

Title (en)

METHOD AND APPARATUS FOR THE TREATMENT OF AIR IN WIND TURBINES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR LUFTBEHANDLUNG IN WIND-ENERGIEANLAGEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE GESTION DE L'AIR DANS DES INSTALLATIONS D'ÉNERGIE ÉOLIENNE

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Application

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Abstract (en)

[origin: WO2010015674A2] Disclosed are a method and an apparatus for treating air in offshore wind turbines comprising a tower, at the upper end of which a nacelle (11) that has a generator and at least one rotor blade (12) is arranged, and in the interior of which heat dissipating electric and electronic units (16), such as switchgear, switching devices, transformers, frequency converters, and the like, are arranged in a unit module (15) of the tower (10), and which has at least one air inlet and air outlets (3). Ambient air AL sucked in from the surroundings of the tower (10) via an air inlet is conducted via a first flow path (AL'-ZL) of an air treatment system (6) comprising an air treatment device (5) that has separate flow paths (AL'-ZL, UL). The second flow path (UL) that is in heat exchanging connection with the first flow path (AL'-ZL) is guided through the unit module (15) in a closed loop and transfers the thermal energy absorbed from the dissipated heat of the electric and electronic units (16) to the first flow path (AL'-ZL) via the air treatment device (5), and the first flow path (AL'-ZL) dissipates incoming air (ZL") that is heated without using the unit module (15) to the interior (100) of the tower (10) and the nacelle (11) at a pressure above atmospheric.

IPC 8 full level

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