

HIGH EFFICIENCY THERMAL ENGINE

ABSTRACT

The engine comprises a low pressure stage (1) and a high pressure stage (2) with two independent rotors (3,4) and associated fixed fluid preparation members (9,10,13,14), combining "compressor" means (15,16) and "expander" means (17,18) and at least one combustion chamber (19,20) in a central volume defined axially by the rotors (3,4) and laterally by three substantially cylindrical, coaxial walls (22,23,24), defining in pairs an outer duct (25) connecting the outlet of the LP compressor (15) to the inlet of the HP compressor (16) and an inner duct (26) connecting the outlet of the HP compressor (16) to the inlet of a first combustion chamber (19), whose outlet supplies the HP expander (18) with gases produced by combustion guided to the inlet of the LP expander (17), whose outlet is in communication with the outside via at least one exhaust opening (41) for the combustion gases.

(Figure 1)