

Title (en)

RADIAL CONTINUOUS-FLOW MACHINE WITH COOLING AND LUBRICATION BY WAY OF A MEDIUM WHICH FLOWS THROUGH THE MACHINE

Title (de)

RADIALSTRÖMUNGSMASCHINE MIT KÜHLUNG UND SCHMIERUNG DURCH EIN DURCH DIE MASCHINE FLIEßENDES MEDIUM

Title (fr)

MACHINE À FLUX CONTINU RADIAL AVEC REFROIDISSEMENT ET LUBRIFICATION AU MOYEN D'UN MILIEU QUI S'ÉCOULE À TRAVERS LA MACHINE

Publication

EP 4285030 A1 20231206 (DE)

Application

EP 22700777 A 20220114

Priority

- DE 102021102149 A 20210129
- EP 2022050727 W 20220114

Abstract (en)

[origin: WO2022161791A1] The invention relates to a radial continuous-flow machine with cooling and lubrication by way of a medium which flows through the machine, wherein the medium flows from a high pressure side to a low pressure side of the radial continuous-flow machine, • with a housing assembly (1) and a rotor assembly (2) which is mounted rotatably in an interior space of the housing assembly (1), • wherein at least one first bearing is provided for mounting the rotor assembly (2) in the housing assembly (1), • wherein the rotor assembly (2) comprises a rotor (25) of an electric motor (15, 25) and an impeller (21), • wherein the motor (15, 25) comprises, in addition to the rotor (25), a stator (15) which is a part of the housing assembly (1), • wherein the rotor (25) of the motor (15, 25) is arranged in a first region (2a) of the rotor assembly (2), and the stator (15) is arranged in a first region (1a) of the housing assembly (1), • wherein the first region (1a) of the housing assembly (1) encloses the first region (2a) of the rotor assembly (2).

IPC 8 full level

F04D 13/06 (2006.01); **F04D 29/06** (2006.01); **F04D 29/16** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP US)

F04D 13/06 (2013.01 - EP); **F04D 29/061** (2013.01 - EP US); **F04D 29/167** (2013.01 - EP); **F04D 29/5806** (2013.01 - EP US);
F04D 29/588 (2013.01 - US); **F04D 13/06** (2013.01 - US); **F05D 2260/232** (2013.01 - US); **F05D 2260/98** (2013.01 - 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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021102149 A1 20220804; CN 116583678 A 20230811; EP 4285030 A1 20231206; US 2023366410 A1 20231116;
WO 2022161791 A1 20220804

DOCDB simple family (application)

DE 102021102149 A 20210129; CN 202280008001 A 20220114; EP 2022050727 W 20220114; EP 22700777 A 20220114;
US 202318227684 A 20230728