

Title (en)

ROTOR FOR A ROTATING ELECTRIC MACHINE AND ROTATING ELECTRICAL MACHINE COMPRISING SUCH A ROTOR

Title (de)

ROTOR FÜR EINE ELEKTRISCHE DREHMASCHINE UND ELEKTRISCHE DREHMASCHINE MIT EINEM DERARTIGEN ROTOR

Title (fr)

ROTOR DE MACHINE ELECTRIQUE TOURNANTE ET MACHINE ELECTRIQUE TOURNANTE COMPRENANT UN TEL ROTOR

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Application

EP 12780226 A 20121008

Priority

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Abstract (en)

[origin: WO2013060960A2] The rotor (1) according to the invention comprises a plurality of alternating north poles (N) and south poles (S) formed from a plurality of permanent magnets (3) having a radial polygonal section and arranged in first recesses (4). These first recesses extend axially and are distributed regularly between a circumferential portion (5) and a central portion (6) of the magnetic mass (2) of the rotor in such a way as to define a plurality of circumferential polar sections (10). In accordance with the invention, the radial section comprises a substantially rectangular portion (8) next to the circumferential portion adjacent to a substantially trapezoidal portion (7) next to the central portion. According to another feature of the rotor, a ratio (R) of a first height (h) of the trapezoidal portion to a second height (H) of the rectangular portion, in a radial direction, is predetermined in such a way as to maximise the efficiency of the electrical machine.

IPC 8 full level

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CPC (source: EP US)

H02K 1/2773 (2013.01 - EP US); **H02K 1/27** (2013.01 - US); **H02K 1/276** (2013.01 - US); **H02K 2213/03** (2013.01 - EP US)

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