

Title (en)

PERMANENT MAGNET SYNCHRONOUS ELECTRIC MOTOR FOR HERMETIC COMPRESSORS

Title (de)

ELEKTRISCHER PERMANENTMAGNET-SYNCHRONMOTOR FÜR HERMETISCHE VERDICHTER

Title (fr)

MOTEUR ÉLECTRIQUE SYNCHRONE À AIMANTS PERMANENTS POUR COMPRESSEURS HERMÉTIQUES

Publication

**EP 3718196 A1 20201007 (EN)**

Application

**EP 18782055 A 20181002**

Priority

- TR 201719103 A 20171129
- EP 2018076816 W 20181002

Abstract (en)

[origin: WO2019105633A1] The present invention relates to a rotor (1) suitable for use in a permanent magnet synchronous electric motor (19) of a hermetic compressor (20), rotating in a stator (15) about a rotary axis (E) formed by a shaft (17) mounted in a shaft hole (16) in its center, having an air gap (18) in between itself and the inner surface of the stator (15), comprising a core (2) made of ferromagnetic laminations or ferromagnetic metal powders, a plurality of magnets (3) placed circumferentially adjacent with equal space in between on the core (2), whose transversal section vertical to the rotary axis (E) is shaped as an arc segment curved in radial direction from the circumference of the core (2) towards its center, having a convex lower surface (4) contacting the core (2) and a concave upper surface (5) not contacting the core (2).

IPC 8 full level

**H02K 1/27** (2006.01); **H02K 5/128** (2006.01)

CPC (source: EP US)

**H02K 1/2781** (2022.01 - EP US); **H02K 7/14** (2013.01 - EP); **H02K 5/128** (2013.01 - EP)

Citation (search report)

See references of WO 2019105633A1

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 2019105633 A1 20190606**; EP 3718196 A1 20201007; TR 201719103 A2 20190621

DOCDB simple family (application)

**EP 2018076816 W 20181002**; EP 18782055 A 20181002; TR 201719103 A 20171129