

Title (en)
Multi-split type air conditioning system

Title (de)
Multisplit-Klimaanlage

Title (fr)
Système de conditionnement d'air de type multi-divisions

Publication
EP 2535669 A2 20121219 (EN)

Application
EP 12171591 A 20120612

Priority
JP 2011134778 A 20110617

Abstract (en)

Provided is a multi-split type air conditioning system AC in which a plurality of indoor units 30 are connected in parallel, and which comprises a receiver 20 installed upstream of an outdoor heat exchanger 12 that serves as an evaporator in heating operation; and an outdoor unit electronic expansion valves 21 installed between the receiver 20 and the outdoor heat exchanger 12, wherein a control unit 50 is provided with an in-heating-operation opening degree control mode for controlling the outdoor unit electronic expansion valve 21, the in-heating-operation opening degree control mode comprising an open-loop control that performs an operation for a predetermined time period with an outdoor unit electronic expansion valve interim opening degree set corresponding to the actual number of rotation of a variable-power operated type compressor 11 determined by the number of the indoor units 30 being in operation and outdoor air condition; and an outdoor air temperature, a total heat exchange capacity value of the indoor heat exchangers 31, a number of indoor heat exchangers 31 that are stopped, suction superheating and discharge superheating of the variable-power operated type compressor 11 are employed as parameters for calculating the outdoor unit electronic expansion valve interim opening degree.

IPC 8 full level
F25B 13/00 (2006.01); **F25B 45/00** (2006.01)

CPC (source: EP)
F25B 13/00 (2013.01); **F25B 41/39** (2021.01); **F25B 45/00** (2013.01); **F25B 2313/005** (2013.01); **F25B 2600/2513** (2013.01)

Citation (applicant)

- JP 2002156166 A 20020531 - FUJITSU GENERAL LTD
- JP 3671850 B2 20050713
- JP 2010210164 A 20100924 - PANASONIC CORP
- JP H0714772 A 19950117 - MITSUBISHI CABLE IND LTD
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CN107676922A; CN104101052A; CN104214905A; CN105605753A; CN110836433A; CN109974223A; CN113587500A; EP3702696A4; CN114688689A; CN114811863A; US11486617B2; US12117194B2; WO2018053728A1; WO2020164228A1

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)

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DOCDB simple family (application)

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