

Title (en)
MULTI-FUNCTIONAL HINGE DEVICE

Title (de)
MULTIFUNKTIONSSCHARNIERVORRICHTUNG

Title (fr)
DISPOSITIF DE CHARNIÈRE MULTIFONCTION

Publication
EP 3625419 B1 20210804 (EN)

Application
EP 18724545 A 20180514

Priority
• IT 201700053708 A 20170518
• EP 2018062413 W 20180514

Abstract (en)
[origin: WO2018210768A1] Multi-functional hinge device having a first connection means (3) assigned to be fixed to a structure or frame of an appliance; and a second connection means (5), that is rotatable around its own hinge hub means (7), and assigned to be fixed to a door or hatch of the appliance to allow the opening and closing movements between the extreme closing and opening conditions of said door; in an operative condition, the rotation axis of said hub means (7) is horizontal, and the plane of the door in the closed condition is vertical or nearly vertical. Said device (1) comprises at least: - a rocker arm means (10) that is constrained, by means of a first pivot means (11) parallel to the hub means (7), to the first connection means (3), so as to freely rotate around the axis of the first pivot means (11) where such rocker arm means (10) bears a second pivot means (13) spaced from the first pivot means (11) and parallel thereto; - a connecting rod means (14) having an end that is linked to the rocker arm means (10) by means of the second pivot means (13), so as to freely rotate around the axis of such second pivot means, and having the opposite end that is linked to the second connection means (5) by means of a third pivot means (15), parallel to the hub means (7), so as to freely rotate around the axis of such third pivot means (15); - a slider means (40) that is constrained to the first connection means (3) by means of guide means (41, 42) for the sliding of the slider means (40) towards the inside and the outside of the appliance and that bears the hub means (7) at an outer end thereof (40); such slider means (40) being linked to the rocker arm means (10) whose rotation towards the closing condition causes the translation of the slider means (40) towards the internal condition; - an elastic means (17) having an end that is linked to the first connection means (3) and the other end that is linked to the slider means (40).

IPC 8 full level
E05F 1/12 (2006.01); **E05D 3/02** (2006.01)

CPC (source: EP)
E05F 1/1276 (2013.01); **E05D 3/022** (2013.01); **E05Y 2201/716** (2013.01); **E05Y 2201/722** (2013.01); **E05Y 2800/102** (2013.01); **E05Y 2900/30** (2013.01); **E05Y 2900/308** (2013.01)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2018210768 A1 20181122; EP 3625419 A1 20200325; EP 3625419 B1 20210804; ES 2886847 T3 20211221; IT 201700053708 A1 20181118; PL 3625419 T3 20211213

DOCDB simple family (application)
EP 2018062413 W 20180514; EP 18724545 A 20180514; ES 18724545 T 20180514; IT 201700053708 A 20170518; PL 18724545 T 20180514