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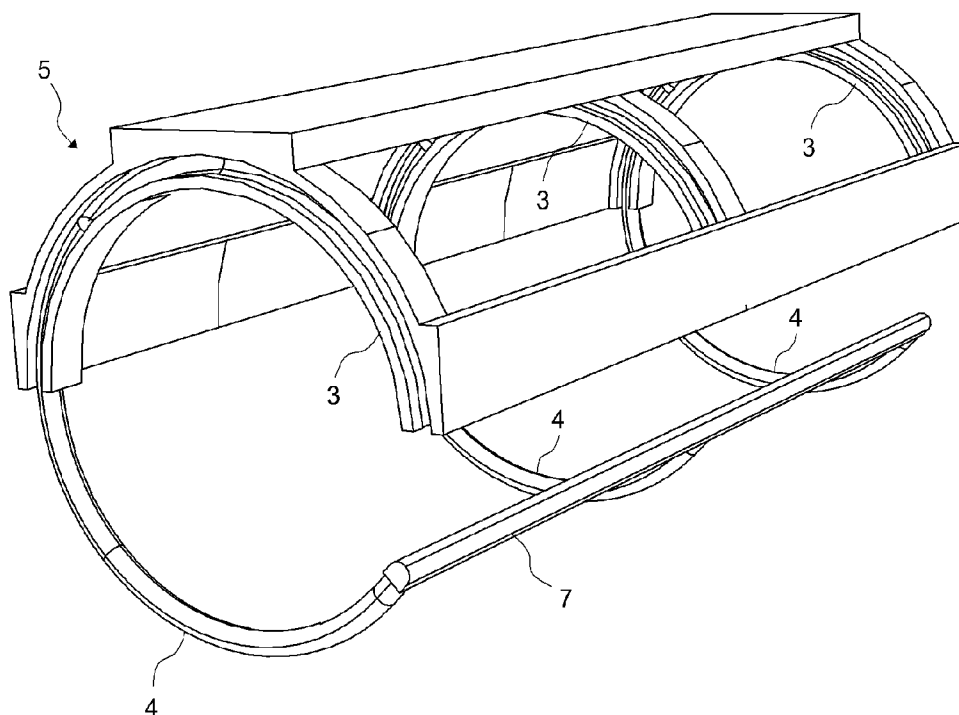
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(54) Title: A COOLING DEVICE



(57) Abstract: The present invention relates to a cooling device (1) that comprises a body wherein items to be cooled are stored, a door (8) allowing access inside from the outside, one or more shelves (2) disposed inside at various heights wherein the inner space of the cooling device (1) is utilized efficiently when the holders (5) are not used.

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Description**A COOLING DEVICE**

- [0001] The present invention relates to a cooling device comprising a holder that facilitates storing bottles.
- [0002] Various solutions have been devised for storing bottles in the interior volume of the cooling device without occupying much space. These solutions are generally bottle holders of various configurations positioned above or under the shelves that divide the inner space of the cooling device into partitions.
- [0003] In the state of the art German Patent Application no. DE2653303, a bottle holder is described that is attached to the wire shelf and partially clasps around the bottle placed therein. This bottle holder occupies the same usage space when used or not used.
- [0004] In another state of the art Great Britain Patent Application no. GB2174891, a bottle holder is described which entirely clasps the bottle placed therein. This bottle holder occupies the same usage space when used or not used.
- [0005] The object of the present invention is to design a cooling device that comprises a holder which supports and stores bottles and occupies less space when not in use.
- [0006] The cooling device designed to fulfill the objective of the present invention, explicated in the first claim and the respective claims thereof, comprises a holder used for supporting the bottles vertically or horizontally, having a guide shaped as a circle segment and at least one retainer, disposed within the guide, configured like a circle segment that moves telescopically inside the guide.
- [0007] When the holder is not used, the retainer stays in the guide and when the retainer is drawn out of the guide, the circle segments virtually complement one another, forming a surface wherein bottles can be placed, clasped from the below and supported safely.
- [0008] In another embodiment of the present invention, the guide and the retainer are configured as plates shaped as cylinder segments that move telescopically, for holding the bottle lengthwise. In this embodiment, when the retainer is taken out of the guide, the cylinder segments virtually

complement each other forming a hollow cylindrical surface wherein bottles can be emplaced.

