

Title (en)
ELECTRIC MOTOR

Title (de)
ELEKTRISCHER MOTOR

Title (fr)
MOTEUR ÉLECTRIQUE

Publication
EP 3912259 A1 20211124 (DE)

Application
EP 19829090 A 20191217

Priority
• DE 102019100907 A 20190115
• EP 2019085571 W 20191217

Abstract (en)
[origin: WO2020148057A1] An electric motor (1), at least having: a housing (2) and a stator (3) situated therein with at least a plurality of coils (4); and a rotor (5) with at least one magnet (6), an axis of rotation (7) and an outer circumferential surface (8); wherein: the stator (3) and the rotor (5) are adjacent to one another along the axis of rotation (7); the rotor (5) has a fluid conduction structure (9) between the axis of rotation (7) and the outer circumferential surface (8); the fluid conduction structure (9) has at least one surface (13) extending at least radially (10) and being inclined relative to at least a circumferential direction (11), or to an axial direction (12) running parallel to the axis of rotation (7); and at least part of a fluid flow (14), transported through the fluid conduction structure (9) inside the housing (2) during the operation of the motor (1), can be conducted over the coils (4).

IPC 8 full level
H02K 9/19 (2006.01); **H02K 1/27** (2006.01)

CPC (source: EP US)
H02K 1/20 (2013.01 - EP); **H02K 1/2795** (2022.01 - EP US); **H02K 5/207** (2021.01 - US); **H02K 9/10** (2013.01 - EP); **H02K 9/19** (2013.01 - EP); **H02K 21/24** (2013.01 - EP US)

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)
DE 102019100907 A1 20200716; CN 113544948 A 20211022; EP 3912259 A1 20211124; JP 2022518217 A 20220314; US 2022077745 A1 20220310; WO 2020148057 A1 20200723

DOCDB simple family (application)
DE 102019100907 A 20190115; CN 201980094163 A 20191217; EP 19829090 A 20191217; EP 2019085571 W 20191217; JP 2021540895 A 20191217; US 201917423072 A 20191217