

## SECTION G — PHYSICS

### G12 INSTRUMENT DETAILS

#### G12B DETAILS OF INSTRUMENTS, OR COMPARABLE DETAILS OF OTHER APPARATUS, NOT OTHERWISE PROVIDED FOR

##### Note(s)

1. This subclass covers only details which are not restricted to measuring instruments or to any other apparatus covered by a single class.
2. This subclass does not cover:
  - details covered by any other subclass in section A, F, G or H. In particular, details restricted to the measuring instruments are covered by the relevant subclasses of class G01, e.g. G01D;
  - constructional details restricted to electric apparatus, e.g. casings, screenings, which are covered by subclass H05K or the relevant subclass in section H.
3. Attention is drawn to the Notes following the title of section G, especially as regards to the definition of the term "measuring" in Note (2) following the title of class G01.

##### Subclass index

SENSITIVE ELEMENTS PRODUCING MOVEMENT OR DISPLACEMENT; DETAILS OF MOVEMENTS.....	1/00, 3/00
ADJUSTING POSITION OR ATTITUDE; COMPENSATING FOR TEMPERATURE EFFECTS.....	5/00, 7/00
HOUSING, SUPPORTING; INDICATING ELEMENTS.....	9/00, 11/00
CALIBRATING.....	13/00
COOLING; SCREENING.....	15/00, 17/00

#### **1/00 Sensitive elements capable of producing movement or displacement for purposes not limited to measurement; Associated transmission mechanisms therefor**

- 1/02 • Compound strips or plates, e.g. bimetallic (thermometers using bimetallic elements G01K 5/62)
- 1/04 • Hollow bodies having parts which are deformable or displaceable under pressure, e.g. Bourdon tube, bellows (bellows in general F16J 3/00)

#### **3/00 Details of movements not otherwise provided for (damping of shock or vibrations in general F16F; avoiding out-of-balance forces F16F 15/00; testing balance G01M) [1, 7]**

- 3/02 • Caging of movements, i.e. locking of movements when not in use
- 3/04 • Suspensions (bearings F16C)
- 3/06 • Reducing effects of friction, e.g. by vibration (by lubrication F16N)
- 3/08 • Damping of movements, e.g. to promote rapid non-oscillatory movement to a final reading
- 3/10 • • using eddy currents

#### **5/00 Adjusting position or attitude, e.g. level, of instruments or other apparatus, or of parts thereof (levels per se G01C 9/00); Compensating for the effects of tilting or acceleration, e.g. for optical apparatus**

- 7/00 **Compensating for the effects of temperature** (by cooling G12B 15/00)

#### **9/00 Housing or supporting of instruments or other apparatus**

- 9/02 • Casings; Housings; Cabinets (sealing arrangements for transmission members F16J, particularly F16J 15/50)
- 9/04 • • Details, e.g. cover
- 9/06 • • • Metal casings
- 9/08 • Supports; Devices for carrying
- 9/10 • • Instrument boards; Panels; Desks; Racks; Frameworks

#### **11/00 Indicating elements; Illumination thereof**

- 11/02 • Scales; Dials
- 11/04 • Pointers; Setting-mechanisms therefor

#### **13/00 Calibrating of instruments or apparatus (calibrating of measuring instruments G01)**

- 15/00 **Cooling** (by refrigeration, e.g. circulation of refrigerated fluid, F25D; heat-exchange or heat-transfer details of general application F28F)
  - 15/02 • by closed-cycle fluid-circulating systems
  - 15/04 • by currents of fluid, e.g. air, in open cycle
  - 15/06 • by contact with heat-absorbing or radiating masses, e.g. heat-sink

#### **17/00 Screening** (insulation or other protection of buildings E04B; emergency protection of apparatus in general F16P 7/00; in connection with acoustic waves G10K 11/00; in connection with nuclear radiation G21F)

**Note(s)**

This group covers:

- the protection of instruments or other apparatus from external radiation or other influences;
- the prevention of the emission of undesirable radiation or other influences by instruments or other apparatus.

- |       |  |
|-------|--|
| 17/02 | • from electric or magnetic fields, e.g. radio waves   |
| 17/04 | • from ultra-violet, visible, or infra-red light (screening of lighting devices F21V; optical filters G02B 5/20)                           |
| 17/06 | • from heat (G12B 17/04 takes precedence; cooling G12B 15/00)  |
| 17/08 | • from influences producing mechanical damage, e.g. caused by blast, by external object, by person (G12B 17/02-G12B 17/06 take precedence) |