

ABSTRACT OF THE DISCLOSURE

A rotary cylinder apparatus which prevents a fluid from leaking from a contact portion of a piston and a cylinder member and consequently enables efficient rotation. The rotary cylinder apparatus comprises: a rotary cylinder member 2 which has cylinder chambers 22 and 23 formed thereto so as to pass through a rotary shaft center O and rotates around the rotary shaft center O; pistons 3 and 4 demonstrating reciprocating linear motion in the cylinder chambers 22 and 23; a piston holding member 5 which holds the pistons 3 and 4 and rotates around a rotation center X eccentric from the rotary shaft center O of the rotary cylinder member 2; and a casing 6 which rotatably supports the rotary cylinder member 2 and has at least one inlet 61 and at least one outlet 62, wherein the pistons 3 and 4 are rotatably supported at a position away from the rotation center X of the piston holding member 5 by a fixed distance and with that position at the center thereof.