

Title (en)

CAMSHAFT ASSEMBLY AND METHOD OF PRODUCTION

Title (de)

NOCKENWELLENBAUGRUPPE SOWIE VERFAHREN ZUM HERSTELLEN EINER NOCKENWELLENBAUGRUPPE

Title (fr)

ENSEMBLE D'ARBRE A CAMES ET SON PROCEDE DE FABRICATION

Publication

EP 2649281 B1 20150506 (DE)

Application

EP 12713896 A 20120312

Priority

- DE 102011001420 A 20110318
- EP 2012054234 W 20120312

Abstract (en)

[origin: WO2012126756A1] The invention relates to a camshaft assembly, comprising a camshaft (2) having a receiving space (6) in the interior thereof, at least some sections of the assembly being made of a magnetizable material, for an internal combustion engine, and an electromagnetic actuating unit (4) for actuating an actuating partner (5), in particular a control valve of a camshaft adjuster (3), comprising a coil winding (8) and an armature (7) for cooperating with the actuating partner (5), the armature being adjustable by energizing the coil winding (8). According to the invention, the armature (7) is arranged at least in some sections, preferably completely, inside the camshaft (2) in the receiving space (6) and the coil winding (8) for the non-contact adjustment of the armature (7) is arranged radially outside the camshaft (2), and the camshaft (2) has a first axial section (9) and a second axial section (10), between which a material region (11) influencing the magnetic flow (12) is provided in order to increase the magnetic flow (12) from one of the axial sections (9, 10) to the respective other axial section (9, 10) via the armature (7).

IPC 8 full level

F01L 1/047 (2006.01); **F01L 1/344** (2006.01)

CPC (source: EP US)

F01L 1/047 (2013.01 - EP US); **F01L 1/344** (2013.01 - EP US); **F01L 2001/0475** (2013.01 - EP US); **F01L 2001/3443** (2013.01 - EP US); **F01L 2001/34433** (2013.01 - EP US); **F01L 2013/0052** (2013.01 - EP US); **F01L 2820/031** (2013.01 - EP US); **Y10T 29/49293** (2015.01 - EP 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 102011001420 A1 20120920; EP 2649281 A1 20131016; EP 2649281 B1 20150506; US 2014007828 A1 20140109; US 8931450 B2 20150113; WO 2012126756 A1 20120927

DOCDB simple family (application)

DE 102011001420 A 20110318; EP 12713896 A 20120312; EP 2012054234 W 20120312; US 201214005755 A 20120312