

Title (en)

ROTOR FOR A PERMANENT MAGNET ELECTRIC MACHINE AND USE THEREOF

Title (de)

ROTOR FÜR EINE PERMANENTERREGTE ELEKTRISCHE MASCHINE SOWIE DESSEN VERWENDUNG

Title (fr)

ROTOR POUR MOTEUR ÉLECTRIQUE À EXCITATION PERMANENTE ET UTILISATION DUDIT ROTOR

Publication

EP 2896120 A2 20150722 (DE)

Application

EP 13756507 A 20130905

Priority

- DE 102012216431 A 20120914
- DE 102013009115 A 20130529
- EP 2013068324 W 20130905

Abstract (en)

[origin: WO2014040893A2] Rotor (2) for a permanent magnet electric machine (1), in particular a brushless DC machine, which rotor is arranged concentrically about a rotor axis (1') and has a passage opening (8) running along the rotor axis (1') for accommodating a shaft (22), comprising permanent magnets (3) and pole segments (4) extending along the rotor axis (1'), wherein the permanent magnets (3) and the pole segments (4) are arranged alternately around the rotor axis (1') in the circumferential direction, which rotor is further distinguished in that a cross-sectional area (14) of at least one, in particular each, pole segment (4) is formed, in at least one first pole segment region (5), asymmetrically with at least one shaped portion (6) arranged in a radially outer region, with respect to the rotor axis (1'), of the pole segment (4), wherein the shaped portion (6) extends substantially in a circumferential direction (1''). Furthermore, the invention describes the use of the rotor according to the invention.

IPC 8 full level

H02K 29/03 (2006.01)

CPC (source: CN EP US)

H02K 1/2773 (2013.01 - CN EP US); **H02K 1/28** (2013.01 - CN EP US); **H02K 29/03** (2013.01 - CN EP US); **H02K 2201/06** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2014040893A2

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)

DE 102013009115 A1 20140320; CN 104769825 A 20150708; EP 2896120 A2 20150722; KR 20150054859 A 20150520;
US 2015244218 A1 20150827; WO 2014040893 A2 20140320; WO 2014040893 A3 20150528

DOCDB simple family (application)

DE 102013009115 A 20130529; CN 201380047572 A 20130905; EP 13756507 A 20130905; EP 2013068324 W 20130905;
KR 20157007716 A 20130905; US 201314428025 A 20130905