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(54) **A carrier element for cooling devices**

(57) The carrier element (T) of the present invention, in which at least one beverage cup is able to be placed, is suitable for being positioned in an inner compartment (S1) or a door (K) of a cooling device (S) comprising at least one inner compartment (S1) and at least one door (K) closing this inner compartment (S1) and comprises at least two body parts (1) which are engaged to each other by swivel joint (1 a), at least one of which can rotate

around the axis of this joint (1 a), which are suitable for being positioned side by side such that their mouth parts (T2) overlap by rotating at least one of which around the axis of the joint (1a), and which are made of heat insulated material; at least one inner chamber (T1) which is formed by these two body parts (1), in which the beverage cups can be placed; at least one ice pack (3) which is positioned in the inner chamber (T1).

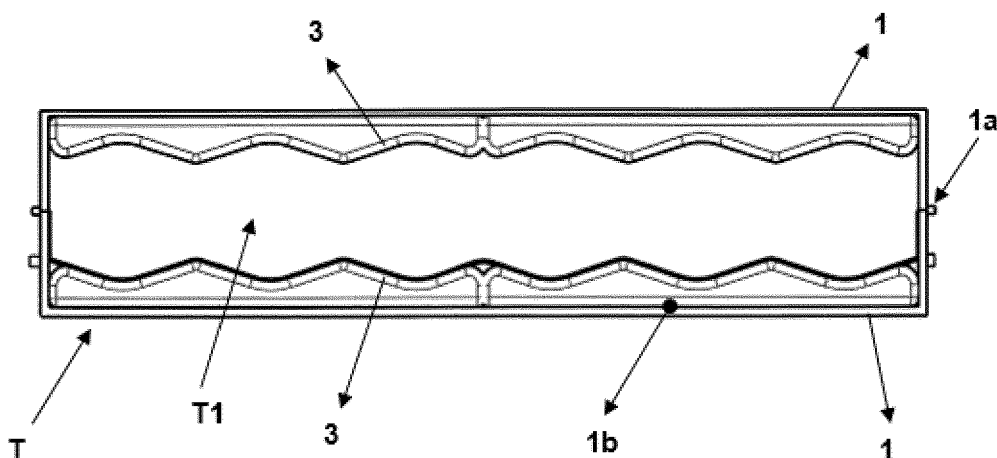


Figure 3

Description

Technical Field

[0001] The present invention is related to carrier elements which are able to be positioned in cooling devices.

Prior Arts

[0002] Beverage cups, in which beverage to be cooled is filled, are able to be positioned vertically or horizontally in a door or in a shelf located in an inner compartment of a cooling device. The beverage cups can be overturned when positioned in vertical positions, and they can be rolled when positioned in horizontal positions if they have rounded surfaces. Besides, when the beverage cups, in which beverages to be consumed cold are filled, are taken out of the cooling device, these beverages are needed to be consumed immediately. However, the user may want to store these beverages outside the device for a certain time (e.g. to consume during a trip).

[0003] The published patent document no WO2009 005008A1 of the state of the art, in which this problem is aimed to be solved, discloses a casing which is able to be positioned inside the cooling device and in which a beverage cup comprising a beverage to be cooled is able to be positioned. This casing comprises at least one outer body, at least one inner body in a flexible structure which is provided in the outer body, in which beverage cup is placed, and a cooling item located between these bodies. When the casing is positioned in the cooling device, the beverage therein is cooled by the cooling item. When the casing is taken out of the device, it is ensured that the beverage inside the casing maintains the coldness due to the coldness keeping capacity of the cooling item.

Brief Description of the Invention

[0004] The carrier element of the present invention, in which at least one beverage cup is able to be placed, is suitable for being positioned in an inner compartment or a door of a cooling device comprising at least one inner compartment and at least one door closing this inner compartment and comprises at least two body parts which are engaged to each other by swivel joint, at least one of which can rotate around the axis of this joint, which are suitable for being positioned side by side such that their mouth parts overlap by rotating at least one of which around the axis of the joint, and which is made of heat insulated material; at least one inner chamber which is formed by these two body parts, in which the beverage cups can be placed; at least one ice pack which is positioned in the inner chamber.

