

Title (en)

HEAT PUMP WITH MICROCHANNEL HEAT EXCHANGERS AS BOTH OUTDOOR AND REHEAT HEAT EXCHANGERS

Title (de)

WÄRMEPUMPE MIT MIKROKANALWÄRMETAUSCHERN ALS AUSSEN- WIE AUCH NACHHEIZWÄRMETAUSCHER

Title (fr)

POMPE À CHALEUR AVEC ÉCHANGEURS THERMIQUES À MICRO-CANAU EN TANT QU'ÉCHANGEUR THERMIQUE EXTÉRIEUR ET ÉCHANGEUR RÉCHAUFFEUR

Publication

EP 2310770 A4 20131218 (EN)

Application

EP 09795030 A 20090707

Priority

- US 2009049734 W 20090707
- US 7915408 P 20080709

Abstract (en)

[origin: WO2010005918A2] A heat pump refrigerant system has a compressor for delivering a compressed refrigerant to a reversing refrigerant flow control device. The reversing refrigerant flow control device selectively delivers refrigerant to an outdoor heat exchanger in a cooling mode of operation, and to an indoor heat exchanger in a heating mode of operation. Refrigerant from an outdoor heat exchanger passes through an expansion device to an indoor heat exchanger in a cooling mode, and from the indoor heat exchanger through an expansion device and to the outdoor heat exchanger in a heating mode. A reheat circuit includes a reheat heat exchanger positioned to be in the path of air delivered over the indoor heat exchanger and into an environment to be conditioned. The reheat heat exchanger and outdoor heat exchanger both are provided by microchannel heat exchangers. The reheat circuit is utilized to minimize or prevent refrigerant charge migration while operating at a wide spectrum of environmental conditions or switching between modes of operation.

IPC 8 full level

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Citation (search report)

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- [Y] US 5765393 A 19980616 - SHLAK PETER [US], et al
- [A] US 5996368 A 19991207 - KIM KYUNG SIK [KR]
- [A] WO 2006083484 A1 20060810 - CARRIER CORP [US], et al
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- See references of WO 2010005918A2

Designated contracting state (EPC)

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DOCDB simple family (application)

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