

## SECTION G — PHYSICS

### G01 MEASURING; TESTING

**G01T MEASUREMENT OF NUCLEAR OR X-RADIATION** (radiation analysis of materials, mass spectrometry G01N 23/00; tubes for determining the presence, intensity, density or energy of radiation or particles H01J 47/00)

#### Note(s)

1. This subclass covers the measurement of X-radiation, gamma radiation, corpuscular radiation, cosmic radiation, or neutron radiation.
2. Attention is drawn to the Notes following the title of class G01.

**1/00 Measuring X-radiation, gamma radiation, corpuscular radiation, or cosmic radiation** (G01T 3/00, G01T 5/00 take precedence) [1, 2, 2006.01]

1/02 • Dosimeters (G01T 1/15 takes precedence) [1, 2, 2006.01]

1/04 • • Chemical dosimeters (G01T 1/06, G01T 1/08 take precedence) [1, 2006.01]

1/06 • • Glass dosimeters [1, 2006.01]

1/08 • • Photographic dosimeters [1, 2006.01]

1/10 • • Luminescent dosimeters [1, 2006.01]

1/105 • • • Read-out devices (G01T 1/115 takes precedence) [2, 2006.01]

1/11 • • • Thermo-luminescent dosimeters [1, 2006.01]

1/115 • • • • Read-out devices [2, 2006.01]

1/12 • • Calorimetric dosimeters [1, 2006.01]

1/14 • • Electrostatic dosimeters (construction of ionisation chambers H01J 47/02) [1, 2006.01]

1/142 • • • Charging devices; Read-out devices [2, 2006.01]

1/15 • Instruments in which pulses generated by a radiation detector are integrated, e.g. by a diode pump circuit [1, 2006.01]

1/16 • Measuring radiation intensity (G01T 1/29 takes precedence) [1, 2, 2006.01]

1/161 • • Applications in the field of nuclear medicine, e.g. in vivo counting [2, 2006.01]

1/163 • • • Whole-body counters [2, 2006.01]

1/164 • • • Scintigraphy [2, 2006.01]

1/166 • • • • involving relative movement between detector and subject [2, 2006.01]

1/167 • • Measuring radioactive content of objects, e.g. contamination (whole-body counters G01T 1/163) [2, 2006.01]

1/169 • • Exploration, location of contaminated surface areas [2, 2006.01]

1/17 • • Circuit arrangements not adapted to a particular type of detector [1, 2006.01]

1/172 • • • with coincidence circuit arrangements (G01T 1/178 takes precedence) [2, 2006.01]

1/175 • • • Power supply circuits [2, 2006.01]

1/178 • • • for measuring specific activity in the presence of other radioactive substances, e.g. natural, in the air or in liquids such as rain-water [2, 2006.01]

1/18 • • with counting-tube arrangements, e.g. with Geiger counters (tubes H01J 47/00) [1, 2006.01]

1/185 • • with ionisation-chamber arrangements [2, 2006.01]

1/20 • • with scintillation detectors [1, 2006.01]

1/202 • • • the detector being a crystal [1, 2006.01]

1/203 • • • the detector being made of plastics [1, 2006.01]

1/204 • • • the detector being a liquid [1, 2006.01]

1/205 • • • the detector being a gas [1, 2006.01]

1/208 • • • Circuits specially adapted for scintillation detectors, e.g. for the photo-multiplier section [2, 2006.01]

1/22 • • with Cerenkov detectors [1, 2006.01]

1/24 • • with semiconductor detectors [1, 2006.01]

1/26 • • with resistance detectors [1, 2006.01]

1/28 • • with secondary-emission detectors [1, 2006.01]

1/29 • Measurement performed on radiation beams, e.g. position or section of the beam; Measurement of spatial distribution of radiation [2, 2006.01]

1/30 • Measuring half-life of a radioactive substance [1, 2006.01]

1/32 • Measuring polarisation of particles [1, 2006.01]

1/34 • Measuring cross-section, e.g. absorption cross-section of particles [1, 2006.01]

1/36 • Measuring spectral distribution of X-rays or of nuclear radiation [1, 2006.01]

1/38 • • Particle discrimination and measurement of relative mass, e.g. by measurement of loss of energy with distance ( $dE/dx$ ) [2, 2006.01]

1/40 • • Stabilisation of spectrometers [2, 2006.01]

**3/00 Measuring neutron radiation** (G01T 5/00 takes precedence) [1, 2, 2006.01]

3/02 • by shielding other radiation [1, 2006.01]

3/04 • using calorimetric devices [1, 2006.01]

3/06 • with scintillation detectors [2, 2006.01]

3/08 • with semiconductor detectors [2, 2006.01]

**5/00 Recording of movements or tracks of particles** (spark chambers H01J 47/14); **Processing or analysis of such tracks** [1, 2, 2006.01]

5/02 • Processing of tracks; Analysis of tracks [1, 2006.01]

5/04 • Cloud chambers, e.g. Wilson chamber [1, 2006.01]

5/06 • Bubble chambers [1, 2006.01]

5/08 • Scintillation chambers (discharge tubes H01J 40/00, H01J 47/00) [1, 2006.01]

## G01T

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|------|---|------|--|
| 5/10 | <ul style="list-style-type: none"><li>• Plates or blocks in which tracks of nuclear particles are made visible by after-treatment, e.g. using photographic emulsion, using mica <b>[1, 2006.01]</b></li></ul> | 7/02 | <ul style="list-style-type: none"><li>• Collecting-means for receiving or storing samples to be investigated <b>[1, 2006.01]</b></li></ul> |
| 5/12 | <ul style="list-style-type: none"><li>• Circuit arrangements with multi-wire or parallel-plate chambers, e.g. spark chambers (tubes <u>per se</u> H01J 47/00) <b>[2, 2006.01]</b></li></ul>                   | 7/04 | <ul style="list-style-type: none"><li>• • by filtration <b>[1, 2006.01]</b></li></ul>  |
|      |   | 7/06 | <ul style="list-style-type: none"><li>• • by electrostatic precipitation (G01T 7/04 takes precedence) <b>[1, 2006.01]</b></li></ul>        |
|      |   | 7/08 | <ul style="list-style-type: none"><li>• Means for conveying samples received <b>[1, 2006.01]</b></li></ul>                                 |
| 7/00 | <b>Details of radiation-measuring instruments [1, 2006.01]</b>  | 7/10 | <ul style="list-style-type: none"><li>• • using turntables <b>[1, 2006.01]</b></li></ul>   |
|      |   | 7/12 | <ul style="list-style-type: none"><li>• Provision for actuation of an alarm <b>[1, 2006.01]</b></li></ul>                                  |