

Title (en)
Air conditioner and control method thereof

Title (de)
Klimaanlage und zugehöriges Steuerverfahren

Title (fr)
Climatiseur et son procédé de fonctionnement

Publication
EP 2733440 A1 20140521 (EN)

Application
EP 13181163 A 20130821

Priority
KR 20120130644 A 20121119

Abstract (en)
Provided are an air conditioner and a control method thereof. The air conditioner includes a main body defining an outer appearance, an indoor heat exchanger disposed within the main body, a plurality of branch tubes guiding a refrigerant introduced into the indoor heat exchanger, a circulation tube connected to the plurality of branch tubes to guide the refrigerant, a bypass tube connecting a portion of the plurality of branch tubes to the circulation tube, and a branch tube valve disposed in the portion of the plurality of branch tubes to adjust a flow of the refrigerant flowing into the portion of the plurality of branch tubes. The portion of the plurality of branch tubes has a diameter less than that of each of the remaining branch tubes. In a cooling mode, the refrigerant is introduced from the circulation tube into the indoor heat exchanger through the portion of the plurality of branch tubes. In a heating mode, the refrigerant is discharged from the indoor heat exchanger into the circulation tube through the bypass tube.

IPC 8 full level
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F24F 1/0007 (2013.01 - KR); **F24F 1/0041** (2019.01 - KR); **F24F 1/0063** (2019.01 - EP US); **F25B 13/00** (2013.01 - EP US); **F25B 41/20** (2021.01 - EP KR US); **F25B 41/31** (2021.01 - KR); **F25B 2400/04** (2013.01 - EP US); **F25B 2600/2501** (2013.01 - EP KR US)

Citation (search report)

- [XAI] WO 2012014345 A1 20120202 - MITSUBISHI ELECTRIC CORP [JP], et al & EP 2600082 A1 20130605 - MITSUBISHI ELECTRIC CORP [JP]
- [XI] GB 2194651 A 19880309 - TOSHIBA KK
- [A] EP 1589299 A2 20051026 - DAEWOO ELECTRONICS CORP [KR]
- [A] EP 2365253 A2 20110914 - LG ELECTRONICS INC [KR]

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

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EP 2733440 A1 20140521; **EP 2733440 B1 20230201**; CN 103822301 A 20140528; CN 103822301 B 20161228; KR 101988034 B1 20190611; KR 20140063931 A 20140528; US 2014138064 A1 20140522

DOCDB simple family (application)
EP 13181163 A 20130821; CN 201310380503 A 20130828; KR 20120130644 A 20121119; US 201313970747 A 20130820