

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  
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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  $\phi_1$ ,  $\phi_2$ ,  $\phi_3$ , 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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