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(54) **MULTI-FUNCTIONAL SUPPORT MEANS FOR HOUSEHOLD ELECTRICAL APPLIANCES SUCH AS FREEZERS, REFRIGERATORS AND THE LIKE**

MEHRFUNKTIONSSTÜTZMITTEL FÜR ELEKTRISCHE HAUSHALTSGERÄTE WIE
GEFRIERSCHRÄNKE, KÜHLSCHRÄNKE UND DERGLEICHEN

DISPOSITIF DE SUPPORT MULTIFONCTIONNEL POUR APPAREILS ELECTROMENAGERS TELS
QUE CONGELATEURS, REFRIGERATEURS ET AUTRES

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Description

[0001] The present invention relates to a multi-functional support means for household electrical appliances, particularly for freezers, in accordance with the introduction to the main claim. It relates in particular to a multi-functional support means for heavy household electrical appliances which in certain situations need to be shifted with agility, but can also be used for appliances of static position.

[0002] Household electrical appliances are known to rest on the floor via support means in the form of feet, usually four in number.

[0003] These feet are well known, they being substantially profiled plastic protuberances fixed to the lower surface of the appliance.

[0004] In the more costly appliances of this type, instead of feet, which represent static support means, support means in the form of wheels are present, these facilitating shifting of the appliance. These wheel-type support means are often positioned only on the rear side so that the appliance has merely to be lifted on its front side to enable it to be comfortably moved. When the front side is again lowered it rests on the floor, the appliance then maintaining the position attained.

[0005] DE9306848U discloses a floor support device according to the preamble of claim 1. W003008205 discloses a wheeled levelling device for a home appliance.

[0006] A drawback of the known art is that such an appliance is provided either with wheels or with static support feet, with the result that when the support means (static or wheel-type) has been mounted it can no longer be changed other than by very difficult removal and mounting operations.

[0007] The two different support means must also be produced and kept in store and the appropriate one mounted at the time of order.

[0008] An object of the present invention is to provide a support device which can be easily transformed from static to movable or vice versa.

[0009] A further object of the present invention is to provide a support device which is economical and easily installed.

[0010] This and further objects are attained by a multi-functional support device especially for household electrical appliances such as refrigerators, freezers and the like in accordance with the technical teachings of the accompanying claims.

[0011] Other characteristics and advantages will be apparent from the description of a preferred but non-exclusive embodiment of the support device, illustrated by way of non-limiting example in the accompanying drawing, in which the single figure shows a perspective view of the support device of the present invention.

[0012] Said figure shows a foot for household electrical appliances, particularly refrigerators, freezers and the like, which is indicated overall by 1.

[0013] It comprises a connection plate 2, from which

there projects, in one piece therewith, a static support part 3. The support part 3 lowerly presents a substantially flat surface 3a which acts as the floor support during static use of the appliance to which the support means is applied via the connection plate. In the interior of said support element 3 there is formed a compartment 5 containing, again in one piece therewith, snap connection means in the form of a cradle acting as a seat 4 for the shaft 6 of a wheel 7; said means enable the wheel to rotate, they presenting a cradle part 4a in which said shaft 6 rests, and snap-tangs 4b which maintain said shaft 6 in position and enable it to rotate.

[0014] Said compartment 5 is of cross shape, with said seats being provided at the ends of one of the arms of the cross. In this manner the wheel shaft lies in the seats, with that wheel part which is to make contact with the ground being housed in the wider arm of the cross.

[0015] The use of the invention is apparent from that described and illustrated. Specifically, if a static support is required, the foot 1 is used as it is, such that the surface 3a rests on the ground, whereas if a movable support is required, the wheel 7 is inserted into the appropriate seats, so that by projecting from the surface 3a it allows the appliance to be easily moved. To return to a static support condition the wheel 7 has merely to be extracted from the static support part.

[0016] Such a foot can be mounted on any type of household electrical appliance, whether of low or high cost.

[0017] Inserting the wheel 7 into the appropriate seats is sufficient to transform the foot from a static support means to a movable support means.

[0018] This provides considerable advantages in terms of mounting speed and reduces the number of pieces required for mounting which have to be kept in store, with all the consequent advantages.

[0019] Modifications and variants are possible in addition to those already stated, hence for example the foot can be formed integral with the base part or base frame.

[0020] All the components of the invention can be of any material, however a polymeric material such as ABS is preferred.

Claims

1. A floor support device (1) for household electrical appliances such as freezers, refrigerators and the like, comprising a static support part (3) rigid with the appliance, said static support part being provided with at least one seat to removably receive a wheel for transforming said static support part into a dynamic support part, **characterised in that** profiled elastic tangs (4b) are provided in said seat (4) for snap-engagement of the wheel (7).
2. A device as claimed in claim 1, **characterised in that** a pair of said seats are provided in a cross-

shaped compartment, each comprising a pair of elastic tangs (4b).

