

Title (en)

REFRIGERATION CIRCUIT AND REFRIGERATION UNIT WITH MICROCHANNEL EVAPORATOR

Title (de)

KÜHLKREISLAUF UND KÜHLEINHEIT MIT MIKROKANALVERDAMPFER

Title (fr)

CIRCUIT DE RÉFRIGÉRATION ET UNITÉ DE RÉFRIGÉRATION DOTÉE D'UN ÉVAPORATEUR À MICROCANAU

Publication

EP 3872421 A1 20210901 (EN)

Application

EP 20159559 A 20200226

Priority

EP 20159559 A 20200226

Abstract (en)

A refrigeration circuit 200 comprises: a compressor 202; a condenser 203; a expansion valve 208 and sensor 209, wherein the expansion valve sensor 209 is for controlling the degree of opening of the expansion valve 208 in accordance with the temperature and/or pressure of refrigerant fluid at the bulb 209; an evaporator 205, wherein the evaporator 205 is a microchannel or microtube heat exchanger; and a further heat exchanger 211. The further heat exchanger 211 is positioned in the circuit between a refrigerant outlet of the evaporator 205 and the expansion valve sensor 209 and is configured for internal heat exchange between refrigerant in a return flow line leading from the evaporator 205 and refrigerant in a condensed flow line leading to the expansion valve 208.

IPC 8 full level

F25B 40/00 (2006.01)

CPC (source: CN EP)

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Citation (search report)

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- [I] WO 0163187 A1 20010830 - E PAK TECHNOLOGY INC [US], et al
- [I] US 2003126875 A1 20030710 - ENOMOTO SHINICHI [JP]
- [A] WO 9641111 A1 19961219 - HEAT PIPE TECHNOLOGY INC [US]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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