

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAANLAGE

Title (fr)  
CLIMATISEUR

Publication  
**EP 3467406 A1 20190410 (EN)**

Application  
**EP 16903088 A 20160524**

Priority  
JP 2016065326 W 20160524

Abstract (en)  
An air-conditioning apparatus includes an outdoor unit and an indoor unit, the outdoor unit having at least a compressor, a refrigerant flow path switching device, a heat source side heat exchanger, and a first expansion device, the indoor unit having at least a load side heat exchanger and a second expansion device, the compressor, the refrigerant flow path switching device, the heat source side heat exchanger, the first expansion device, the load side heat exchanger and the second expansion device being connected by refrigerant pipes to form a refrigerant circuit a first valve device provided at a refrigerant pipe of the refrigerant pipes, the refrigerant pipe connecting between the first expansion device and the second expansion device; a second valve device provided at a refrigerant pipe of the refrigerant pipes, the refrigerant pipe connecting between the refrigerant flow path switching device and the load side heat exchanger; and a controller configured to control the first expansion device during a cooling operation mode to expand, into a two-phase gas-liquid state, refrigerant flowing through the first expansion device to the refrigerant pipe between the first expansion device and the second expansion device. The first valve device and the second valve device are closed when leakage of the refrigerant is detected.

IPC 8 full level  
**F25B 1/00** (2006.01); **F25B 13/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)  
**F24F 11/89** (2017.12); **F25B 13/00** (2013.01); **F25B 49/00** (2013.01); **F25B 2313/003** (2013.01); **F25B 2313/0292** (2013.01); **F25B 2313/0294** (2013.01); **F25B 2313/0314** (2013.01); **F25B 2400/0409** (2013.01); **F25B 2400/0411** (2013.01); **F25B 2400/19** (2013.01); **F25B 2700/1931** (2013.01); **F25B 2700/1933** (2013.01); **F25B 2700/21152** (2013.01)

Cited by  
EP4067776A4; EP4012294A1; CN114623558A; US11274864B2; US11162725B2; US11143439B2; US11231199B2; WO2023246779A1

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 3467406 A1 20190410**; **EP 3467406 A4 20190508**; **EP 3467406 B1 20200909**; JP 6081033 B1 20170215; JP WO2017203606 A1 20180607; WO 2017203606 A1 20171130

DOCDB simple family (application)  
**EP 16903088 A 20160524**; JP 2016065326 W 20160524; JP 2016550651 A 20160524