

Title (en)

A VEHICLE THERMAL SYSTEM COMPRISING AN EXHAUST GAS HEAT EXCHANGER

Title (de)

KRAFTFAHRZEUGKLIMAANLAGE MIT ABGASWÄRMETAUSCHER

Title (fr)

SYSTEME THERMIQUE POUR VEHICULE COMPRENANT UN ECHANGEUR DE CHALEUR DE GAZ D'ECHAPPEMENT

Publication

EP 1372997 A1 20040102 (EN)

Application

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- GB 0203127 A 20020208

Abstract (en)

[origin: WO02081241A1] An exhaust gas heat exchanger is arranged for heat exchange between engine exhaust gas and coolant fluid in the engine coolant circuit, the engine coolant fluid comprises a substantially glycol-free fluid. A valve arrangement is reconfigurable between a first condition in which engine coolant is directed to the exhaust gas heat exchanger and a second condition in which engine coolant is inhibited from passing to the exhaust gas heat exchanger. Preferably an HVAC heat exchanger arranged for heat exchange between vehicle climate directed air and coolant in the engine coolant circuit. The invention utilises the counter-intuitive step of permitting coolant to boil/vaporise in the exhaust gas heat exchanger. By permitting the coolant to boil, the system can be significantly simplified in terms of both control and operation of component parts.

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