

Title (en)  
LOCKING DEVICE FOR LOCKING A DOOR OF A DOMESTIC APPLIANCE, DOMESTIC APPLIANCE, AND CORRESPONDING METHOD

Title (de)  
VERRIEGELUNGSEINRICHTUNG ZUM VERRIEGELN EINER TÜR EINES HAUSHALTSGERÄTS, HAUSHALTSGERÄT UND  
ENTSPRECHENDES VERFAHREN

Title (fr)  
DISPOSITIF DE VERROUILLAGE PERMETTANT DE VERROUILLER UNE PORTE D'UN APPAREIL MÉNAGER, APPAREIL MÉNAGER ET  
PROCÉDÉ CORRESPONDANT

Publication  
**EP 3143189 A1 20170322 (DE)**

Application  
**EP 15720735 A 20150508**

Priority  
• DE 102014209113 A 20140514  
• EP 2015060208 W 20150508

Abstract (en)  
[origin: WO2015173145A1] The invention relates to a locking device (6) for locking a door (5) of a domestic appliance (1), comprising a locking element (27) for mechanically locking the door (5), comprising a driving element (20) for moving the locking element (27) from an unlocking position in which the door (5) is unlocked into a locking position in which the door (5) is locked by the locking element (27), depending upon a current flow (I) through the driving element (20), wherein the driving element (20) is electrically coupled to a DC voltage source (12), comprising a switching element (22, 23) electrically coupled to the driving element (20) for controlling the current flow (I) through the driving element (20), and comprising a control unit (25) for controlling the switching element (22, 23), wherein the control unit (25) is designed for controlling the current flow (I) through the driving element (20) to emit a sequence of control pulses (30) to the switching element (22, 23). The locking device (6) comprises means for detecting a current voltage value (V) of a DC voltage (VZK) provided by the DC voltage source (12), wherein the control unit (25) is designed to adjust a pulse length (w) of the control pulses (30) as a function of the current voltage value (V).

IPC 8 full level  
**D06F 39/14** (2006.01); **D06F 37/42** (2006.01)

CPC (source: CN EP RU US)  
**D06F 37/42** (2013.01 - CN EP RU US); **D06F 39/14** (2013.01 - CN EP RU US)

Citation (search report)  
See references of WO 2015173145A1

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)  
**DE 102014209113 A1 20151119**; CN 106460299 A 20170222; CN 106460299 B 20181030; EP 3143189 A1 20170322;  
EP 3143189 B1 20180228; ES 2665329 T3 20180425; PL 3143189 T3 20180831; RU 2644102 C1 20180207; WO 2015173145 A1 20151119

DOCDB simple family (application)  
**DE 102014209113 A 20140514**; CN 201580025020 A 20150508; EP 15720735 A 20150508; EP 2015060208 W 20150508;  
ES 15720735 T 20150508; PL 15720735 T 20150508; RU 2016148213 A 20150508