

Title (en)

ELECTROMAGNETIC MOTOR COMPRISING RADIAL AIR GAPS AND A ROTOR SURROUNDED BY TWO STATORS, REDUCING COGGING TORQUE

Title (de)

ELEKTROMAGNETISCHER MOTOR MIT RADIALEN LUFTSPALTEN UND EINEM VON ZWEI STATOREN UMGBENDEN ROTOR ZUR VERRINGERUNG DES RASTMOMENTS

Title (fr)

MOTEUR ÉLECTROMAGNÉTIQUE AUX ENTREFERS RADIALS A ROTOR ENCADRE PAR DEUX STATORS REDUCTANT LE COUPLE DE DÉTENTE

Publication

EP 3164929 A2 20170510 (FR)

Application

EP 15754255 A 20150701

Priority

- FR 1401594 A 20140704
- FR 2015000131 W 20150701

Abstract (en)

[origin: WO2016001495A2] The invention relates to an electromagnetic motor (M) with radial flux, intended in particular to aid power-assisted steering in a motor vehicle. The motor comprises at least two stators (1, 1a) surrounding at least one rotor (2), an air gap (4, 4a) being defined between each of the stators (1, 1a) and the surrounded rotor (2). The magnet or magnets (3) borne by the rotor (2) extend(s) fully inside the rotor (2) between the two air gaps (4, 4a) and each of the coil elements (5, 6, 7, 5a, 6a, 7a) of the series of coil elements borne by a corresponding stator (1, 1a) comprises a spacer element (5, 5a) disposed between each slot (6, 6a) of one tooth (7, 7a) and the slot (6, 6a) of the successive tooth (7, 7a). In this way, cogging torque is prevented. The invention is suitable for use in the field of electromagnetic motors.

IPC 8 full level

H02K 1/27 (2006.01); **H02K 1/16** (2006.01); **H02K 1/30** (2006.01); **H02K 3/28** (2006.01); **H02K 3/47** (2006.01); **H02K 16/04** (2006.01); **H02K 29/03** (2006.01)

CPC (source: EP)

H02K 1/27 (2013.01); **H02K 3/28** (2013.01); **H02K 16/04** (2013.01); **H02K 29/03** (2013.01); **H02K 1/165** (2013.01); **H02K 1/30** (2013.01); **H02K 3/47** (2013.01)

Citation (search report)

See references of WO 2016001495A2

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)

WO 2016001495 A2 20160107; WO 2016001495 A3 20160414; EP 3164929 A2 20170510; FR 3023430 A1 20160108; FR 3023430 B1 20171201

DOCDB simple family (application)

FR 2015000131 W 20150701; EP 15754255 A 20150701; FR 1401594 A 20140704