

Title (en)

Hinge device, particularly for the door of household electric appliances and the like with counterbalancing and self-regulating means

Title (de)

Scharniervorrichtung, insbesondere für eine Tür eines elektrischen Haushaltsgerätes o.dgl., mit selbstregulierendem Gewichtsausgleich

Title (fr)

Dispositif de charnière, en particulier pour une porte d'appareil électroménager ou similaire, avec équilibreur autorégulant

Publication

EP 0919776 B1 20040526 (EN)

Application

EP 98122491 A 19981127

Priority

- IT BO970689 A 19971127
- IT BO980490 A 19980806

Abstract (en)

[origin: EP0919776A2] A hinge device for the door of household electric appliances, includes: a coupling element (2), having a frontal wall (12) and fixed to a frame (10) fixable to the structure of the appliance; a support element (3), pivoted to the coupling element (2) and to which the door is fixed; first counterbalancing means (6), designed to practice an antagonist force against the weight force of the door; a shaped element (9), hinged to the first counterbalancing means (6) and to the support element (3), and designed to slide along the frontal wall (12) by virtue of the interposition of sliding means (30) in correspondence of the passage from a closing condition (C) of the device (1), in which the support element (3) is faced to the frontal wall (12), to an opening condition (A), in which the axle of the support element (3) is almost orthogonal to the frontal wall (12), and vice versa in such a way that the sliding causes an antagonistic force of increasing intensity between the sliding block (13) and the frontal wall (12) and proportional to the increasing of the opening angle of the door and to the arm of the antagonistic force. The hinge device 1 can moreover include second counterbalancing means (15) slidable on an outer contour (8) of the shaped element (9), so as to exert a further antagonistic force thereon proportionally increasing in correspondence of the passage from the closing condition (C) to the opening condition (A). <IMAGE>

IPC 1-7

F24C 15/02; **A47L 15/42**

IPC 8 full level

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CPC (source: EP)

A47L 15/4261 (2013.01); **E05F 1/1261** (2013.01); **F24C 15/023** (2013.01); **E05D 11/08** (2013.01); **E05Y 2201/26** (2013.01); **E05Y 2900/308** (2013.01)

Cited by

EP2678469A4; EP1840309A1; EP1764557A3; IT201800009511A1; EP2116167A1; US8367133B2; WO2007107848A3; EP2912984B1

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