

Title (en)
CASCADE TURBINE

Title (de)
KASKADENTURBINE

Title (fr)
TURBINE DE CASCADE

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Application
EP 19752662 A 20190730

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Abstract (en)
[origin: WO2020025635A1] The invention relates to a turbine (1) that has a housing (101) and a module (13, 15) which is arranged in the housing (102) and has a multistage design and which has an impeller assembly and a diffuser assembly. The diffuser assembly has a plurality of diffusers (10) which are rigidly connected to the housing (101) and comprise diffuser blades (100), and the impeller assembly has a shaft (110), which rotates about a rotational axis (x), and a plurality of impellers (11) with turbine blades (111), at least some of said impellers (11) and diffusers (10) having at least one impeller ring blade (2) and diffuser ring blade (20), respectively, which are arranged concentrically to the rotational axis (x). The impeller ring blade and diffuser ring blade has an asymmetrical impeller and diffuser ring blade profile (22), respectively, with a suction side and a pressure side, wherein the suction sides of the diffuser ring blade (20) and the impeller ring blade (2) are arranged opposite one another on the exterior or interior of the diffuser ring blade (20) and the impeller ring blade (20, 2), respectively.

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