

Title (en)

A movement and balancing mechanism for vertical sliding doors

Title (de)

Bewegungs- und Ausgleichsmechanismus für Vertikalschiebetüren

Title (fr)

Mécanisme de mouvement et d'équilibrage pour portes à coulissolement vertical

Publication

EP 1074686 A2 20010207 (EN)

Application

EP 00101359 A 20000124

Priority

IT MI991743 A 19990803

Abstract (en)

A movement and balancing mechanism for vertical sliding doors (2) has a return spring (38); to instantly counterbalance a variable force exerted by the spring, which is greater the more the spring is extended, a cable (36) cooperates with the spring and winds round a varying radius profile of an idle wheel (28), so that the moment exerted by the spring on the wheel is kept constant. Preferably, the device includes an idle wheel (16) for winding the cable (12) of the door, coupled to the varying profile wheel (28) through a reduction ratio. Use is particularly envisaged for furniture.
<IMAGE>

IPC 1-7

E05D 13/00; E05D 13/12

IPC 8 full level

E05D 13/00 (2006.01); **E05D 15/16** (2006.01); **E05F 1/16** (2006.01); **E05D 15/18** (2006.01); **E05F 15/16** (2006.01)

CPC (source: EP)

E05D 13/1207 (2013.01); **E05D 15/16** (2013.01); **E05D 15/18** (2013.01); **E05F 15/665** (2015.01); **E05F 15/686** (2015.01);
E05Y 2201/488 (2013.01); **E05Y 2900/106** (2013.01); **E05Y 2900/20** (2013.01)

Cited by

FR2893067A1; CN107645920A; EP2148032A1; US10499789B2; WO2016156146A1

Designated contracting state (EPC)

DE ES FR GB

DOCDB simple family (publication)

EP 1074686 A2 20010207; EP 1074686 A3 20041027; EP 1074686 B1 20090617; DE 60042384 D1 20090730; ES 2328896 T3 20091119;
IT 1313341 B1 20020723; IT MI991743 A0 19990803; IT MI991743 A1 20010203

DOCDB simple family (application)

EP 00101359 A 20000124; DE 60042384 T 20000124; ES 00101359 T 20000124; IT MI991743 A 19990803