Title (en)

DRIVE UNIT FOR A WIND TURBINE

Title (de)

ANTRIEBSEINHEIT FÜR WINDTURBINE

Title (fr)

UNITÉ D'ENTRAÎNEMENT POUR UNE TURBINE ÉOLIENNE

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Application

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Abstract (en)

[origin: WO2011058184A2] The invention relates to a wind turbine comprising a rotor, wherein the rotor is mounted on a substantially horizontal rotor axis rotatably about a rotational axis. The rotor comprises a hub and preferably three rotor blades fastened thereto. Advantageously, but not necessarily, the rotor blades are mounted rotatably about the longitudinal axes thereof on the hub, whereby the angle of attack of the rotor blades can be varied. The hub is attached rotatably on the rotor axis directly or via a connecting component, wherein the rotor axis in turn is rigidly connected to a mainframe of the wind turbine. The mainframe accommodates the nacelle housing and the components present therein. In addition, the mainframe is mounted rotatably on a tower of the wind turbine by means of the so-called azimuth bearing. The rotor is non-rotationally connected to output means, for example a gear or a generator. The aim of the invention is to provide a wind turbine that avoids the disadvantages of the prior art, wherein in particular a simple, lightweight and cost-effective design of the drive train is to be made possible. The aim is achieved by the characteristics of the main claim 1, wherein decoupling connecting means are arranged in an effective manner between the output means and the rotor. Said means have the effect that the rotor can only transmit peripheral forces or torque to the output means. Otherwise, the rotor and output means are substantially decoupled with respect to the transmission of translatory motions, in particular radial, axial or tilt motions, in a certain range.

IPC 8 full level

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