

Title (en)  
Refrigerant system

Title (de)  
Kühlmittelsystem

Title (fr)  
Système réfrigérant

Publication  
**EP 2354728 A3 20130424 (EN)**

Application  
**EP 10197204 A 20101228**

Priority  
KR 20100011592 A 20100208

Abstract (en)  
[origin: EP2354728A2] Provided is a refrigerant system including a high-pressure bypass tube (45) guiding a refrigerant of a high-pressure tube (42) to flow into an indoor unit tube by bypassing a high-pressure valve (31). Thus, impact and noise that may be generated when an operation mode of an indoor unit (2) is switched to a heating mode may be minimized.

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

CPC (source: EP KR US)  
**F25B 41/20** (2021.01 - KR); **F25B 45/00** (2013.01 - KR); **F25B 49/02** (2013.01 - EP KR US); **F25B 13/00** (2013.01 - EP US); **F25B 2313/007** (2013.01 - EP US); **F25B 2313/0233** (2013.01 - EP US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2400/04** (2013.01 - EP US); **F25B 2400/075** (2013.01 - EP US); **F25B 2600/2501** (2013.01 - EP US); **F25B 2700/2104** (2013.01 - EP US)

Citation (search report)  
• [X] EP 0639745 A1 19950222 - DAIKIN IND LTD [JP]  
• [X] EP 1921400 A2 20080514 - LG ELECTRONICS INC [KR]

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 2354728 A2 20110810**; **EP 2354728 A3 20130424**; **EP 2354728 B1 20190703**; KR 101146409 B1 20120517; KR 20110092120 A 20110817; US 2011192183 A1 20110811

DOCDB simple family (application)  
**EP 10197204 A 20101228**; KR 20100011592 A 20100208; US 201113019642 A 20110202