

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 4158754 A1 20230405 (FR)

Application

EP 21733499 A 20210520

Priority

- FR 2005689 A 20200529
- FR 2021050922 W 20210520

Abstract (en)

[origin: WO2021240101A1] Rotor (10) comprising a shaft (12) mounted around an axis of rotation (X); - a laminated core (14) mounted coaxially on the shaft (12), the laminated core (14) extending between a front side face (143) and a rear side face (144). It comprises first internal cavities (141), a plurality of permanent magnets (15) housed inside the first internal cavities (141), a front flange (17) and a rear flange (19) in the form of discs and arranged on either side of the laminated core (14). The shaft (12) is provided with an internal inlet channel (124) for circulating a coolant. The front (17) or rear (19) flange is configured to form, with the front (143) or rear (144) side face, at least one front outlet channel (175) or rear outlet channel (195) inside which a coolant is circulated. The front (175) or rear (195) outlet channel connected to the inlet channel opens at an outlet opening (178) at the outer periphery (177) of the front flange (17) or rear flange (19).

IPC 8 full level

H02K 1/27 (2006.01); **H02K 1/32** (2006.01); **H02K 7/00** (2006.01); **H02K 9/19** (2006.01)

CPC (source: EP US)

H02K 1/02 (2013.01 - US); **H02K 1/276** (2013.01 - EP US); **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 2021240101A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3111029 A1 20211203; **FR 3111029 B1 20230630**; CN 115668695 A 20230131; EP 4158754 A1 20230405; US 2023223807 A1 20230713; WO 2021240101 A1 20211202

DOCDB simple family (application)

FR 2005689 A 20200529; CN 202180039155 A 20210520; EP 21733499 A 20210520; FR 2021050922 W 20210520; US 202117928469 A 20210520