

Title (en)

ROTOR CORE USING PERMANENT MAGNETS, AND ELECTRIC MACHINE USING SAID ROTOR CORE

Title (de)

ROTORKERN MIT VERWENDUNG VON DAUER\_MAGNETEN BZW. ELEKTRISCHE MASCHINE MIT VERWENDUNG DIESES ROTORKERNS

Title (fr)

NOYAU DE ROTOR AVEC UTILISATION D'AIMANTS PERMANENTS OU MACHINE ÉLECTRIQUE UTILISANT CE NOYAU DE ROTOR

Publication

**EP 3465876 A1 20190410 (DE)**

Application

**EP 17720384 A 20170413**

Priority

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- EP 2017058910 W 20170413

Abstract (en)

[origin: WO2017207158A1] A magnetically conductive rotor core (100) of a rotor of an electric machine which is excited by permanent magnets comprises, for a low torque ripple and high torque, two permanent magnets (101; 102) per magnetic pole of the rotor in a "V"-shaped design (101, 102) which opens towards the rotor outer surface (104), and, for each permanent magnet, a recess (111; 112) which adjoins that side surface (115; 116) of said permanent magnet which faces the rotor outer surface, which recess (111; 112) extends towards the rotor outer surface and is divided therefrom by way of a connecting web (113; 114). Each of the recesses has a supporting shoulder (121; 122) for the permanent magnet in one of the borders (119; 120) thereof which points in the circumferential direction (105) of the rotor core towards the exterior of the "V"-shaped design, and a shaped-out formation (125; 126) in one of the borders (123; 124) thereof which points towards the interior of the "V"-shaped design. The shaped-out formation protrudes towards the interior of the "V"-shaped design beyond a plane of a pole surface (127) of the permanent magnet, which pole surface (127) faces the interior of the "V"-shaped design.

IPC 8 full level

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