Title (en)

#### DEVICE AND METHOD FOR CONTROLLED DOOR CLOSING

Title (de)

# VORRICHTUNG UND VERFAHREN ZUM GESTEUERTEN SCHLIESSEN EINER TÜR

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR LA FERMETURE COMMANDÉE DE PORTES

Publication

# EP 2823124 A1 20150114 (EN)

Application

## EP 13723577 A 20130306

Priority

- SI 201200072 A 20120306
- SI 2013000011 W 20130306

Abstract (en)

[origin: WO2013133774A1] The object of the invention is the device and method for controlled door closing, whereby the technical solution is functional, technologically suitable for production, economical, strong and reliable throughout the expected service life. The object of the invention is in particular intended for the installation of doors to appliances, such as stoves, ovens, built-in cooking appliances, dishwashers, cooling and other appliances. The object of the invention solves the technical problem of controlled door closing, whereby an even transfer of translatory load of the spring (4) is provided by the curved section (2) fitted in the hinge body or the curved section fitted in the component of the hinge body (1). The piece (9) travels on the curved section (2) fitted in the hinge body, and its movement is connected to the movement of the latch (8) and the spring guide (3). The curved section (2) fitted in the hinge body is constructed in such a manner to ensure additional pressure on the appliance or its seal during the closing of the door, ensure a stable position of the door at a predefined angle of opening and ensure balancing of the door from the stable position to the open position. The object of the invention also comprises the installation of one, two or more dampers (10) for reducing the loads (forces and vibrations) directed at the axles of the spring guide. The damper (10) is installed in such a manner to absorb mainly the loads that are generated by the closing or opening of the door and also absorb the loads that are generated at the last few degrees of door closing or opening.

IPC 8 full level

E05F 1/12 (2006.01); F24C 15/02 (2006.01)

CPC (source: EP)

E05F 1/1261 (2013.01); F24C 15/023 (2013.01); E05Y 2900/308 (2013.01)

Citation (search report)

See references of WO 2013133774A1

Cited by

WO2019190083A1; US11116049B2; US11751294B2

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 MF

#### DOCDB simple family (publication)

WO 2013133774 A1 20130912; EP 2823124 A1 20150114; EP 2823124 B1 20170510; ES 2629132 T3 20170807; PL 2823124 T3 20171229; SI 24023 A 20130930; SI 2823124 T1 20171030

### DOCDB simple family (application)

SI 2013000011 W 20130306; EP 13723577 A 20130306; ES 13723577 T 20130306; PL 13723577 T 20130306; SI 201200072 A 20120306; SI 201303721 T 20130306