Title (en)

Floor hinge hidden in door panel

Title (de)

In Türplatte eingelassenes Bodenscharnier

Title (fr)

Charnière de sol cachée dans un panneau de porte

Publication

EP 2682552 B1 20161019 (EN)

Application

EP 12180358 A 20120814

Priority

TW 101124486 A 20120706

Abstract (en)

[origin: EP2682552A2] Provided is a floor hinge (10) including a base (20) fixed to the ground, a body (30) disposed in a door panel (12), an axle (40) pivotally disposed in the body (30), and a damping unit (50) disposed in the body (30) and abutting against the axle (40). To allow the door panel (12) to open or shut, the body (30) rotates about the axle (40) in response to the opening and shutting of the door panel (12). The damping unit (50) is pushed by the axle (40) to thereby compress a hydraulic oil stored in the body (30) while the body (30) is rotating. Therefore, not only can the floor hinge (10) be fixed to the door panel (12) from inside easily, but a hydraulic resistance between the damping unit (50) and the hydraulic oil is also generated to lessen door-opening and door-shutting forces.

IPC 8 full level

E05F 3/10 (2006.01); **E05F 3/22** (2006.01)

CPC (source: EP)

E05F 3/104 (2013.01); **E05F 3/226** (2013.01); E05Y 2600/10 (2013.01); E05Y 2600/46 (2013.01); E05Y 2600/626 (2013.01)

Cited by

IT201600126661A1; EP3505713A1; US2019195010A1; EP2993294A1; EP3770366A1; US11208835B2; IT201600126630A1; EP3715568A1; WO2024054667A1

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

DOCDB simple family (publication)

EP 2682552 A2 20140108; **EP 2682552 A3 20150401**; **EP 2682552 B1 20161019**; DK 2682552 T3 20170206; ES 2609844 T3 20170424; PL 2682552 T3 20170630; PT 2682552 T 20170118; TW 201402925 A 20140116; TW I480456 B 20150411

DOCDB simple family (application)

EP 12180358 A 20120814; DK 12180358 T 20120814; ES 12180358 T 20120814; PL 12180358 T 20120814; PT 12180358 T 20120814; TW 101124486 A 20120706