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(71) Applicant: **WHIRLPOOL CORPORATION**
Benton Harbor Michigan 49022 (US)

(72) Inventors:
- **Martinoia, Rosanna**
  V.Le G. Borghi 27, 21025 Comerio (IT)
- **Brambilla, Enrico**
  V.Le G. Borghi 27, 21025 Comerio (IT)

(74) Representative: **Guerci, Alessandro**
Whirlpool Europe S.r.l.
Patent Department
Viale G. Borghi 27
21025 Comerio (VA) (IT)

(54) Composite shelf for refrigerators, freezers and similar appliances

(57) A shelf for refrigerators, freezers and similar appliances comprising a substantially flat first component (1) providing a first support surface, and a substantially flat second component (2) supported by the first component below the relative support surface and movable relative to said first component (1) along an obligatory path between a non-utilization position close to the first component (1) and a utilization position spaced from said first component to form a second support surface and a containing compartment (Figure 2).

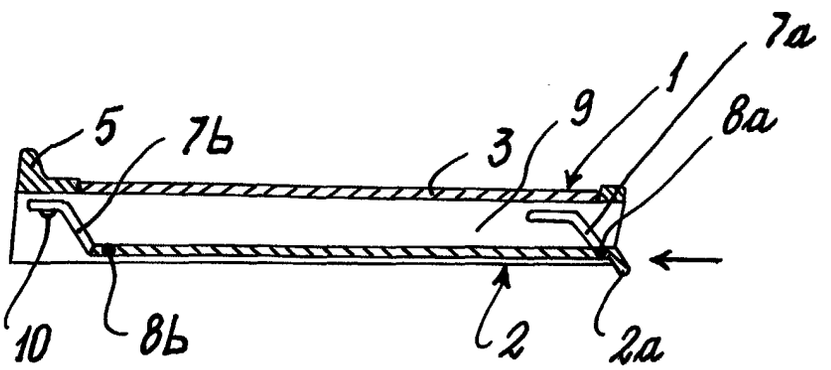

FIG. 2

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Description

[0001] The present invention relates to a shelf for domestic refrigeration appliances, such as refrigerators and the like.

[0002] The shelves of refrigerators and the like, which can be constructed of the most varied materials, form simple resting surfaces for the foods to be refrigerated. Foods, such as cakes, cheeses, delicatessen products or sliced meat, which have a small height but a relatively considerable extension in the other two directions (depth and width) have often to be placed on these selves. The food product concerned may hence occupy a considerable part and in certain cases the whole of the resting surface of the shelf, the shelf hence being badly used as such food products have necessarily to receive, placed thereon, other food products having a weight and/or shape which could negatively influence the appearance and use of the underlying food product, which could appropriately be defined as "flat".

[0003] The main object of the present invention is to provide a composite transformable shelf which is not only able to support "flat" food products but is also able to adequately protect them.

[0004] Another object of the present invention is to provide a composite transformable shelf which enables the "flat" food product positioned in one of its component parts to be seen.

[0005] These and further objects which will be more apparent from the ensuing detailed description are attained by a shelf in accordance with the teachings of the accompanying claims.

[0006] The invention will be more apparent from the following detailed description provided by way of example and given with reference to the accompanying drawings, in which:

Figure 1 is a schematic perspective view of the composite shelf of the invention seen from its front side;
Figure 2 is a schematic longitudinal section through the composite shelf of Figure 1 in its position for using "flat" food products; and
Figure 3 is a schematic longitudinal section similar to Figure 2 showing the composite shelf in its position when "flat" food products are not in use.

[0007] It should firstly be noted that the term "flat" refers to and comprises food products which have a relatively small height.

[0008] The composite shelf of the invention comprises a first component 1 and a second component 2. The second component is carried by the first component, and can be moved relative to said first component, below which it is positioned. Specifically, the first component 1 comprises a panel 3 formed from a transparent rectangular sheet, for example of plastic material or glass, surrounded by a plastic frame 4 which is raised at its rear, at 5, and presents two downwardly directed lateral walls 6 of suitable height on each of its sides.

[0009] In their mutually facing sides, the lateral walls 6 present front and rear guide grooves 7a, 7b into which front and rear pins or projections 8a, 8b projecting from two corresponding sides of the lower component 2 guidedly extend. The lower component is substantially flat and can be constructed either of metal, for example painted and stamped sheet metal or chromium plated rod, or of plastic (for example ABS).

[0010] To facilitate its handling, the second component 2 is suitably bent frontally, at 2a, to offer a grip for the fingers of the hand by which the user can move the second component.

[0011] The shape of the guide grooves 7a, 7b is such (see Figures 2 and 3) that the second component 2 can be moved from its non-utilization position (Figure 3), in which it is close to or nearly touching the first component 1, to its utilization position (Figure 2), in which it is spaced from the first component 1 to form a resting surface for "flat" food products and, together with the first component, a compartment 9 for containing and protecting these food products, which are visible through the transparent sheet 3 of the overlying first component 1. By a reverse movement the second component 2 can be returned from its utilization position (Figure 2) to its non-utilization position (Figure 3).

