(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 0 666 458 B1

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
04.06.1997 Bulletin 1997/23

(51) Int Cl.[6]: **F25D 25/02**

(21) Application number: **95850008.4**

(22) Date of filing: **11.01.1995**

(54) **Refrigerator or freezer cabinet with a wire shelf**

Kühl- oder Gefrierschrank mit einem Traggitter

Réfrigérateur ou congélateur avec une clayette

(84) Designated Contracting States:
DE DK ES FR GB IT SE

(30) Priority: **04.02.1994 SE 9400365**

(43) Date of publication of application:
09.08.1995 Bulletin 1995/32

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

(72) Inventors:
- **Börjesson, Per Nils Roland**
  S-161 63 Bromma (SE)
- **Gustafsson, Göran Nils**
  S-542 93 Mariestad (SE)

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

(56) References cited:
EP-A- 0 365 936
AU-B- 45 333
DE-A- 1 282 035

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 0 666 458 B1

Printed by Jouve, 75001 PARIS (FR)

Description

The invention refers to a refrigerator or freezer cabinet with a wire shelf showing a front transverse wire, a rear transverse wire and longitudinal wires connecting the transverse wires, which shelf with two opposite edges is intended to be pushed in and rest in grooves in opposite inner side walls of the cabinet.

At a known such cabinet there is nothing preventing the shelf from sliding out of the groove if the cabinet is tipped forwards, why the shelf must be fastened with tape in the cabinet, so that the shelf during handling of the cabinet, e.g. on delivery from the factory, shall not damage the door of the cabinet.

The object of the invention is to improve the known cabinet such that the shelf remains in the groove even if the cabinet would be tipped.

This object is obtained through the cabinet according to the invention thereby that at at least one of the edges the end of the rear wire rests in a pit in the groove and the end of the front wire, which rests against the bottom of the pit, shows an extension pointing backwards in the groove and by elasticity in the longitudinal wires constantly is pressed against the roof of the groove or is at least pressed against the roof of the groove, when the end of the rear wire moves out of the pit when the shelf is taken out.

An embodiment of a cabinet with a wire shelf according to the invention is described below in connexion with the attached drawing, in which Fig. 1 in a perspective view shows the edges of the shelf in grooves in the side walls of the cabinet, Fig. 2 shows one of the grooves from the side with the shelf locked in a pit in the groove, and Fig. 3 shows the shelf on the way to be taken out of or inserted into the groove.

By 10 is designated a horizontal groove in an inner side wall 12 of a refrigerator cabinet. A wire shelf 14 is pushed into the groove 10. The shelf 14 shows a rear transverse wire 16, the end 18 of which resting against the bottom of a pit 20 in the groove at its rear end, and a front transverse wire 22, which rests with its end 26 against the bottom of the groove. On the wires 16 and 22, which are of steel, longitudinal wires 24 are welded. The end 26 of the wire 22 is extended by an arm 28, which bears on the roof 30 of the groove at 32 and keeps the ends 18 and 26 pressed against the bottom of the pit and the groove respectively. When the shelf shall be taken out one can for instance by one hand press up the shelf at 34 against the action of spring force in the wires 24, which then will bend (Fig.3), so that the end 18 comes up from the pit 20, and then by the other hand pull out the shelf.

At the other side wall of the cabinet the shelf is shown to be supported by the ends 16 and 22 of the wires resting in a groove 11. The groove 11 kan be made as a reflected image of the groove 10 and the edge of the shelf which co-operates with the groove 11 can be made as a reflected image of the edge of the shelf which co-operates with the groove 10, the locking of the shelf becoming identically the same in both grooves.

The wires 24 can at their middles be fixed against movement sideways by a transverse wire, which runs parallel with the wires 16 and 22 and is welded to the wires 24.

Claims

1. Refrigerator or freezer cabinet with a wire shelf (14) showing a front transverse wire (22), a rear transverse wire (16) and longitudinal wires (24) connecting the transverse wires, which shelf with two opposite edges is intended to be pushed in and rest in grooves (10, 11) in opposite inner side walls (12) of the cabinet, **characterized** in that at at least one of the edges the end (18) of the rear wire (16) rests in a pit (20) in the corresponding groove (10) and the end (26) of the front wire (22), which rests against the bottom of the groove (10), shows an extension (28) pointing backwards in the groove (10), which extension (28), by elasticity of the longitudinal wires (24), is pressed against the roof of the groove either constantly or at least when the end (18) of the rear wire moves out of the pit (20) when the shelf is taken out.

Patentansprüche

1. Kühl- oder Gefrierschrank mit einem Traggitter (14), das einen vorderen Querdraht (22), einen hinteren Querdraht (16) und Längsdrähte (24) besitzt, die die Querdrähte verbinden, wobei das Gitter dafür vorgesehen ist, mit zwei gegenüberliegenden Seiten in Rillen (10, 11) eingeschoben zu werden und dort aufzusitzen, die auf inneren, gegenüberliegenden Seitenwänden (12) des Schranks vorgesehen sind, **dadurch gekennzeichnet, daß** mindestens an einer Seite das Ende (18) des hinteren Drahts (16) in einer Vertiefung (20) in der korrespondierenden Rille (10) aufsitzt und das Ende (26) des vorderen Drahts (22), der auf dem Boden der Rille (10) aufsitzt, eine Verlängerung (28) besitzt, die nach hinten in der Rille (10) gerichtet ist, wobei die Verlängerung (28) durch die Elastizität der Längsdrähte (24) gegen die Decke der Rille entweder konstant oder zumindest dann gedrückt ist, wenn das Ende (18) des hinteren Drahts aus der Vertiefung (20) herausbewegt wird, wenn das Gitter herausgenommen wird.

