

Title (en)  
SUBCOOLER AND AIR CONDITIONER INCLUDING THE SAME

Title (de)  
UNTERKÜHLER UND DAMIT VERSEHENE KLIMAANLAGE

Title (fr)  
SOUS-REFROIDISSEUR ET CLIMATISEUR COMPRENANT CELUI-CI

Publication  
**EP 3086070 A1 20161026 (EN)**

Application  
**EP 16165548 A 20160415**

Priority  
KR 20150058054 A 20150424

Abstract (en)  
A subcooler and an air conditioner including the same are provided. The includes a supercooling body to receive a first refrigerant passed through a condenser and a second refrigerant branched from the first refrigerant, a plurality of internal tubes provided inside the supercooling body and through which the first refrigerant flows, a flow path through which the second refrigerant flows, the flow path being a space external to the internal tubes in the supercooling body, and a baffle to support at least one of the internal tubes, wherein the baffle comprises a baffle body having an outer circumferential surface that is coupled to the supercooling body, a through-hole formed at the baffle body and through which a first internal tube of the internal tubes passes, and a support groove to support a second internal tube of the internal tubes.

IPC 8 full level  
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**F24F 13/24** (2013.01 - US); **F25B 5/02** (2013.01 - CN); **F25B 40/02** (2013.01 - CN US); **F25B 45/00** (2013.01 - US);  
**F28D 7/1607** (2013.01 - EP US); **F28F 9/0131** (2013.01 - EP US); **F28F 9/22** (2013.01 - EP US); **F28D 2021/0068** (2013.01 - EP US);  
**F28F 2009/226** (2013.01 - EP US)

Citation (applicant)  
KR 20130027290 A 20130315 - LG ELECTRONICS INC [KR]

Citation (search report)  
• [X] US 2014262171 A1 20140918 - LJUBICIC BLAZO [LU]  
• [X] US 4699211 A 19871013 - GEARY DAVID F [US], et al  
• [X] US 3630276 A 19711228 - KIKIN GERALD M, et al  
• [X] JP 2012072923 A 20120412 - MDI CORP  
• [A] JP 2012207813 A 20121025 - TOKYO ELECTRIC POWER CO INC

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 3086070 A1 20161026**; **EP 3086070 B1 20171122**; CN 106066103 A 20161102; CN 106066103 B 20190312; KR 101645132 B1 20160802;  
US 2016313036 A1 20161027

DOCDB simple family (application)  
**EP 16165548 A 20160415**; CN 201610105922 A 20160226; KR 20150058054 A 20150424; US 201615060209 A 20160303