

Title (en)  
Air conditioner

Title (de)  
Klimaanlage

Title (fr)  
Climatiseur

Publication  
**EP 2450647 A2 20120509 (EN)**

Application  
**EP 11166009 A 20110513**

Priority  
KR 20100110417 A 20101108

Abstract (en)  
Disclosed is an air conditioner including a plurality of compressors (2) (8) compressing a refrigerant, a first heat exchanger (10) for condensing the refrigerant compressed in the compressor (2), a first expansion valve (40) for expanding the condensed refrigerant, a second expansion valve (42) for expanding the refrigerant emerging from the first expansion valve (40), a second heat exchanger (12) for evaporating the refrigerant emerging from the second expansion valve (42). The refrigerant from the first expansion valve (40) is guided such that a portion of the refrigerant is introduced into one of the compressors (2) (8) after bypassing the second expansion valve (42) and second heat exchanger (12), and a remaining portion of the refrigerant is introduced into another one of the compressors (2)(8) after passing through the second expansion valve (42) and second heat exchanger (12), to minimize electric power consumption and to enhance heating performance.

IPC 8 full level  
**F25B 41/00** (2006.01); **F25B 13/00** (2006.01); **F25B 40/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP KR US)  
**F24F 1/00** (2013.01 - KR); **F25B 1/10** (2013.01 - KR); **F25B 13/00** (2013.01 - EP KR US); **F25B 41/30** (2021.01 - KR); **F25B 41/39** (2021.01 - EP KR); **F25B 43/00** (2013.01 - KR); **F25B 49/022** (2013.01 - EP KR US); **F25B 41/39** (2021.01 - US); **F25B 2313/02741** (2013.01 - EP KR US); **F25B 2400/0401** (2013.01 - EP KR US); **F25B 2400/0411** (2013.01 - EP KR US); **F25B 2400/0751** (2013.01 - EP KR US); **F25B 2400/13** (2013.01 - EP KR US); **F25B 2400/23** (2013.01 - EP KR US)

Cited by  
US10801757B2

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 2450647 A2 20120509**; **EP 2450647 A3 20150107**; CN 102466361 A 20120523; KR 101212681 B1 20121217; KR 20120049440 A 20120517; US 2012111050 A1 20120510

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**EP 11166009 A 20110513**; CN 201110071085 A 20110321; KR 20100110417 A 20101108; US 201113163441 A 20110617