

Title (en)

HEAT TRANSFER DEVICE USING CAPILLARY PUMPING

Title (de)

WÄRMEÜBERTRAGUNGSVORRICHTUNG MIT KAPILLARPUMPUNG

Title (fr)

DISPOSITIF DE TRANSPORT DE CHALEUR À POMPAGE CAPILLAIRE

Publication

EP 2756252 B1 20171011 (FR)

Application

EP 12766395 A 20120912

Priority

- FR 1158203 A 20110914
- EP 2012067753 W 20120912

Abstract (en)

[origin: WO2013037785A1] Heat transfer device using capillary pumping, designed to extract heat from a hot source (11) and surrender this heat to a cold source (12) using a two-phase working fluid, comprising an evaporator (1) having a microporous mass (10) performing capillary pumping of the fluid in the liquid phase, a condenser (2), a reservoir (3) having an interior volume (30) and an inlet and/or outlet orifice (31; 31a, 31b), a vapour communication circuit (4) connecting the outlet of the evaporator to the inlet of the condenser, a liquid communication circuit (5), characterized in that it comprises a nonreturn member (6) positioned between the interior volume (30) of the reservoir and the microporous mass (10) of the evaporator, and designed to prevent liquid present in the evaporator from moving to the interior volume of the reservoir.

IPC 8 full level

F28D 15/04 (2006.01); **F28D 15/06** (2006.01)

CPC (source: EP US)

F28D 15/043 (2013.01 - EP US); **F28D 15/06** (2013.01 - EP US)

Citation (examination)

- JP S60205187 A 19851016 - SHOWA ALUMINIUM CO LTD
- US 5725018 A 19980310 - PACZONAY JOSEPH R [US]
- US 2008115843 A1 20080522 - WANG CHI-CHANG [TW]

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

FR 1158203 A 20110914; CN 201280055586 A 20120912; EP 12766395 A 20120912; EP 2012067753 W 20120912; ES 12766395 T 20120912; JP 2014530189 A 20120912; US 201214344883 A 20120912