Title (en)

METHOD FOR CONVERTING THERMAL ENERGY AT A LOW TEMPERATURE INTO THERMAL ENERGY AT A RELATIVELY HIGH TEMPERATURE BY MEANS OF MECHANICAL ENERGY, AND VICE VERSA

Title (de)

VERFAHREN ZUM UMWANDELN THERMISCHER ENERGIE NIEDRIGER TEMPERATUR IN THERMISCHE ENERGIE HÖHERER TEMPERATUR MITTELS MECHANISCHER ENERGIE UND UMGEKEHRT

Title (fr)

PROCÉDÉ DE CONVERSION D'ÉNERGIE THERMIQUE À FAIBLE TEMPÉRATURE EN ÉNERGIE THERMIQUE À PLUS HAUTE TEMPÉRATURE AU MOYEN D'ÉNERGIE MÉCANIQUE ET INVERSEMENT

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Application

EP 08782795 A 20080721

Priority

- AT 2008000265 W 20080721
- AT 12032007 A 20070731

Abstract (en)

[origin: WO2009015402A1] Method for converting thermal energy at a low temperature into thermal energy at a relatively high temperature by means of mechanical energy, and vice versa, with a working medium which runs through a closed thermodynamic circulation process, wherein the circulation process has the following working steps: - reversible adiabatic compression of the working medium, - isobaric conduction away of heat from the working medium, - reversible adiabatic relaxing of the working medium, - isobaric supply of heat to the working medium, and wherein the increase or decrease in pressure of the working medium is produced during the compression or relaxing, increasing or decreasing the centrifugal force acting on the working medium, with the result that the flow energy of the working medium is essentially retained during the compression or relaxing process.

IPC 8 full level

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