

Title (en)

WATER TURBINE, IN PARTICULAR AXIAL TURBINE, AND HYDROELECTRIC POWER PLANT HAVING SAID WATER TURBINE

Title (de)

WASSERTURBINE, INSBESONDERE AXIALTURBINE, UND WASSERKRAFTWERK MIT SELBIGER

Title (fr)

TURBINE HYDRAULIQUE, NOTAMMENT TURBINE AXIALE, ET CENTRALE HYDROÉLECTRIQUE ÉQUIPÉ DE CELLE-CI

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Application

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Abstract (en)

[origin: WO2017148756A1] The invention relates to a water turbine (11) for a hydroelectric power plant (1), and to a hydroelectric power plant (1) of this type. It is proposed that the water turbine has a flow duct (12) with a flow inlet (13) and a flow inlet (15), a turbine rotor (17) which is arranged in the flow duct (12) with a rotational axis (X), a ring generator for generating electric power with a generator rotor (25) and a generator stator (27), wherein the generator rotor (25) is connected fixedly to the turbine rotor (17) so as to rotate with it, forming a rotor unit (35), and a bearing unit (31a, b) for absorbing the radial and axial forces which act on the rotor unit, wherein the bearing unit is arranged radially outside the flow duct (12) in relation to the rotational axis (X). It is proposed according to the invention that the bearing unit is water-lubricated, wherein the bearing unit has a water inlet (55a) which is connected in a fluid-conducting manner to a dedicated water reservoir (57).

IPC 8 full level

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