Title (en)

LIQUID-COOLED ELECTRIC MACHINE

Title (de)

FLÜSSIGKEITSGEKÜHLTE ELEKTRISCHE MASCHINE

Title (fr)

MACHINE ELECTRIQUE À REFROIDISSEMENT PAR LIQUIDE

Publication

EP 3161358 A1 20170503 (DE)

Application

EP 15774527 A 20150918

Priority

- DE 102014219739 A 20140930
- EP 2015071463 W 20150918

Abstract (en)

[origin: WO2016050534A1] The invention relates to an electric machine (1, 51), in particular an asynchronous machine, which comprises a stator (2), a rotatably mounted rotor (4) with a shaft (5), and a flow guiding element (7). Said shaft (5) comprises an axial borehole (6). Said flow guiding element (7) extends in such a manner in the axial borehole (6) such that a coolant (15), in particular a cooling liquid (15), can flow out from the flow guiding element (7, 47) into the borehole (6) or vice versa. A slide ring seal (40) seals the opening of the axial borehole (6). When the electrical machine (1, 51) is in operation, a value can be determined for the humidity in a cavity (55) of the electric machine (1, 51) .

IPC 8 full level

F16J 15/34 (2006.01); **G01M 3/22** (2006.01); **G01M 3/28** (2006.01); **H02K 5/124** (2006.01); **H02K 9/197** (2006.01)

CPC (source: CN EP RU US)

F16J 15/34 (2013.01 - RU); **F16J 15/3404** (2013.01 - CN EP US); **G01M 3/183** (2013.01 - CN EP US); **H02K 1/20** (2013.01 - CN EP US); **H02K 1/32** (2013.01 - CN EP US); **H02K 5/124** (2013.01 - EP RU US); **H02K 5/1732** (2013.01 - CN EP US); **H02K 9/197** (2013.01 - CN EP RU US); **H02K 9/227** (2021.01 - CN EP RU US); **H02K 11/20** (2016.01 - US); **H02K 17/16** (2013.01 - CN EP US); H02K 5/124 (2013.01 - CN)

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)

WO 2016050534 A1 20160407; BR 112017004942 A2 20171205; CN 106662255 A 20170510; CN 106662255 B 20190205; EP 3161358 A1 20170503; RU 2670601 C1 20181024; RU 2670601 C9 20181122; US 2018269743 A1 20180920

DOCDB simple family (application)

EP 2015071463 W 20150918; BR 112017004942 A 20150918; CN 201580040834 A 20150918; EP 15774527 A 20150918; RU 2017110526 A 20150918; US 201515515476 A 20150918