

Abstract

The invention relates to an apparatus (1) for converting thermal energy into mechanical energy by means of a cycle, having a heat exchanger (4), a reservoir (3) for an operating medium, a feed line (5), a turbine (2), and a return line (6) having at least one recovery device (9). In order to also be able to utilize waste heat for the generation of electrical energy, it is provided according to the invention that the turbine (2) is embodied as a disc rotor turbine. The invention furthermore relates to a method for converting thermal energy into mechanical energy in a cycle, wherein thermal energy is supplied to an operating medium in a reservoir (3), wherein the operating medium evaporates and/or a pressure in the operating medium is increased, whereupon the operating medium releases energy in a turbine (2), after which the operating medium is returned to the reservoir (3).

Figure 1