

Title (en)

ROTOR FOR AN ELECTRIC MOTOR PROVIDED WITH A COOLING CIRCUIT

Title (de)

ROTOR FÜR EINEN ELEKTROMOTOR MIT KÜHLKREISLAUF

Title (fr)

ROTOR POUR MOTEUR ÉLECTRIQUE MUNI D'UN CIRCUIT DE REFROIDISSEMENT

Publication

**EP 4158753 A1 20230405 (FR)**

Application

**EP 21733498 A 20210520**

Priority

- FR 2005691 A 20200529
- FR 2021050921 W 20210520

Abstract (en)

[origin: WO2021240100A1] A rotor (10) comprising channels (124, 126, 175, 195) for circulating a cooling fluid, a rotor shaft (12) which is mounted for rotation about an axis (X), and a lamination stack (14) which is mounted coaxially on the shaft (12). The lamination stack (14) comprises first internal cavities (141) and second internal cavities (142) which are symmetrical relative to the axis (X) of the shaft (12) and relative to each other. The two second internal cavities (142) extend axially through the whole of the lamination stack (14) so that they open, at the first end, into a front lateral face (143) of the lamination stack (14) and, at the other end, into a rear lateral face (144). The two second internal cavities (142) are configured to allow a cooling fluid to circulate inside the lamination stack (14). A plurality of permanent magnets (15) are received inside the first internal cavities (141). A front flange (17) and a rear flange (19) which are mounted coaxially on the shaft (32) are arranged on either side of the lamination stack (14) so as to be contiguous with the front and rear lateral faces (143, 144), respectively.

IPC 8 full level

**H02K 1/27** (2006.01); **H02K 1/32** (2006.01); **H02K 7/00** (2006.01); **H02K 9/197** (2006.01)

CPC (source: EP US)

**H02K 1/276** (2013.01 - EP); **H02K 1/32** (2013.01 - EP US); **H02K 7/003** (2013.01 - EP US); **H02K 9/197** (2013.01 - EP)

Citation (search report)

See references of WO 2021240100A1

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