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(54) Title: HIGH EFFICIENCY TURBINE

(57) Abstract: A turbine system has a turbine that uses an aeromatic hydrocarbon as a working fluid. The turbine discharges the fluid in vapor form against a boundary layer on the inside of a rotor where it condenses as it loses its energy. The outside of the rotor is formed to define chambers which are divided into suction and discharge or pressure cavities by stationary and rotating seals. Apertures connect the boundary layer to the pump chambers and apertures are positioned as discharge ports so that as the rotor rotates, it also pumps the working fluid into a closed loop system in which it is reheated and reintroduced into the turbine through a nozzle. The fluid is heated by a fluid heater that may be positioned in the interior of the rotor.