

CPC**COOPERATIVE PATENT CLASSIFICATION****G01H**

MEASUREMENT OF MECHANICAL VIBRATIONS OR ULTRASONIC, SONIC OR INFRASONIC WAVES (generation of mechanical vibrations without measurement [B06B](#), [G10K](#); measuring position, direction or velocity of an object [G01C](#), [G01S](#); measuring quasi-steady pressure of a fluid [G01L 7/00](#); determining unbalance [G01M 1/14](#); determining properties of material by sonic or ultrasonic waves transmitted therethrough [G01N](#); systems using the reflection or reradiation of acoustic waves, e.g. acoustic imaging, [G01S 15/00](#); seismology, seismic prospecting, acoustic prospecting [G01V 1/00](#); acousto-optical devices per se [G02F](#); obtaining records by techniques analogous to photography using ultrasonic, sonic or infrasonic waves [G03B 42/06](#); speech analysis or synthesis, speech recognition [G10L](#); information storage based on relative movement between record carrier and transducer [G11B](#); piezo-electric, electrostrictive or magnetostrictive elements in general [H01L](#); manufacture of electromechanical resonators by processes which include measurement of frequency with consequential modification of the resonator [H03H 3/00](#), [H03H 3/007](#), [H03H 9/00](#))

NOTES

1. This subclass covers the combination of generation and measurement of mechanical vibrations.
2. Attention is drawn to the Notes following the title of class [G01](#).

G01H 1/00

Measuring {characteristics of} vibrations in solids by using direct conduction to the detector ([G01H 9/00](#), [G01H 11/00](#) take precedence)

G01H 1/003

- {of rotating machines ([G01H 1/10](#) takes precedence)}

G01H 1/006

- • {of the rotor of turbo machines}

G01H 1/04

- of vibrations which are transverse to direction of propagation

G01H 1/06

- • Frequency

G01H 1/08

- • Amplitude

G01H 1/10

- of torsional vibrations

G01H 1/12

- of longitudinal or not specified vibrations

G01H 1/14

- • Frequency

G01H 1/16

- • Amplitude

G01H 3/00

Measuring {characteristics of} vibrations by using a detector in a fluid ([G01H 7/00](#), [G01H 9/00](#), [G01H 11/00](#) take precedence)

G01H 3/005

- {Testing or calibrating of detectors covered by the subgroups of [G01H 3/00](#) (calibrating geophysical instruments, e.g. seismic receivers [G01V 13/00](#))}

G01H 3/04

- Frequency

G01H 3/06

- • by electric means

G01H 3/08

- • Analysing frequencies present in complex vibrations, e.g. comparing harmonics present {(acoustic presence detection [G01V 1/001](#))}

G01H 3/10	<ul style="list-style-type: none"> Amplitude; Power
G01H 3/12	<ul style="list-style-type: none"> by electric means (G01H 3/14 takes precedence)
G01H 3/125	<ul style="list-style-type: none"> {for representing acoustic field distribution (using optical means G01H 9/002; sonar systems for imaging G01S 7/56, G01S 15/89; acoustic holography G03H 3/00)}
G01H 3/14	<ul style="list-style-type: none"> Measuring mean amplitude; Measuring mean power; Measuring time integral of power
G01H 5/00	Measuring propagation velocity of ultrasonic, sonic or infrasonic waves, {e.g. of pressure waves}
G01H 7/00	Measuring reverberation time; {Room acoustic measurements} (measuring absorption of vibrations in a material G01N ; modifying acoustic properties to change reverberation time G10K)
G01H 9/00	Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves by using radiation-sensitive means, e.g. optical means
G01H 9/002	<ul style="list-style-type: none"> {for representing acoustic field distribution (sonar systems for imaging G01S 7/56, G01S 15/89; acoustic holography G03H 3/00)}
G01H 9/004	<ul style="list-style-type: none"> {using fibre optic sensors (light guides per se G02B 6/00, acousto-optical devices specially adapted for gating or modulating in optical wave guides G02F 1/125)}
G01H 9/006	<ul style="list-style-type: none"> {the vibrations causing a variation in the relative position of the end of a fibre and another element}
G01H 9/008	<ul style="list-style-type: none"> {by using ultrasonic waves (measuring position using ultrasonic waves G01S 15/02)}
G01H 11/00	Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves by detecting changes in electric or magnetic properties, {e.g. capacitance or reluctance} (structural combination of musical instruments with microphones or other pick-up devices G10H 3/16 , G10H 3/18 , G10H 3/20)
G01H 11/02	<ul style="list-style-type: none"> by magnetic means e.g. reluctance
G01H 11/04	<ul style="list-style-type: none"> using magnetostrictive devices
G01H 11/06	<ul style="list-style-type: none"> by electric means
G01H 11/08	<ul style="list-style-type: none"> using piezo-electric devices
G01H 13/00	Measuring resonant frequency
G01H 15/00	Measuring mechanical or acoustic impedance
G01H 17/00	Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves, not provided for in the preceding groups {(see provisionally also G01H 1/00)}