

Title (en)
HEAT PUMP SYSTEM

Title (de)
WÄRMEPUMPENSYSTEM

Title (fr)
SYSTÈME DE POMPE À CHALEUR

Publication
EP 3457050 A1 20190320 (EN)

Application
EP 16901624 A 20160510

Priority
JP 2016063892 W 20160510

Abstract (en)

A heat pump system of the present invention includes: a low temperature heating side refrigerant circuit; a high temperature heating side refrigerant circuit; a first pipe to connect a low temperature side liquid supply port, a low temperature heating side condenser, and a high temperature heating side evaporator in this order, thereby to circulate liquid; a second pipe configured to connect a high temperature side liquid supply port and a high temperature heating side condenser in this order, thereby to circulate the liquid; a pump provided in the first pipe and configured to feed the liquid heated in the low temperature heating side condenser to the high temperature heating side evaporator; a control valve provided in the first pipe between the low temperature heating side condenser and the high temperature heating side evaporator and configured to control a flow rate of the liquid circulated inside the first pipe; and a control unit configured to control at least one of the pump and the control valve, and control a flow rate of the liquid fed from the low temperature heating side condenser to the high temperature heating side evaporator.

IPC 8 full level
F25B 7/00 (2006.01); **F25B 1/00** (2006.01); **F25B 30/02** (2006.01)

CPC (source: EP)
F25B 1/00 (2013.01); **F25B 7/00** (2013.01); **F25B 25/005** (2013.01); **F25B 30/02** (2013.01); **F25B 47/02** (2013.01); **F25B 2339/047** (2013.01);
F25B 2400/061 (2013.01); **F25B 2700/197** (2013.01); **F25B 2700/21161** (2013.01); **F25B 2700/21175** (2013.01)

Cited by
DE102019111173A1; CN115103986A; WO2021156348A1

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 3457050 A1 20190320; **EP 3457050 A4 20190522**; **EP 3457050 B1 20240403**; JP 6559339 B2 20190814; JP WO2017195275 A1 20181122;
WO 2017195275 A1 20171116

DOCDB simple family (application)
EP 16901624 A 20160510; JP 2016063892 W 20160510; JP 2018516249 A 20160510