

Title (en)
DEVICE FOR THE THERMAL MANAGEMENT OF ENGINE INTAKE AIR

Title (de)
VORRICHTUNG ZUR WÄRMEVERWALTUNG DER ANSAUGLUFT EINES MOTORS

Title (fr)
DISPOSITIF DE GESTION THERMIQUE DE L'AIR D'ADMISSION D'UN MOTEUR.

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Application
EP 16707690 A 20160225

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Abstract (en)
[origin: WO2016135244A1] The present invention relates to a device (1) for the thermal management of the intake air of a combustion engine (3) equipped with a turbocharger (5), said device comprising: a first heat exchanger (7) placed in the air intake circuit (9), a second heat exchanger (10) placed on the main exhaust line (12) and connected to the first heat exchanger (7) to form a heating loop (A), said thermal management device (1) further comprising what is referred to as a low-pressure exhaust gas recuperation system (14) comprising a first branch-off (141) positioned downstream of the turbine (5b), an outlet (142) positioned upstream of the compressor (5a), and a regulating valve (140), the second heat exchanger (10) being positioned between the turbine (5b) and the first branch-off (141), the main exhaust line (12) comprising a bypass (26) between a second branch-off (201) positioned on the main exhaust line (12) upstream of the second heat exchanger (10), a bypass device (200) able to manage the circulation of the exhaust gases, and an outlet (202).

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