Title (en)

METHOD AND DEVICE FOR CONVERTING THERMAL ENERGY OF A LOW TEMPERATURE HEAT SOURCE INTO MECHANICAL ENERGY

Title (de)

VERFAHREN UND VORRICHTUNG ZUR UMWANDLUNG DER WÄRMEENERGIE EINER NIEDERTEMPERATUR-WÄRMEQUELLE IN MECHANISCHE ENERGIE

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE TRANSFORMER L'ÉNERGIE THERMIQUE D'UNE SOURCE DE CHALEUR BASSE TEMPÉRATURE EN ÉNERGIE MÉCANIQUE

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Abstract (en)

[origin: WO2009030283A2] The invention relates a method and to a device (1) for converting thermal energy of a low temperature heat source (20) into mechanical energy in a closed circuit. The method consists of heating a liquid working agent by transmitting heat from the low temperature source (20) and partially evaporating it in an expansion device (3). According to the invention, erosion to the condenser (8) for condensing the partially evaporated working agent can be prevented by separating the liquid phase from the evaporator phase in the partially evaporated working agent that is directly in front of the condenser (8), and only the evaporator phase is transferred to the condenser (8) for condensing and subsequently, the condensed evaporator phase and the liquid phase are merged.

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