

Title (en)
ENERGY CONVERSION DEVICE

Title (de)
ENERGIEUMWANDLUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE CONVERSION D'ÉNERGIE

Publication
EP 2059731 B8 20120509 (EN)

Application
EP 07789307 A 20070823

Priority
• GB 2007003216 W 20070823
• GB 0616848 A 20060825

Abstract (en)
[origin: US2010115977A1] A thermodynamic energy conversion device (14) based on the effect of differential evaporation generated by a convex liquid surface and by a temperature gradient is constructed for the use either as a heat or hydraulic pump. In one arrangement the device (14) comprises two heat conductive containers (1) and (2); a working liquid (5) disposed in said containers with open surfaces (6) and (6'); a vapour (7) of the working liquid; a porous device (8) for creating at least one convex meniscus (9) on the open surface (6), of the working liquid (5) in one of the containers said convex meniscus having higher mean curvature than that of the open surface (6'); means (10) for connecting containers (1) and (2) to an external hydraulic circuit (11). An efficient external combustion engine using such a device (14) is disclosed.

IPC 8 full level
F25B 30/00 (2006.01)

CPC (source: EP GB US)
F02G 1/02 (2013.01 - GB); **F02G 1/043** (2013.01 - GB); **F04B 17/00** (2013.01 - GB); **F04B 19/00** (2013.01 - GB); **F04F 1/04** (2013.01 - GB);
F04F 1/18 (2013.01 - GB); **F25B 30/00** (2013.01 - EP GB US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2010115977 A1 20100513; US 8266915 B2 20120918; AT E550613 T1 20120415; DK 2059731 T3 20120709; EP 2059731 A1 20090520;
EP 2059731 B1 20120321; EP 2059731 B8 20120509; GB 0616848 D0 20061025; GB 2441149 A 20080227; GB 2441149 B 20110413;
WO 2008023183 A1 20080228

DOCDB simple family (application)
US 43891707 A 20070823; AT 07789307 T 20070823; DK 07789307 T 20070823; EP 07789307 A 20070823; GB 0616848 A 20060825;
GB 2007003216 W 20070823