

Title (en)

A COMBUSTION ENGINE HAVING TWO TURBOCHARGERS CONNECTED IN SERIES AND A METHOD FOR OPERATING THIS ENGINE

Title (de)

VERBRENNUNGSMOTOR MIT ZWEI IN REIHE GESCHALTETEN TURBOLADERN UND VERFAHREN ZUM BETREIBEN DIESER MOTORS

Title (fr)

MOTEUR À COMBUSTION AYANT DEUX TURBOCOMPRESSEURS RELIÉS EN SÉRIE ET PROCÉDÉ POUR LE FONCTIONNEMENT DE CE MOTEUR

Publication

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Application

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Abstract (en)

[origin: WO2015067845A1] The combustion engine (1) according to the invention has two turbochargers (6, 4) connected in series. The first turbocharger (6) is arranged to run in a higher pressure range than the second turbocharger (4), and the first turbocharger is connected to an exhaust pipeline (8) to provide exhaust gas to a turbine wheel (18) of the first turbocharger (6). The engine also has a wastegate (11) that is connected to the exhaust pipeline (8), and an exhaust line (13) between the first turbocharger and the second turbocharger. In case a sudden load change of the engine (1), a control unit (26) is arranged to provide a second fuel injection into cylinders (2) of the engine (1) after main fuel injections to control the first turbocharger (6) to an over speeding state, and to open the wastegate (11) in order to prevent the turbocharger (1) to run in the over speed state.

IPC 8 full level

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