

Title (en)
METHOD AND DEVICE FOR RECUPERATING AMBIENT THERMAL ENERGY FOR VEHICLE EQUIPPED WITH AN POLLUTION-FREE ENGINE WITH SECONDARY COMPRESSED AIR

Title (de)
VERFAHREN UND VORRICHTUNG ZUR RÜCKGEWINNUNG VON UMGEBUNGSWÄRME FÜR FAHRZEUGE MIT UMWELTFREUNDLICHEM MOTOR MIT ZUSÄTZLICHER DRUCKLUFT

Title (fr)
PROCEDE ET DISPOSITIF DE RECUPERATION DE L'ENERGIE THERMIQUE AMBIANTE POUR VEHICULE EQUIPE DE MOTEUR DEPOLLUE A INJECTION D'AIR COMPRI ME ADDITIONNEL

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Application
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Abstract (en)
[origin: FR2758589A1] The invention concerns a method for recuperating ambient thermal energy for an engine or vehicles equipped with pollution-free motors functioning with injection of secondary compressed air in the combustion chamber (2) and having a reservoir for storing highly compressed air (23). The highly compressed air contained in the reservoir is, previous to its being injected into the chamber (2), expanded in a system with variable volume such as a piston-cylinder assembly (54, 55), producing a work which is used by mechanical means or the like. This expansion- to the injecting pressure- with work causes the air to cool to a very low temperature. This air is then propelled into a heat exchanger (41) where it is heated, thus increasing in pressure and/or in volume by recuperating a supply of thermal energy derived from the atmosphere. The invention is applicable to all engines equipped with compressed air injection and to the production of conditioned air in the vehicle.

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