

Title (en)
AIR CONDITIONER

Title (de)
KLIMAANLAGE

Title (fr)
CLIMATISEUR

Publication
EP 4033177 A1 20220727 (EN)

Application
EP 20865415 A 20200626

Priority
• JP 2019168316 A 20190917
• JP 2019168317 A 20190917
• JP 2019168319 A 20190917
• JP 2020025338 W 20200626

Abstract (en)
An air conditioner according to one embodiment carries out a heating operation and a cooling operation, carries out a cooling/heating mixed operation in which a higher priority is given to cooling by causing a portion of exhaust gas to flow into one of a plurality of intermediate heat exchangers and condensing the same, condensing the remaining exhaust gas in an outdoor-side heat exchanger, causing the obtained condensate to flow through a liquid tube and mixing the same with the refrigerant condensed by the intermediate heat exchanger, and causing the mixed condensate to flow through a second expansion valve into the other intermediate heat exchanger and evaporating the same, and carries out a cooling/heating mixed operation in which a higher priority is given to heating by causing exhaust gas to flow into one of the plurality of intermediate heat exchangers and condensing the same, causing a portion of the exhaust gas to flow through a liquid tube into the outdoor-side heat exchanger and evaporating the same, and causing the remaining condensate to flow through the second expansion valve into the other intermediate heat exchanger and evaporating the same.

IPC 8 full level
F25B 13/00 (2006.01); **F24F 5/00** (2006.01); **F24F 11/46** (2018.01); **F24F 11/65** (2018.01); **F24F 11/86** (2018.01); **F25B 1/00** (2006.01); **F24F 110/12** (2018.01); **F24F 140/20** (2018.01)

CPC (source: CN EP US)
F24F 1/0003 (2013.01 - CN); **F24F 5/00** (2013.01 - US); **F24F 11/46** (2017.12 - EP US); **F24F 11/64** (2017.12 - CN); **F24F 11/65** (2017.12 - CN EP); **F24F 11/67** (2017.12 - US); **F24F 11/86** (2017.12 - EP US); **F24F 11/89** (2017.12 - CN); **F24F 13/30** (2013.01 - CN); **F25B 13/00** (2013.01 - EP US); **F25B 25/005** (2013.01 - EP); **F25B 41/20** (2021.01 - EP US); **F25B 41/30** (2021.01 - EP); **F25B 41/31** (2021.01 - CN); **F25B 41/40** (2021.01 - CN); **F25B 49/005** (2013.01 - EP); **F25B 49/02** (2013.01 - EP); **F25B 49/022** (2013.01 - US); **F24F 2110/12** (2017.12 - CN EP US); **F24F 2140/20** (2017.12 - CN EP); **F24F 2140/50** (2017.12 - US); **F25B 2313/003** (2013.01 - EP); **F25B 2313/007** (2013.01 - EP); **F25B 2313/0231** (2013.01 - EP); **F25B 2313/0253** (2013.01 - EP); **F25B 2313/0312** (2013.01 - EP); **F25B 2313/0314** (2013.01 - EP); **F25B 2339/047** (2013.01 - EP); **F25B 2500/19** (2013.01 - EP); **F25B 2600/0253** (2013.01 - US); **F25B 2600/2513** (2013.01 - EP); **F25B 2700/197** (2013.01 - EP); **F25B 2700/2106** (2013.01 - EP); **F25B 2700/21174** (2013.01 - EP)

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 4033177 A1 20220727; **EP 4033177 A4 20240124**; CN 114466995 A 20220510; CN 114466995 B 20230815; JP 7356506 B2 20231004; JP WO2021053924 A1 20210325; US 2022205671 A1 20220630; WO 2021053924 A1 20210325

DOCDB simple family (application)
EP 20865415 A 20200626; CN 202080065478 A 20200626; JP 2020025338 W 20200626; JP 2021546514 A 20200626; US 202217697178 A 20220317