

HIGH TORQUE ROTARY MOTOR

ABSTRACT

The present invention relates to a rotary motor, comprising a plurality of vanes, an inner rotary member housing the plurality of vanes projecting from a central rotation axis of the inner rotor, a multi lobe member encompassing the inner rotary member and the plurality of vanes, where the multi lobe member comprises at least two lobes wherein each of the lobes comprises an inlet and an outlet for a working medium, and a plurality of chambers wherein each of the chambers is encompassed by an inner surface of the multi lobe member and an outer surface of the inner rotary member. Such devices in accordance with some embodiments of the invention provide that a plurality of inlets and outlets amplify the output torque of the motor, that any side load is absent or minimized, and that a faster and stronger rotational force is achieved compared to a conventional hydraulic motor having a single pair of inlet and outlet.

FIG. 1