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(54) **ROTARY PISTON ENGINE**

(57) Abstract:

PURPOSE: To reduce unburnt HC component without sacrifice of fuel consumption, by setting the projected distance of trailing edge of rotor recess from the center of rotor of rotary piston to the value obtainable from particular formula.

CONSTITUTION: In a rotary piston engine where a triangular rotor 4 supported by an eccentric shaft 5 is performing planetary rotation in a rotor housing 2 having poly-arched innercircumferential face 2a, the trailing edge 7a of rotor recess 7 formed in each flank face 4a of rotor 4 is provided at the position where the projected distance at the eccentric shaft rotary angle $\alpha(85 \leqq \alpha \leqq 110)$ will match with the short shaft section (K) of rotor housing 2. Assuming the projected distance of said edge section 7a from the center of rotor (A) is (L), formed radius is (R) and the eccentric amount is (e), they are set to satisfy the formula $L=(R-e).\sin(\alpha/3)+e.\sin(2\alpha/3)$.

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