

Title (en)
Air conditioner

Title (de)
Klimaanlage

Title (fr)
Dispositif de conditionnement d'air

Publication
EP 1701114 A1 20060913 (EN)

Application
EP 05256352 A 20051013

Priority
KR 20040083299 A 20041018

Abstract (en)

Disclosed is an air conditioner. The air conditioner has a main compressor for compressing a refrigerant; a four-way valve disposed at a discharge side of the main compressor and switching a fluid path; an outdoor heat exchanger having one side connected with the four-way valve; an indoor heat exchanger having one side connected with the outdoor heat exchanger and the other side connected with the four-way valve; an expansion valve disposed between the outdoor heat exchanger and the indoor heat exchanger; and an auxiliary compression unit for reducing the load on the main compressor. Accordingly, since the load on the main compressor decreases, efficiency and reliability of the main compressor are enhanced and noises are reduced. In addition, an instrumental part such as a bearing inside the main compressor is not subject to abrasion and high heat damage to a motor unit is prevented.

IPC 8 full level

F25B 13/00 (2006.01)

CPC (source: EP KR US)

F24F 5/00 (2013.01 - KR); **F25B 1/00** (2013.01 - KR); **F25B 13/00** (2013.01 - EP US); **F25B 31/004** (2013.01 - EP US);
F25B 41/00 (2013.01 - KR); **F25B 1/10** (2013.01 - EP US); **F25B 2500/02** (2013.01 - EP US); **F25B 2700/1931** (2013.01 - EP US);
F25B 2700/1933 (2013.01 - EP US); **F25B 2700/2106** (2013.01 - EP US)

Citation (search report)

- [X] US 2003233838 A1 20031225 - LEE WON HEE [KR], et al
- [X] US 6276148 B1 20010821 - SHAW DAVID N [US]
- [X] US 5839886 A 19981124 - SHAW DAVID N [US]
- [X] US 4362030 A 19821207 - VOORHIS ROGER J

Cited by

DE102013014543A1

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

US 2006080990 A1 20060420; CN 1763459 A 20060426; DE 602005006377 D1 20080612; DE 602005006377 T2 20090610;
EP 1701114 A1 20060913; EP 1701114 B1 20080430; KR 100575693 B1 20060503; KR 20060034148 A 20060421

DOCDB simple family (application)

US 24970605 A 20051014; CN 200510114073 A 20051018; DE 602005006377 T 20051013; EP 05256352 A 20051013;
KR 20040083299 A 20041018