Title (en)

PERMANENT MAGNET SYNCHRONOUS ELECTRIC MOTOR

Title (de

ELEKTRISCHER PERMANENTMAGNET-SYNCHRONMOTOR

Title (fr)

MOTEUR ÉLECTRIQUE SYNCHRONE À AIMANTS PERMANENTS

Publication

EP 3552302 A1 20191016 (EN)

Application

EP 17792075 A 20171101

Priority

- TR 201618100 A 20161208
- EP 2017077942 W 20171101

Abstract (en)

[origin: WO2018103969A1] The present invention relates to a permanent magnet synchronous electric motor (1) comprising a stator (2); a cylindrical rotor (3) that is composed of stacked magnetic steel laminations and that has annular and planar front and rear surfaces; a shaft (5) that is snap-fitted into the shaft hole (4) arranged at the center of the rotor (3); a plurality of magnet coupling holes (7) that are disposed around the shaft hole (4), that extend towards the interior of the rotor (3) in the axial direction from the annular surface of the rotor (3) and wherein magnets (6) providing synchronous operation are disposed; and a plurality of slots (11) that extend in the rotor (3) all around and in the axial direction in the area close to the cylindrical side surface of the rotor (3) and wherein aluminum is injected in the injection mold during the production of the rotor (3).

IPC 8 full level

H02K 1/27 (2006.01); H02K 21/46 (2006.01)

CPC (source: EP)

H02K 1/276 (2013.01); H02K 21/46 (2013.01)

Citation (search report)

See references of WO 2018103969A1

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 2018103969 A1 20180614; EP 3552302 A1 20191016; TR 201618100 A2 20180621

DOCDB simple family (application)

EP 2017077942 W 20171101; EP 17792075 A 20171101; TR 201618100 A 20161208