

Title (en)  
Air conditioner

Title (de)  
Klimaanlage

Title (fr)  
Climatiseur

Publication  
**EP 2568247 A2 20130313 (EN)**

Application  
**EP 12183206 A 20120905**

Priority  
• KR 20110090780 A 20110907  
• KR 20110090781 A 20110907

Abstract (en)  
Provided is an air conditioner. The air conditioner includes a compressor (10), a condenser (20,30), a super cooling device (100), and an evaporator (30,20). The super cooling device includes: a first flow passage disposed in the super cooling device to guide the refrigerant coming from the condenser toward the evaporator; and a second flow passage located in the super cooling device for exchanging heat with the first flow passage and guiding the refrigerant toward the compressor. One of the first and second flow passage includes: a distribution part configured to divide a flow of the refrigerant; and an inner tube connected to the distribution part. A stream of the refrigerant flowing in the first flow passage exchanges heat with a stream of the refrigerant flowing in the second flow passage while using an outer surface area of the inner tube as a heat exchange area.

IPC 8 full level  
**F25B 13/00** (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP US)  
**F25B 13/00** (2013.01 - EP US); **F28D 7/0091** (2013.01 - EP US); **F28D 7/06** (2013.01 - EP US); **F28D 7/1607** (2013.01 - EP US); **F28F 9/0246** (2013.01 - EP US); **F25B 2400/054** (2013.01 - EP US); **F25B 2400/13** (2013.01 - EP US); **F25B 2500/18** (2013.01 - EP US)

Cited by  
CN106796066A; EP2966394A1; US9797658B2; WO2016191480A1

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 2568247 A2 20130313**; **EP 2568247 A3 20140716**; **EP 2568247 B1 20190410**; US 2013055753 A1 20130307

DOCDB simple family (application)  
**EP 12183206 A 20120905**; US 201213605703 A 20120906