[0009] In another embodiment of the present invention, the guide and the retainer are shaped as rings that move telescopically, holding the bottle at certain intervals. In this embodiment, when the retainer is drawn out of the guide, the rings almost complement each other forming a surface wherein bottles can be emplaced. Thus less material is used and a more esthetic appearance is provided.

[0010] In another embodiment of the present invention, the holder comprises more than one retainer placed one inside the other. In this embodiment, the retainer can be gradually displaced from the guide. In the preferred embodiment of the present invention, each retainer is quarter circle shaped. Thus when the holder is not used, minimum space is occupied within the cooling device.

[0011] By means of the present invention, when desired, the retainer can be drawn out until a surface is formed that will clasp the bottle from below, providing the bottle to be safely supported in the vertical or horizontal position. When the holder is not used, minimum space is occupied in the cooling device by placing the retainer inside the guide. Consequently, the inner space of the cooling device can be utilized efficiently.

[0012] The cooling device designed to fulfill the objective of the present invention is illustrated in the attached figures, where:

[0013] Figure 1 – is the perspective view of the holder in the open position, ready for use.

[0014] Figure 2 – is the perspective view of the holder in the closed position.

[0015] Figure 3 – is the perspective view of the holder mounted under the shelf.

[0016] Figure 4 – is the perspective view of the holder mounted to the body.

[0017] Figure 5 – is the perspective view of the holder mounted to the door.

[0018] The elements illustrated in the figures are numbered as follows:

1. Cooling device
2. Shelf
3. Guide
4. Retainer

- 5. Holder
- 6. Stopper
- 7. Connector
- 8. Door

- [0019] The cooling device (1) comprises a body wherein items to be cooled are stored, a door (8) allowing access inside from the outside, one or more shelves (2), a guide (3) shaped as a circle segment, mounted to the shelf (2), the door (8) or the body and at least one retainer (4) configured as a circle segment, placed in the guide (3) one within the other, moved telescopically with respect to the guide (3) in the direction to complement a circle shape (Figure 1 and Figure 2).
- [0020] When the holder (5) is not used, the guide (3) and the retainer (4) stay one within the other, when the retainer (4) is drawn out of the guide (3), the circle segments virtually complement each other forming a surface wherein bottles can be placed.
- [0021] The holder (5) furthermore comprises one or more stoppers (6) that prevent the retainer (4) to be entirely displaced from the guide (3). The stopper (6) can be provided either on the retainer (4) or the guide (3).
- [0022] The retainer (4) is moved inside the guide (3) by the user and the bottle placed in the holder (5) is encircled partially or entirely by the guide (3) and the retainer (4) depending on the length of the retainer (4) drawn out of the guide (3).
- [0023] One end of the retainer (4) is pulled out of the guide (3) by the user, with the other end staying in the guide (3). The retainer (4) is pulled out until a surface for clasping the bottle from below is formed. When the retainer (4) is entirely opened, the end thereof staying in the guide (3) rests against the stopper (6) and the retainer (4) cannot move further in the guide (3). In this position, the retainer (4) virtually forms a circle with the other end of the guide (3) and the bottle placed in the holder (5) is encircled by the guide (3) and the retainer (4). In this embodiment, when the holder (5) is not used, the retainer (4) is moved in exactly the opposite direction and driven into the guide (3). When the insertion process is completed, the retainer (4) either bears on the stopper (6) at the other end of the guide (3)

or the end of the retainer (4) outside the guide (3) bears on the guide (3), providing the retainer (4) to be seated in the guide (3). Thus the space occupied by the holder (5) inside the cooling device (1) is reduced when not in use (Figure 3, Figure 4, and Figure 5).

