

SECTION G – PHYSICS

G01 MEASURING (counting G06M); TESTING

G01T MEASUREMENT OF NUCLEAR OR X-RADIATION (radiation analysis of materials, mass spectrometry G01N; counters per se G06M, H03K; electric discharge tubes for analysing radiation or particles H01J 40/00, H01J 47/00, H01J 49/00)

- (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.

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- 1/00 Measuring X-radiation, gamma radiation, corpuscular radiation, or cosmic radiation** (G01T 3/00, G01T 5/00 take precedence) [2]
- 1/02 . Dosimeters (G01T 1/15 takes precedence; measuring exposure time to X-rays H05G 1/28) [2]
- 1/04 . . Chemical dosimeters (G01T 1/06, G01T 1/08 take precedence)
- 1/06 . . Glass dosimeters
- 1/08 . . Photographic dosimeters (photosensitive materials or processes for photographic purposes G03C)
- 1/10 . . Luminescent dosimeters
- 1/105 . . . Read-out devices (G01T 1/115 takes precedence) [2]
- 1/11 . . . Thermo-luminescent dosimeters
- 1/115 Read-out devices [2]
- 1/12 . . Calorimetric dosimeters
- 1/14 . . Electrostatic dosimeters (construction of ionisation chambers H01J 47/02)
- 1/142 . . . Charging devices; Read-out devices [2]
- 1/15 . Instruments in which pulses generated by a radiation detector are integrated, e.g. by a diode pump circuit (pulse rate meters in general G01R 23/02)
- 1/16 . Measuring radiation intensity (G01T 1/29 takes precedence) [2]
- 1/161 . . Applications in the field of nuclear medicine, e.g. in vivo counting (applying radioactive material to the body A61M 36/00) [2]
- 1/163 . . . Whole-body counters [2]
- 1/164 . . . Scintigraphy (radio isotopes G21G 4/00; tracers G21H 5/00) [2]
- 1/166 involving relative movement between detector and subject [2]
- 1/167 . . Measuring radioactive content of objects, e.g. contamination (whole-body counters G01T 1/163) [2]
- 1/169 . . Exploration, location of contaminated surface areas (prospecting by the use of nuclear radiation, natural or induced G01V 5/00) [2]
- 1/17 . . Circuit arrangements not adapted to a particular type of detector
- 1/172 . . . with coincidence circuit arrangements (G01T 1/178 takes precedence) [2]
- 1/175 . . . Power supply circuits (converters H02M) [2]
- 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]
- 1/18 . . with counting-tube arrangements, e.g. with Geiger counters (tubes H01J 47/00)
- 1/185 . . with ionisation-chamber arrangements (construction of ionisation chambers H01J 47/02) [2]
- 1/20 . . with scintillation detectors
- 1/202 . . . the detector being a crystal
- 1/203 . . . the detector being made of plastics
- 1/204 . . . the detector being a liquid
- 1/205 . . . the detector being a gas
- 1/208 . . . Circuits specially adapted for scintillation detectors, e.g. for the photo-multiplier section [2]
- 1/22 . . with Cerenkov detectors
- 1/24 . . with semiconductor detectors (semiconductor detectors per se H01L 31/00)
- 1/26 . . with resistance detectors
- 1/28 . . with secondary-emission detectors (secondary-electron-emitting electrodes in general H01J 1/32)
- 1/29 . Measurement performed on radiation beams, e.g. position or section of the beam; Measurement of spatial distribution of radiation (scintigraphy G01T 1/164) [2]
- 1/30 . Measuring half-life of a radioactive substance
- 1/32 . Measuring polarisation of particles
- 1/34 . Measuring cross-section, e.g. absorption cross-section of particles
- 1/36 . Measuring spectral distribution of X-rays or of nuclear radiation
- 1/38 . . Particle discrimination and measurement of relative mass, e.g. by measurement of loss of energy with distance (dE/dx) [2]
- 1/40 . . Stabilisation of spectrometers [2]
- 3/00 Measuring neutron radiation** (G01T 5/00 takes precedence) [2]
- 3/02 . by shielding other radiation
- 3/04 . using calorimetric devices
- 3/06 . with scintillation detectors [2]
- 3/08 . with semiconductor detectors (semiconductor detectors per se H01L 31/00) [2]
- 5/00 Recording of movements or tracks of particles** (spark chambers H01J 47/00); **Processing or analysis of such tracks** [2]
- 5/02 . Processing of tracks; Analysis of tracks
- 5/04 . Cloud chambers, e.g. Wilson chamber
- 5/06 . Bubble chambers
- 5/08 . Scintillation chambers (discharge tubes H01J 40/00, H01J 47/00; semiconductor devices H01L)

G01T

- 5/10 . Plates or blocks in which tracks of nuclear particles are made visible by after-treatment, e.g. using photographic emulsion, using mica
- 5/12 . Circuit arrangements with multi-wire or parallel-plate chambers, e.g. spark chambers (tubes per se H01J 47/00) [2]
- 7/00 Details of radiation-measuring instruments**
- 7/02 . Collecting-means for receiving or storing samples to be investigated
- 7/04 . . by filtration
- 7/06 . . by electrostatic precipitation (G01T 7/04 takes precedence)
- 7/08 . Means for conveying samples received
- 7/10 . . using turntables
- 7/12 . Provision for actuation of an alarm