

Title (en)
DOOR CLOSING DEVICE OF SLIDING DOOR

Title (de)
T RSCHLIESSVORRICHTUNG F R SCHIEBET R

Title (fr)
DISPOSITIF DE FERMETURE DE PORTE D'UNE PORTE COULISSANTE

Publication
EP 1640540 A4 20130515 (EN)

Application
EP 04730023 A 20040428

Priority
• JP 2004006111 W 20040428
• JP 2003189082 A 20030630

Abstract (en)
[origin: EP1640540A1] The present invention relates to a door closing device for sliding doors used in a range of storage furniture such as cupboards, bookcases and showcases, which is designed so that, when the sliding door is moved closer to the door closing side end part of the sliding door in particular, the sliding door is forcibly pulled to the door closing side end part and the speed of the sliding door is decelerated appropriately to realize an excellent door closing motion at the completion of the closing of the door. A turnable hook member 2 is turnably mounted in a slide member 1 that slides along the appropriate region in a casing A mounted in the end part location of the guide rail 17, and the abovementioned slide member 1 is urged to the door closing side by way of an elastic member 3. A guide moving body B that moves along a guide rail 17 is moved along the sliding region of the abovementioned slide member 1 in the direction of door closing from a state in which it is engaged with the abovementioned hook member 2 by a resistance force T produced by a buffer member 4 that reduces the elastic force of said elastic member 3.

IPC 8 full level
E05F 1/16 (2006.01); **E05F 1/08** (2006.01); **E05F 5/00** (2006.01); **E05F 5/02** (2006.01); **E05F 5/10** (2006.01)

CPC (source: EP KR)
E05F 1/16 (2013.01 - EP); **E05F 3/227** (2013.01 - EP); **E05F 5/003** (2013.01 - EP); **E05F 15/632** (2015.01 - KR); **E05D 13/04** (2013.01 - EP); **E05F 3/221** (2013.01 - EP); **E05F 5/10** (2013.01 - EP); **E05Y 2201/21** (2013.01 - EP); **E05Y 2201/254** (2013.01 - EP); **E05Y 2201/266** (2013.01 - EP); **E05Y 2201/412** (2013.01 - EP); **E05Y 2600/45** (2013.01 - EP); **E05Y 2800/24** (2013.01 - EP); **E05Y 2900/20** (2013.01 - EP)

Citation (search report)
• [X] DE 20218927 U1 20030213 - HETTICH HEINZE GMBH & CO KG [DE]
• [X] DE 20218067 U1 20030130 - BLUM GMBH JULIUS [AT]
• [E] EP 1468631 A1 20041020 - SALICE ARTURO SPA [IT]
• [A] JP 2003056245 A 20030226 - TAKUBO IND CORP
• See references of WO 2005001227A1

Cited by
DE202008008006U1; DE102010061160A1; EP2048311A3; DE102011107961A1; DE102011107961B4; DE102010061160B4; EP2048311A2; WO2010081567A1; US9388622B1; EP2372064A1; EP2372066B1

Designated contracting state (EPC)
AT DE IT

DOCDB simple family (publication)
EP 1640540 A1 20060329; EP 1640540 A4 20130515; CN 100526588 C 20090812; CN 1780968 A 20060531; HK 1092512 A1 20070209; JP 2005023615 A 20050127; JP 3930459 B2 20070613; KR 100695771 B1 20070316; KR 20050051689 A 20050601; WO 2005001227 A1 20050106

DOCDB simple family (application)
EP 04730023 A 20040428; CN 200480011683 A 20040428; HK 06113086 A 20061129; JP 2003189082 A 20030630; JP 2004006111 W 20040428; KR 20057006222 A 20050411