- [0024] In another embodiment of the present invention, the guide (3) and the retainer (4) are plates bent as cylinder segment forms that move telescopically for holding the bottle lengthwise. In this embodiment, the guide (3) and the retainer (4) are one within the other and when the retainer (4) is taken out of the guide (3), the cylinder segments virtually complement each other forming a cylindrical surface wherein bottles can be emplaced.
- [0025] In another embodiment of the present invention, the guide (3) and the retainer (4) are configured as rings that move telescopically, holding the bottle at certain intervals for using less material and also for esthetic appearance. In this embodiment, the guide (3) and the retainer (4) are shaped as rings and the retainer (4) moves telescopically inside the guide (3). When the retainer (4) is taken out of the guide (3), the rings virtually complement each other forming a surface wherein bottles can be emplaced.
- [0026] In another embodiment of the present invention, the holder (5) comprises a connector (7) to which the end of each retainer (4) staying outside the guide (3) is attached. In this embodiment, the connector (7) provides each retainer (4) to move simultaneously inside the guide (3) to be easily opened or closed by the user. Besides, when the retainer (4) is partially taken out of the guide (3), the connector (7) providing the holder (5) to support the bottle more safely, also serves as a stopper (6) when the retainer (4) is desired to be inserted into the guide (3).
- [0027] In another embodiment of the present invention, the holder (5) comprises more than two retainers (4) that are disposed one within the other inside the guide (3). In this embodiment, the retainers (4) can be taken out of each other and thus the retainer (4) can be gradually taken out of the guide (3). In the preferred embodiment of the present invention, the retainer (4) is shaped as a quarter ring. Consequently, when the holder (5)

is not used, minimum space is occupied inside the cooling device (1).

[0028] In another embodiment of the present invention, the retainers (4) are placed in the guide (3) at certain intervals so that stoppers (6) can stay at certain points. Accordingly, the retainer (4) can either entirely open or stop at certain angles serving to partially clasp the bottle.

[0029] By means of the holders (5) in the cooling device (1) of the present invention, the retainer (4) is drawn outwards until a surface is formed to clasp the bottle from below and the bottle can be supported safely in the vertical or horizontal positions. In the case the holder (5) is not used, the retainer (4) is placed inside the guide (3) allowing less space to be occupied by the holder (5) in the cooling device (1). Consequently, the inner space of the cooling device (1) can be utilized efficiently.

Claims

1. A cooling device (1) comprising a body wherein items to be cooled are stored, a door (8) allowing access inside from the outside, and one or more shelves (2), **characterized by** a holder (5) having a guide (3) shaped as a circle segment, mounted to the shelf (2), the door (8) or the body and at least one retainer (4) configured as a circle segment, placed in the guide (3) one within the other, moved telescopically with respect to the guide (3) in the direction to complement a circle shape, the guide (3) and the retainer (4) staying one within the other when not used, and when the retainer (4) is drawn out of the guide (3), the circle segments virtually complementing each other to form a surface for supporting the bottles.
2. A cooling device (1) as in any one of the above claims, **characterized by** a holder (5) comprising one or more stoppers (6) that prevent the retainer (4) to be entirely displaced from the guide (3).
3. A cooling device (1) as in Claim 2, **characterized by** a holder (5) comprising a stopper (6) disposed at certain intervals so that the retainer (4) can stay at certain points inside the guide (3).
4. A cooling device (1) as in any one of the above claims, **characterized by** a holder (5) comprising a guide (3) and a retainer (4) configured as plates bent into cylinder segments that move telescopically for holding the bottle lengthwise.
5. A cooling device (1) as in any one of the Claims 1 to 4, **characterized by** a holder (5) comprising a guide (3) and a retainer (4) configured as rings that move telescopically for holding the bottle at certain intervals.
6. A cooling device (1) as in any one of the above claims, **characterized by** a holder (5) comprising a connector (7) to which the end of each retainer (4) staying outside the guide (3) is attached for providing each retainer (4) to move simultaneously inside the guide (3) to be easily opened or closed by the user.
7. A cooling device (1) as in Claim 1, **characterized by** a holder (5) comprising at least two retainers (4) disposed one within the other inside the guide (3), which are taken out of the guide (3) gradually.

