

Title (en)

A HEAT PUMP AIR CONDITION SYSTEM, AND THE STEAM JET SYSTEM AND THE CONTROL METHOD THEREOF

Title (de)

WÄRMEPUMPENKLIMAANLAGE UND DAMPFSTRAHLSYSTEM SOWIE STEUERVERFAHREN DAFÜR

Title (fr)

SYSTÈME DE CONDITIONNEMENT D'AIR À POMPE THERMIQUE, SYSTÈME FRIGORIFIQUE À ÉJECTION DE VAPEUR ET PROCÉDÉ DE COMMANDE ASSOCIÉ

Publication

EP 2009369 A1 20081231 (EN)

Application

EP 07720698 A 20070406

Priority

- CN 2007001125 W 20070406
- CN 200610034943 A 20060411

Abstract (en)

The present invention relates to a heat pump air conditioning system, a compressor steam jet system of the same and a control method thereof, wherein the heat pump air conditioning system comprises a four-way valve (13), an indoor unit heat exchanger (19), an indoor throttle device (20), an outdoor throttle device (15) and an outdoor unit heat exchanger (14) which are connected in series to form a loop. The heat pump air conditioning system further comprises a compressor steam jet system, and said compressor steam jet system comprises a compressor (11) which comprises a first air inlet (111), a second air inlet (112) and an air outlet (113), wherein said first air inlet (111) is connected with said four-way valve (13) through a gas-liquid separator (12), and said second air inlet (112) is connected to between said indoor throttle device (20) and said outdoor throttle device (15) by means of the bypass pipe on which an electronic expansion valve (21) is disposed, and said air outlet (113) is connected with said four-way valve (13). Sensors (201, 202, 203) for detecting gas state are respectively disposed at the two air inlets (111, 112) and the air outlet (113), thereby the second air inlet (112) is controlled according to the test results from the sensors.

IPC 8 full level

F25B 30/02 (2006.01); **F25B 1/10** (2006.01); **F25B 6/02** (2006.01); **F25B 13/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)

F25B 13/00 (2013.01); **F25B 49/022** (2013.01); **F25B 1/10** (2013.01); **F25B 2313/023** (2013.01); **F25B 2313/02741** (2013.01); **F25B 2400/13** (2013.01); **F25B 2500/19** (2013.01); **F25B 2500/31** (2013.01); **F25B 2600/0272** (2013.01); **F25B 2700/1931** (2013.01); **F25B 2700/1933** (2013.01); **F25B 2700/21151** (2013.01); **F25B 2700/21152** (2013.01)

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CN102466368A; CN106839095A; CN107062463A; CN103307805A; WO2022001077A1; WO2022007375A1; WO2022001076A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 2009369 A1 20081231; **EP 2009369 A4 20161123**; **EP 2009369 B1 20181031**; CN 100386580 C 20080507; CN 1828186 A 20060906; ES 2705478 T3 20190325; PL 2009369 T3 20190531; RU 2008143066 A 20100510; RU 2426956 C2 20110820; TR 201820044 T4 20190221; WO 2007115494 A1 20071018

DOCDB simple family (application)

EP 07720698 A 20070406; CN 200610034943 A 20060411; CN 2007001125 W 20070406; ES 07720698 T 20070406; PL 07720698 T 20070406; RU 2008143066 A 20070406; TR 201820044 T 20070406