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(54) Refrigerator door with shelves on its inside

Kühlschranksür mit an der Innenseite angebrachten Kùhlgutablagen

Porte de réfrigrérateur avec étagères fixées à sa face interne

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(73) Proprietor: **AKTIEBOLAGET ELECTROLUX**
(publ.)
105 45 Stockholm (SE)

(72) Inventors:
• **Ahlund, Bengt**
191 34 Sollentuna (SE)
• **Börjesson, Per**
161 63 Bromma (SE)

• **Johansson, Lennart**
161 31 Bromma (SE)
• **Ramel, Elisabeth**
113 50 Stockholm (SE)
• **Uggla, Maria**
111 29 Stockholm (SE)

(74) Representative: **Erixon, Bo et al**
c/o AB ELECTROLUX Corporate Patents &
Trademarks
105 45 Stockholm (SE)

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Description

[0001] The invention refers to a refrigerator door, which on its inside has two vertical ridges arranged in parallel with and at a distance from each other, at least one shelf being arranged between the ridges, which shelf at each of its ends is provided with a projective part, which is hooked in a corresponding cavity in the respective ridge. Such a refrigerator is known, for example, from US-A-3 647 075.

[0002] At such a door the cavities use to be arranged on the ridges on their sides which face each other. These cavities, which are exposed to the articles on the shelf, are easily made dirty by the articles.

[0003] The object of the invention is to improve the known door so that its surface which is exposed to the articles can be made even and smooth, so that it easily can be cleaned.

[0004] This object is reached by the door according to the invention thereby that the cavities are arranged on the ridges on their sides which are turned away from each other and that the projective parts are arranged at the tip of tongue-shaped prolongations of the ends of the shelf, which prolongations extend around the protruding edge of the respective ridge.

[0005] An embodiment of the invention is described below in connexion with the enclosed drawings, in which Fig. 1 shows the inside of a refrigerator door with a shelf arranged on the door, Fig. 2 shows a view of the door according to the marking II in fig. 1, Fig. 3 shows an enlarged view of the shelf according to the marking III-III in fig. 2, and Fig. 4 shows a sectional view according to the marking IV-IV in fig. 3.

[0006] In fig. 1 is shown the inside 10 of a door 12 of a refrigerator cabinet 14. A magnetic strip 16 extends around the periphery of the door, which strip seals against a surface 18 of the cabinet 14, when the door is closed. A ridge 20 is shaped in the inside 10, which ridge extends with an edge 22 around the periphery of the door inside the magnetic strip 16. On the outside of the vertical parts of the ridge 20 hook-shaped convexities 24 are shaped in one piece with the ridge, a cavity 26 being arranged in each convexity 24.

[0007] Shelves 28 are arranged between the vertical parts of the ridge 20. The respective shelf 28 has the shape of an elongated tray with a bottom 30, a rear wall 32 and a front wall 34, which walls are united by arched end walls 36 at the respective ends of the shelf. The part of the inside 10 of the door which is located inside the ridge 20 has a smooth and substantially plane surface 38, which joins the edge 22 of the ridge with an arched and smooth surface 40. The walls 32 and 36 of the shelf join the surfaces 38 and 40 of the door, so that they substantially bear on each other.

[0008] The shelf is at each of its ends provided with a tongue-shaped prolongation 42, which extends around the edge 22 of the ridge and at its tip on the inside is provided with a projective part 44, by which the shelf is

hooked in the cavity 26, the lower end 50 of the projective part 44 resting against the bottom 52 of the cavity 26, which bottom takes up vertical forces from the shelf. When the shelf is loaded by vertical forces the shelf will also be exposed to horizontal reaction forces 46, see fig. 4. The shelf is shaped so that the lower force 46 is taken up by the lower edge of the wall 32. The upper force 46 is taken up by the projective part 44. In order to minimize the force 46 the projective part 44 has been given a high position, at the level of the upper edge 48 of the shelf.

[0009] The shelf with the tongue-shaped prolongations is suitably made of plastic in one piece.

Claims

1. Refrigerator door (12), which on its inside (10) has two vertical ridges (20) arranged in parallel with and at a distance from each other, at least one shelf (28) being arranged between the ridges, which shelf at each of its ends is provided with a projective part (44), which is hooked in a corresponding cavity (26) in the respective ridge, **characterized in that** the cavities (26) are arranged on the ridges (20) on their sides which are turned away from each other and that the projective parts (44) are arranged at the tip of tongue-shaped prolongations (42) of the ends of the shelf, which prolongations (42) extend around the protruding edge (22) of the respective ridge.
2. Door according to claim 1, **characterized in that** the cavity (26) is shaped in one piece with the ridge (20).
3. Door according to claim 1 or 2, **characterized in that** the shelf with the tongue-shaped prolongations (42) and the projective parts (44) are made in one piece.

