Title (en)

Angle-adjustable hinge

Title (de

Scharnier mit einstellbarer Angel

Title (fr)

Charnière à réglage d'angle

Publication

EP 2805642 A1 20141126 (EN)

Application

EP 13198906 A 20131220

Priority

JP 2013106339 A 20130520

Abstract (en)

A first member (1) holding a disc body (16) having a non-circular through hole (23) as to freely rotate around an oscillation axis (C), a non-circular shaft portion (20) to be inserted to the through hole (23), and a second member (2) fixed to an end of the non-circular shaft portion (20), are provided; the first member (1) and the second member (2) are pivoted as to relatively oscillate by insertion of the shaft portion (20) to the through hole (23), a gear portion (4) is formed on a peripheral edge portion of the disc body (16); a floating wedge member (6), of which one side is a toothed face (7) engaged to the gear portion (4) and another face is a contact face (9) to contact a wedge face (8) formed on the first member (1) side, is provided; and a recovery means (10), which recovers the floating wedge member (6) from a retreat state to an engaged state with the gear portion (4) by a return action (M 2) of a predetermined small angle (3) in a direction (A) on way of free oscillation (M 1) in which the first member (1) and the second member (2) are relatively oscillated in a direction (B) from a lock-releasing position (P 0), is provided.

IPC 8 full level

A47C 7/38 (2006.01); A47C 7/40 (2006.01); A47C 7/54 (2006.01)

CPC (source: EP US)

A47C 1/036 (2013.01 - EP); A47C 7/38 (2013.01 - EP); A47C 7/402 (2013.01 - EP); A47C 7/54 (2013.01 - US); A47C 7/541 (2018.07 - EP); A47C 17/04 (2013.01 - EP); A47C 17/18 (2013.01 - EP)

Citation (applicant)

JP 4418519 B1 20100217

Citation (search report)

- [E] EP 2767188 A1 20140820 KOYO GIKEN KABUSHIKI KAISHA [JP]
- [X] US 2005046260 A1 20050303 YAMASHITA TADANOBU [JP]

Cited by

DE102017129057A1; CN113085681A; EP3400839A1; FR3066241A1; EP3058850A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2805642 A1 20141126; **EP 2805642 B1 20180516**; CN 104172790 A 20141203; CN 104172790 B 20160817; CN 203662356 U 20140625; ES 2681823 T3 20180917; JP 2014226206 A 20141208; JP 5611416 B1 20141022; PL 2805642 T3 20180831

DOCDB simple family (application)

EP 13198906 Å 20131220; CN 201310401140 A 20130905; CN 201420032467 U 20140117; ES 13198906 T 20131220; JP 2013106339 A 20130520; PL 13198906 T 20131220