

Title (en)
PROCESS FOR THE TRANSFORMATION OF THERMAL ENERGY INTO MECHANICAL ENERGY BY MEANS OF A COMBUSTION ENGINE,
AND THE ENGINE

Publication
EP 0104541 B1 19880107 (FR)

Application
EP 83109057 A 19830914

Priority
CH 564882 A 19820924

Abstract (en)
[origin: US4513568A] An energy transformation cycle in which the number of strokes is higher than four, at least four of which are: a. the compression of air contained in a variable volume chamber, into a preheating chamber; b. the expansion of the variable volume chamber through the expansion of hot air contained in the preheating chamber; c. the compression of the expanded hot air contained in the variable volume chamber into a combustion chamber where fuel is introduced to cause the combustion of the mixture; and d. the expansion of the variable volume chamber through the expansion in the chamber of high temperature and high pressure combustion gases from the combustion chamber. The engine comprises a body (23) inside which is a movable member (25) defining a variable volume chamber (29). The body (23) comprises an admission duct (35) and an exhaust duct (34). This engine comprises further an air preheating chamber (41) the inlet and outlet of which communicate, through a distribution member (36), alternately with the variable volume chamber (29). This engine comprises further a combustion chamber (44), provided with a fuel distributor, the inlet and outlet of which communicate, through the distribution member (36), alternately with the variable volume chamber (29).

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