

Title (en)

Device for rapid locking and delayed unlocking a door, more particularly of a washing machine.

Title (de)

Türverriegelungsvorrichtung mit schneller Verriegelung und verzögerter Entriegelung, insbesondere für eine Waschmaschine.

Title (fr)

Dispositif de verrouillage de porte avec verrouillage rapide et déverrouillage retardé, notamment d'une machine à laver.

Publication

EP 0439849 A1 19910807 (EN)

Application

EP 90203047 A 19901116

Priority

IT 2272989 A 19891218

Abstract (en)

The invention relates to a device for locking doors of machines containing rotating members which closes the contacts of an electrical switch subsequent to locking the door and opens the contacts prior to unlocking the door. It is characterized by the fact that hook 5 of the door is retained by a block 4 which is rotated about its axis due to the action of hook 5 while closing the door so that after the locking of the rotating block 4, hook 5 can no longer be drawn out. Rotating block 4 is fixed on a small shaft 3 with which it rotates, said small shaft 3 having in turn a second substantially cylindrical block 7 which has a peripheral surface shaped as a cam and which has in the end opposite the first block 4 a cavity 8 to house the tail 27 of a locking bolt 9 which moves parallel to the axis of said small shaft 3, the opposite end 26 of locking bolt 9 working on the moving contact 10 of the electrical switch 11. When the end of locking bolt 27 enters the cavity 8 it locks block 7 and therefore block 4 against rotation, thereby locking the door. The operation of the various parts of the device is obtained by means of two mobile boxes moving parallel to the axis of the shaft 3, of which one 14 cooperates with cam 7 arranged on shaft 3 and the other 13 cooperates with the front part 29 of locking bolt 9 and with a lever arm 19 rotating about a pivot 20 with the opposite end connected to a small piston 22 of an electromagnet 23. <IMAGE>

IPC 1-7

D06F 37/42

IPC 8 full level

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CPC (source: EP US)

D06F 37/42 (2013.01 - EP US); **E05B 47/0009** (2013.01 - EP US)

Citation (search report)

- [X] DE 2942515 B1 19801016 - TRUMPF SCHLOSS & BESCHLAG
- [AD] WO 8805476 A1 19880728 - ROCCHITELLI ONOFRIO [IT]

Cited by

DE102017128301B3; WO2009007802A1; EP1808558A3; CN103228835A; US6082787A; EP1039012A1; EP0600390A1; EP4033057A1; US11814874B2

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EP 0439849 A1 19910807; **EP 0439849 B1 19970507**; AT E152790 T1 19970515; DE 69030652 D1 19970612; IT 1236884 B 19930426; IT 8922729 A0 19891218; IT 8922729 A1 19910618

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