

Title (en)

Multi air-conditioner for simultaneously cooling/heating room air and method for controlling the same

Title (de)

Mehrsystem-Klimaanlage zum gleichzeitigen Kühlen/Heizen der Raumluft und Verfahren zu ihrer Ansteuerung

Title (fr)

Climatiseur d'air multiple pour refroidir/réchauffer simultanément l'air de la pièce et son procédé de contrôle

Publication

EP 2006615 A3 20150520 (EN)

Application

EP 08150592 A 20080124

Priority

KR 20070061375 A 20070622

Abstract (en)

[origin: EP2006615A2] A multi air-conditioner (100) for simultaneously cooling/heating room air and a method for controlling the same are disclosed. The multi air-conditioner for simultaneously cooling/heating room air includes: a high-pressure gas pipe (410), a low-pressure gas pipe (430), and a liquid line (420), which are connected between at least one outdoor unit (200) and a plurality of cooling/heating switching sets (300); a flow-regulating valve (260) mounted to a bypass pipe (250) connected between the high-pressure gas pipe (410) and the liquid pipe (420); and a controller (500) for increasing an opening degree of the flow-regulating valve, if a heating rate is not below a reference rate during a heating-biased operation and is equal to or less than a required cooling capacity of an indoor cooling unit during the heating-biased operation.

IPC 8 full level

F25B 13/00 (2006.01); **F24F 11/76** (2018.01); **F25B 47/00** (2006.01)

CPC (source: EP KR)

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F25B 2313/005 (2013.01 - EP KR); **F25B 2313/007** (2013.01 - EP KR); **F25B 2313/0231** (2013.01 - EP KR); **F25B 2313/02741** (2013.01 - EP KR);
F25B 2313/0294 (2013.01 - KR); **F25B 2600/2501** (2013.01 - EP KR); **F25B 2700/2106** (2013.01 - EP KR)

Citation (search report)

- [X] EP 1645810 A2 20060412 - SAMSUNG ELECTRONICS CO LTD [KR]
- [A] EP 1635129 A2 20060315 - HITACHI AIR CONDITIONING SYS [JP]
- [A] US 2003010047 A1 20030116 - SHIMODA JUNICHI [JP]
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EP2354723A3; JP2013170718A; CN114135946A; GB2527457A; RU2612995C1; GB2527457B; SE541272C2; EP2833086A4; EP2863152A4;
CN112443947A; US9518755B2; WO2014141724A3; WO2024018594A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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KR 20080112670 A 20081226

DOCDB simple family (application)

EP 08150592 A 20080124; CN 200810082234 A 20080226; KR 20070061375 A 20070622