

Title (en)

ROTOR BLADE FOR A WATER TURBINE, IN PARTICULAR FOR A TIDAL POWER STATION, AND METHOD FOR OPERATING SAME

Title (de)

ROTORBLATT FÜR EINE WASSERTURBINE, INSBESONDERE FÜR EIN GEZEITENKRAFTWERK, UND VERFAHREN FÜR DESSEN BETRIEB

Title (fr)

PALE DE ROTOR POUR UNE TURBINE HYDRAULIQUE, EN PARTICULIER POUR UNE USINE MARÉMOTRICE, ET PROCÉDÉ DE FONCTIONNEMENT DE LADITE PALE DE ROTOR

Publication

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Application

**EP 12748168 A 20120811**

Priority

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Abstract (en)

[origin: CA2853693A1] The invention relates to a rotor blade for a water turbine having a hydrodynamic profile, with which a suction side and a pressure side is associated, comprising a plurality of overflow channels that are arranged in the hydrodynamic profile and that establish a hydraulic connection between the suction side and the pressure side and with each of which a valve unit is associated. The invention is characterized in that the valve unit is closed below a predetermined maximum load threshold for the rotor blade and open above the maximum load threshold, wherein, in the open position of the valve arrangement, each overflow channel reduces the power coefficient and/or the thrust coefficient of the rotor blade with respect to the closed position thereof.

IPC 8 full level

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Citation (search report)

See references of WO 2013060399A1

Citation (examination)

- DE 419563 C 19260127 - AERO DYNAMO AKT GES
- DE 386992 C 19240216 - VENTIMOTOR BILAU & CO
- US 2003091436 A1 20030515 - STIESDAL HENRIK [DK]
- US 6142425 A 20001107 - ARMANIOS ERIAN A [US], et al

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