

Title (en)

A door locking device for a domestic appliance

Title (de)

Eine Türverriegelungseinrichtung für ein Haushaltgerät

Title (fr)

Dispositif de verrouillage de porte pour des appareils ménagers

Publication

EP 1621658 A2 20060201 (EN)

Application

EP 05105753 A 20050628

Priority

IT TO20040540 A 20040730

Abstract (en)

The device (1) includes a support structure (2, 3); a retaining slider (6) operable to remain in a rest position while the door is open but to move into a working position in which it retains the door in its closed position; and an electro-mechanical control device (20) including a stationary solenoid (21) for controlling the axial position of an associated core (29) which is movable along a path intersecting the trajectory of the slider (6); a resilient member (14) associated with the core (29) and cam members (31-35) associated with the core (29) and cooperating with it in such a way that each time the solenoid (21) is excited, the core (29) is returned to its axially retracted position and rotated about its axis by a predetermined amount, and each time the solenoid (21) is de-excited, the core (29) is urged back into its axially extracted position by the associated resilient member (14). The cam members (31-35) are shaped so as to define at least first and second stable angular positions for the core (29), in which they respectively allow the core (29) to move or prevent it from moving into its axially extended position.

IPC 8 full level

D06F 37/42 (2006.01); **D06F 39/14** (2006.01); **E05B 47/00** (2006.01); **E05B 47/02** (2006.01); **E05C 19/02** (2006.01); **E05B 15/04** (2006.01)

CPC (source: EP US)

D06F 37/42 (2013.01 - EP US); **D06F 39/14** (2013.01 - EP US); **E05B 47/0005** (2013.01 - EP); **E05B 47/026** (2013.01 - EP); **E05C 19/028** (2013.01 - EP); **E05B 2047/0069** (2013.01 - EP); **E05B 2047/0081** (2013.01 - EP)

Cited by

US2024191542A1; DE102018002418A1; DE102018002418B4; ITRM20130017A1; KR20160041846A; US8727391B2; US8991877B2; US10190336B2; WO2010026536A1; WO2014108928A1; EP3587656A1; WO2020049603A1; WO2020049602A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1621658 A2 20060201; **EP 1621658 A3 20090701**; **EP 1621658 B1 20150909**; DE 09158169 T1 20190228; EP 2075365 A1 20090701; IT TO20040540 A1 20041030; PL 1621658 T3 20160429

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