

Title (en)
INTERNAL COMBUSTION ENGINE HAVING SEQUENTIAL SUPERCHARGING

Title (de)
BRENNKRAFTMASCHINE MIT REGISTERAUFLADUNG

Title (fr)
MOTEUR À COMBUSTION INTERNE AVEC SURALIMENTATION PAR REGISTRE

Publication
EP 2406475 A1 20120118 (DE)

Application
EP 10708119 A 20100303

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Abstract (en)
[origin: WO2010102745A1] The invention relates to an internal combustion engine, in particular for a motor vehicle, in particular comprising an electrified drive train, in particular comprising a combination of an electric motor and an internal combustion engine (hybrid engine), comprising at least one first exhaust gas turbocharger (30) which has at least one first turbine (28) and at least one first compressor (36), at least one second exhaust gas turbocharger (34) which has at least one second turbine (32) and at least one second compressor (38), wherein the first and second turbines (28, 32) are arranged in an exhaust tract (22) of the internal combustion engine parallel to one another in relation to an exhaust gas flow, wherein the first and second compressors (36, 38) are arranged in a fresh air tract (18) of the internal combustion engine parallel to one another in relation to a fresh air flow, wherein at least one valve device (54; 64) is arranged and designed in the exhaust tract (22) such that it optionally reduces and/or interrupts the exhaust gas flow through the second turbine (32) depending on an operational state of the internal combustion engine and at the same time allows the unlimited exhaust gas flow through the first turbine (28) such that substantially only the first exhaust gas turbocharger (30) generates a charging pressure. To this end, at least one further drive device (58) is arranged at the second exhaust gas turbocharger (34) in addition to the second turbine (32).

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Citation (search report)
See references of WO 2010102745A1

Citation (examination)
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• WO 2004099585 A1 20041118 - SIEMENS AG [DE], et al
• EP 1645736 A1 20060412 - PEUGEOT CITROEN AUTOMOBILES SA [FR]
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