

Title (en)
DOOR CLOSER

Title (de)
TÜRSCHLIESSER

Title (fr)
FERME-PORTE

Publication
EP 2119860 A1 20091118 (EN)

Application
EP 07832291 A 20071121

Priority

- JP 2007072561 W 20071121
- JP 2007034512 A 20070215

Abstract (en)
[Problem to be Solved] A door closer is provided that is capable of reducing the change in closing time of a door with an ambient temperature change and also capable of preventing damage to a piston and a casing when the door is closed. [Solution Means] A door closer 10 is installed along the axis of rotation of a door D. The door closer 10 has a closing-urging section 12 that urges the door D toward a closed position and a speed adjusting section 14 that adjusts the return speed of the door D. The speed adjusting section 14 has a cylindrical casing 11, a piston 34 that moves in the casing 11 in response to opening and closing of the door D, and an oil storage section 26 that stores an oil (damping fluid) P. The piston 34 is in thread engagement with a cylinder 24 and vertically movable in the cylinder while being braked by the oil stored in the oil storage section 26. The oil has a small change in viscosity with temperature. The oil storage section 26 is provided with a compression spring (resilient member) 38 that presses the piston 34 toward one end side of the direction of its movement.

IPC 8 full level
E05F 3/08 (2006.01); **E05F 1/12** (2006.01); **E05F 3/20** (2006.01)

CPC (source: EP KR)
E05F 1/12 (2013.01 - KR); **E05F 3/08** (2013.01 - EP KR); **E05F 3/20** (2013.01 - EP); **E05F 1/1016** (2013.01 - EP); **E05F 1/1215** (2013.01 - EP);
E05Y 2900/132 (2013.01 - EP)

Citation (search report)
See references of WO 2008099546A1

Cited by
WO2021170871A1; WO2021170870A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2119860 A1 20091118; CN 101641486 A 20100203; JP 2008196256 A 20080828; KR 20090110912 A 20091023;
WO 2008099546 A1 20080821

DOCDB simple family (application)
EP 07832291 A 20071121; CN 200780052318 A 20071121; JP 2007034512 A 20070215; JP 2007072561 W 20071121;
KR 20097016974 A 20071121