

Title (en)

AIR CONDITIONER AND CONTROL METHOD THEREOF

Title (de)

KLIMAANLAGE UND STEUERUNGSVERFAHREN DAFÜR

Title (fr)

APPAREIL DE CONDITIONNEMENT D'AIR ET PROCÉDÉ DE COMMANDE DE CELUI-CI

Publication

**EP 3374704 A4 20190109 (EN)**

Application

**EP 16890766 A 20161208**

Priority

- JP 2016029767 A 20160219
- KR 20160069716 A 20160603
- KR 2016014355 W 20161208

Abstract (en)

[origin: JP2017146061A] PROBLEM TO BE SOLVED: To secure differential pressure of a compressor effortlessly during air-cooling operation at low-ambient temperature.SOLUTION: The air conditioner includes: a discharge-side pipe Lc for discharging refrigerant from the compressor 23; a throttle part 30 provided in the discharge-side pipe Lc; and a return flow passage 205 of which one end is connected to the discharge-side pipe Lc upstream from the throttle part 30 and the other end is connected to a suction side of the compressor 23 to return the refrigerant discharged from the compressor 23 to the compressor 23.SELECTED DRAWING: Figure 1

IPC 8 full level

**F25B 30/02** (2006.01); **F24F 1/28** (2011.01); **F24F 5/00** (2006.01); **F25B 13/00** (2006.01); **F25B 41/00** (2006.01); **F25B 41/04** (2006.01); **F25B 41/06** (2006.01); **F25B 49/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP KR US)

**F24F 1/28** (2013.01 - KR); **F24F 5/001** (2013.01 - KR); **F25B 13/00** (2013.01 - EP US); **F25B 30/02** (2013.01 - KR); **F25B 41/20** (2021.01 - EP KR US); **F25B 41/31** (2021.01 - KR); **F25B 41/37** (2021.01 - EP KR US); **F25B 41/40** (2021.01 - KR); **F25B 49/00** (2013.01 - KR); **F25B 49/02** (2013.01 - EP US); **F25B 2313/0233** (2013.01 - EP); **F25B 2400/0411** (2013.01 - EP); **F25B 2400/075** (2013.01 - EP); **F25B 2400/121** (2013.01 - KR); **F25B 2600/0271** (2013.01 - EP); **F25B 2600/2501** (2013.01 - EP KR US); **F25B 2600/2509** (2013.01 - EP); **F25B 2600/2517** (2013.01 - EP); **F25B 2700/1931** (2013.01 - EP US); **F25B 2700/1933** (2013.01 - EP); **F25B 2700/21** (2013.01 - KR); **F25B 2700/2106** (2013.01 - EP); **F25B 2700/21152** (2013.01 - EP)

Citation (search report)

- [XAI] WO 2015107876 A1 20150723 - DENSO CORP [JP]
- [XA] US 2012266622 A1 20121025 - INABA ATSUSHI [JP], et al
- [A] US 2014033750 A1 20140206 - TANAKA KOSUKE [JP], et al

Citation (examination)

- JP 2015114026 A 20150622 - SAMSUNG ELECTRONICS CO LTD
- See also references of WO 2017142176A1

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EP4417900A1

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)

CN 108474595 A 20180831; CN 108474595 B 20210709; EP 3374704 A1 20180919; EP 3374704 A4 20190109; JP 2017146061 A 20170824; KR 102461708 B1 20221102; KR 20170098138 A 20170829

DOCDB simple family (application)

CN 201680079580 A 20161208; EP 16890766 A 20161208; JP 2016029767 A 20160219; KR 20160069716 A 20160603