TAILORED AIRFOILS FOR VERTICAL AXIS WIND TURBINES*

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ABSTRACT

The evolution of a family of airfoil sections designed to be used as blade elements of a vertical axis wind turbine (VAWT) is described. This evolution consists of extensive computer simulation, wind tunnel testing and field testing. The process reveals that significant reductions in system costs-of-energy and increases in fatigue lifetime may be expected for VAWT systems using these blade elements.

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