

Title (en)
METHOD FOR DETERMINING THE REMAINING SERVICE LIFE OF A WIND TURBINE

Title (de)
VERFAHREN ZUM BESTIMMEN EINER RESTLEBENSDAUER EINER WINDENERGIEANLAGE

Title (fr)
PROCÉDÉ SERVANT À DÉTERMINER LA DURÉE DE VIE RESTANTE D'UNE ÉOLIENNE

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Application
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Abstract (en)
[origin: CA2980644A1] The invention relates to a method for determining the remaining service life of a wind turbine. The method comprises continuously detecting movements or vibrations of components of the wind turbine by means of sensors while the wind turbine is operating, and determining modes and frequencies of the movements or vibrations. In addition, the forces acting on the components of the wind turbine are determined on the basis of a model, in particular a numerical model, of the wind turbine, and stress spectra and/or load spectra of the components of the wind turbine are determined. Furthermore, the method comprises determining or estimating the remaining service life by comparing the determined stress spectra and load spectra with total stress spectra and total load spectra.

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