

Title (en)
HUMIDITY CONTROL DEVICE

Title (de)
FEUCHTIGKEITSREGELVORRICHTUNG

Title (fr)
RÉGULATEUR D'HUMIDITÉ

Publication
EP 2216607 A4 20161221 (EN)

Application
EP 08844254 A 20081030

Priority
• JP 2008003110 W 20081030
• JP 2007283683 A 20071031

Abstract (en)
[origin: EP2216607A1] A humidity control apparatus (10) includes: a casing (11); exhaust and air-supplying fans (25, 26) and dampers (41-48, 83, 84) for exchanging the outside air and the room air with each other via air passageways (31-34, 37, 38, 81, 82) of the casing (11); and a refrigerant, circuit (50) for controlling the humidity of the air passing through the air passageways. The humidity control apparatus (10) further includes a controller (60) for monitoring an abnormality inside the apparatus and determining the type of the detected abnormality. When the detected abnormality is an abnormality related to the refrigerant circuit (50) and is not an abnormality related to the exhaust and air-supplying fans (25, 26) and the dampers (41-48, 83, 84), the controller (60) stops the refrigeration cycle of the refrigerant circuit (50) to shut down the humidity-controlling mode, and keeps the ventilation mode available.

IPC 8 full level
F24F 11/02 (2006.01); **F24F 3/14** (2006.01); **F24F 3/147** (2006.01); **F24F 7/007** (2006.01); **F24F 7/08** (2006.01); **F24F 11/00** (2006.01);
F25B 13/00 (2006.01)

CPC (source: EP KR US)

F24F 3/1405 (2013.01 - EP KR US); **F24F 3/1411** (2013.01 - EP US); **F24F 3/1429** (2013.01 - EP KR US); **F24F 11/0001** (2013.01 - KR);
F24F 11/0008 (2013.01 - KR); **F24F 11/30** (2017.12 - EP US); **F24F 11/32** (2017.12 - KR); **F24F 11/38** (2017.12 - EP KR US);
F24F 11/65 (2017.12 - KR); **F24F 11/83** (2017.12 - EP US); **F25B 13/00** (2013.01 - KR); **F24F 11/32** (2017.12 - EP US);
F24F 2011/0002 (2013.01 - KR); **F24F 2110/20** (2017.12 - EP KR US); **F24F 2110/22** (2017.12 - EP KR US); **F25B 13/00** (2013.01 - EP US)

Citation (search report)

- [XI] JP 2000314546 A 20001114 - MATSUSHITA ELECTRIC IND CO LTD
- [A] JP 2007014874 A 20070125 - MATSUSHITA ELECTRIC IND CO LTD
- [A] JP 2002089905 A 20020327 - TOSHIBA CARRIER KK
- [A] WO 0109555 A1 20010208 - CATERPILLAR INC [US]
- See references of WO 2009057306A1

Citation (examination)

JP H05141747 A 19930608 - MITSUBISHI ELECTRIC CORP

Cited by

EP3665423A4; EP3059513A4; US11703237B2

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

DOCDB simple family (publication)

EP 2216607 A1 20100811; EP 2216607 A4 20161221; AU 2008320195 A1 20090507; AU 2008320195 B2 20111222;
CN 101842640 A 20100922; JP 2009109124 A 20090521; KR 101191604 B1 20121015; KR 20100087192 A 20100803;
US 2010252642 A1 20101007; WO 2009057306 A1 20090507

DOCDB simple family (application)

EP 08844254 A 20081030; AU 2008320195 A 20081030; CN 200880113903 A 20081030; JP 2007283683 A 20071031;
JP 2008003110 W 20081030; KR 20107011769 A 20081030; US 74059608 A 20081030