

Title (en)

Method and device for dynamically measuring the imbalance of the rotor of a turbocharger core assembly

Title (de)

Verfahren und Vorrichtung zum dynamischen Messen der Unwucht des Rotors einer Turbolader-Rumpfgruppe

Title (fr)

Procédé et dispositif de mesure dynamique du balourd du rotor d'un composant intermédiaire de turbosoufflante

Publication

EP 2581553 B1 20180314 (DE)

Application

EP 11184723 A 20111011

Priority

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Abstract (en)

[origin: EP2581553A1] The method involves arranging a turbine housing (1) and a compressor housing (2) at a distance from each other at a machine bed (3). The turbine housing is connected with compressed air sources, and a rotor (6) is accelerated by driving a turbine wheel (7) with pressurized air at normal operating speed. Oscillations induced by imbalance, at a unit housing (5) are measured during rotation of the rotor with the normal speed. Phase position of the oscillations is determined. The measured oscillations and the phase position are utilized to determine imbalance of the rotor to be adjusted. An independent claim is also included for a device for dynamic measurement of imbalance of a rotor of a turbo supercharger core assembly.

IPC 8 full level

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CPC (source: EP)

F01D 5/027 (2013.01); **F01D 21/003** (2013.01); **F05D 2220/40** (2013.01); **F05D 2260/34** (2013.01)

Cited by

CN112177963A; CN107560791A; US2023044931A1; JP2018091808A; CN109477424A; EP3447264A4; CN109563773A; EP3444463A4; US11187608B2; US11060940B2; US11808655B2; CN111656151A; JPWO2020049680A1; WO2017203649A1; WO2018105499A1; WO2017203648A1; US11029230B2

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