

Title (en)
TURBINE ASSEMBLY

Title (de)
TURBINENANORDNUNG

Title (fr)
ENSEMBLE TURBINE

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Abstract (en)
[origin: WO2022090990A1] The present invention relates to a turbine assembly comprising: - a compressor (1) for drawing in combustion air and compressing it into a combustion air supply line (31), - a recuperator (2) located in the combustion air supply line (31) for applying thermal energy to the combustion air, - a combustion chamber (3) having the combustion air supply line (31) located at the inlet and a combustion gas discharge means (33) located at the outlet, - a gas turbine (4) which is connected at the inlet to the combustion gas discharge means (33) of the combustion chamber (3) and at the outlet has a waste gas discharge means (43), wherein the waste gas discharge means (43) is guided through the recuperator (2), - a heat exchanger (5, 21) which is thermally connected to the waste gas discharge means (43) for applying waste gas heat to a working fluid that can be evaporated, - an expansion turbine (6) which at the inlet has a working fluid supply line (61) for expanding the evaporated working fluid, wherein the expanded working fluid is discharged at the outlet through a working fluid discharge means (63), and wherein the compressor (1), the gas turbine (4) and the expansion turbine (6) are located on a common shaft (11) which is connected to a generator (12) for generating electrical energy.

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