

Title (en)
Air conditioner refrigerant circuit

Title (de)
Kühlschaltung für eine Klimaanlage

Title (fr)
Circuit réfrigérant de climatiseur

Publication
EP 1933102 A1 20080618 (EN)

Application
EP 08003787 A 20010712

Priority
• EP 01947994 A 20010712
• JP 2000213115 A 20000713

Abstract (en)
An air conditioner refrigerant circuit, in which the refrigerant circuit includes an outdoor unit refrigerant circuit that includes an accumulator 105, a compressor 101, a four way directional control valve 102 and an outdoor heat exchanger 103 disposed inside an outdoor unit 100, and an indoor heat exchanger 201 disposed inside an indoor heat exchanger 200. A bypass circuit is provided that bypasses liquid line piping 131 and gas line piping 132, a receiver 121 is provided that collects liquid refrigerant in the bypass circuit, and a liquid line electric valve 128 and a gas line electric valve 129 are provide before and after the receiver 121.

IPC 8 full level
F24F 11/02 (2006.01); **F25B 1/00** (2006.01); **F25B 13/00** (2006.01); **F25B 40/02** (2006.01); **F25B 47/00** (2006.01)

CPC (source: EP KR)
F25B 13/00 (2013.01 - EP); **F25B 43/02** (2013.01 - KR); **F25B 43/043** (2013.01 - KR); **F25B 45/00** (2013.01 - EP); **F25B 40/02** (2013.01 - EP); **F25B 47/006** (2013.01 - EP); **F25B 2313/021** (2013.01 - KR); **F25B 2313/0232** (2013.01 - EP); **F25B 2313/02331** (2013.01 - EP); **F25B 2313/02334** (2013.01 - EP); **F25B 2313/02741** (2013.01 - KR); **F25B 2313/0311** (2013.01 - EP); **F25B 2313/0314** (2013.01 - EP); **F25B 2313/0315** (2013.01 - EP); **F25B 2345/006** (2013.01 - KR); **F25B 2400/04** (2013.01 - KR); **F25B 2400/0415** (2013.01 - EP); **F25B 2400/05** (2013.01 - EP); **F25B 2400/16** (2013.01 - EP KR); **F25B 2400/19** (2013.01 - EP); **F25B 2600/02** (2013.01 - EP); **F25B 2600/2501** (2013.01 - KR); **F25B 2600/2523** (2013.01 - EP); **F25B 2700/1931** (2013.01 - EP); **F25B 2700/1933** (2013.01 - EP); **F25B 2700/2104** (2013.01 - EP); **F25B 2700/2106** (2013.01 - EP); **F25B 2700/21152** (2013.01 - EP)

Citation (applicant)
US 5784892 A 19980728 - REEDY WAYNE P [US]

Citation (search report)
• [XY] US 5784892 A 19980728 - REEDY WAYNE P [US]
• [Y] EP 0971183 A1 20000112 - DAIKIN IND LTD [JP]
• [A] JP S60114669 A 19850621 - TOSHIBA KK
• [A] US 5937660 A 19990817 - LAU BILLY YING BUI [US], et al
• [A] US 5140827 A 19920825 - REEDY WAYNE R [US]
• [A] JP H07120092 A 19950512 - FUJITSU GENERAL LTD

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1300637 A1 20030409; **EP 1300637 A4 20061220**; **EP 1300637 B1 20081126**; AT E415601 T1 20081215; AT E449295 T1 20091215; AU 6951201 A 20020130; AU 766170 B2 20031009; CN 1162665 C 20040818; CN 1386184 A 20021218; DE 60136707 D1 20090108; DE 60140584 D1 20091231; EP 1933102 A1 20080618; EP 1933102 B1 20091118; JP 2002022306 A 20020123; JP 3584862 B2 20041104; KR 100474400 B1 20050309; KR 20020035137 A 20020509; WO 0206738 A1 20020124

DOCDB simple family (application)
EP 01947994 A 20010712; AT 01947994 T 20010712; AT 08003787 T 20010712; AU 6951201 A 20010712; CN 01802003 A 20010712; DE 60136707 T 20010712; DE 60140584 T 20010712; EP 08003787 A 20010712; JP 0106061 W 20010712; JP 2000213115 A 20000713; KR 20027003261 A 20020312