

Title (en)

A method for thermally managing an internal combustion engine

Title (de)

Verfahren zur Wärmeverwaltung eines Verbrennungsmotors

Title (fr)

Procédé de gestion thermique d'un moteur à combustion interne

Publication

EP 2014889 A1 20090114 (EN)

Application

EP 07110663 A 20070620

Priority

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Abstract (en)

Methods for thermally managing an internal combustion engine (101, 401) during engine warm-up or during warmed-up conditions of the engine, which internal combustion engine (101, 401) comprises an engine block (101, 402) with a fluid coolant flow passage (104, 404) therein, a cylinder head (106, 406) secured to the engine block 102, 402) and provided with a fluid coolant flow passage (108, 408) therein, and a first fluid coolant circuit (109, 409) comprising the fluid coolant flow passages (104, 108, 404, 408), the internal combustion engine (101, 401) being provided with a second fluid coolant circuit (111) connected to the first fluid coolant circuit (109, 409) and comprising a coolant pump (112) for producing coolant flow in the first fluid coolant circuit, temperature sensing means (115) and valve means (117), which methods comprise the step of preventing (202) the coolant pump (112) from pumping the fluid coolant and thus providing a stagnation of the fluid coolant in the first fluid coolant circuit (109, 409), and/or the step of controlling (205, 209) the coolant pump (112) to produce such a coolant flow so that the temperature (T in) of the fluid coolant supplied to the first fluid coolant circuit (109, 409) from the second fluid coolant (111) circuit is at least 10 °C lower than the temperature (T out) of the fluid coolant discharged from the first fluid coolant circuit (109, 409) to the second fluid coolant circuit (111).

IPC 8 full level

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Citation (search report)

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