

Title (en)

HEAT PUMP SYSTEM HAVING HOT WATER PREPARATION FUNCTION AND CONTROL METHOD

Title (de)

WÄRMEPUMPENSYSTEM MIT HEISSWASSERZUBEREITUNGSSYSTEM UND STEUERUNGSVERFAHREN

Title (fr)

SYSTÈME DE POMPE À CHALEUR AYANT UNE FONCTION DE PRÉPARATION D'EAU CHAUDE ET PROCÉDÉ DE COMMANDE

Publication

**EP 3882538 A4 20211222 (EN)**

Application

**EP 19885035 A 20190612**

Priority

- CN 201811354464 A 20181114
- CN 2019090902 W 20190612

Abstract (en)

[origin: EP3882538A1] Disclosed is a heat pump system with a water heating function. The heat pump system comprises a compressor, an indoor heat exchanger, a throttling device and an outdoor heat exchanger which are connected by a pipeline to form a circulation flow passage, wherein the circulation flow passage is provided with a first control device to switch a flow direction of a refrigerant in the circulation flow passage; and the indoor heat exchanger comprises a first heat exchanger for exchanging heat of an indoor airflow and a second heat exchanger for exchanging heat of a water tank of a water heater, and the circulation flow passage is provided with a second control device, so that the first heat exchanger or the second heat exchanger is separately connected into the circulation flow passage or the first heat exchanger and the second heat exchanger are jointly connected into the circulation flow passage. Further disclosed is a control method for the above-mentioned heat pump system with a water heating function. When water stored in the water tank of the water heater is heated and the indoor airflow is refrigerated by an air conditioning system, the refrigerant flowing out of the compressor firstly exchanges heat with the water stored in a water tank of a heat pump to heat the water stored in the water tank, and then exchanges heat with an outdoor airflow so as to be condensed.

IPC 8 full level

**F25B 29/00** (2006.01); **F24F 12/00** (2006.01); **F25B 13/00** (2006.01)

CPC (source: CN EP US)

**F24F 5/001** (2013.01 - CN); **F24F 5/0096** (2013.01 - CN); **F24F 11/67** (2017.12 - CN); **F24F 11/84** (2017.12 - CN); **F24F 11/89** (2017.12 - CN); **F24F 13/30** (2013.01 - CN); **F25B 13/00** (2013.01 - EP); **F25B 41/20** (2021.01 - CN EP US); **F24D 17/02** (2013.01 - EP); **F24F 2221/183** (2013.01 - CN); **F25B 2313/003** (2013.01 - EP); **F25B 2313/0233** (2013.01 - EP); **F25B 2313/02742** (2013.01 - EP)

Citation (search report)

- [XA] EP 2891849 A1 20150708 - O Y L RES & DEV CT SDN BHD [MY]
- [XA] CN 201935475 U 20110817 - GUANGDONG EUROKLIMAT AIR COND
- See references of WO 2020098263A1

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)

**EP 3882538 A1 20210922**; **EP 3882538 A4 20211222**; **EP 3882538 B1 20231206**; **EP 3882538 C0 20231206**; CN 111189138 A 20200522; WO 2020098263 A1 20200522

DOCDB simple family (application)

**EP 19885035 A 20190612**; CN 201811354464 A 20181114; CN 2019090902 W 20190612