

Title (en)

Hinge with torsion spiral springs with adjustable tension

Title (de)

Scharnier mit Torsions-Spiral-Feder, deren Spannung einstellbar ist

Title (fr)

Charnière dotée d'un ressort à torsion-spiral dotée d'une tension réglable

Publication

EP 2405090 A3 20130828 (DE)

Application

EP 11003964 A 20110513

Priority

DE 202010009919 U 20100706

Abstract (en)

[origin: CN102312632A] Hinge with one pivoting and one fixed hinge leaf, with a physical hinge axle similar to a hollow cylinder which is common to both hinge leaves with an imaginary mathematical axis. The hinge axle is connected unmovably to the pivoting hinge leaf and mounted rotatably on a journal bearing, the body of which journal bearing is connected rigidly with the fixed hinge leaf. In the hinge axle a spiral torsion spring arranged, the first of whose two ends is connected unmovably to the hinge axle and the second of whose two ends is connected via a worm-gear unit consisting of a worm wheel and endless screw to the journal-bearing body of the journal bearing. The worm wheel is arranged in the journal bearing to rotate around the axis of the hinge axle and is fixed permanently to the second of the two ends of the spiral torsion spring. The adjustment of the worm wheel and consequently the adjustment of the tension of the spiral torsion spring takes place by turning the endless screw which is arranged in the fixed part of the journal-bearing body of the journal bearing and into which the teeth of the worm wheel engage.

IPC 8 full level

E05F 1/12 (2006.01)

CPC (source: EP US)

E05F 1/1215 (2013.01 - EP US); **E05D 5/10** (2013.01 - EP US); **E05D 2003/027** (2013.01 - EP US); **E05D 2005/102** (2013.01 - EP US); **E05Y 2201/224** (2013.01 - EP US); **E05Y 2201/499** (2024.05 - EP US); **E05Y 2201/702** (2013.01 - EP US); **E05Y 2600/20** (2013.01 - EP US); **E05Y 2800/28** (2013.01 - EP US); **E05Y 2900/502** (2013.01 - EP US)

Citation (search report)

- [IAY] US 2072094 A 19370302 - GUSTAV BOMMER, et al
- [YA] US 631462 A 18990822 - HANINGTON CHARLES F [US]
- [AD] EP 0894933 A2 19990203 - FISCHER ADV COMPONENTS GMBH [AT]

Cited by

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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)

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DOCDB simple family (application)

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