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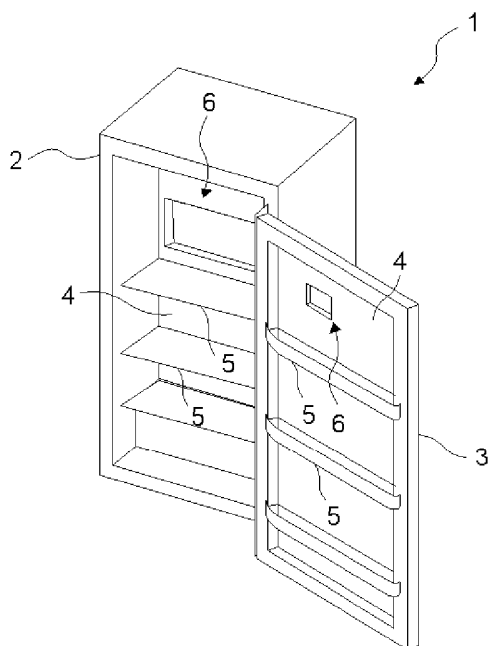
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(54) Title: A COOLING DEVICE



(57) Abstract: The cooling device (1) of the present invention comprises one or more cooling cabinets (2) which cool or freeze items stored inside the cooling device (1), one or more doors (3) that allow access to the inside of the cooling cabinet (2), more than one inner wall (4) confining the inner volume, one or more shelves (5) positioned in the cooling cabinet (2) or on the door (3) at various elevations, upon which items to be cooled are stored. The shelves (5) can be stored inside the cooling device (1) without creating idle volumes.

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Description

A COOLING DEVICE

- [001] The present invention relates to a cooling device, the inner volume of which is utilized efficiently.
- [002] In cooling devices, support elements such as shelves are utilized for storing food containers, bottles or foods such as eggs having distinct shapes securely. These elements occupy space within the cooling compartment and when not used, the user takes the elements out to utilize the inner volume of the cooling device effectively. However, these elements might get lost or might be damaged due to various reasons. In the current state-of-the-art, in order to avoid these mishaps, there are supports, which can be folded within the inner volume of the cooling device, leading to effective usage of the inner volume.
- [003] Especially, egg racks which are positioned on the door shelves, allowing efficient usage of the door shelves when not in use are described in the current state-of-the-art.
- [004] The state-of-the-art United States Patent no. 2955006 describes a foldable egg rack.
- [005] In another state-of-the-art, in Japanese Patent Application no. 3217781, an egg rack, which can be turned upside down when not in use to allow for storing of items to be cooled on the door shelf is described.
- [006] The shelves inside the cooling compartment and especially the egg racks positioned on the door shelves having a foldable structure allows for efficient usage of the inner volume of a cooling device. However, this type of foldable structures, especially the folding of egg racks situated in small spaces like the door shelf creates both visual and ergonomic disadvantages.
- [007] The object of the present invention is to design a cooling device, the inner volume of which is efficiently utilized by eliminating the idle volumes.
- [008] The cooling device designed to fulfill the object of the present invention is shown in the attached figures, where:
- [009] Figure 1 – is the perspective view of a cooling device.
- [010] Figure 2 – is the perspective view of a housing situated on the inner wall.
- [011] Figure 3 – is the perspective view of a shelf.
- [012] Figure 4 – is the perspective view of a housing inside which a shelf is positioned.
- [013] Figure 5 – is the perspective view of a housing having a fastener.
- [014] Figure 6 – is the perspective view of a housing where the shelf is fixed by a fastener.
- [015] Figure 7 – is the perspective view of a lid and a housing.
- [016] Figure 8 – is the perspective view of a housing where the shelf is attached by a hinge.

[017] Elements shown in the figures are numbered as follows:

1. Cooling device
2. Cooling cabinet
3. Door
4. Inner wall
5. Shelf
6. Housing
7. Lid
8. Fastener
9. Hinge

[018] The cooling device (1) comprises one or more cooling cabinets (2) which cools or freezes the items stored inside, one or more doors (3) allowing access to the inside of the cooling cabinet (2), more than one inner walls (4) confining the inner volume, one or more shelves (5) positioned in the cooling cabinet (2) or on the door (3) at various elevations upon which items to be cooled are stored and a housing (6) situated in the cooling cabinet (2) or on the inner wall (4) of the door (3), having the shape and dimensions for the shelf (5) not in use to be inserted inside to be stored (Figure 1 and Figure 2).

[019] The shelf (5) is produced of material like wire, glass, plastic etc.

