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(54) ROTARY PISTON ENGINE WITH PUMPING LOSS REDUCTION DEVICE

(57) Abstract:

PURPOSE: To prevent dilution gas in one cylinder from flowing out to the other cylinder by making side clearances on the connecting passage open sides smaller than the those on the other sides, in a engine which has a connecting passage that ventilates the intake air between cylinders according to the phase difference in cylinders.

CONSTITUTION: A connecting passage 15, which connects together operation chambers 5_1, 5_2 of respective cylinders I, II, is formed in a middle side housing 4 which separates 2 cylinders I, II of a engine 1 from each other, and a rotary valve 16 which is fully opened under low load is provided in the midst of this passage. And, in this case, side clearances 17a, 17b and 18a, 18b, formed on both sides of rotors 6_1, 6_2 of respective cylinders I, II are formed in such manner that clearances 17b, 18a on the connecting passage open sides are smaller than the clearances 17a, 18b other sides. Thus, when both intake port and exhaust port open simultaneously to one operation chamber, it is prevented that much dilution gas is brought into the operation chamber of the other cylinder through the connecting passage 15.

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