

Title (en)

CIRCUIT FOR THE SELF-EXCITATION OF A MECHANICAL OSCILLATION SYSTEM TO ITS CHARACTERISTIC RESONANT FREQUENCY

Publication

**EP 0343403 B1 19930908 (DE)**

Application

**EP 89107994 A 19890503**

Priority

DE 3815007 A 19880503

Abstract (en)

[origin: WO8910802A1] Circuitry for self-excitation of self-resonant vibrations in a mechanical vibrating system (10) comprises an electromechanical transducer system (20) arranged in the feedback circuit of an electrical amplifier circuit (30) so that mechanical vibrations are induced in the system by the output alternating voltage of the amplifier circuit (30) and the system supplies an alternating voltage having the frequency of the mechanical vibrations to the input of the amplifier circuit (30). The amplifier circuit (30) has a non-linear amplification characteristic curve, which results in greater amplification at lower values of the input signal than at higher values. This ensures reliable vibration even under unfavorable operating conditions, while reducing the risk of false indications concerning the state of vibration, for example due to foreign vibrations.

IPC 1-7

**B06B 1/02**

IPC 8 full level

**B06B 1/02** (2006.01); **G01F 23/28** (2006.01)

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