[0012] For completion, it should be noted: a) that the first component 1 presents, for example laterally, suitable known projections for its support by formations, such as ribs or recesses present on the sides of the preservation compartment of a refrigerator, the formations being arranged to prevent any undesirable movement of the composite shelf of the invention; b) that the guide grooves, especially the rear groove 7b, can present a lateral seat or concavity 10 in which the rear pin 8b of the second component becomes located to prevent undesired movements of the second component 2 when in its non-utilization position (Figure 3); c) that the front guide groove is closed lowerly to form a support for the front pin 8a of the second component 2, in order to prevent its involuntary escape; d) that the fitting of the second component 2 into the first 1 is enabled by the intrinsic flexibility of the lateral walls 6; e) that the guide grooves 7a, 7b can be connected together at their upper side, in which case the radius between such a connection and the descending side of the rear guide groove 7b is such that passage of the second component from its non-utilization position to its utilization position takes place with the necessary fluidity.

Claims

1. A shelf for refrigerators, freezers and similar appliances comprising a substantially flat first component (1) providing a first support surface, and a substantially flat second component (2) supported by the first component below the relative support sur-

face and movable relative to said first component (1) along an obligatory path between a non-utilization position close to the first component (1) and a utilization position spaced from said first component to form a second support surface and a containing compartment.

2. A shelf as claimed in claim 1, wherein the obligatory path is imposed by a guided engagement between guide grooves (7a, 7b) of the first component (1) and projecting parts (8a, 8b) of the second component.

3. A shelf as claimed in the preceding claims, wherein the first component (1) comprises downwardly extending parallel lateral walls (6), in the facing surfaces of which the guide grooves (7a, 7b) are present.

4. A shelf as claimed in the preceding claims, wherein the first component (1) comprises a sheet of transparent material (3) surrounded by a frame of plastic material, of which the lateral walls (6) form part.

5. A shelf as claimed in the preceding claims, wherein the second component (2) is of chromium plated rod, of plastic material, or of stamped and painted sheet metal.

6. A shelf as claimed in the preceding claims, wherein the guide grooves (7a, 7b) have a shape such as to enable the second component (2) to be moved towards and away from the first component (1).

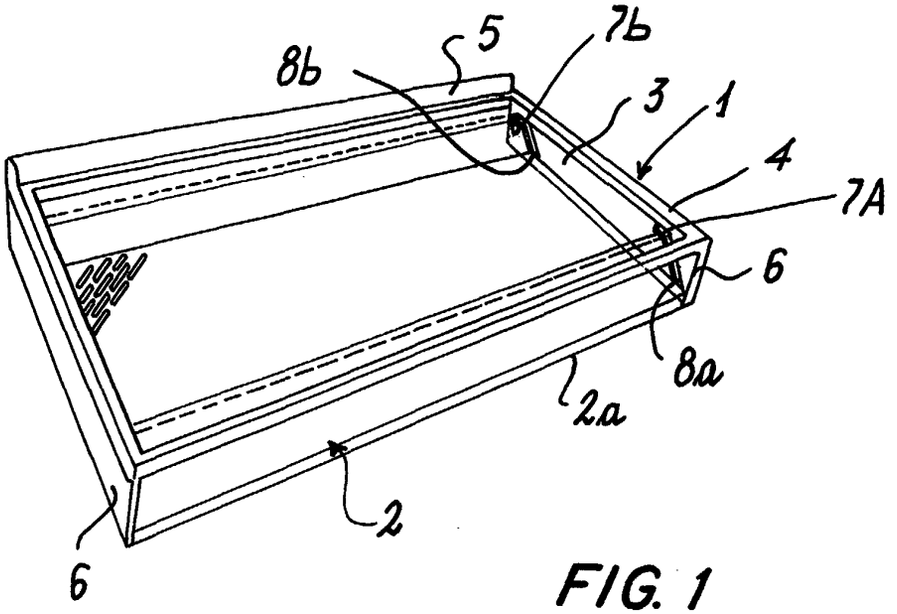

FIG. 1

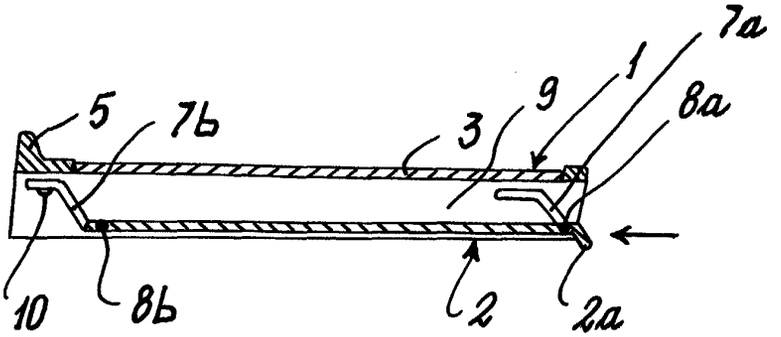

FIG. 2

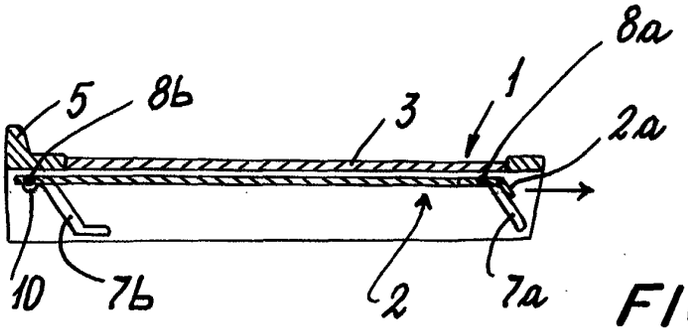

FIG. 3