Title (en)
  Air conditioner

Title (de)
  Klimaanlage

Title (fr)
  Climatiseur

Publication
  EP 1830142 B1 20090701 (EN)

Application
  EP 07012491 A 20010724

Priority
  • EP 01950048 A 20010724
  • JP 2000225427 A 20000726

Abstract (en)
  [origin: EP1304532A1] In a refrigerant circuit, a bypass circuit for providing a bypass between a liquid-side pipe 131 and a gas-side pipe 132 is provided with a receiver 121 collecting liquid refrigerant, a liquid pipe motor-operated valve 128 provided in a liquid pipe connection pipe 122 connecting the receiver 121 to the liquid-side pipe 131, and a gas pipe motor-operated valve 129 provided in a gas pipe connection pipe 123 connecting the receiver 121 to the gas-side pipe 132. Presence/absence of surplus refrigerant is determined based on a current heat exchange capacity of the indoor heat exchanger 103, and the amount of refrigerant in the receiver 121 is controlled by controlling the liquid pipe motor-operated valve 128 and the gas pipe motor-operated valve 129. <IMAGE>

IPC 8 full level
  F25B 1/00 (2006.01); **F25B 13/00** (2006.01); **F25B 41/04** (2006.01); F25B 45/00 (2006.01); F25B 49/02 (2006.01)

CPC (source: EP KR US)
  F25B 13/00 (2013.01 - EP KR US); **F25B 41/20** (2021.01 - EP US); **F25B 41/24** (2021.01 - KR); **F25B 45/00** (2013.01 - KR);
  F25B 49/02 (2013.01 - KR); F25B 41/24 (2021.01 - EP US); F25B 45/00 (2013.01 - EP); F25B 49/02 (2013.01 - EP);
  F25B 2313/0233 (2013.01 - EP KR); F25B 2313/0314 (2013.01 - EP KR); F25B 2313/0315 (2013.01 - EP KR); F25B 2400/16 (2013.01 - EP KR);
  F25B 2600/024 (2013.01 - EP KR); F25B 2600/05 (2013.01 - EP KR); F25B 2700/151 (2013.01 - EP KR); F25B 2700/1931 (2013.01 - EP KR);
  F25B 2700/1933 (2013.01 - EP KR); F25B 2700/195 (2013.01 - EP KR); F25B 2700/2106 (2013.01 - EP); F25B 2700/21152 (2013.01 - EP KR)

Cited by
  US8966919B2

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 1304532 A1 20030423; **EP 1304532 A4 20061102**; **EP 1304532 B1 20080723**; AT E402379 T1 20080815; AT E434744 T1 20090715;
  AT E435405 T1 20090715; AT E437343 T1 20090815; AU 7108301 A 20020205; AU 766171 B2 20031009; CN 1170095 C 20041006;
  CN 1386185 A 20021218; DE 60134984 D1 20080904; DE 60139091 D1 20090806; DE 60139168 D1 20090813; DE 60139353 D1 20090903;
  EP 1830141 A1 20070905; EP 1830141 B1 20090624; EP 1830142 A1 20070905; EP 1830142 B1 20090701; EP 1832820 A2 20070912;
  EP 1832820 A3 20070926; EP 1832820 B1 20090722; ES 2307629 T3 20081201; JP 2002039642 A 20020206; JP 4089139 B2 20080528;
  KR 100478392 B1 20050328; KR 20020035138 A 20020509; WO 0208674 A1 20020131

DOCDB simple family (application)
  EP 01950048 A 20010724; AT 01950048 T 20010724; AT 07012490 T 20010724; AT 07012491 T 20010724; AT 07012492 T 20010724;
  AU 7108301 A 20010724; CN 01802132 A 20010724; DE 60134984 T 20010724; DE 60139091 T 20010724; DE 60139168 T 20010724;
  DE 60139353 T 20010724; EP 07012490 A 20010724; EP 07012491 A 20010724; EP 07012492 A 20010724; ES 01950048 T 20010724;
  JP 0106389 W 20010724; JP 2000225427 A 20000726; KR 20027003272 A 20020312