

Title (en)

Heat exchanger and refrigeration cycle device using the same

Title (de)

Wärmetauscher und Kältekreislaufvorrichtung mit einem solchen Wärmetauscher

Title (fr)

Échangeur thermique et dispositif avec circuit de réfrigération utilisant cet échangeur

Publication

EP 1826521 A3 20131211 (EN)

Application

EP 07003912 A 20070226

Priority

JP 2006050561 A 20060227

Abstract (en)

[origin: EP1826521A2] Heat exchanger, more especially evaporator for use in a refrigeration cycle device in which carbon dioxide is used as a refrigerant, including a pair of plate materials (76,70B), the whole periphery of a peripheral portion of an outer plate (76) as at least one of the plate materials (76) being secured to the other plate material (70B) constituting a bottom surface of an inner tank (70) to constitute a sealed refrigerant passage space (77) between the plate materials (76,70B), a portion of the outer plate (76) other than the peripheral portion being provided with a plurality of secured inner portions (78) which are secured at predetermined intervals to the bottom surface (70B), and a plurality of refrigerant inlet tubes (16A) and refrigerant outlet tubes (16B) being attached so as to communicate with the refrigerant passage space (77).

IPC 8 full level

F28F 3/12 (2006.01); **F25B 9/00** (2006.01); **F25B 39/02** (2006.01); **F28F 3/14** (2006.01)

CPC (source: EP US)

F25B 39/022 (2013.01 - EP US); **F28F 3/12** (2013.01 - EP US); **F28F 3/14** (2013.01 - EP US); **F25B 9/008** (2013.01 - EP US); **F25B 2309/061** (2013.01 - EP US)

Citation (search report)

- [XAY] US 2626130 A 19530120 - LEON RASKIN
- [Y] JP 2003185271 A 20030703 - MATSUSHITA ELECTRIC IND CO LTD
- [Y] WO 2004085927 A1 20041007 - SIDDONS STEVENS DEVELOPMENTS P [AU], et al
- [A] EP 0157061 A1 19851009 - JACQUEMIN PIERRE
- [A] US 2002195234 A1 20021226 - WU NANPING [US]
- [A] US 3141500 A 19640721 - WALTER RASKIN
- [A] US 2908149 A 19591013 - HALL JAMES A
- [A] US 4700445 A 19871020 - RASKIN RUBIN [US]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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