Patentansprüche

1. Kühlschranktür (12), welche an ihrer Innenseite (10) zwei vertikale Stege (20), die zueinander parallel und in einem gewissen Abstand voneinander angeordnet sind, aufweist, wobei mindestens Ablage (28) zwischen den Stegen angeordnet ist und besagte Ablage an jedem ihrer Enden mit einem vorstehenden Teil (44) versehen ist, welches in eine entsprechende Vertiefung (26) in den jeweiligen Steg eingehängt ist, **dadurch gekennzeichnet, dass** die Vertiefung (26) an den Stegen (20) an denjenigen Seiten angeordnet sind, die voneinander abgewendet sind, und dass die vorstehenden Teile (44) an der Spitze von zungenförmigen Vorsprüngen (42) der Enden der Ablage angeordnet sind, wobei besagte Vorsprünge (42) sich um die vorste-

hende Kante (22) des jeweiligen Steges erstrecken.

2. Tür nach Anspruch 1, **dadurch gekennzeichnet, dass** die Vertiefung (26) zusammen mit dem Steg (20) in einem Stück gestaltet ist. 5
3. Tür nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Ablage mit den zungenförmigen Vorsprüngen (42) und die vorstehenden Teile (44) aus einem Stück gefertigt sind. 10

Revendications

1. Porte de réfrigérateur (12), qui présente sur sa face interne (10) deux arêtes verticales (20) disposées parallèlement et à distance l'une de l'autre, au moins une étagère (28) étant disposée entre les arêtes, laquelle étagère est pourvue à chacune de ses extrémités d'une partie en saillie (44), laquelle est accrochée dans une cavité correspondante (26) dans l'arête respective, **caractérisée en ce que** les cavités (26) sont disposées sur les arêtes (20) sur leurs côtés qui sont tournés en éloignement l'un de l'autre, et **en ce que** les parties en saillie (44) sont disposées au bout de prolongations en forme de langue (42) des extrémités de l'étagère, lesquelles prolongations (42) s'étendent autour du bord faisant saillie (22) de l'arête respective. 15 20 25
2. Porte selon la revendication 1, **caractérisée en ce que** la cavité (26) est moulée d'un seul tenant avec l'arête (20). 30
3. Porte selon la revendication 1 ou 2, **caractérisée en ce que** l'étagère avec les prolongations en forme de langue (42) et les parties projectives (44) sont réalisées d'un seul tenant. 35

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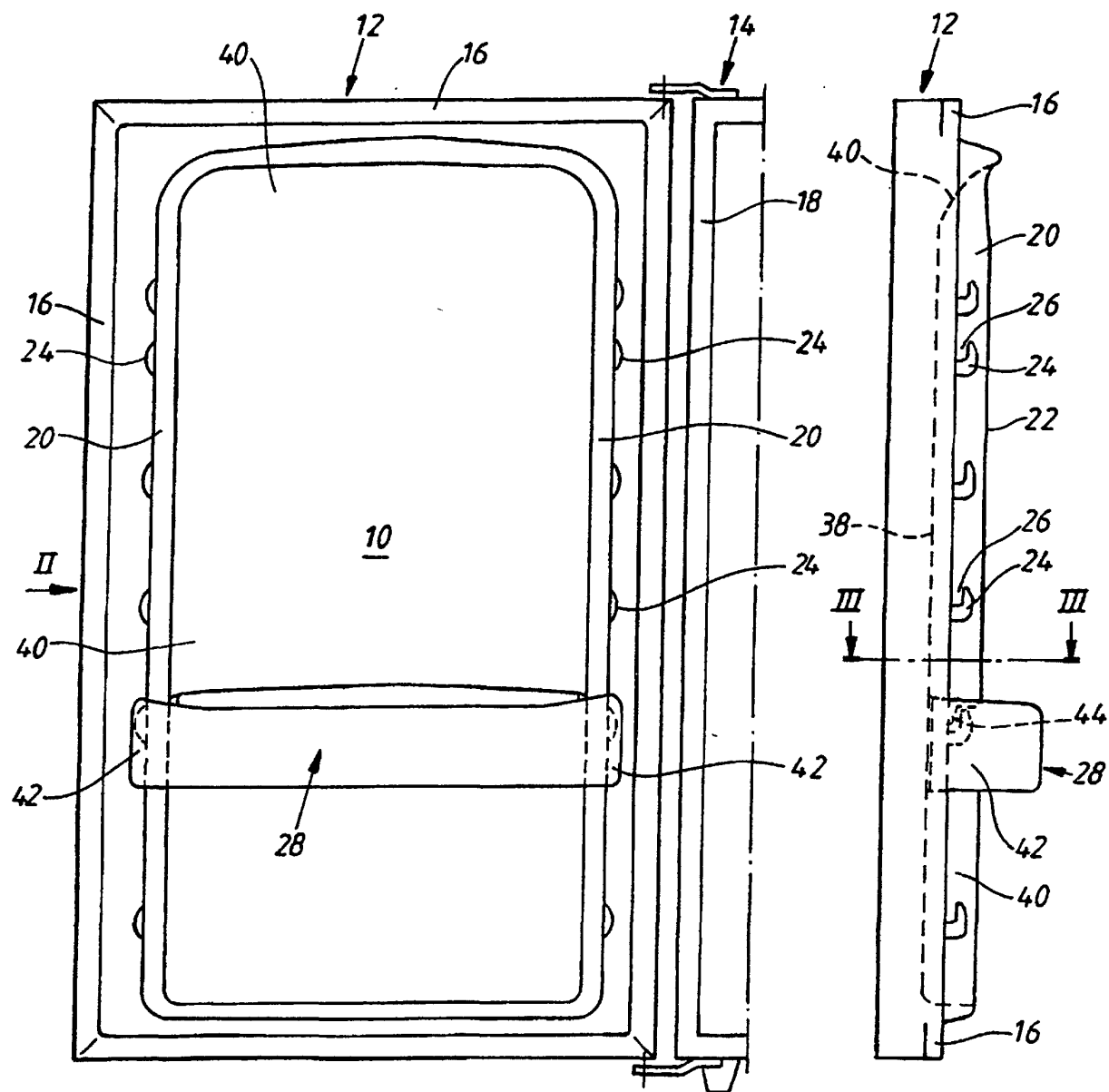