[0005] By positioning beverage cups having beverages inside in the carrier element of the present invention, it is ensured that cooled beverages maintain their coldness outside the cooling device for a certain period of time. Moreover, thanks to the two pieces structure of said

element connected to each other by swivel joint, the carrier element is able to be used either in a box form in which beverage cups are able to be positioned in vertical position, or in an open position in which beverage cups are able to be positioned horizontally. Besides, since the carrier element is able to be positioned in a part inside the device suitable for usage (e.g. in an inner compartment or door), internal volume of the cooling device can be used efficiently.

Objectives of the Invention

[0006] An aim of the invention is to develop a carrier element which is suitable for placing a beverage cup, in multi-piece structure, and heat insulated.

[0007] The other aim of the invention is to develop a carrier element which is able to be positioned in a door of a cooling device and which is in multi-piece structure, and heat insulated.

[0008] Another aim of the invention is to develop a heat insulated and multiple-pieced carrier element which ensures maintaining coldness of the beverages even though positioned outside a cooling device.

[0009] A further aim of the invention is to develop a heat insulated and multiple-pieced carrier element in which the beverage cup is able to be positioned vertically or horizontally.

[0010] Yet a further aim of the invention is to develop a carrier element which is easy to produce, cost effective and reliable.

Description of the Drawings

[0011] Exemplary embodiments of the carrier element of the invention and a cooling device in which the carrier element is positioned are shown in attached drawings wherein;

Figure 1 is a perspective view of the cooling device. Figure 2 is a perspective view of the carrier element. Figure 3 is a top sectional view of the carrier element. Figure 4 is a perspective view of an ice pack positioned in the carrier element.

Figure 5 is another perspective view of the carrier element.

Figure 6 is a perspective view of one of the body parts which are comprised by the carrier element and rotated around an axis of a joint.

Figure 7 is a perspective view of the body parts comprised by the carrier element and positioned side by side.

[0012] The parts in figures are individually enumerated and the corresponding terms of reference numbers are given as follows:

Cooling device (S)

Inner compartment	(S1)
Door	(K)
Carrier element	(T)
Inner chamber	(T1)
Mouth	(T2)
Body part	(1)
Joint	(1a)
Inner surface	(1b)
Cover	(2)
Handle	(2a)
Ice pack	(3)
Curved surface	(3a)
Outer surface	(3b)
Connection element	(4)

Description of the Invention

[0013] When the products positioned in a cooling device for being cooled are taken outside, they are warmed in a certain time depending on the temperature of the environment they are provided. However, if the cooled product will be consumed after a certain time, it can lost its coldness in that time and thus it is consumed hot while consuming cold is necessary. In other words, the beverages needed to be stored in cold environment and consumed cold are warmed in a certain time after taken out of the cooling device and thus they go off due to the warmth. Therefore, in the present invention, a heat insulated carrier element suitable for placing beverage cup is developed.

[0014] The carrier element (T), in which at least one beverage cup is able to be placed, of the present invention is suitable for being positioned in an inner compartment (S1) or a door (K) of a cooling device (S) (the inner compartment (S1) can be a cooling compartment or a freezing compartment provided in the cooling device (S)), an exemplary view of which is shown in figure 1, and which comprises at least one inner compartment (S1) and at least one door (K) closing this inner compartment (S1).

[0015] The carrier element (T), exemplary views of which are shown in figure 2-3, comprises at least two body parts (1) which are engaged to each other by swivel joint (1 a), at least one of which is able to rotate around the axis of this joint (1a), and which are made of heat insulated material; at least one inner chamber (T1) which is formed by these two body parts (1), in which the beverage cups can be placed; and at least one ice pack (3) which is placed in the inner chamber (T1). Heat insulated body parts (1) of the carrier element (T) form a box form, and the ice pack (3) ensures maintaining coldness of the beverages placed inside the carrier element (T) when the carrier element (T) is positioned outside the cooling device (S).

[0016] Said ice pack (3) comprises at least one outer surface (3b) preferably in such a structure that overlaps

with at least one inner surface (1 b) of the body part (1). Therefore, when said pack (3) is positioned in the inner chamber (T1), it seats on the inner surface (1b) and it can be ensured that the beverage cups are placed in the inner chamber (T1) in a proper and reliable way. Besides the ice pack (3) is preferably comprises at least one curved surface (3a) for placing circular-sectioned beverage cups. Circular-sectioned beverage cups seat on the curved surface (3a) and maintain their coldness efficiently since the contact surface of the beverage cups with said pack (3) is advanced. Therefore, it is ensured that the beverage cups in different geometries are stored in a reliable manner. Moreover, the ice pack (3) serves as a support for the beverage cups higher than the carrier element (T) (e.g. water bottle in 1.5 liter) and ensures storing these cups without being tilted.

