

Title (en)

AIR CONDITIONER AND METHOD OF CONTROLLING THE SAME

Title (de)

KLIMAANLAGE UND VERFAHREN ZUR STEUERUNG DAVON

Title (fr)

CLIMATISATION ET PROCÉDÉ DE COMMANDE CORRESPONDANT

Publication

EP 3015793 B1 20180110 (EN)

Application

EP 15191922 A 20151028

Priority

- KR 20140147976 A 20141029
- KR 20140147977 A 20141029
- KR 20140147978 A 20141029

Abstract (en)

[origin: EP3015793A1] An air conditioner includes a compressor; a flow switching part disposed at an outlet side of the compressor to switch a flow direction of a refrigerant according to whether a cooling operation or heating operation is performed; an outdoor heat exchanger connected to the flow switching part and having a plurality of the refrigerant pipes to guide the refrigerant which heat-exchanges with outdoor air; and a main expansion valve connected to one side of the outdoor heat exchanger. A first inlet/outlet pipe connects the flow switching part to the outdoor heat exchanger; and a second inlet/outlet pipe connects the outdoor heat exchanger to the main expansion valve, where the outdoor heat exchanger includes a header to form a flowing space of the refrigerant and having an upper header and a lower header; a check valve disposed between the upper header and the lower header to guide the refrigerant to flow one way; and a bypass pipe connecting the lower header to the second inlet/outlet pipe and guiding a discharge of a liquid refrigerant located in the lower header, and a bypass pipe valve controlling an amount of the liquid refrigerant flowing through the bypass pipe.

IPC 8 full level

F25B 39/00 (2006.01); **F25B 13/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP US)

F25B 13/00 (2013.01 - EP US); **F25B 49/02** (2013.01 - EP US); **F25B 39/00** (2013.01 - EP US); **F25B 2313/02533** (2013.01 - EP US); **F25B 2313/02541** (2013.01 - EP US); **F25B 2313/0315** (2013.01 - EP US); **F25B 2600/2501** (2013.01 - EP US); **F25B 2700/04** (2013.01 - EP US)

Cited by

CN106352524A; CN108716789A; CN112567193A

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

DOCDB simple family (publication)

EP 3015793 A1 20160504; **EP 3015793 B1 20180110**; US 2016123645 A1 20160505

DOCDB simple family (application)

EP 15191922 A 20151028; US 201514925499 A 20151028