

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 A3 20150401 (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)

Citation (search report)

- [X] US 2588010 A 19520304 - LORENZO KENNON
- [X] DE 2748623 A1 19790503 - VER GLASWERKE GMBH
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- [X] KR 20070000806 A 20070103 - PARK HYUN SEOK [KR]
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Cited by
IT201600126661A1; EP3505713A1; US2019195010A1; US11208835B2; EP2993294A1; EP3770366A1; 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

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BA ME

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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