

Title (en)
Device for locking and unlocking a door of an electric household appliance

Title (de)
Vorrichtung zum Verriegeln und Entriegeln einer Tür eines elektrischen Haushaltsgeräts

Title (fr)
Dispositif de verrouillage et de déverrouillage d'une porte d'un appareil domestique électrique

Publication
EP 2537973 A1 20121226 (EN)

Application
EP 12173182 A 20120622

Priority
IT TO20110557 A 20110624

Abstract (en)
The device (1) comprises: a support casing (2) with an opening (5) for the introduction of a hook member (A) connected to the door (P), a retaining member (6) movable between a rest position in which it allows the introduction of the hook member (A) into the opening (5) and a working position in which it is adapted to retain the hook member (A) introduced into this opening (5); a locking device including a locking member (9) movable between a disengaged position and an engaged position, in which it is adapted to allow and prevent, respectively, the passage of the retaining member (6) from the working position to the rest position, and control means (20 to 34) which are electrically activatable and are adapted to control the position of the locking member (9); and an electric switch (10) with an opposing contact (11) and a movable contact (13), the latter being carried by a first flexible conductive blade (14), mounted in the casing (2), the blade (14) being coupled to the locking member (9) in such a way that the blade causes the switch (10) to be closed when the movable locking member (9) is in the engaged position, in which it prevents the door (P) from being opened. The opposing contact (11) is movable between a position close to and a position remote from the movable contact (13), and the control devices (20 to 34) are also coupled to the opposing contact (11) and are adapted to control the position thereof in such a way that, when they cause the locking member (9) to pass from the engaged position to the disengaged position, they also cause the opposing contact (11) to pass from the position close to the movable contact (13) to the position remote from the latter, thus contributing to the opening of the switch (10).

IPC 8 full level
D06F 39/14 (2006.01); **D06F 37/28** (2006.01)

CPC (source: EP US)
D06F 37/42 (2013.01 - EP US); **D06F 39/14** (2013.01 - EP US); **D06F 2105/44** (2020.02 - EP US)

Citation (applicant)
US 6334637 B1 20020101 - CHIOFFI MARIO [IT]

Citation (search report)
• [AD] US 6334637 B1 20020101 - CHIOFFI MARIO [IT]
• [A] EP 2105527 A1 20090930 - BITRON SPA [IT]
• [A] EP 1467048 A1 20041013 - BITRON SPA [IT]
• [A] WO 8805476 A1 19880728 - ROCCHITELLI ONOFRIO [IT]
• [A] WO 2009004447 A1 20090108 - ITW METALFLEX DRUZBA ZA PROIZV [SI], et al
• [A] US 2002017793 A1 20020214 - SPIESSL GEORG [DE]
• [A] WO 2005106099 A1 20051110 - MARQUARDT GMBH [DE], et al

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CN105927069A; CN108118492A; IT201800004000A1; CN112272719A; WO2019190975A1; WO2018236746A1

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

Designated extension state (EPC)
BA ME

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DOCDB simple family (application)
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