

ABSTRACT

A rotary fluid device comprises: a cylinder (21) having an annular cylinder chamber (50); an annular piston (22) which is accommodated in the cylinder chamber (50) to be eccentric relative to the cylinder (21), the annular piston (22) dividing the cylinder chamber (50) into an outer working chamber (51) and an inner working chamber (52); and a blade (23) placed in the cylinder chamber (50) and partitioning each of the working chambers (51, 52) into a high-pressure space and a low-pressure space. The cylinder (21) and the piston (22) relatively rotate. The outer working chamber (51) constitutes a compression chamber which compresses and discharges a sucked fluid with the progress of the relative rotation of the cylinder (21) and the piston (22). The inner working chamber (52) constitutes an expansion chamber which expands and discharges a sucked fluid with the progress of the relative rotation of the cylinder (21) and the piston (22).