

Title (en)

HEATH MONITORING METHOD AND APPARATUS FOR COMPOSITE MATERIALS

Title (de)

ZUSTANDSÜBERWACHUNGSVERFAHREN UND -VORRICHTUNG FÜR VERBUNDWERKSTOFFE

Title (fr)

PROCEDE ET APPAREIL DE CONTROLE DE LA SANTE DE MATERIAUX COMPOSITES

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Application

EP 05723488 A 20050223

Priority

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Abstract (en)

[origin: WO2005081930A2] An in-situ method for monitoring the heath of a composite component (103) utilizes a condition sensor (101) made of electrically conductive particles (109) dispersed in a polymeric matrix (111). The sensor is bonded or otherwise formed on the matrix surface of the composite material. Age-related shrinkage of the sensor matrix results in a decrease in the resistivity of the condition sensor. Correlation of measured sensor resistivity with data from aged specimen allows indirect determination of mechanical properties and remaining age of the composite component.

IPC 8 full level

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