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**DEVELOPMENTS IN BLADE SHAPE DESIGN FOR A
DARRIEUS VERTICAL AXIS WIND TURBINE**

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ABSTRACT

A new computer program package has been developed that determines the troposkein shape for a Darrieus Vertical Axis Wind Turbine Blade with any geometrical configuration or rotation rate. This package allows users to interact and develop a "buildable" blade whose shape closely approximates the troposkein. Use of this package can significantly reduce flatwise mean bending stresses in the blade and increase fatigue life.

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