

96-0036

The internal combustion engine contains one or more pairs of the first and second cylinders (12, 14), by that the first cylinder (12) has a greater working volume than the second cylinder (14), as well as the corresponding first and second pistons (16, 18). The second piston (18) is provided with the driving rod (234) and divides the second cylinder (14) into the first volume (15a), containing the driving rod of the second piston, and the second volume (15b) between the two pistons. The first cylinder (12) is provided with an air inlet pipe (25) and an outlet pipe (27). Between the two pistons (16, 18), it is formed the combustion space, when the pistons are in the positions of the internal dead centre, the combustion space with that contains the second volume (15b). The transferal means (39, 128) provide for the gas flow possibility between the first volume (15a) and the combustion space to the compression stroke and just as the release mean (128) arrests the air and fuel mixture movement from the first volume into the second volume till the end of the compression stroke of the second piston (18). The injector (34) feeds the fuel into the first volume during the suction stroke of the second piston. The engine is also provided with a driving mean for setting in motion of the second piston (18), which includes a retention mean, retaining the second piston (18) in the internal dead centre position during one part of the working stroke of the first piston (16).

It is also proposed a process for operation of such engine.

