

Title (en)

INTERNAL COMBUSTION ENGINE COMPRISING MEANS FOR RECIRCULATING EXHAUST AND TURBO BOOST GASES

Title (de)

BRENNKRAFTMASCHINE MIT ABGASRÜCKFÜHRUNGS- UND AUFLADUNGSVORRICHTUNG

Title (fr)

MOTEUR A COMBUSTION INTERNE COMPORTANT DES MOYENS DE RECIRCULATION DES GAZ D'ECHAPPEMENT ET DE SURALIMENTATION

Publication

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Application

EP 98942834 A 19980907

Priority

- FR 9801908 W 19980907
- FR 9711294 A 19970911

Abstract (en)

[origin: FR2768178A1] The invention concerns an internal combustion engine devoid of mechanical turbo boost means comprising n cylinders (C1,.....,C4) each provided with a piston with reciprocating translation movement, each cylinder being equipped with q exhaust valves and r induction valves, q and r being whole numbers not less than 1, each cylinder being, in an operating cycle, filled with air and fuel, a subsequent combustion with expansion supplying the energy delivered by the engine and an exhaust for evacuating burnt gases, the exhaust valves of n cylinders being connected to p exhaust manifold branches such that, on the same manifold branch, n' cylinders are coupled with $n' < n$ and $p < n$, each exhaust manifold branch (D) being connected to the exhaust gas outlet by a closure member (B) and connected to the atmosphere by at least one breather vent valve (SS) and each cylinder comprising, over part of its operating cycle, three successive phases ϕ_1 , ϕ_2 , ϕ_3 , the n' groups of three phases of the whole set of n' cylinders connected to a common manifold branch covering the engine entire operating cycle.

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