

Title (en)  
DEVICE FOR DYNAMICALLY MEASURING THE IMBALANCE OF THE ROTOR OF A TURBOCHARGER

Title (de)  
VORRICHTUNG ZUM DYNAMISCHEN MESSEN DER UNWUCHT DES ROTORS EINES TURBOLADERS

Title (fr)  
DISPOSITIF DE MESURE DYNAMIQUE DE DÉSÉQUILIBRE DU ROTOR D'UN TURBOCOMPRESSEUR

Publication  
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Application  
**EP 08856694 A 20081202**

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Abstract (en)  
[origin: WO2009071521A2] The invention relates to a device for dynamically measuring the imbalance of a turbocharger rotor rotatably supported in a housing segment (6), said device comprising a support device (3) having a spring element whereon the housing segment (6) can be mounted, such that it has at least two degrees of freedom for vibrating relative to the support device, a turbine housing (4) mounted on the support device (3) and having a channel designed for feeding a drive fluid and for impinging the drive fluid on the turbocharger rotor, wherein a free space is located between the turbine housing (4) and the housing segment (6), a measurement transducer for measuring the vibrations of the housing segment (6), an automatic coupling device (9) having a displaceable holder, a connecting part (10) held by the holder and thereby displaceable toward the housing segment (6), and at least one displaceable coupling element, by which the connecting part (10) can be coupled to the housing segment (6), wherein the coupling device (9) can be moved into a position in which the at least one coupling element coupling the connecting part (10) to the housing segment (6) can be displaced relative to the holder such that the coupled connecting part (10) can freely vibrate with the housing segment (6).

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