Figure 1

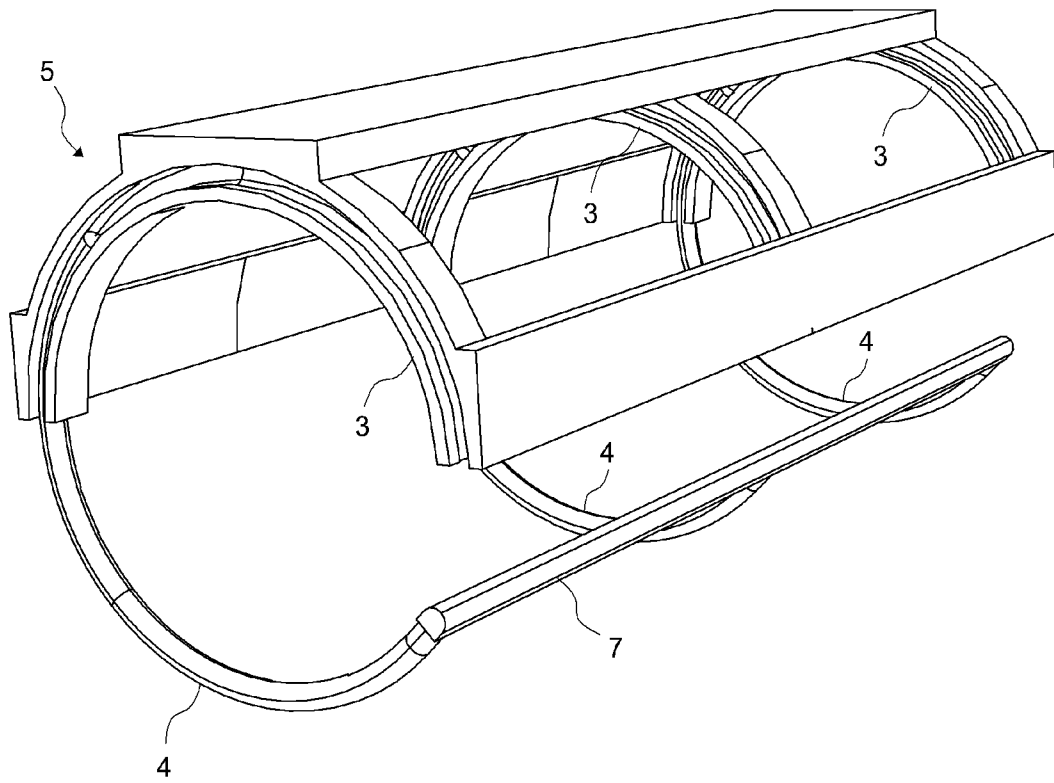


Figure 2

