

Title (en)

HEAT PUMP COMPRISING A COOLING DEVICE FOR COOLING A GUIDE SPACE OR A SUCTION MOUTH

Title (de)

WÄRMEPUMPE MIT EINER KÜHLVORRICHTUNG ZUM KÜHLEN EINES LEITRAUMS ODER EINES SAUGMUNDS

Title (fr)

POMPE À CHALEUR COMPRENANT UN DISPOSITIF DE REFROIDISSEMENT POUR REFROIDIR UNE CHAMBRE DE CONDUCTION OU UNE BOUCHE D'ASPIRATION

Publication

EP 3676544 A2 20200708 (DE)

Application

EP 18759919 A 20180821

Priority

- DE 102017215085 A 20170829
- EP 2018072548 W 20180821

Abstract (en)

[origin: WO2019042825A2] The invention relates to a heat pump having the following features: an evaporator (90) for evaporating working liquid; a condenser (114) for condensing compressed working steam; a compressor motor (110) having a suction mouth (92), on which a radial impeller (304) is mounted in order to convey working steam (314) evaporated in the evaporator (90) through the suction mouth (92); a guide space (302) which is arranged to guide a working steam (112) conveyed by the radial impeller (304) into the condenser (114); and a cooling device (420) for cooling the guide space (302) or the suction mouth (92) with a liquid, wherein the cooling device (420) is designed to guide (421, 422) the liquid on an outer side of the guide space (302) or the suction mouth (92), wherein the outer side is not in contact with the working steam (314, 112), and wherein an inner side of the guide space (302) or the suction mouth (92) is in contact with the working steam (314, 112).

IPC 8 full level

F25B 30/02 (2006.01); **F25B 31/00** (2006.01); **F25B 31/02** (2006.01)

CPC (source: EP US)

F25B 30/02 (2013.01 - EP US); **F25B 31/006** (2013.01 - US); **F25B 31/008** (2013.01 - EP); **F25B 31/026** (2013.01 - EP US); **F25B 2400/071** (2013.01 - EP); **F25B 2500/09** (2013.01 - US)

Citation (search report)

See references of WO 2019042825A2

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 102017215085 A1 20190228; CN 111094874 A 20200501; CN 111094874 B 20220412; EP 3676544 A2 20200708; EP 3676544 B1 20230524; JP 2020531786 A 20201105; JP 6985502 B2 20211222; US 11754325 B2 20230912; US 2020200447 A1 20200625; WO 2019042825 A2 20190307; WO 2019042825 A3 20190425

DOCDB simple family (application)

DE 102017215085 A 20170829; CN 201880056900 A 20180821; EP 18759919 A 20180821; EP 2018072548 W 20180821; JP 2020511953 A 20180821; US 202016793260 A 20200218