

Title (en)
HEAT-PUMP AIR CONDITIONER

Title (de)
WÄRMEPUMPENKLIMAANLAGE

Title (fr)
CLIMATISEUR D'AIR À POMPE À CHALEUR

Publication
EP 3388758 A1 20181017 (EN)

Application
EP 18176668 A 20081111

Priority
• JP 2007303420 A 20071122
• EP 08851740 A 20081111
• JP 2008070471 W 20081111

Abstract (en)
An object is to provide a heat-pump air conditioner that can reliably prevent an outdoor heat exchanger and a drain pan from freezing during heating, while maintaining high capacity and high performance, without affecting the cooling/heating capacity and performance. In a heat-pump air conditioner 1 provided with a gas injection circuit 33 that injects an intermediate-pressure refrigerant into an intermediate intake port 21A of a compressor 21, an auxiliary heat exchanger 24 having an anti-freezing function is provided at a lower part of the outdoor heat exchanger 23, and a liquefied injection circuit 36 is connected, which, after the intermediate-pressure refrigerant vaporized in the gas injection circuit 33 is switched by switching valves 34 and 35 to be introduced into the auxiliary heat exchanger 24, guides the refrigerant to the intermediate intake port 21A of the compressor 21.

IPC 8 full level
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Citation (applicant)
• JP S608665 A 19850117 - MATSUSHITA REFRIGERATION
• JP S60114666 A 19850621 - MATSUSHITA ELECTRIC IND CO LTD
• JP H07280378 A 19951027 - MITSUBISHI HEAVY IND LTD
• JP 2006097992 A 20060413 - SHARP KK

Citation (search report)
• [A] JP H08193771 A 19960730 - HITACHI LTD, et al
• [A] US 5056327 A 19911015 - LAMMERT PAUL F [US]
• [A] JP 2006258343 A 20060928 - MITSUBISHI ELECTRIC CORP

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