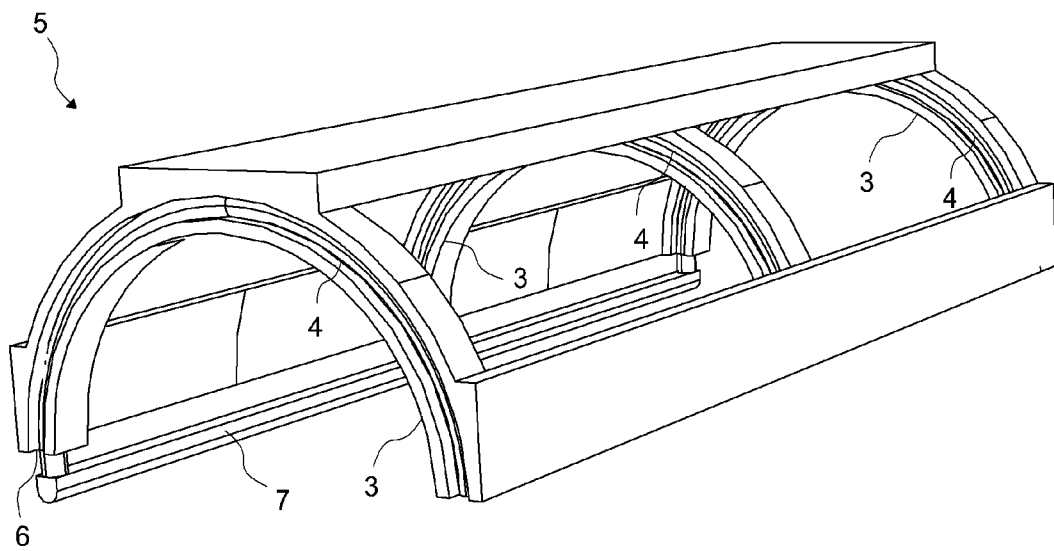
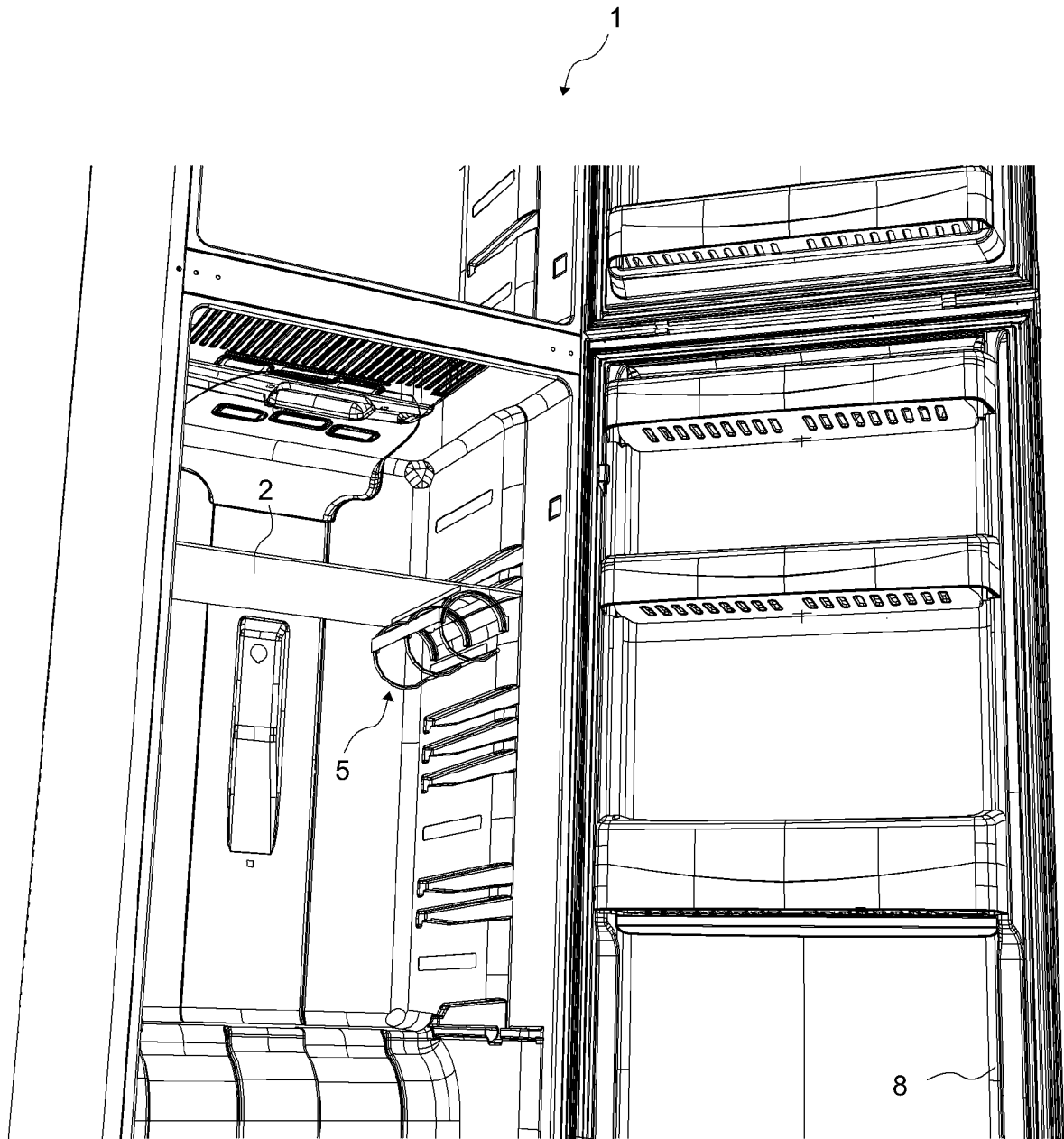


