

Title (en)  
ASCERTAINING THE STATE OF A SUSPENSION MEANS

Title (de)  
ZUSTANDSERMITTLUNG EINES TRAGMITTELS

Title (fr)  
DÉTERMINATION DE L'ÉTAT D'UN MOYEN DE SUSPENSION

Publication  
**EP 3947233 A1 20220209 (DE)**

Application  
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Abstract (en)  
[origin: WO2020200727A1] The invention relates to a method and an apparatus 21 for monitoring the physical state of a suspension means 23 which is connected to an elevator cabin 11 and can move the latter. Along its length, the suspension means 23 comprises markings 25 which divide the suspension means 23 into segments S1, S2, Sn. According to the invention, it is possible to monitor the strain difference  $\Delta\epsilon$  of the suspension means 23 segment-by-segment by using a signal processing unit 31 to ascertain, from a distance between two selected markings 25 detected by a detection device 29, a first strain  $\epsilon_1$  at a first load F and a second strain  $\epsilon_2$  at a second load 2, and to calculate a strain difference  $\Delta\epsilon$  representing the elastic behavior of the segment S1, S2, Sn from the two strain values  $\epsilon_1$ ,  $\epsilon_2$ , wherein the load  $F < u > 1 < /u >$ , F2 acting on the suspension means 23 between the two selected markings 25 can be measured by means of a load measuring device 33.

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