[0017] In a preferred embodiment of the invention, the carrier element (T) comprises at least one cover (2) which closes the inner chamber (T1) located in said element (T), which is engageable to and disengageable from the carrier element (T), and which is made of a heat insulated material. Therefore, when the carrier element (T) is positioned outside the device (S), a closed box form is obtained by closing the cover (2), and efficiency of the carrier element (T) increases by ensuring maintaining coldness of the beverage positioned in the carrier element (T) for longer time.

[0018] In an exemplary embodiment of the invention shown in figures 5 - 7, the body parts (1) are able to be positioned side by side (open position) such that their mouth parts (T2) overlap by rotating at least one of the body parts (1) around the axis of the joint (1a). Therefore; beverages, which are needed to be stored horizontally such as wine, are able to be positioned in the carrier element (T). In this embodiment, the carrier element (T) comprises at least two ice packs (3) which are positioned such that their outer surfaces (3b) seat on the mutual inner surfaces (1 b) of the body parts (1). Therefore, it can be ensured that the carrier element (T) maintains the coldness of the beverages remaining horizontally in the open position of the carrier element (T). Moreover, the curved surface (3a) comprised by the ice packs (3) forms a slot in which the curved surface of the beverage cups horizontally stored is able to seat, and storing these beverage cups horizontally in a reliable way is able to be ensured.

[0019] In a preferred embodiment of the invention, the carrier element (T) comprises at least one connection element (4) for positioning the carrier element (T) at the door (K) of the cooling device (S). The connection element (4) can be in the form of at least one protrusion being able to be placed in a slot located in the door (K) as well as in the form of at least one slot in which at least one protrusion located in the door (K) is placed.

[0020] In another exemplary embodiment of the invention shown in figures, the carrier element (T) comprises at least one handle (2a) positioned on the cover (2) closing the inner chamber (T1). The cover (2) can easily be

opened and closed thanks to this handle (2a).

[0021] The carrier element of the present invention (T) is able to be positioned in an inner compartment (S1) or in a door (K) of the cooling device (S). Therefore the internal volume of the cooling device (S) is able to be used efficiently depending on the user needs. When the user desires to store a beverage in the cooling device (S), he/she can place the beverage cup, comprising the beverage to be stored, in said carrier element (T) in a desired position (e.g. in a horizontal or vertical position) thanks to the multiple-pieced structure of the carrier element (T). When a beverage in the carrier element (T) is desired to be stored outside the cooling device (S), the beverage cup comprising the cold beverage is taken out of the device (S) together with the carrier element (T). Thanks to the heat insulated body parts (1) and the ice pack (3) comprised by the carrier element (T); it is ensured that the beverage being stored inside the carrier element (T) outside the device (S) maintains its coldness for a certain time.

Claims

1. A carrier element (T) in which at least one beverage cup is able to be placed and which is suitable for being positioned in an inner compartment (S1) or a door (K) of a cooling device (S) comprising at least one inner compartment (S1) and at least one door (K) closing this inner compartment (S1) **characterized by** comprising
 - at least two body parts (1) which are engaged to each other by swivel joint (1 a), at least one of which is able to rotate around the axis of this joint (1 a), which are suitable for being positioned side by side such that their mouth parts (T2) overlap by rotating at least one of which around the axis of the joint (1 a), and which are made of heat insulated material;
 - at least one inner chamber (T1) which is formed by these two body parts (1), in which the beverage cups can be placed;
 - at least one ice pack (3) which is positioned in the inner chamber (T1).
2. A carrier element (T) according to claim 1 **characterized in that** the ice pack (3) comprises at least one outer surface (3b) in such a structure that overlaps with at least one inner surface (1b) of the body part (1) and which seats on said internal surface (1 b) when said ice pack (3) is positioned in the inner chamber (T1).
3. A carrier element (T) according to claim 1 or 2 **characterized in that** the ice pack (3) comprises at least one curved surface (3a) for placing circular-sectioned beverage cups.
4. A carrier element (T) according to claim 1 **characterized by** comprising at least one cover (2) which closes the inner chamber (T1) located in said element (T), which is engageable to and disengageable from the carrier element (T), and which is made of a heat insulated material.
5. A carrier element (T) according to claim 4 **characterized by** comprising at least one handle (2a) positioned on the cover (2) closing the inner chamber (T1).
6. A carrier element (T) according to any one of the preceding claims **characterized by** comprising at least one connection element (4) for positioning the carrier element (T) at the door (K) of the cooling device (S).
7. A carrier element (T) according to claim 6 **characterized in that** the connection element (4) is in the form of at least one protrusion being able to be placed in a slot located in the door (K).
8. A carrier element (T) according to claim 6 **characterized in that** the connection element (4) is in the form of at least one slot in which at least one protrusion located in the door (K) is placed.

