Title (en)

DUAL STAGE SUPERCHARGING SYSTEM FOR INTERNAL COMBUSTION ENGINE

Title (de)

ZWEISTUFIGES auflADUNGSSYSTEM FÜR VERBRENNUNGSMOTOREN

Title (fr)

SYSTEME DE SURALIMENTATION A DOUBLE ETAGE POUR MOTEUR A COMBUSTION INTERNE

Publication

EP 2129895 A1 20091209 (FR)

Application

EP 08762069 A 20080212

Priority

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Abstract (en)

[origin: WO2008122725A1] The invention relates to a dual-stage supercharging system for an internal combustion engine, that comprises a high-pressure turbocharger with a high-pressure turbine for receiving a first flow of exhaust gases from the engine, a low-pressure turbocharger having a low-pressure turbine for receiving a second flow of exhaust gases and located downstream from the high-pressure turbine, characterised in that it comprises: a controlled single-way valve (C1) located in the downstream exhaust circuit of the high-pressure turbine (THp), a two-way valve (C2) located in the exhaust circuit for the gases from the engine upstream relative to the low-pressure turbine (TBp) and downstream relative to the high-pressure turbine (THP) and that can be controlled between two end positions for operating the turbines alternatively in a serial mode and in a parallel mode, wherein both valves are controlled by a central electronic unit onboard the vehicle.

IPC 8 full level

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