

Title (en)

METHOD FOR PRODUCING A ROTOR FOR A PERMANENT-MAGNET SYNCHRONOUS MOTOR

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES ROTORS FÜR EINEN PERMANENTERREGTEN SYNCHRONMOTOR

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ROTOR POUR UN MOTEUR SYNCHRONE À EXCITATION PERMANENTE

Publication

EP 3078098 A1 20161012 (DE)

Application

EP 15732281 A 20150701

Priority

- DE 102014212807 A 20140702
- EP 2015064934 W 20150701

Abstract (en)

[origin: WO2016001277A1] The invention describes a method for producing a rotor for a permanent-magnet synchronous motor. Packs of sheet-metal elements are provided between the individual permanent magnets, said packs of sheet-metal elements being produced from thin sheet-metal elements which are connected to one another and are arranged one above the other. The sheet-metal elements have a radially outer soft-iron core section and a central ring which are connected to one another by means of connecting webs. The sheet-metal elements are provided with a number of connecting webs which is smaller than the number of soft-iron core sections. All of the sheet-metal elements have an identical sectional geometry, wherein, after a sheet metal element is stamped out, the stamping device is rotated through an angle which corresponds to $360^\circ/\text{number of soft-iron core sections}$. This method can be executed in a particularly simple manner for a rotor design which is particularly expedient for electric motors.

IPC 8 full level

H02K 1/27 (2006.01); **H02K 15/03** (2006.01)

CPC (source: CN EP US)

B21D 22/02 (2013.01 - US); **H02K 1/274** (2013.01 - US); **H02K 1/2773** (2013.01 - EP US); **H02K 15/03** (2013.01 - CN EP US);
H02K 2213/03 (2013.01 - EP US)

Citation (search report)

See references of WO 2016001277A1

Citation (examination)

- DE 102007024406 A1 20081127 - BOSCH GMBH ROBERT [DE]
- DE 102009001035 A1 20100826 - BOSCH GMBH ROBERT [DE]

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 2016001277 A1 20160107; CN 106031001 A 20161012; DE 102014212807 A1 20160204; EP 3078098 A1 20161012;
US 2017149317 A1 20170525

DOCDB simple family (application)

EP 2015064934 W 20150701; CN 201580007986 A 20150701; DE 102014212807 A 20140702; EP 15732281 A 20150701;
US 201515115946 A 20150701