

Title (en)

METHOD AND DEVICE FOR GENERATING MECHANICAL OR ELECTRICAL ENERGY FROM HEAT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR GEWINNUNG VON MECHANISCHER ODER ELEKTRISCHER ENERGIE AUS WÄRME

Title (fr)

PROCEDE ET DISPOSITIF POUR PRODUIRE DE L'ENERGIE MECANIQUE OU ELECTRIQUE A PARTIR DE CHALEUR

Publication

**EP 1941160 A1 20080709 (DE)**

Application

**EP 06806086 A 20061002**

Priority

- EP 2006009680 W 20061002
- DE 102005049215 A 20051007

Abstract (en)

[origin: WO2007042215A1] A method for generating mechanical energy from heat is provided. It comprises the steps of: extracting heat from a heat source; transferring the extracted heat to a heat fluid circulating in a closed heat circuit (200, 300) and evaporating the heat fluid by means of the transferred heat while increasing the pressure in the evaporated heat fluid; wherein the heat fluid under high pressure flows through a turbo-machine (22) and thereby performs work while it cools and expands; the heat fluid that has expanded and cooled after flowing through the turbo-machine is condensed again; and the pressure of the condensed heat fluid is increased again by means of the heat of the heat source, and the heat fluid is chosen such that, by using a temperature range with a maximum temperature of no more than 13°C, a vapour pressure difference of at least 0.5 MPa can be realized.

IPC 8 full level

**F03G 7/04** (2006.01); **F02C 1/05** (2006.01)

CPC (source: EP US)

**F01K 25/08** (2013.01 - EP US); **F02C 1/05** (2013.01 - EP); **F03G 6/003** (2013.01 - EP); **F24T 10/30** (2018.04 - EP US); **Y02E 10/10** (2013.01 - EP); **Y02E 10/46** (2013.01 - EP)

Citation (search report)

See references of WO 2007042215A1

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

DOCDB simple family (publication)

**DE 102005049215 A1 20070419**; EP 1941160 A1 20080709; WO 2007042215 A1 20070419

DOCDB simple family (application)

**DE 102005049215 A 20051007**; EP 06806086 A 20061002; EP 2006009680 W 20061002