

Title (en)
Movement system for a door or openable part of an electrical household appliance and electrical household appliance equipped with the system

Title (de)
Bewegungssystem einer Gerätetür eines elektrischen Haushaltgeräts und elektrisches Haushaltgerät mit dem System

Title (fr)
Système de mise en mouvement d'une porte d'appareil électroménager et appareil électroménager avec le système

Publication
EP 2784257 A1 20141001 (EN)

Application
EP 14161936 A 20140327

Priority
IT BO20130139 A 20130329

Abstract (en)
A movement system for a door or openable part of an electrical household appliance (100) comprises a first hinge body (2) attachable to a frame (101), a second hinge body (3) attachable to a door (104) and rotatably connected to the first body (2) to rotate between a first, closed position and a second, open position, and movement means (5) by which the second body (3) is moved relative to the first body (2) and which comprise elastic means (6) and a link mechanism (7) associated with the elastic means (6) to transfer the force generated thereby to the second body (3) in such a way that the force contributes to rotating the second body (3) relative to the first body (2). The elastic means (6) are dimensioned to apply a force suitable for generating a moment which is smaller than a resistance moment (R) generated by the door (104) when the second body (3) is at the second position, and the movement means (5) comprise at least one actuator (8) associated with the link mechanism (7) and configured to act in conjunction with the elastic means (6) in order to deliver a total force such as to overcome the resistance moment and allow the door (104) to move from the second position to the first position.

IPC 8 full level
E05F 1/12 (2006.01); **A47L 15/42** (2006.01); **E05F 15/12** (2006.01); **E05F 15/60** (2015.01); **F24C 15/02** (2006.01); **E05F 15/04** (2006.01)

CPC (source: EP)
A47L 15/4261 (2013.01); **E05F 1/1276** (2013.01); **E05F 15/622** (2013.01); **F24C 15/023** (2013.01); **E05F 1/1261** (2013.01); **E05F 15/53** (2015.01); **E05Y 2201/21** (2013.01); **E05Y 2201/624** (2013.01); **E05Y 2201/626** (2013.01); **E05Y 2400/302** (2013.01); **E05Y 2400/326** (2013.01); **E05Y 2400/532** (2013.01); **E05Y 2900/304** (2013.01); **E05Y 2900/308** (2013.01)

Citation (applicant)
• US 2007267401 A1 20071122 - COLLENE JAMES J [US], et al
• JP H08240069 A 19960917 - NTT FACILITIES KK, et al
• US 2009113803 A1 20090507 - ARENZ BERND [DE]

Citation (search report)
• [XAY] EP 0541974 A1 19930519 - MIELE & CIE [DE]
• [IAY] EP 2336469 A2 20110622 - V ZUG AG [CH]
• [Y] WO 2007035971 A1 20070405 - BLUM GMBH JULIUS [AT], et al
• [YD] US 2007267401 A1 20071122 - COLLENE JAMES J [US], et al

Citation (examination)
FR 2401296 A1 19790323 - ESSWEIN SA [FR]

Cited by
CN107126176A; CN114000793A; CN108577763A; IT201900010302A1; EP3783266A1; DE102015000407B3; EP3045639A1; CN107771237A; CN109184401A; CN109386197A; EP3438391A3; IT201700090723A1; CN107514200A; EP3431689A1; IT201900010305A1; AU2018304808B2; CN108577759A; EP3508676A1; CN109989648A; CN110584502A; US11339600B2; US10494851B2; US10301866B2; US11480341B2; WO2019015994A1

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

DOCDB simple family (publication)
EP 2784257 A1 20141001; IT BO20130139 A1 20140930

DOCDB simple family (application)
EP 14161936 A 20140327; IT BO20130139 A 20130329