

Title (en)
MODULAR WIND TURBINE BLADE

Title (de)
MODULARE WINDTURBINENSCHAUFEL

Title (fr)
PALE D'ÉOLIENNE MODULAIRE

Publication
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Application
EP 20819622 A 20201127

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Abstract (en)
[origin: WO2021104599A1] In a first aspect of the invention there is provided a modular wind turbine blade comprising a first blade module and a second blade module for connection end to end, each blade module having an outer shell extending longitudinally in a spanwise direction, and extending transversely in a chordwise direction between a leading edge and a trailing edge. The first blade module comprises a first bearing surface and the second blade module comprises a second bearing surface, each bearing surface extends transversely and at least one of the bearing surfaces is angled such that the first and second bearing surfaces are mutually divergent when the first and second blade modules are arranged end to end. The modular wind turbine blade further comprises a tension element configured to span an interface between the first and second blade modules, the tension element comprising first and second mutually-opposed contact surfaces. The first contact surface is configured to engage the first bearing surface and the second contact surface is configured to engage the second bearing surface, wherein moving the tension element in a generally chordwise direction along the mutually divergent bearing surfaces causes the first and second blade modules to be pulled together in a generally spanwise direction, such that a pre-tensioned connection is established between the first and second blade modules.

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