

Title (en)

ELECTROMAGNETIC DRIVE ARRANGEMENT IN PARTICULAR FOR SETTING THE POSITION OF A CAMSHAFT IN AN INTERNAL COMBUSTION ENGINE

Title (de)

ELEKTROMAGNETISCHE STELLVORRICHTUNG INSbesondere ZUM VERSTELLEN VON NOCKENWELLEN EINES VERBRENNUNGSMOTORS

Title (fr)

DISPOSITIF D'ACTIONNEMENT ELECTROMAGNÉTIQUE, EN PARTICULIER POUR LE CALAGE D'UN ARBRE À CAMES DE MOTEUR À COMBUSTION INTERNE

Publication

EP 3510260 B1 20210929 (DE)

Application

EP 17768005 A 20170825

Priority

- DE 102016116776 A 20160907
- EP 2017071412 W 20170825

Abstract (en)

[origin: WO2018046314A1] The invention relates to an electromagnetic control device, in particular for adjusting camshafts or a camshaft section of an internal combustion engine, comprising: an energizable coil unit (46), by means of which, in the energized state, an armature (26) mounted for movement along a longitudinal axis (L) of the control device (10) can be moved relative to a pole core between a retracted position and an extended position; a tappet (24), which interacts with the armature (26) and is mounted for movement along the longitudinal axis (L), having a free end (28), by means of which the tappet (24) interacts with the camshaft in the extended position in order to adjust the camshaft; and an adapter (18), by means of which the control device (10) can be fastened to a component, in particular to a cylinder head cover, wherein the armature (26) and the tappet (24) are connected to each other for conjoint rotation and the control device (10) has a first bearing section (22) within the adapter (18) for the rotatable mounting of the tappet (24) and a second bearing section (30) outside of the adapter (18) for the rotatable mounting of the tappet (24) and/or the armature (26).

IPC 8 full level

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

CPC (source: EP US)

F01L 13/0036 (2013.01 - EP US); **H01F 7/1607** (2013.01 - EP US); **F01L 1/047** (2013.01 - US); **F01L 2013/0052** (2013.01 - EP US);
F01L 2301/00 (2020.05 - EP); **F01L 2820/03** (2013.01 - EP); **F01L 2820/031** (2013.01 - US); **H01F 7/081** (2013.01 - US);
H01F 2007/086 (2013.01 - US)

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

DOCDB simple family (publication)

DE 102016116776 A1 20180308; CN 109690035 A 20190426; CN 109690035 B 20210629; EP 3510260 A1 20190717;
EP 3510260 B1 20210929; JP 2019528399 A 20191010; JP 6731542 B2 20200729; US 2021003047 A1 20210107;
WO 2018046314 A1 20180315

DOCDB simple family (application)

DE 102016116776 A 20160907; CN 201780054466 A 20170825; EP 17768005 A 20170825; EP 2017071412 W 20170825;
JP 2019511539 A 20170825; US 201716330711 A 20170825