[020] The housing (6) has dimensions preventing the shelf (5) which is situated into the housing (6) from extending out and forming any protrusions on the inner wall (4). The housing (6) is situated on the inner wall (4) of the cooling device (1), preferably on the inner wall (4) of the door (3) facing to the inside of the cooling cabinet (2).

[021] The housing (6) comprises one or more fasteners (8) to which the shelf (5) is fastened for the purpose of preferably preventing the movement of the shelf (5) to be situated inside (Figure 5 and Figure 6).

[022] The unused shelf (5) is placed in the housing (6). Even though the dimensions of the housing (6) are not smaller than that of the shelf (5), the shelf (5) can be fitted in this housing (6) like a lid, whereby forming flat, convex or concave surfaces on the inner wall (4) of the cooling cabinet (2) or the door (3) depending on the shape of the shelf (5).

[023] In another embodiment of the present invention, the shelf (5) is utilized as an egg storage means (Figure 3). If there are holes on the shelf (5) used as an egg storage means, this shelf (5) is fitted inside the housing (6) in such a way not to close the housing (6) or extend outside of the housing (6) (Figure 4).

[024] In another embodiment of the present invention, the cooling device (1) comprises a lid (7) which is fixed on the inner wall (4) or over the housing (6) so as to cover the housing (6). The lid (7) provides the housing (6) to be hidden from sight, furthermore

in cases when fasteners (8) are not used, prevents the shelf (5) fitted in the housing (6) from extending outside and creates a visual unity (Figure 7).

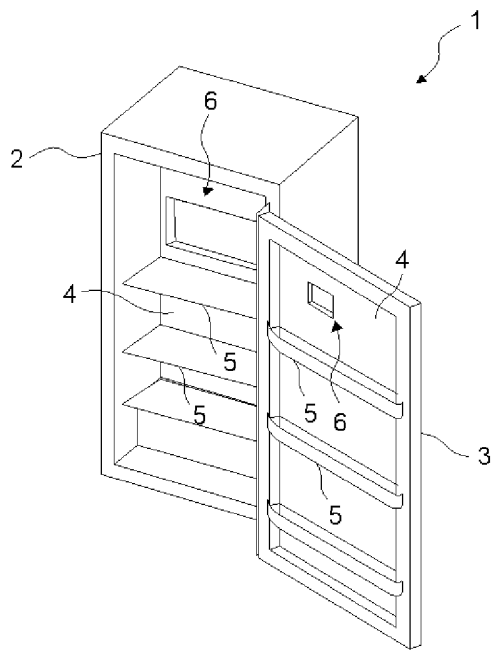
[025] In another alternative embodiment of the present invention, the housing (6) comprises one or more hinges (9) on it for fastening the shelf (5) and allowing for its movement (Figure 8). In this embodiment, the shelf (5) remains in the housing (6) when folded and the shelf (5) is not caused to extend outside the housing (6) on account of the shelf (5) being folded as explained above.

[026] With the present invention, the shelves (5) are stored in the cooling device (1) without the need to be taken out of the cooling device (1) when not in use, therefore leading to an efficient utilization of the cooling device (1) inner volume.

