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(54) Title: ROTARY ENERGY RECOVERY DEVICE

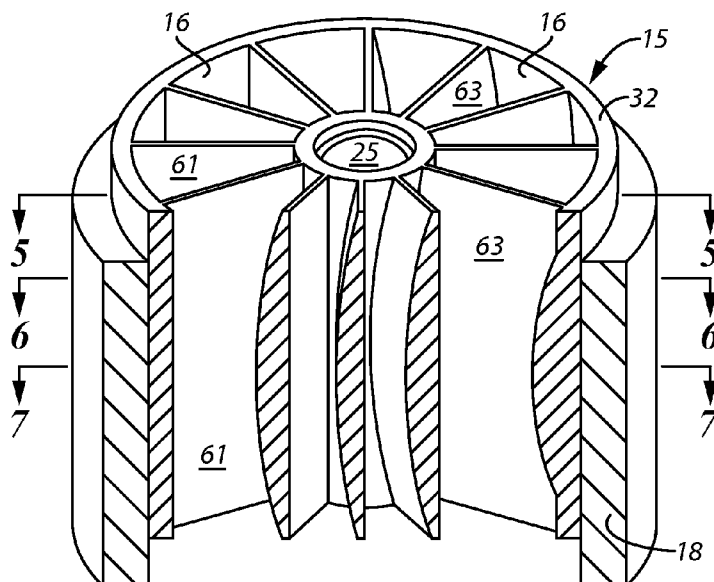


FIG. 3

(57) Abstract: A rotary energy recovery device (11) wherein a multi-channel cylindrical rotor (15) revolves with its end faces (32) juxtaposed in sealing relationship with end surfaces (33) of a pair of flanking end covers (19, 21), and wherein inlet and outlet fluid passage ways (27, 29) are provided in each end cover. Fluid may be directed into the rotor channels (16) and allowed to exit therefrom in an axial direction parallel to the axis of the rotor; however, rotor revolution is self-driven as a result of the interior design of the channels (16) which extend axially through the rotor and are shaped so that fluid flow therethrough creates a torque.

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