

SECTION G – PHYSICS

G01 MEASURING (counting G06M); TESTING

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) [4]

- (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.

PRINCIPLE OF THE MEASURING

By direct conduction; by detection
 in a fluid; by sensitivity to
 radiation; by detection of changes
 in electric or magnetic properties 1/00; 3/00;
 9/00; 11/00

SPECIAL CHARACTERISTICS MEASURED

Propagation velocity; reverberation
 time; resonant frequency;
 mechanical or acoustic impedance 5/00; 7/00;
 13/00; 15/00

1/00 Measuring vibrations in solids by using direct conduction to the detector (G01H 9/00, G01H 11/00 take precedence)

- 1/04 . of vibrations which are transverse to direction of propagation
 1/06 . . Frequency
 1/08 . . Amplitude
 1/10 . of torsional vibrations
 1/12 . of longitudinal or not specified vibrations [4]
 1/14 . . Frequency [4]
 1/16 . . Amplitude [4]

3/00 Measuring vibrations by using a detector in a fluid (G01H 7/00, G01H 9/00, G01H 11/00 take precedence)

- 3/04 . Frequency
 3/06 . . by electric means
 3/08 . . Analysing frequencies present in complex vibrations, e.g. comparing harmonics present
 3/10 . Amplitude; Power
 3/12 . . by electric means (G01H 3/14 takes precedence) [2]
 3/14 . . Measuring mean amplitude; Measuring mean power; Measuring time integral of power [2]

5/00 Measuring propagation velocity of ultrasonic, sonic or infrasonic waves

7/00 Measuring reverberation time (measuring absorption of vibrations in a material G01N; arrangements for producing a reverberation G10K 15/08)

9/00 Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves by using radiation-sensitive means, e.g. optical means

11/00 Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves by detecting changes in electric or magnetic properties

- 11/02 . by magnetic means, e.g. reluctance [4]
 11/04 . . using magnetostrictive devices [4]
 11/06 . by electric means [4]
 11/08 . . using piezo-electric devices [4]

13/00 Measuring resonant frequency

15/00 Measuring mechanical or acoustic impedance [3]

17/00 Measuring mechanical vibrations or ultrasonic, sonic or infrasonic waves, not provided for in the other groups of this subclass [4]