

Title (en)
HEAT PUMP HOT WATER SUPPLIER

Title (de)
WÄRMEPUMPE FÜR HEISSWASSERVERSORGUNGSVORRICHTUNG

Title (fr)
ALIMENTATION EN EAU CHAUDE D'UNE POMPE À CHALEUR

Publication
EP 2009371 A4 20151118 (EN)

Application
EP 07740149 A 20070328

Priority
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• JP 2006099382 A 20060331

Abstract (en)
[origin: EP2009371A1] It is an object of the present invention to prevent a shortage of suction gas in a compressor by ensuring that surplus refrigerant does not occur in a refrigerant circuit and to suppress the occurrence of noise in the vicinity of a rotary type compressor. A refrigerating apparatus (1) is disposed with a compressor (21), a first heat exchanger (22), an expansion mechanism (23), a second heat exchanger (24) and a muffler (26). The compressor is a rotary type compressor that compresses a refrigerant. The first heat exchanger causes the refrigerant of a high temperature and a high pressure that has been compressed by the compressor to exchange heat with a first fluid. The expansion mechanism reduces the pressure of the refrigerant that has been condensed inside the first heat exchanger. The second heat exchanger causes the refrigerant whose pressure has been reduced by the expansion mechanism to exchange heat with a second fluid. The muffler is disposed between the second heat exchanger and the compressor and reduces the pulsation of the flow of the refrigerant.

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Citation (search report)
• [Y] JP 2005188863 A 20050714 - DAIKIN IND LTD
• [Y] US 6220050 B1 20010424 - COOKSEY EDWARD A [US]
• See references of WO 2007114187A1

Cited by
CN104968942A; US2021095889A1; US10578339B2; US11821657B2; US10041698B2; US11300322B2

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