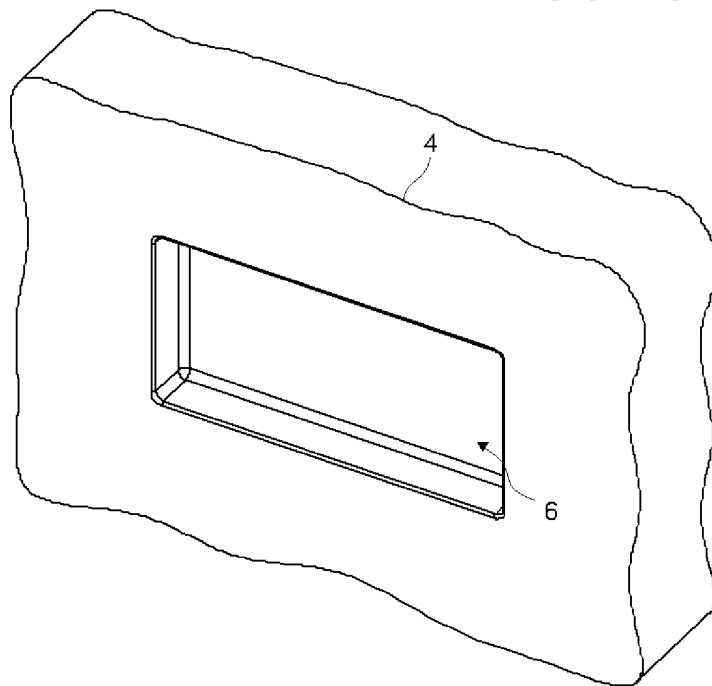
Claims

- [001] A cooling device (1) comprising one or more cooling cabinets (2) which cool or freeze items stored inside, one or more doors (3) that allow access to the inside of the cooling cabinet (2), more than one inner walls (4) confining the inner volume, one or more shelves (5) positioned in the cooling cabinet (2) or on the door (3) at various elevations, upon which items to be cooled are stored and characterized by a housing (6) inside which the unused shelf (5) is placed and stored.
- [002] A cooling device (1) as in Claim 1, characterized by a housing (6) having the size and dimensions for the shelf (5) to be fitted in and preventing extending out of the shelf (5) that is situated inside.
- [003] A cooling device (1) as in any one of the above claims, characterized by a housing (6) comprising one or more fasteners (8) to which the shelf (5) is fastened for the purpose of preventing the movement of the shelf (5) that will be situated inside.
- [004] A cooling device (1) as in any one of the above claims, characterized by a lid (7) which is fixed on the inner wall (4) or over the housing (6) so as to cover the housing (6).
- [005] A cooling device (1) as in any one of the above claims, characterized by a housing (6) having one or more hinges (9) on the housing (6) for fastening the shelf (5) and allowing it to move.

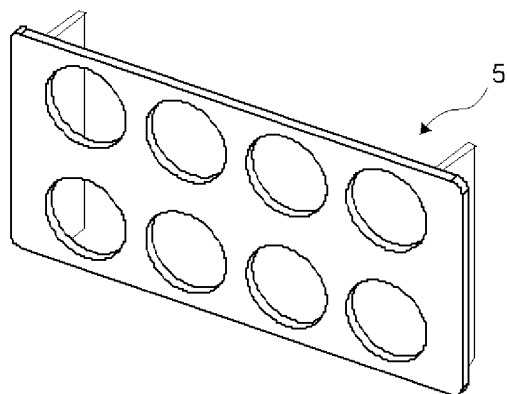
[Fig. 001]



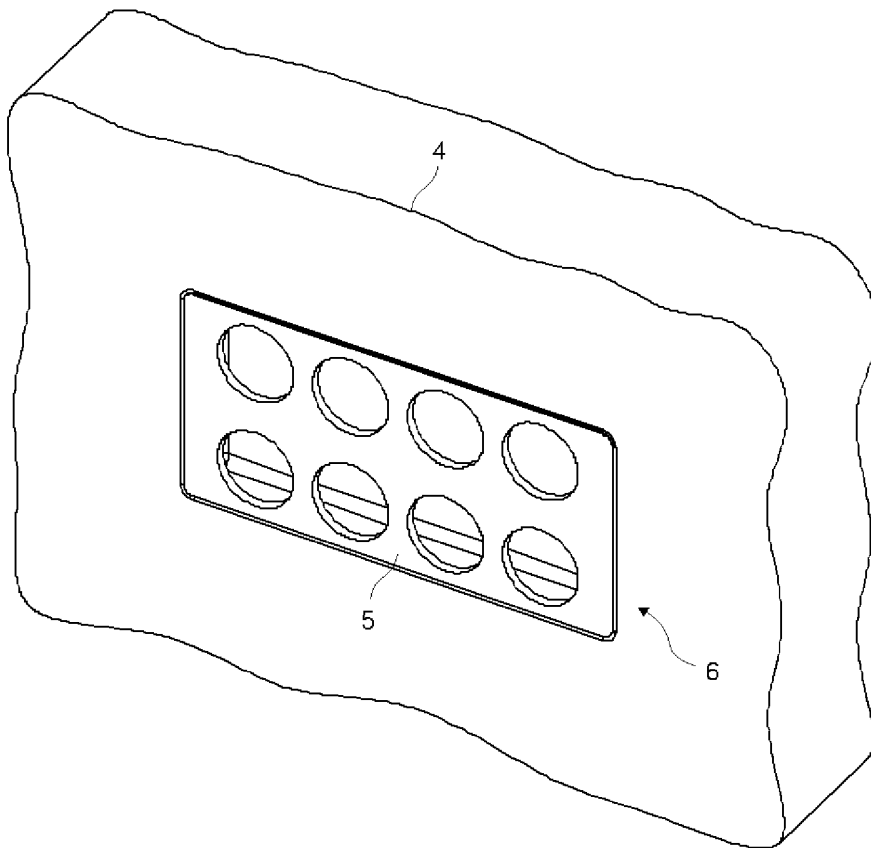
[Fig. 002]



