

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAANLAGE

Title (fr)  
CLIMATISEUR D'AIR

Publication  
**EP 3199889 A1 20170802 (EN)**

Application  
**EP 17152946 A 20170125**

Priority  
JP 2016014300 A 20160128

Abstract (en)  
An air conditioner 1 includes a refrigerant circuit including a refrigerant compressor 11, a heat source side heat exchanger 12, an electronic expansion valve for heating 17, an electronic expansion valve for cooling 16, and a use side heat exchanger 13 and an expansion valve control unit 50 for controlling a refrigerant superheating degree of an exit of the heat source side heat exchanger by the electronic expansion valve for heating and controlling a refrigerant supercooling degree of an exit of the use side heat exchanger by the electronic expansion valve for cooling at the time of a heating cycle for heating the use side with a refrigerant by the use side heat exchanger. The expansion valve control unit 50 includes a target value correction control unit 53 which gradually lowers a target supercooling degree of the electronic expansion valve for cooling when the opening of the electronic expansion valve for heating is equal to or larger than the set opening and a set opening correction control unit 54 which corrects the set opening of the electronic expansion valve for heating in the target value correction control unit according to the rotation speed of the refrigerant compressor.

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

CPC (source: EP)  
**F25B 13/00** (2013.01); **F25B 49/02** (2013.01); **F25B 2600/19** (2013.01); **F25B 2600/21** (2013.01); **F25B 2600/2513** (2013.01)

Citation (applicant)  
JP 2011252622 A 20111215 - MITSUBISHI HEAVY IND LTD

Citation (search report)  
• [YD] JP 2011252622 A 20111215 - MITSUBISHI HEAVY IND LTD  
• [Y] JP 2005291553 A 20051020 - MITSUBISHI HEAVY IND LTD  
• [A] EP 2532992 A1 20121212 - MITSUBISHI HEAVY IND LTD [JP]

Cited by  
CN114963547A; CN109373497A; CN109099612A; US2023168011A1; US11841176B2

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 3199889 A1 20170802**; **EP 3199889 B1 20180822**; JP 2017133763 A 20170803; JP 6640579 B2 20200205

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