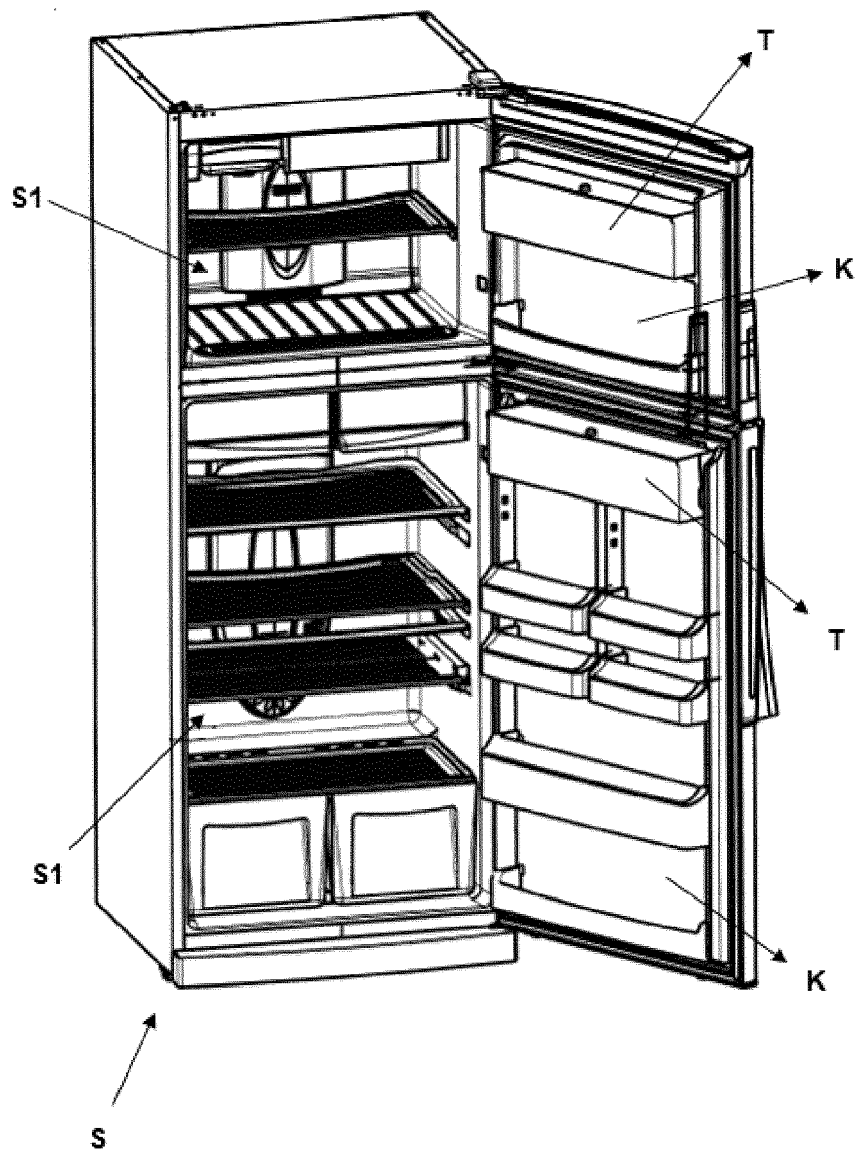


Figure 1

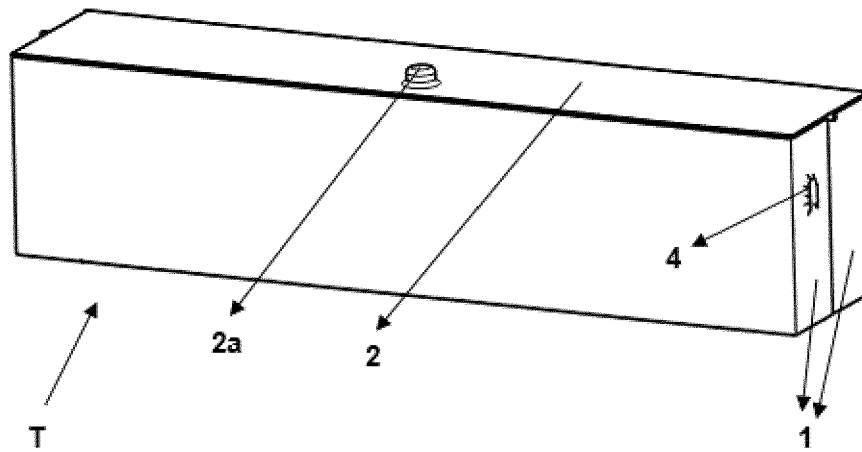


Figure 2

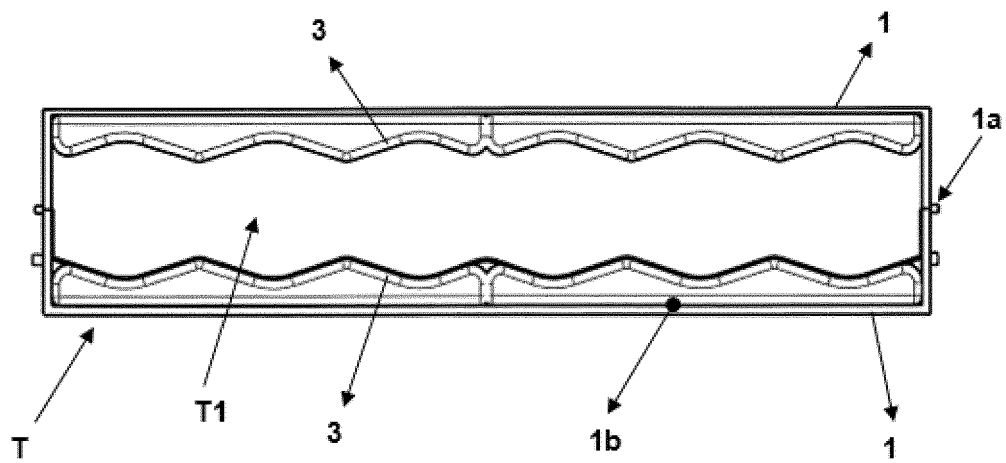


Figure 3

