

Title (en)  
DEVICE FOR DETERMINING STRAINS ON FIBER COMPOSITE COMPONENTS

Title (de)  
VORRICHTUNG ZUR FESTSTELLUNG VON BELASTUNGEN AN FASERVERBUND-BAUTEILEN

Title (fr)  
DISPOSITIF PERMETTANT DE DETECTER LES SOLLICITATIONS SUBIES PAR DES PARTIES STRUCTURALES EN COMPOSITE A BASE DE FIBRES

Publication  
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Application  
**EP 04791066 A 20041029**

Priority  

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- DE 10350974 A 20031030

Abstract (en)  
[origin: WO2005043107A2] The invention relates to a device for determining strains on fiber composite components (1), more particularly of vehicle and airplane parts, wherein the components (1) are provided with a predetermined quantity of sensor elements (3) for determining expansions. The sensor elements (3) are connected to an evaluation device (4), which is particularly designed to control and monitor loads and to determine strains that can cause damages. The device is characterized in that the sensor elements are configured in the shape of expansion measuring strips (3). The expansion measuring strips (3) are preferably integrated in the fiber composite component (1) in such a way that the measuring grids (5) thereof are placed between the individual fiber layers (2) and are guided out of the fiber composite component (1) ready for connection by means of special connecting pins (8). These connecting pins (8) serve to connect the individual expansion measuring strips (2) to the corresponding evaluation device (4) by means of loose cable connections (12).

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IPC 8 full level  
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Citation (search report)  
See references of WO 2005043107A2

Citation (examination)  

- DE 2728916 A1 19790118 - HOTTINGER MESSTECHNIK BALDWIN
- US 4307371 A 19811222 - ORT WERNER

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CN111766146A

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