

Title (en)
TURBINE ANNULAR AXIAL ROTOR

Title (de)
RINGFÖRMIGER AXIALROTOR EINER TURBINE

Title (fr)
ROTOR AXIAL ANNULAIRE POUR TURBINE

Publication
EP 2394052 A4 20140115 (EN)

Application
EP 09824326 A 20091109

Priority
• CA 2009001640 W 20091109
• CA 2643587 A 20081110

Abstract (en)
[origin: WO2010051647A1] An annular axial rotor for a turbine. The rotor includes a hub structure having a hub diameter and attached to a rotating shaft of the turbine. The rotor also has a plurality of turbine blades extending radially from the hub structure, and at least one annular shroud surrounding the plurality of turbine blades. The annular shroud has a first annular shroud diameter. The turbine blades are held between the hub structure and the annular shroud and the hub diameter is at least 0.3 times the shroud diameter. This configuration greatly facilitates the use of a plurality of airfoils to adjust the solidity and the tip speed ratio of the rotor. This can be achieved while maintaining a high coefficient for the conversion of fluid energy into useful torque.

IPC 8 full level
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Designated contracting state (EPC)
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