

Title (en)
DAMPING DEVICE

Title (de)
DÄMPFUNGSVORRICHTUNG

Title (fr)
DISPOSITIF D'AMORTISSEMENT

Publication
EP 1404938 B2 20110309 (DE)

Application
EP 02782435 A 20020504

Priority
• DE 20111085 U 20010706
• DE 20115250 U 20010914
• EP 0204915 W 20020504

Abstract (en)
[origin: EP1538293A1] The damper (30) has a piston and cylinder damping unit (32) is fastened to a carrier arm (18) which is mounted on a plate (16) fastened to the fixed door frame (14). The carrier arm has the fixed part of the hinge formed on its end. The door (12) has a hinge plate (24) and a hinge arm (28). The end of the damper piston rod has a bumper (42) which contacts the door when it swings open to a wide angle.

IPC 8 full level
E05F 5/02 (2006.01); **E05D 3/06** (2006.01); **E05D 11/10** (2006.01); **E05F 5/00** (2006.01); **E05F 5/10** (2006.01)

CPC (source: EP US)
E05D 3/142 (2013.01 - EP US); **E05D 3/183** (2013.01 - EP US); **E05D 11/1021** (2013.01 - EP US); **E05F 5/006** (2013.01 - EP US); **E05F 5/02** (2013.01 - EP US); **E05F 5/10** (2013.01 - EP US); **E05Y 2201/21** (2013.01 - EP US); **E05Y 2201/254** (2013.01 - EP US); **E05Y 2201/256** (2013.01 - EP US); **E05Y 2201/264** (2013.01 - EP US); **E05Y 2201/266** (2013.01 - EP US); **E05Y 2201/624** (2013.01 - EP US); **E05Y 2201/688** (2013.01 - EP US); **E05Y 2201/722** (2013.01 - EP US); **E05Y 2600/45** (2013.01 - EP US); **E05Y 2600/46** (2013.01 - EP US); **E05Y 2800/00** (2013.01 - EP US); **E05Y 2800/205** (2013.01 - EP US); **E05Y 2800/21** (2013.01 - EP US); **E05Y 2800/70** (2013.01 - EP US); **E05Y 2900/20** (2013.01 - EP US)

Citation (opposition)
Opponent :
• DE 20104100 U1 20010523 - BLUM GMBH JULIUS [AT]
• US 2297655 A 19420929 - KOCH PAUL F
• US 1218197 A 19170306 - MACKINLAY EBEN H [CA]
• DE 1971916 U 19671102 - HEINZE FA R [DE]
• DE 6923018 U 19700122 - KUNSTSTOFF GMBH [DE]
• DE 29910626 U1 20000120 - SALICE ARTURO SPA [IT]
• DE 2411574 A1 19750925 - KUEHL HANS DIPL ING
• FR 2586266 A1 19870220 - MARCEAU GERARD [FR]

Cited by
AT503983B1; DE112007001747B4; EP2060719A2; DE212007000088U1; WO2008009345A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
DE 20115250 U1 20021114; AT E298834 T1 20050715; AT E331110 T1 20060715; DE 50203519 D1 20050804; DE 50207345 D1 20060803; DK 1538293 T3 20061030; EP 1404938 A1 20040407; EP 1404938 B1 20050629; EP 1404938 B2 20110309; EP 1538293 A1 20050608; EP 1538293 B1 20060621; ES 2245409 T3 20060101; ES 2245409 T5 20110714; ES 2267080 T3 20070301; US 2004205935 A1 20041021; US 2007062366 A1 20070322; US 7275284 B2 20071002; US 7562416 B2 20090721; WO 03004817 A1 20030116

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