

Title (en)
ELECTRIC FLUID PUMP FOR A MOTOR VEHICLE

Title (de)
ELEKTRISCHE KFZ-FLUIDPUMPE

Title (fr)
POMPE À FLUIDE ÉLECTRIQUE DE VÉHICULE AUTOMOBILE

Publication
EP 3701624 A1 20200902 (DE)

Application
EP 17788241 A 20171025

Priority
EP 2017077309 W 20171025

Abstract (en)
[origin: WO2019081011A1] The invention relates to an electric fluid pump for a motor vehicle, having an electric drive motor (12), which is brushless and electronically commutated, wherein the drive motor (12) has a permanent-magnet motor rotor (30) having a motor shaft (32) and having at least two rotor poles (361, 363), in each of which a permanent magnet (361, 367) is embedded, a plurality of stator-side magnetic coils (40), at least two sensor magnets (361,363), at least one Hall sensor (60), which is arranged to lie eccentrically in a transverse plane in such a way that the Hall sensor detects the axial magnetic fields of the sensor magnets (361,363), wherein the at least two sensor magnets (361,363) are magnetised diametrically, wherein the at least one Hall sensor (60) is arranged in such a way that during one rotor revolution of each sensor magnet (361,363), both polarities can be detected.

IPC 8 full level
H02K 29/08 (2006.01); **H02K 1/27** (2006.01); **H02K 11/215** (2016.01); **H02K 11/33** (2016.01)

CPC (source: EP US)
H02K 11/215 (2016.01 - EP US); **H02K 11/33** (2016.01 - EP); **H02K 29/08** (2013.01 - EP US); **H02K 1/276** (2013.01 - EP US);
H02K 2211/03 (2013.01 - EP US); **H02K 2213/03** (2013.01 - US)

Citation (search report)
See references of WO 2019081011A1

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 2019081011 A1 20190502; WO 2019081011 A9 20200326; CN 111226384 A 20200602; CN 111226384 B 20220705;
EP 3701624 A1 20200902; JP 2021501550 A 20210114; JP 7083895 B2 20220613; US 11462971 B2 20221004; US 2020251965 A1 20200806

DOCDB simple family (application)
EP 2017077309 W 20171025; CN 201780095967 A 20171025; EP 17788241 A 20171025; JP 2020522978 A 20171025;
US 201716758402 A 20171025