95-0101

The invention relates to the internal combustion engines and it is directed to improve efficiency thereof. The Meritt internal combustion engine contains a set two cylinders (12,14), at the same time the first cylinder has a greater displacement volume than the second one (14) and cylinders possess the pistons (16, 18) respectively, which are moved in a cyclic manner at the same frequency. The intake air hole (25) and the exhaust port are connected with the first cylinder, while the fuel injector provides feeding of the second cylinder. There is also the combustion chamber (20), which is connected with both cylinders at least during a fraction of expansion stroke. The second contains piston the bottom (35) and the body, by that the bottom is shift out from body, but connected with latter and having an edge (37), which is relative small in axial direction compared with the distance between body and bottom in axial direction. The combustion chamber (20) is formed between the piston bottom, body and lateral wall (14a) of the second cylinder.

Claims: 33