

Title (en)

DOOR-LOCKING DEVICE FOR INSTANT LOCKING AND DELAYED UNLOCKING WITH WATER LEVEL SUPERVISION

Publication

EP 0172331 B1 19880330 (DE)

Application

EP 85106984 A 19850605

Priority

DE 3430414 A 19840818

Abstract (en)

[origin: US4620735A] A door-bolting device for electrical appliances, in particular washing machines, comprises a longitudinally displaceable slide bolt having a locking opening for a door-locking hook, one or two bolting openings for engagement by a bolting rod, and a lock-down recess. In open position, the free end of a signal contact spring enters this lock-down recess; this spring and a fixed contactor member opposite and parallel with the former constitute a signal contact unit. During bolting operation, a signal contact is made in this unit and controls a bolt-actuating relay comprising a magnet yoke, a coil, a core and a double-armed magnet armature lever. The free end of a bolting arm of the latter constitutes a bearing for the bolting rod which is displaced, during bolting operation, by a swivel motion of the lever. The end of a main contact arm of the same lever serves as bearing for a connecting shaft which is fastened to a diaphragm subdividing a pressure chamber. The latter is connected with a pressure-equalizing chamber fillable with a fluid medium such as water via a supply duct. The connecting shaft end remote from the diaphragm exerts during bolting displacement increasing pressure on a main contactor spring which makes, together with a fixed main contactor member, a main contact for switching on the appliance.

IPC 1-7

D06F 37/42

IPC 8 full level

D06F 37/42 (2006.01); **E05B 47/00** (2006.01)

CPC (source: EP US)

D06F 37/42 (2013.01 - EP US); **E05B 47/0009** (2013.01 - EP US); **Y10S 70/48** (2013.01 - EP US); **Y10S 292/69** (2013.01 - EP US); **Y10T 70/7051** (2015.04 - EP US); **Y10T 70/7062** (2015.04 - EP US); **Y10T 292/1021** (2015.04 - EP US)

Cited by

EP0354191A3; IT201700039100A1; IT201700039143A1; KR20200014731A; KR20200014733A; WO2018189640A1; US11299913B2; US11591823B2

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