

Title (en)
METHOD AND APPARATUS FOR STORING MECHANICAL ENERGY BY THE QUASI-ISOTHERMAL EXPANSION AND COMPRESSION OF A GAS

Title (de)
VERFAHREN UND VORRICHTUNG ZUM SPEICHERN VON MECHANISCHER ENERGIE DURCH DIE QUASI-ISOTHERME ENTSPANNUNG UND KOMPRIMIERUNG EINES GASES

Title (fr)
PROCÉDÉ ET ÉQUIPEMENT DE STOCKAGE D'ÉNERGIE MÉCANIQUE PAR COMPRESSION ET DÉTENTE QUASI-ISOTHERME D'UN GAZ

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Abstract (en)
[origin: WO2010128222A2] The invention relates to a system for storing energy, in particular mechanical energy, comprising a series of containers (14, 15, 16) inside an insulated chamber (11), a medium (10) for storing thermal energy, a tank (13) containing a hydraulic fluid (9) and a system for the pumping-expansion of said fluid (17). According to the invention, energy storage is achieved by compressing the gas (1, 2, 3) contained in the containers (14, 15, 16) by pumping the liquid (9) using the apparatus (17). The heat released by compressing the gas is stored in the medium (10).

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