

Title (en)

AIR-CONDITIONING HOT-WATER SUPPLY SYSTEM

Title (de)

HEISSWASSERVERSORGUNGSSYSTEM FÜR EINE KLIMAANLAGE

Title (fr)

SYSTÈME D'ALIMENTATION EN EAU CHAUDE POUR CLIMATISEUR

Publication

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Application

EP 10823244 A 20100811

Priority

- JP 2009238938 A 20091016
- JP 2010063638 W 20100811

Abstract (en)

Problem to be Solved: To provide an air-conditioning hot-water supply system in which the advantages of an ejector can be provided in both cooling operation and heating operation and which allows a reduction in power consumption of an air-conditioning refrigerant circuit. Solution: An air-conditioning refrigerant circuit (10) for selectively performing cooling operation and heating operation is composed of two circuits: a high-temperature-side refrigerant circuit constructed of a discharge portion (18c) of an ejector (18), a compressor (11), a four-way valve (12b), an intermediate heat exchanger (90), a second heat exchanger (17b), and a nozzle portion (18a) of the ejector; and a low-temperature-side refrigerant circuit constructed of the discharge portion (18c) of the ejector, the compressor (11), a four-way valve (12a), a heat exchanger (13a), an expansion valve (14), an expansion valve (16), a first heat exchanger (17a), and a suction portion (18b) of the ejector. A refrigerant pipe of the low-temperature-side refrigerant circuit for connecting between the expansion valve (14) and the expansion valve (16) is joined to a refrigerant pipe of the high-temperature-side refrigerant circuit for connecting between the intermediate heat exchanger (90) and the second heat exchanger (17b), to form a common refrigerant circuit into which a refrigerant flows from both of the high-temperature-side refrigerant circuit and the low-temperature-side refrigerant circuit. An air-conditioning expansion valve (15) is incorporated in the common refrigerant circuit.

IPC 8 full level

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CPC (source: EP)

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Cited by

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