

Title (en)  
MONITORING UNIT AND METHOD FOR DETECTING STRUCTURAL DEFECTS WHICH CAN OCCUR IN AN AIRCRAFT NACELLE DURING USE

Title (de)  
ÜBERWACHUNGSEINHEIT UND VERFAHREN ZUR ERKENNUNG VON STRUKTURDEFEKTEN EINER FLUGZEUGTRIEBWERKSGONDEL WÄHREND DES BETRIEBS

Title (fr)  
ENSEMBLE ET PROCEDE DE SURVEILLANCE POUR DETECTER DES DEFAUTS STRUCTURELS POUVANT APPARAÎTRE DANS UNE NACELLE D'AERONEF EN SERVICE

Publication  
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Application  
**EP 12722407 A 20120412**

Priority  
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• FR 2012050799 W 20120412

Abstract (en)  
[origin: WO2012150394A1] The invention relates to a monitoring unit (11) which includes a composite sandwich structure (10) forming a portion of the aircraft nacelle (1), a plurality of sensors (14) for generating signals representative of an amplitude and/or frequency of vibrations. Each sensor (14) transmits said signals via electromagnetic waves, e.g. via radio frequencies. Each sensor (14) is an electromechanical microsystem including a means for converting mechanical energy into electrical energy. A computing unit (15) is suitable for: evaluating the differences between a current transfer function resulting from said signals and a predetermined nominal transfer function; comparing each of said differences with a respective detection threshold; and, from said comparison, estimating or evaluating the size and/or position of said structural defect in the structure (10).

IPC 8 full level  
**G01M 5/00** (2006.01)

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Citation (search report)  
See references of WO 2012150394A1

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DOCDB simple family (publication)  
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