

Title (en)

ELECTRICAL SCREW SPINDLE COOLANT PUMP

Title (de)

ELEKTRISCHE SCHRAUBENSPINDEL-KÜHLMITTELPUMPE

Title (fr)

POMPE À VIS À LIQUIDE DE REFROIDISSEMENT ÉLECTRIQUE

Publication

EP 3924624 A1 20211222 (DE)

Application

EP 19817281 A 20191209

Priority

- DE 102019103470 A 20190212
- EP 2019084161 W 20191209

Abstract (en)

[origin: WO2020164776A1] The invention relates to an electrical screw spindle coolant pump, which is suitable for conveying a coolant circuit or other corrosive, liquid media. The electrical screw spindle coolant pump has a spindle housing (1) with a spindle chamber (10) and an axially adjacent motor housing (3). The invention is characterized in that the motor housing (3) comprises a motor chamber (30), in which a dry-running electric motor (4) is arranged separated from the flow current; and the motor housing (3) has a thermal transition portion (31) through which the flow current flows, which thermal transition portion is arranged between the motor chamber (30) and a component boundary of the motor housing (3) to the spindle housing (1).

IPC 8 full level

F04C 2/16 (2006.01); **F04C 15/00** (2006.01); **F04C 29/04** (2006.01)

CPC (source: EP US)

F04C 2/16 (2013.01 - EP US); **F04C 15/0096** (2013.01 - EP US); **F04C 29/04** (2013.01 - US); **F04C 29/047** (2013.01 - EP); **F04C 2240/40** (2013.01 - EP); **F04C 2240/808** (2013.01 - EP)

Citation (search report)

See references of WO 2020164776A1

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 102019103470 A1 20200813; BR 112021012370 A2 20210831; CN 113227580 A 20210806; CN 113227580 B 20230627; EP 3924624 A1 20211222; EP 3924624 B1 20230419; US 2022099088 A1 20220331; WO 2020164776 A1 20200820

DOCDB simple family (application)

DE 102019103470 A 20190212; BR 112021012370 A 20191209; CN 201980085411 A 20191209; EP 19817281 A 20191209; EP 2019084161 W 20191209; US 201917428582 A 20191209