

Title (en)

HEAT TRANSPORT DEVICE WITH DIPHASIC FLUID

Title (de)

WÄRMETRANSPORTVORRICHTUNG MIT ZWEIPHASIGER FLÜSSIGKEIT

Title (fr)

DISPOSITIF DE TRANSPORT DE CHALEUR À FLUIDE DIPHASIQUE

Publication

**EP 2956729 B1 20180905 (FR)**

Application

**EP 14704781 A 20140214**

Priority

- FR 1351282 A 20130214
- EP 2014052896 W 20140214

Abstract (en)

[origin: WO2014125064A1] The invention relates to a heat transport device with a diphasic working fluid contained in a general closed circuit, including an evaporator (1) having a microporous body (10) suitable for providing capillary pumping of liquid phase fluid; a condenser (2); a tank (3) having an inner space (30), with a liquid portion (6) and a gas portion (7); and an inlet/outlet (31) arranged at the liquid portion, wherein the volume of the liquid portion can vary between a minimum volume (Vmin) and a maximum volume (Vmax), characterized in that the gas portion (7) of the tank contains the vapor phase of the working fluid, at a first partial pressure (P1), and a non-condensable auxiliary gas (8) at a second partial pressure (P2), wherein the second partial pressure is greater than the first partial pressure, at least when the liquid portion (6) is at the minimum volume thereof.

IPC 8 full level

**F28D 15/02** (2006.01); **F28D 15/04** (2006.01); **F28D 15/06** (2006.01)

CPC (source: EP US)

**F28D 15/025** (2013.01 - US); **F28D 15/0266** (2013.01 - EP US); **F28D 15/043** (2013.01 - EP US); **F28D 15/06** (2013.01 - EP US); **F28F 2265/12** (2013.01 - EP US)

Citation (examination)

US 5816313 A 19981006 - BAKER DAVID [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

DOCDB simple family (publication)

**FR 3002028 A1 20140815**; **FR 3002028 B1 20170602**; CN 105074373 A 20151118; CN 105074373 B 20201016; EP 2956729 A1 20151223; EP 2956729 B1 20180905; ES 2690339 T3 20181120; JP 2016507043 A 20160307; JP 6351632 B2 20180704; US 10234213 B2 20190319; US 2015369541 A1 20151224; WO 2014125064 A1 20140821

DOCDB simple family (application)

**FR 1351282 A 20130214**; CN 201480008653 A 20140214; EP 14704781 A 20140214; EP 2014052896 W 20140214; ES 14704781 T 20140214; JP 2015557438 A 20140214; US 201414767887 A 20140214