

Title (en)
AIR CONDITIONER

Title (de)
KLIMAANLAGE

Title (fr)
CLIMATISEUR

Publication
EP 3225938 A1 20171004 (EN)

Application
EP 17163274 A 20170328

Priority
KR 20160036622 A 20160328

Abstract (en)
Disclosed is an air conditioner (10) including a compressor (210), which compresses and discharges a refrigerant, a condenser (240), which condenses the refrigerant compressed in the compressor, an expansion device (22), which expands the refrigerant condensed in the condenser, an evaporator (160), which evaporates the refrigerant expanded in the expansion device, performs heat exchange between the refrigerant and indoor air, and discharges the evaporated refrigerant to the compressor, a bypass unit (31,32), which guides some of the refrigerant discharged from the condenser to an outlet end of the evaporator, a heat exchange unit (253,260), which performs heat exchange between some of the refrigerant discharged from the compressor and the refrigerant to be suctioned into the compressor, and a control unit (300), which controls overall operation of the air conditioner. The control unit controls the bypass unit so as to bypass the refrigerant, discharged from the condenser, to the outlet end of the evaporator upon an oil collection operation.

IPC 8 full level
F25B 31/00 (2006.01); **F25B 40/06** (2006.01)

CPC (source: EP KR)
F25B 31/004 (2013.01 - EP KR); **F25B 40/06** (2013.01 - EP KR); **F25B 41/26** (2021.01 - KR); **F25B 41/31** (2021.01 - KR); **F25B 41/40** (2021.01 - KR); **F25B 43/006** (2013.01 - KR); **F25B 2400/0403** (2013.01 - EP KR); **F25B 2400/0409** (2013.01 - EP KR); **F25B 2400/0411** (2013.01 - EP KR); **F25B 2400/051** (2013.01 - EP KR); **F25B 2500/16** (2013.01 - EP KR); **F25B 2600/2501** (2013.01 - EP KR); **F25B 2700/03** (2013.01 - EP KR); **F25B 2700/21** (2013.01 - EP KR)

Citation (search report)
• [Y] JP 2012207841 A 20121025 - MITSUBISHI ELECTRIC CORP
• [Y] JP H085185 A 19960112 - MITSUBISHI ELECTRIC CORP
• [Y] JP 2003254632 A 20030910 - HITACHI LTD
• [Y] EP 0848214 A2 19980617 - SANYO ELECTRIC CO [JP]
• [Y] WO 2008024110 A1 20080228 - CARRIER CORP [US], et al

Cited by
EP3951283A4; CN109357440A; CN115419966A; US11988419B2

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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