

Title (en)
AIR-CONDITIONING SYSTEM AND METHOD FOR CONTROLLING SAME

Title (de)
KLIMATISIERUNGSSYSTEM UND VERFAHREN ZUR STEUERUNG DAVON

Title (fr)
SYSTÈME DE CLIMATISATION ET SON PROCÉDÉ DE COMMANDE

Publication
EP 4067765 A4 20221130 (EN)

Application
EP 19954508 A 20191129

Priority
JP 2019046796 W 20191129

Abstract (en)
[origin: EP4067765A1] An air-conditioning system includes: a heat source apparatus; a plurality of indoor units; a relay device; a refrigerant circuit; and a heat medium circuit, the heat source apparatus including a compressor, a flow switching valve, and a heat-source-side heat exchanger. The indoor units each include an indoor-side heat exchanger. The relay device includes a pump and an inter-medium heat exchanger. In the refrigerant circuit, the compressor, the flow switching valve, the heat-source-side heat exchanger, and the inter-medium heat exchanger are connected by refrigerant pipes and refrigerant is circulated. In the heat medium circuit, the pump, the inter-medium heat exchanger, and the indoor-side heat exchanger of each of the plurality of indoor units are connected by heat medium pipes and a heat medium is circulated. The air-conditioning system further includes: flow-rate detection devices each provided in an associated one of the plurality of indoor units, and each detect flow-rate information regarding a flow rate of the heat medium in the associated indoor unit; and a controller that controls, when the flow-rate information detected by the flow-rate detection devices is abnormal flow-rate information indicating presence of a control target indoor unit which is an indoor unit to be controlled of the plurality of indoor units and in which a flow of the heat medium is cut off, an operation of at least one of the compressor, the pump, and the control target indoor unit.

IPC 8 full level
F24F 11/32 (2018.01); **F24F 3/06** (2006.01); **F24F 5/00** (2006.01); **F24F 11/36** (2018.01); **F24F 11/43** (2018.01); **F24F 11/64** (2018.01); **F24F 11/74** (2018.01); **F24F 11/85** (2018.01); **F24F 11/86** (2018.01); **F25B 1/00** (2006.01)

CPC (source: EP)
F24F 3/065 (2013.01); **F24F 11/32** (2017.12); **F24F 11/36** (2017.12); **F24F 11/43** (2017.12); **F24F 11/74** (2017.12); **F24F 11/85** (2017.12); **F24F 11/86** (2017.12); **F25B 13/00** (2013.01); **F25B 49/022** (2013.01); **F25B 2313/003** (2013.01)

Citation (search report)
• [A] US 2011297363 A1 20111208 - TAKATA SHIGEO [JP], et al
• [A] EP 2937648 A1 20151028 - MITSUBISHI ELECTRIC CORP [JP]
• [A] EP 2746700 A1 20140625 - MITSUBISHI ELECTRIC CORP [JP]
• [A] JP 2010127568 A 20100610 - MITSUBISHI ELECTRIC CORP
• See references of WO 2021106193A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4067765 A1 20221005; EP 4067765 A4 20221130; JP 7233568 B2 20230306; JP WO2021106193 A1 20210603;
WO 2021106193 A1 20210603

DOCDB simple family (application)
EP 19954508 A 20191129; JP 2019046796 W 20191129; JP 2021561105 A 20191129