

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAANLAGE

Title (fr)  
AIR CONDITIONNÉ

Publication  
**EP 3604973 A1 20200205 (EN)**

Application  
**EP 19185117 A 20190709**

Priority  
JP 2018142635 A 20180730

Abstract (en)  
There is provided an air conditioner in which when one outdoor unit is performing a cooling operation, oil of the operating outdoor unit can be kept, and burn-in of a compressor due to oil exhaustion during the operation can be prevented. When the cooling operation is performed only by one GHP outdoor unit 2 in the GHP outdoor unit 2 and an EHP outdoor unit 3 and the other EHP outdoor unit 3 is stopped, a GHP control section 100 or an EHP control section 101 determines whether or not an oil level lowers below a certain level, on a basis of a detection value from a GHP oil level sensor 106 of the operating GHP outdoor unit 2, and when the control section determines that the oil level lowers below the certain level, the control section executes control to open an oil return valve 34 of the operating GHP outdoor unit 2.

IPC 8 full level  
**F25B 31/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: CN EP)  
**F24F 3/065** (2013.01 - CN); **F24F 5/001** (2013.01 - CN); **F24F 11/89** (2017.12 - CN); **F25B 31/004** (2013.01 - CN EP); **F25B 49/02** (2013.01 - EP); **F25B 2313/025** (2013.01 - EP); **F25B 2600/2515** (2013.01 - EP); **F25B 2700/03** (2013.01 - EP)

Citation (applicant)  
JP 2017150687 A 20170831 - PANASONIC IP MAN CORP

Citation (search report)  
• [X] EP 2525170 A1 20121121 - LG ELECTRONICS INC [KR]  
• [X] JP 3143141 B2 20010307  
• [X] JP 2004144339 A 20040520 - SANYO ELECTRIC CO, et al  
• [A] JP 2017150688 A 20170831 - PANASONIC IP MAN CORP

Cited by  
CN110986431A

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 3604973 A1 20200205**; **EP 3604973 B1 20231101**; CN 110779112 A 20200211; CN 110779112 B 20220823; JP 2020020492 A 20200206; JP 7199032 B2 20230105

DOCDB simple family (application)  
**EP 19185117 A 20190709**; CN 201910660189 A 20190722; JP 2018142635 A 20180730