

Title (en)

Electromagnetic actuating device, in particular for adjusting the camshaft of an internal combustion engine

Title (de)

Elektromagnetische Stellvorrichtung, insbesondere zur Nockenwellenverstellung einer Brennkraftmaschine

Title (fr)

Dispositif d'actionnement électromagnétique, notamment pour le réglage de l'arbre à cames d'un moteur à combustion interne

Publication

EP 2775485 A3 20150701 (DE)

Application

EP 14156741 A 20140226

Priority

DE 102013102241 A 20130306

Abstract (en)

[origin: EP2775485A2] The device (1) has a displaceable anchor assembly (10) connected to an adjusting element (11) in axial direction between a rest position (I) and a parking position. An axially aligned energizable coil unit (50) is provided for influencing magnetic operative connection between the pole core (20) and anchor assembly (10). An actuating element (31) is connected in axial direction between rest position and parking position. A permanent magnet unit (60) is provided for generating magnetic operative connection between the pole cores (20,40) and anchor assemblies (10,30).

IPC 8 full level

H01F 7/16 (2006.01); **F01L 13/00** (2006.01)

CPC (source: EP US)

F01L 13/0036 (2013.01 - EP US); **H01F 7/1646** (2013.01 - EP US); **H01H 36/0006** (2013.01 - US); **F01L 2013/0052** (2013.01 - EP US); **F01L 2820/031** (2013.01 - EP US)

Citation (search report)

- [XAY] DE 3239153 A1 19840426 - BOSCH GMBH ROBERT [DE]
- [YA] DE 102011009327 B4 20120927 - HYDAC ELECTRONIC GMBH [DE]
- [YDA] DE 102007037232 A1 20090212 - ETO MAGNETIC GMBH [DE]
- [A] DE 29912431 U1 19990923 - DUNGS KARL GMBH & CO [DE]
- [A] WO 2010112111 A1 20101007 - HYDAC ELECTRONIC GMBH [DE], et al

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 2775485 A2 20140910; EP 2775485 A3 20150701; EP 2775485 B1 20161005; BR 102014004878 A2 20151006; DE 102013102241 A1 20140911; ES 2617080 T3 20170615; HU E031520 T2 20170728; PL 2775485 T3 20170731; US 2014253265 A1 20140911; US 9305728 B2 20160405

DOCDB simple family (application)

EP 14156741 A 20140226; BR 102014004878 A 20140228; DE 102013102241 A 20130306; ES 14156741 T 20140226; HU E14156741 A 20140226; PL 14156741 T 20140226; US 201414196397 A 20140304