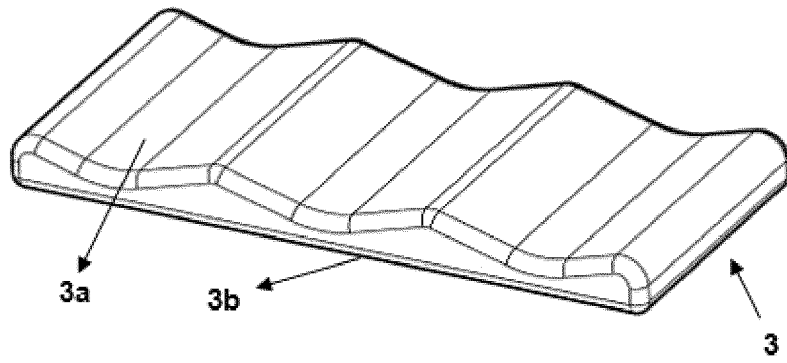


Figure 4

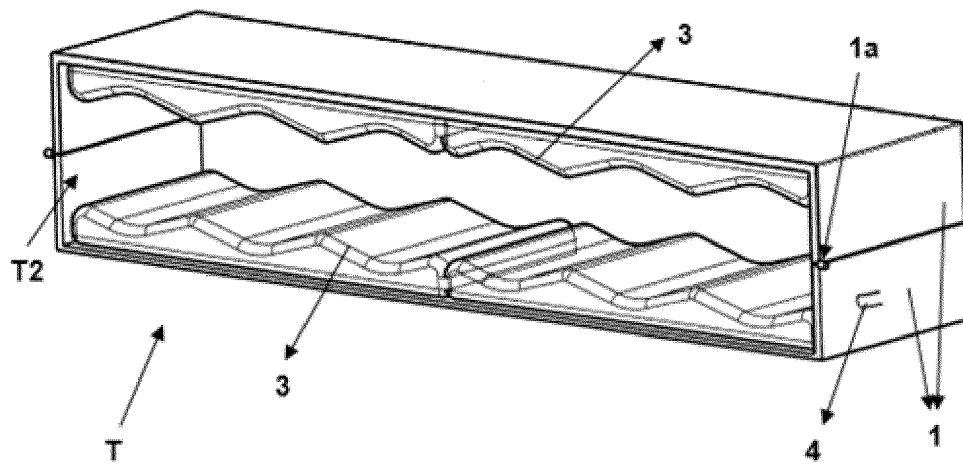


Figure 5

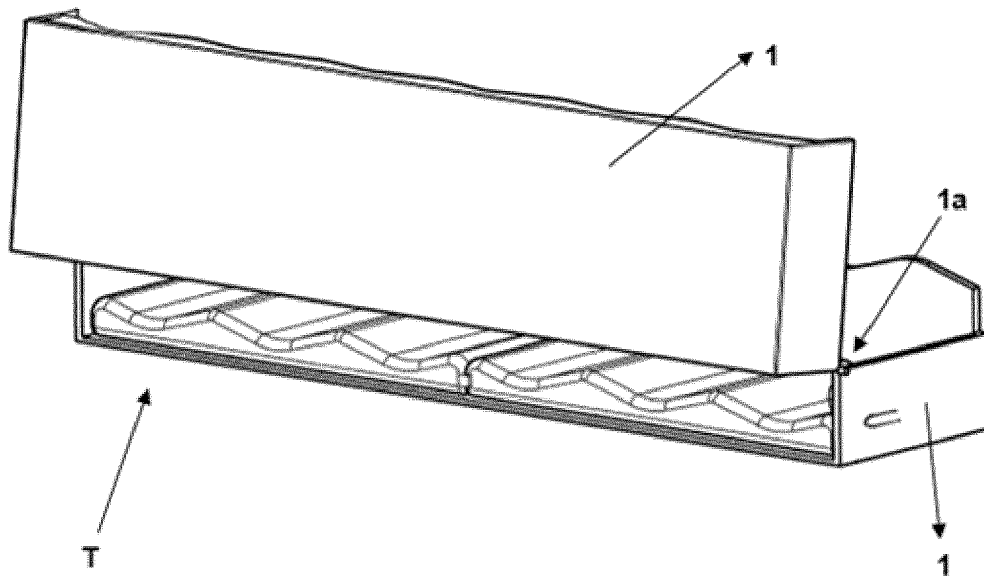


Figure 6

