

Title (en)

BEARING DEFORMATION SENSOR COMPRISING TWO STRESS GAUGES

Title (de)

LAGERDEFORMATIONSSENSOR MIT ZWEI BELASTUNGSMESSGERÄTEN

Title (fr)

ROULEMENT CAPTEUR DE DEFORMATIONS COMPRENANT DEUX JAUGES DE CONTRAINTES

Publication

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Application

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Abstract (en)

[origin: WO2005121731A1] The invention relates to a bearing, comprising at least one system for determining the amplitude (A) of pseudo-sinusoidal deformations of a region (7) of the fixed ring (1), generated on rotation, the system for determination comprising two stress gauges (8), a measuring device (9), for the two signals (V), which are respectively a function of the variations over time of the signals provided by each gauge (8) on rotation, said device forming, by combination of the signals  $V_i$ , two signals which are respectively the SIN and COS of the same angle with the same amplitude, said amplitude being a function of A and a device (10) for calculation of the amplitude A of the deformations in the region (7) as a function of time, said device being embodied to calculate the formula  $\text{SIN}^2 + \text{COS}^2$  such as to give the amplitude A.

IPC 8 full level

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