

Title (en)
Hinge assembly with damping device

Title (de)
Scharnieranordnung mit Dämpfvorrichtung

Title (fr)
Ensemble de charnière avec dispositif d'amortissement

Publication
EP 2749722 A1 20140702 (EN)

Application
EP 12199473 A 20121227

Priority
EP 12199473 A 20121227

Abstract (en)

A hinge assembly includes a hinge cup (10), an arm (14), an installation member (12), a damping device (16), a first resilient member (18), a second resilient member (20), a first pin (22) and a second pin (24). The hinge cup (10) has a receiving space (34) and a positioning hole (40) communicating with the receiving space (34). The bottom wall (28) of the receiving space (34) has two lugs (42a, 42b) and at least one first engaging part (44). The arm (14) is pivotably connected to the hinge cup (10). The damping device (16) is located in the receiving space (34) of the hinge cup (10) and includes a damping member (48), a slide (50) and a housing (52). One end of the damping member (48) is mounted in the positioning hole (40). The damping member (48) has a piston rod (56) which is connected to the slide (50). The housing (52) has at least one second engaging part (68) which is engaged with the first engaging part (44) on the bottom wall (28) of the hinge cup (10). The first resilient pin (22) connects the arm (14) and the first resilient member (18) to the hinge cup (10). The second pin (24) connects the second resilient member (20) to the hinge cup (10). When the arm (14) is moved toward a closed position relative to the hinge cup (10), the arm (14) pushes the slide (50) to provide the damping force.

IPC 8 full level
E05F 5/00 (2006.01); **E05F 5/02** (2006.01)

CPC (source: EP)
E05F 5/006 (2013.01); **E05F 5/02** (2013.01); **E05Y 2201/21** (2013.01); **E05Y 2201/264** (2013.01); **E05Y 2600/53** (2013.01);
E05Y 2900/20 (2013.01)

Citation (applicant)
US 2011291538 A1 20111201 - BRUNNMAYR HARALD [AT]

Citation (search report)

- [A] WO 2009094272 A1 20090730 - GRASS AMERICA INC [US], et al
- [AD] US 2011291538 A1 20111201 - BRUNNMAYR HARALD [AT]
- [A] US 2012174338 A1 20120712 - WU YI TAI [CN], et al
- [A] US 2009083939 A1 20090402 - WU CHUNG-HSIN [TW]

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CN107989503A; CN109138685A; EP3241967A4; EP3181787A1; ITUB20159274A1; CN113294046A; US2016138319A1; IT202200005594A1;
GB2529250A; CN106121428A; GB2529250B; EP3412855A1; JP2018204423A; CN105003149A; CN117449717A

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