Revendications

1. Armoire de réfrigération ou de congélation munie d'une clayette (14) présentant une tige transversale

antérieure (22), une tige transversale postérieure (16) et des baguettes longitudinales (24) reliant les tiges transversales, laquelle clayette est conçue pour être encastrée et logée, par deux bords opposés, dans des rainures (10, 11) pratiquées dans des parois latérales intérieures opposées (12) de l'armoire, caractérisée par le fait que, sur au moins l'un des bords, l'extrémité (18) de la tige postérieure (16) est logée dans un renfoncement (20) ménagé dans la rainure correspondante (10) et l'extrémité (26) de la tige antérieure (22), qui repose contre le fond de la rainure (10), comporte un prolongement (28) saillant vers l'arrière dans ladite rainure (10), lequel prolongement (28) est pressé contre le haut de la rainure, sous l'effet de l'élasticité des baguettes longitudinales (24), soit de manière constante, soit au moins lorsque l'extrémité (18) de la tige postérieure sort du renfoncement (20) au stade de l'enlèvement de la clayette.

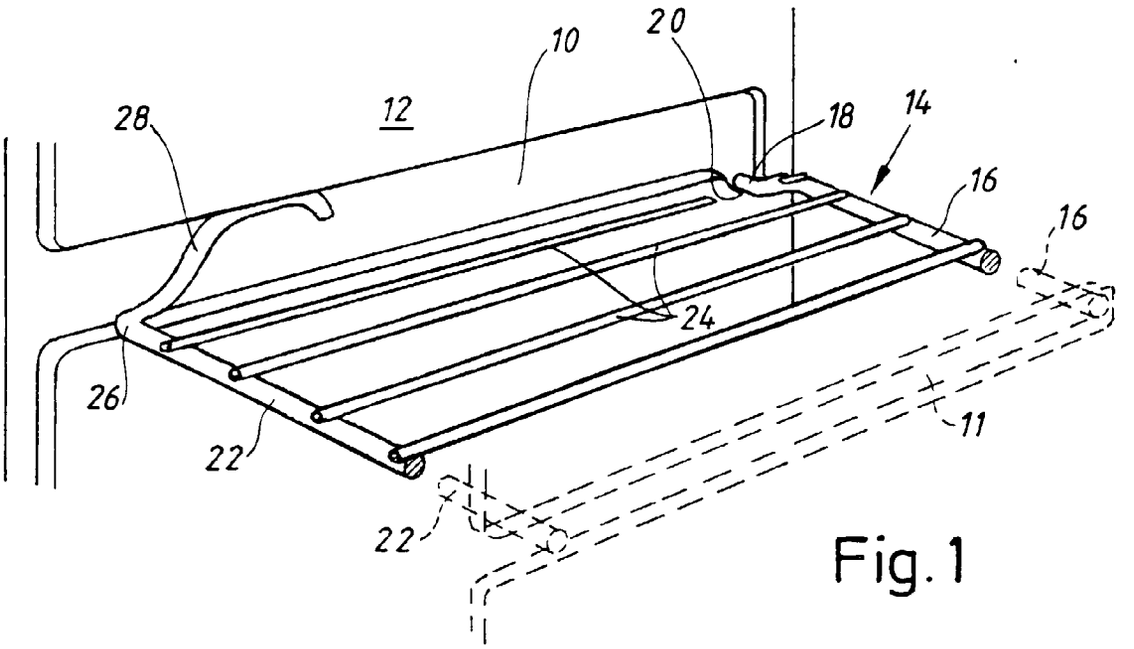


Fig. 1

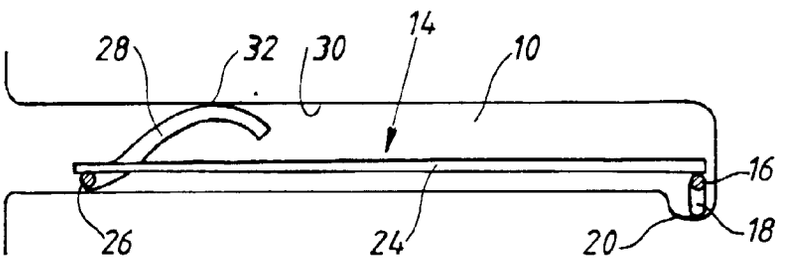


Fig. 2

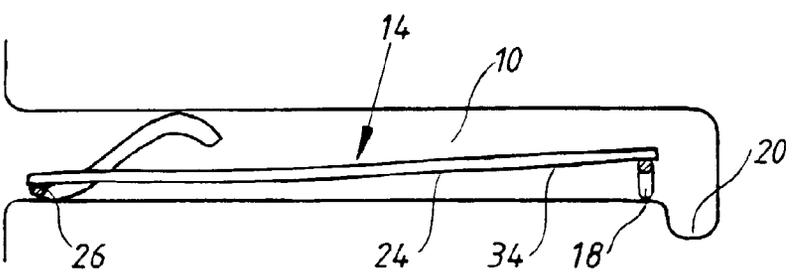


Fig. 3