Figure 3



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Figure 4

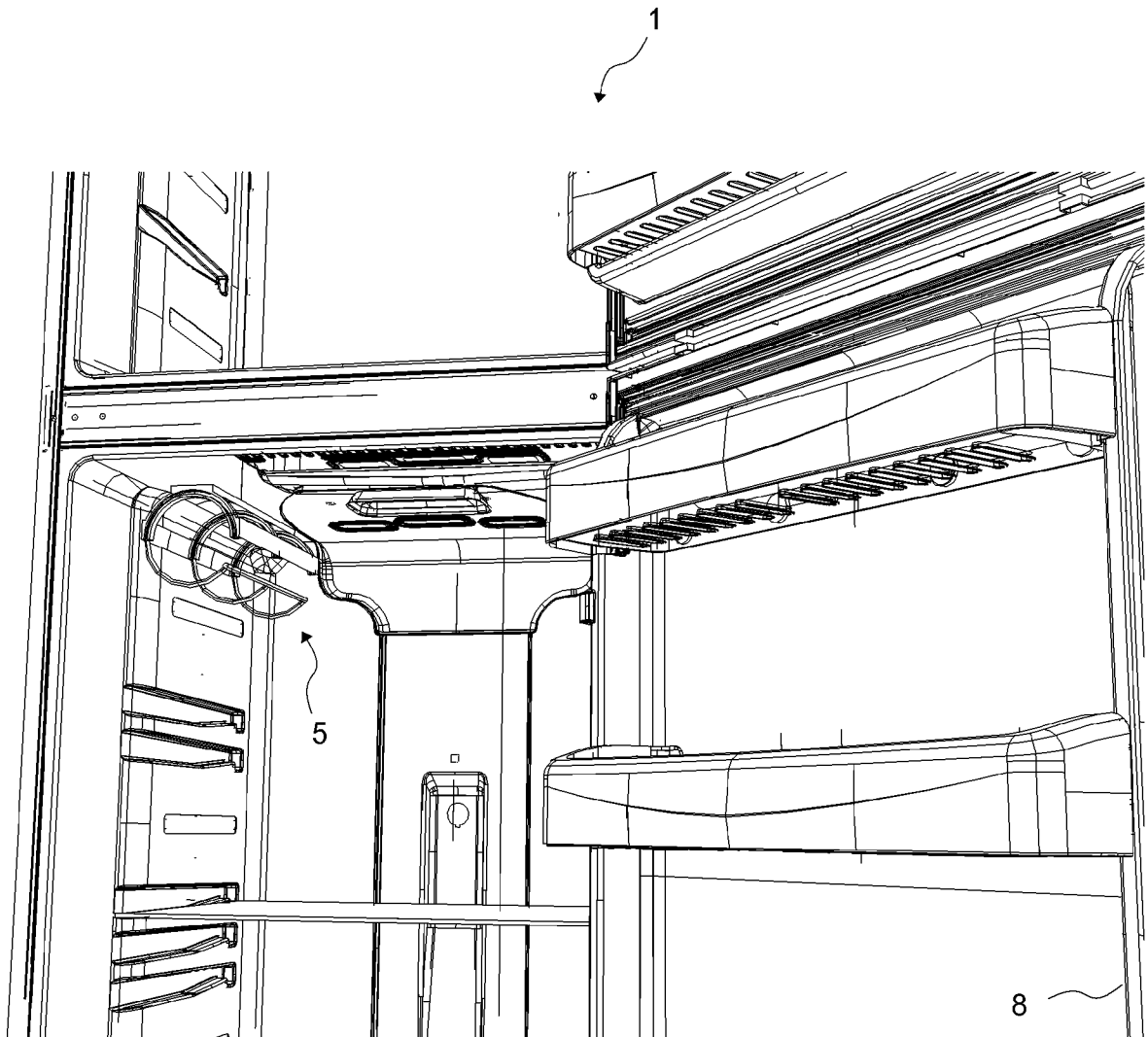


Figure 5

