Title (en)

AIR CONDITIONER

Title (de)

KLIMAANLAGE

Title (fr)

CONDITIONNEUR D'AIR

Publication

EP 3919835 A1 20211208 (EN)

Application

EP 19912296 A 20190128

Priority

JP 2019002650 W 20190128

Abstract (en)

In an air conditioner (1), refrigerant circulates sequentially through a compressor (10), a condenser (40/20), an expansion device (30), and an evaporator (20/40) in this order during an operation. The condenser (40/20) includes: a first heat exchange portion (40A/20A) and a second heat exchange portion (40B/20B) that are configured such that refrigerant in the first heat exchange portion flows in parallel with refrigerant in the second heat exchange portion; a flow rate restricting portion (34/32) configured to cause a flow rate difference between a flow rate of the refrigerant passing through the first heat exchange portion (40A/20A) and a flow rate of the refrigerant passing through the second heat exchange portion (40B/20B). The air conditioner (1) includes a controller (200) configured to control the compressor (10) and the flow rate restricting portion (34/32). When the controller (200) changes an air conditioning capability of the air conditioner (1), the controller (200) uses a combination of a frequency of the compressor (10) and the flow rate difference between the refrigerants passing through two heat exchange portions.

IPC 8 full level

F25B 1/00 (2006.01); **F25B 5/02** (2006.01); **F25B 6/02** (2006.01)

CPC (source: EP US)

F25B 6/02 (2013.01 - US); **F25B 41/20** (2021.01 - EP US); **F25B 49/02** (2013.01 - US); **F25B 49/022** (2013.01 - EP); F25B 13/00 (2013.01 - EP); F25B 2313/0233 (2013.01 - EP); F25B 2313/0253 (2013.01 - EP); F25B 2400/19 (2013.01 - EP); F25B 2600/0253 (2013.01 - EP); F25B 2700/2104 (2013.01 - EP)

Cited by

EP4361530A1

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 3919835 A1 20211208; **EP 3919835 A4 20220119**; CN 113302436 A 20210824; JP 7086231 B2 20220617; JP WO2020157788 A1 20211014; US 2021404710 A1 20211230; WO 2020157788 A1 20200806

DOCDB simple family (application)

EP 19912296 A 20190128; CN 201980088167 A 20190128; JP 2019002650 W 20190128; JP 2020568881 A 20190128; US 201917288999 A 20190128