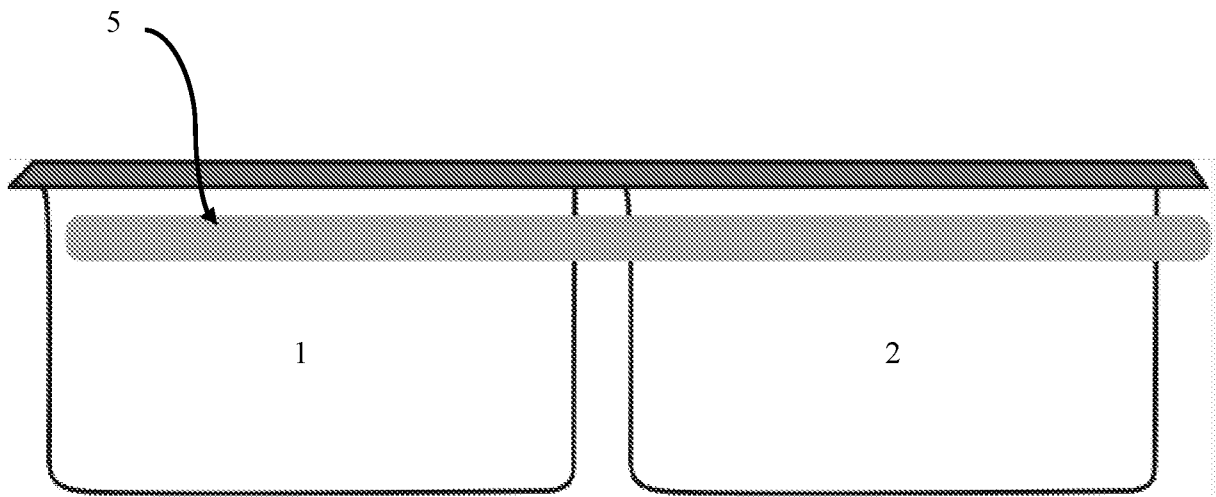


Fig. 3

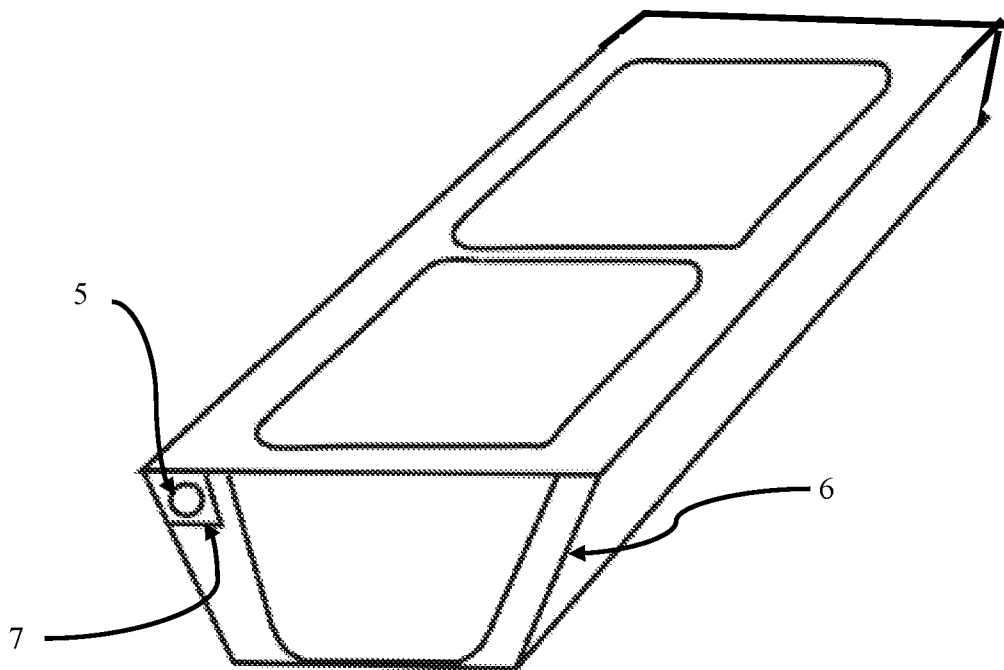


Fig. 4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CZ2022/050025

A. CLASSIFICATION OF SUBJECT MATTER		
B65D 81/32, B65D 85/72, B65D 85/804, A23L 2/385, A23L 2/52, A23L 2/02		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
B65D, A23L		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Database IPO CZ		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
EPOQUE (Epodoc), STN		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 20200367534 A1 (LIAN FA INTERNATIONAL DINING BUSINESS CORPORATION [TW]) 26 November 2020 (2020-11-26), Fig. 1, claim 1	1-10
Y	PL 228046 B1 (ZAREBSKA TERESA NATA [PL]) 28 February 2018 (2018-02-28), Fig. 1, claim 1	1-10
Y	US 20090001079 A1 (BITTON EDDY [US]) 1 January 2009 (2009-01-01), Fig. 3, claims	3-10
☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "D" document cited by the applicant in the international application earlier application or patent but published on or after the international filing date "E" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "L" document referring to an oral disclosure, use, exhibition or other means "O" document published prior to the international filing date but later than the priority date claimed "P" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "T" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "Y" document member of the same patent family "&"		
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
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Patent document cited in search report	Patent family member(s)	Publication date
US 20200367534 A1	None family	
PL 228046 B1	None family	
US 20090001079 A1	US 2013196042 A1	2013-08-01
	US 2014251997 A1	2014-09-11