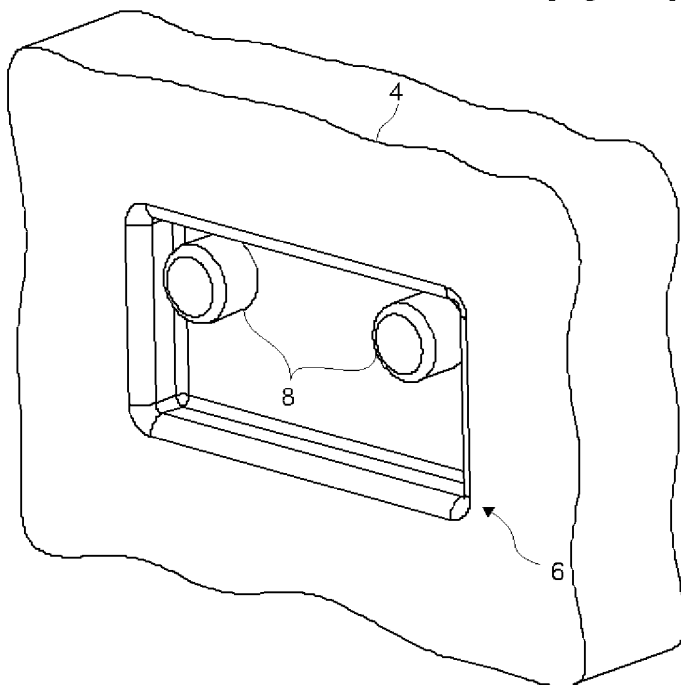
[Fig. 003]



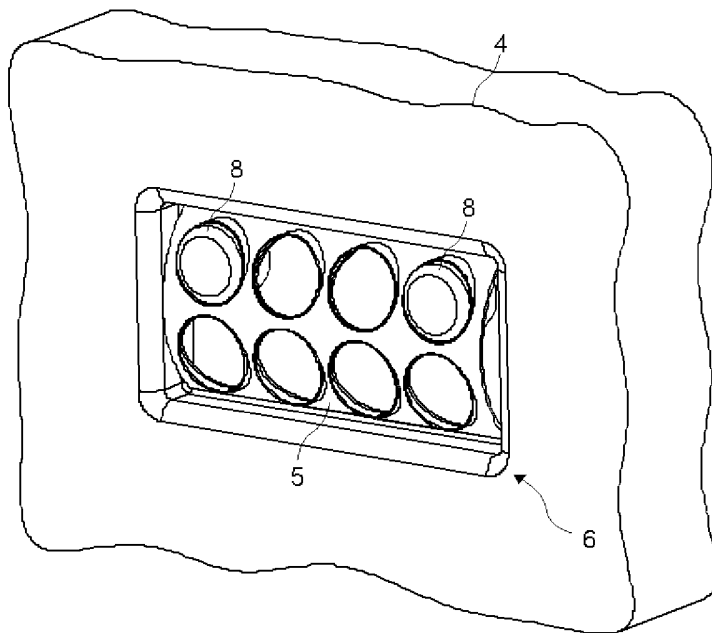
[Fig. 004]



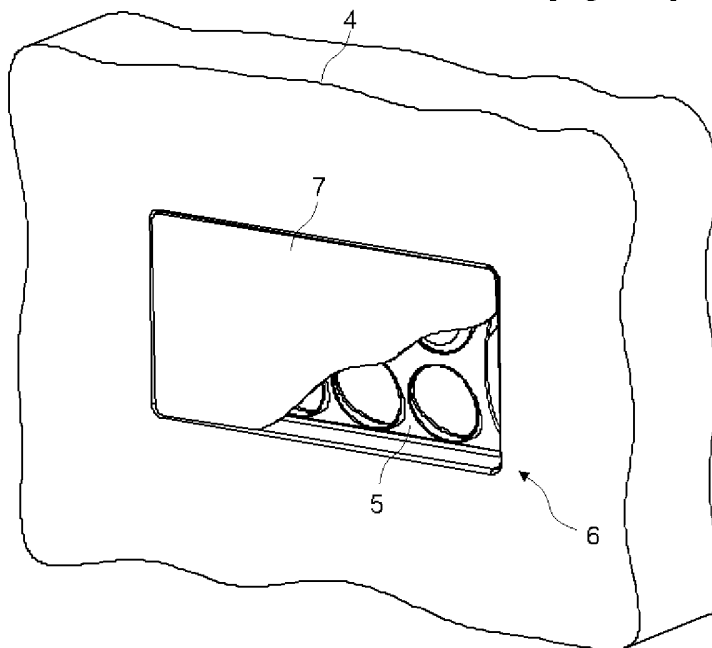
[Fig. 005]



[Fig. 006]



[Fig. 007]



[Fig. 008]