FIG.1

FIG. 2

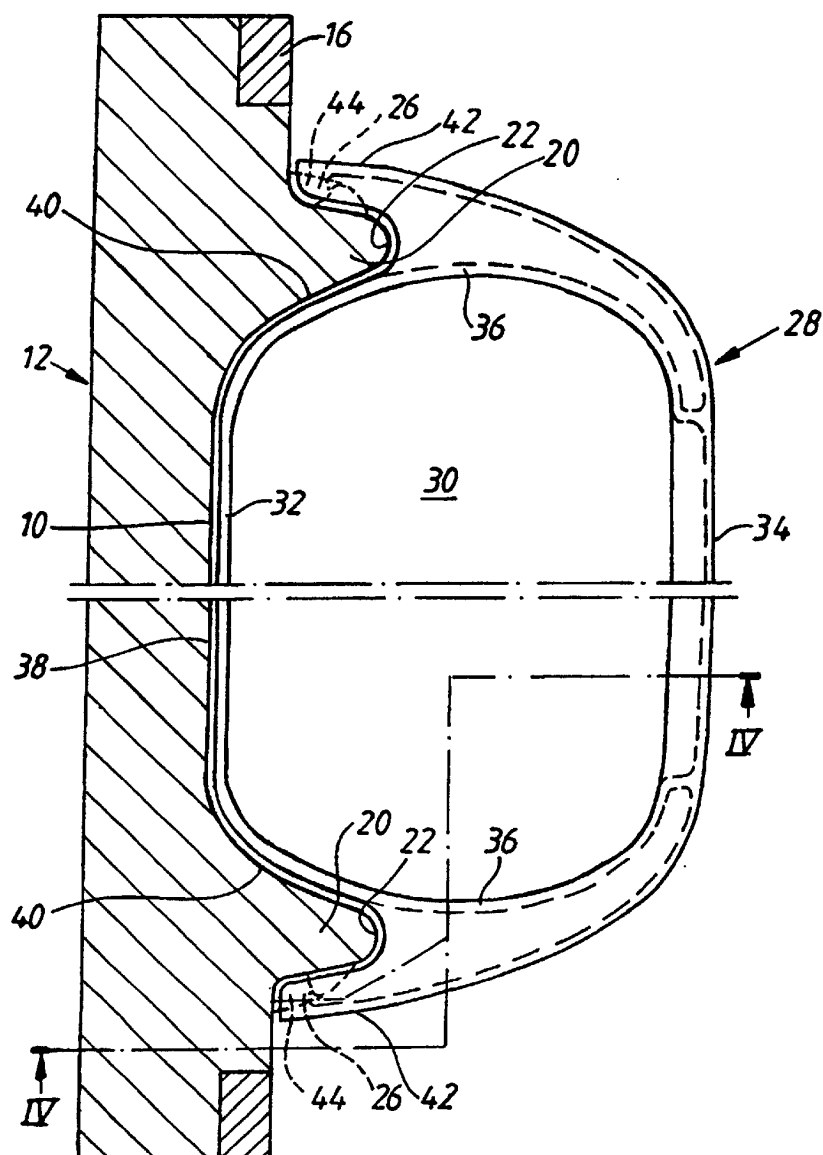


FIG.3

