

Title (en)
MECHANISM FOR CONTROLLING AND OPERATING COMPRESSOR CAPACITY AND AIR CONDITIONER HAVING THE SAME

Title (de)
MECHANISMUS ZUR STEUERUNG UND EINSTELLUNG DER VERDICHTERLEISTUNG UND KLIMAANLAGE DAMIT

Title (fr)
MÉCANISME POUR COMMANDER ET FAIRE FONCTIONNER UNE CAPACITÉ DE COMPRESSEUR ET CLIMATISEUR AYANT CELUI-CI

Publication
EP 2143952 A4 20150617 (EN)

Application
EP 08722683 A 20080324

Priority

- JP 2008055367 W 20080324
- JP 2007085368 A 20070328

Abstract (en)
[origin: EP2143952A1] This invention provides a compressor capacity control operation mechanism and an air conditioner provided with this mechanism, whereby cost increases are prevented and the capacity of the compressor can be controlled in the same manner as in a case of using two two-way valves. A compressor capacity control operation circuit (35) includes a pilot valve (90) for use as a four-way switching valve having four connecting capillary tubes (93a to 93d), a suction branching pipe (87), an intermediate pipe (88), and a discharge branching pipe (89). The suction branching pipe (87) is connected to a first capillary tube (93a) as one of the four connecting capillary tubes, and is a pipe branching off from a suction pipe (28) of a compressor (22) and having a larger diameter than the first capillary tube (93a). The intermediate pipe (88) is connected to a second capillary tube (93b) as one of the four connecting capillary tubes, and is a pipe connected to a cylinder intermediate part (79) of the compressor (22) and having a larger diameter than the second capillary tube (93b). The discharge branching pipe (89) is connected to a third capillary tube (93c) as one of the four connecting capillary tubes, and is a pipe branching off from a discharge pipe (30) of the compressor (22) and having a larger diameter than the third capillary tube (93c).

IPC 8 full level
F25B 41/04 (2006.01); **F04C 28/26** (2006.01)

CPC (source: EP KR US)
F04C 18/0215 (2013.01 - EP KR US); **F04C 28/26** (2013.01 - EP KR US); **F25B 13/00** (2013.01 - EP US); **F25B 41/20** (2021.01 - KR); **F25B 41/24** (2021.01 - EP US); **F25B 49/022** (2013.01 - EP US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2500/01** (2013.01 - EP US); **F25B 2600/02** (2013.01 - EP US); **F25B 2600/0261** (2013.01 - EP US)

Citation (search report)

- [A] US 2006093504 A1 20060504 - KIM CHEOL-HWAN [KR], et al
- See references of WO 2008123171A1

Cited by
EP2626652A1; EP2716999A4; FR2976052A1

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 2143952 A1 20100113; **EP 2143952 A4 20150617**; AU 2008236150 A1 20081016; AU 2008236150 B2 20110428; CN 101652570 A 20100217; JP 2008240699 A 20081009; KR 101212642 B1 20121214; KR 20090130043 A 20091217; US 2010037642 A1 20100218; WO 2008123171 A1 20081016

DOCDB simple family (application)
EP 08722683 A 20080324; AU 2008236150 A 20080324; CN 200880010351 A 20080324; JP 2007085368 A 20070328; JP 2008055367 W 20080324; KR 20097021309 A 20080324; US 53109908 A 20080324