

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAANLAGE

Title (fr)  
CLIMATISEUR

Publication  
**EP 2778569 A4 20160127 (EN)**

Application  
**EP 12841464 A 20121019**

Priority  
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Abstract (en)  
[origin: EP2778569A1] The present invention relates to an air conditioner in which oils mixed in the refrigerant compressed by a plurality of compressors are separated together and recovered in an efficient manner. An air conditioner according to an embodiment of the present invention comprises: a plurality of compressors for compressing refrigerant; an oil separator connected to the plurality of compressors so as to separate oils mixed with the refrigerant compressed by the plurality of compressors; an oil discharge pipe connected to the oil separator so as to discharge the oils separated by the oil separator, and a plurality of oil recovery pipes branched from the oil discharge pipe so as to recover the oils separated by the oil separator to the plurality of compressors.

IPC 8 full level  
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**F25B 2700/03** (2013.01 - EP US)

Citation (search report)  
• [X] JP 2009150368 A 20090709 - SAMSUNG ELECTRONICS CO LTD  
• [XY] JP S57173584 A 19821025 - SANYO ELECTRIC CO, et al  
• [X] US 3633377 A 19720111 - QUICK LESTER K  
• [X] DE 102007028851 A1 20081224 - KONVEKTA AG [DE]  
• [X] JP 2006090673 A 20060406 - MITSUBISHI HEAVY IND LTD  
• [Y] EP 2020578 A2 20090204 - LG ELECTRONICS INC [KR]  
• [XYI] WO 2008101688 A1 20080828 - KONVEKTA AG [DE], et al  
• [XYI] EP 0816780 A2 19980107 - CARRIER CORP [US]  
• [Y] KR 20070106875 A 20071106 - SAMSUNG ELECTRONICS CO LTD [KR]  
• [A] JP 2006308227 A 20061109 - MITSUBISHI HEAVY IND LTD  
• See references of WO 2013058595A1

Cited by  
CN107771267A; EP3254037A4; WO2019097554A1

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