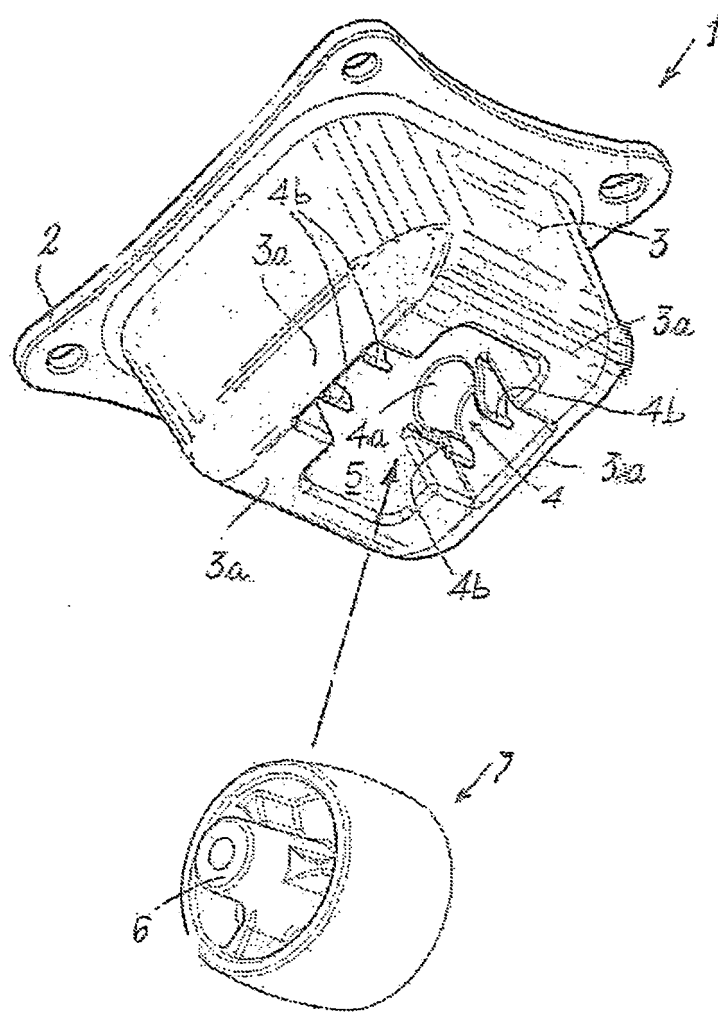
3. A device as claimed in claim 2, **characterised in that** said elastic tangs (4b) are joined together by a cradle-shaped part (4a) for supporting said wheel (7).
4. A device as claimed in claim 1, **characterised in that** said wheel presents a projecting shaft (6), the ends of which engage in said seats (4).
5. A floor support device as claimed in claim 1, **characterised in that** said static support part (3) and said wheel (7) are formed by moulding polymeric material, preferably ABS.

Patentansprüche

1. Bodenabstützeinrichtung (1) für elektrische Haushaltsgeräte, wie Gefrierschränke, Kühlschränke und dergleichen, umfassend einen statischen Abstützabschnitt (3), der zu dem Gerät steif ist, wobei der statische Abstützabschnitt mit zumindest einer Aufnahme versehen ist, um ein Rad zum Umwandeln des statischen Abstützabschnittes in einen dynamischen Abstützabschnitt entfernbar aufzunehmen, **dadurch gekennzeichnet, dass** profilierte elastische Griffzapfen (4b) in der Aufnahme (4) zur Schnappverbindung des Rades (7) vorgesehen sind.
2. Einrichtung nach Anspruch 1, **dadurch gekennzeichnet, dass** ein Paar der Aufnahmen in einem kreuzförmigen Fach vorgesehen ist, wobei die Aufnahmen jeweils ein Paar elastischer Griffzapfen (4b) umfassen.
3. Einrichtung nach Anspruch 2, **dadurch gekennzeichnet, dass** die elastischen Griffzapfen (4b) über ein wiegeförmiges Teil (4a) zum Abstützen des Rades (7) miteinander verbunden sind.
4. Einrichtung nach Anspruch 1, **dadurch gekennzeichnet, dass** das Rad eine hervorstehende Welle (6) aufweist, wobei die Enden dieser in den Aufnahmen (4) aufgenommen werden.
5. Bodenabstützeinrichtung nach Anspruch 1, **dadurch gekennzeichnet, dass** der statische Abstützabschnitt (3) und das Rad (7) durch Formen von Polymermaterial, bevorzugt von ABS, gebildet werden.

Revendications

1. Dispositif de support de plancher (1) pour des appareils électroménagers tels que des congérateurs, des réfrigérateurs et équivalent, comportant une partie de support statique (3) rigide avec l'appareil, ladite partie de support statique étant pourvue d'au moins un siège destiné à recevoir de manière démontable une roue afin de transformer ladite partie de support statique en une partie de support dynamique, **caractérisé en ce que** des pattes élastiques profilées (4b) sont prévues dans ledit siège (4) pour l'engagement encliqueté de la roue (7).
2. Dispositif selon la revendication 1, **caractérisé en ce qu'**une paire desdits sièges est prévue dans un compartiment en forme de croix, chacun comportant une paire de pattes élastiques (4b).
3. Dispositif selon la revendication 2, **caractérisé en ce que** lesdites pattes élastiques (4b) sont reliées ensemble par une partie en forme de berceau (4a) afin de supporter ladite roue (7).
4. Dispositif selon la revendication 1, **caractérisé en ce que** ladite roue présente un arbre saillant (6), dont les extrémités s'engagent dans lesdits sièges (4).
5. Dispositif de support de plancher selon la revendication 1, **caractérisé en ce que** ladite partie de support statique (3) et ladite roue (7) sont formées par moulage d'une matière polymère, de préférence de l'ABS.



REFERENCES CITED IN THE DESCRIPTION

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