

Title (en)

HIGH/LOW TEMPERATURE WATER COOLING SYSTEM AND A FOUR PORT VALVE FOR SUCH A SYSTEM

Title (de)

HOCH-/NIEDERTEMPERATURWASSERKÜHLSYSTEME UND 4-WEGEVENTIL FÜR DERARTIGES SYSTEM

Title (fr)

SYSTÈME DE REFROIDISSEMENT À CIRCULATION D'EAU HAUTE/BASSE TEMPÉRATURE ET SOUPAPE À QUATRE VOIES POUR UN TEL SYSTÈME

Publication

**EP 2097628 B1 20180912 (EN)**

Application

**EP 07857926 A 20071220**

Priority

- EP 2007064305 W 20071220
- SE 0602837 A 20061229

Abstract (en)

[origin: WO2008080872A1] A high/low temperature water cooling system (1) for a combustion engine (3) comprises a high temperature (HT) cooling circuit (4) for cooling the engine (3) and a low temperature (LT) cooling circuit (11) for cooling a water cooled charge air cooler (WCCAC) (2) for charge air to the engine (3). The HT and LT cooling circuits (4, 11) are interconnected upstream and downstream a coolant pump (10) of the HT cooling circuit (4), the LT cooling circuit (11) having a pump (13) of its own. Further the LT cooling circuit (11) has a LT heat exchanger bypass (21) which is controlled by a multi port valve (18). Said valve (18) enables at least two different operational modes, a heat up mode, in which hot coolant from the HT cooling circuit (4) is used to heat the charge air in extremely cold ambient conditions, and a cooling mode, in which charge air is cooled in a traditional way.

IPC 8 full level

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CPC (source: EP SE)

**F01P 7/165** (2013.01 - EP SE); **F02B 29/0443** (2013.01 - SE); **F01P 2005/105** (2013.01 - EP); **F01P 2037/02** (2013.01 - EP); **F01P 2060/02** (2013.01 - EP); **F01P 2060/06** (2013.01 - EP)

Cited by

EP3864266A4; US11697341B2; EP3815948A1; CN112758062A; EP4127433A4; WO2021083532A1; EP3815948B1

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