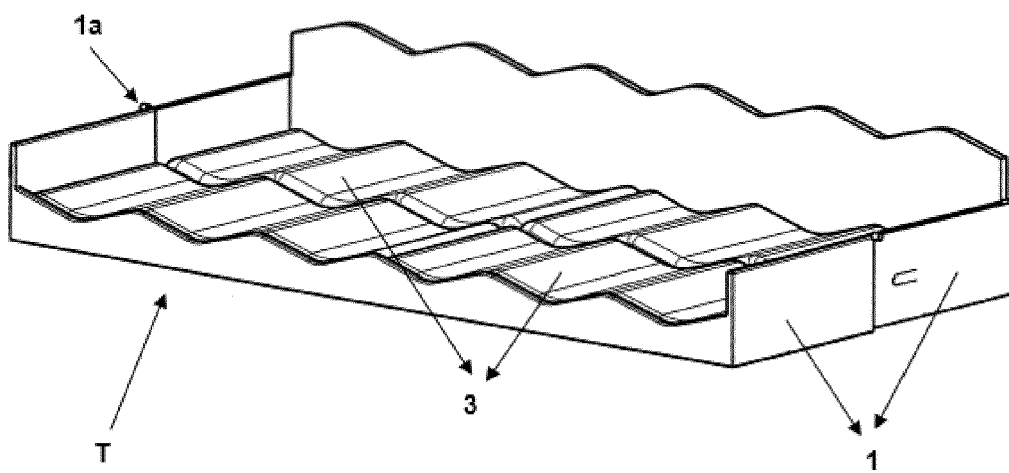


Figure 7

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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