CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS
(NOTES omitted)

INSTRUMENTS

G01 MEASURING; TESTING
(NOTES omitted)

G01Q SCANNING-PROBE TECHNIQUES OR APPARATUS; APPLICATIONS OF SCANNING-PROBE TECHNIQUES, e.g. SCANNING PROBE MICROSCOPY [SPM]

NOTE

In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

10/00 Scanning or positioning arrangements, i.e. arrangements for actively controlling the movement or position of the probe

10/02 . Coarse scanning or positioning
10/04 . Fine scanning or positioning
10/045 . . {Self-actuating probes, i.e. wherein the actuating means for driving are part of the probe itself, e.g. piezoelectric means on a cantilever probe}
10/06 . . Circuits or algorithms therefor
10/065 . . . {Feedback mechanisms, i.e. wherein the signal for driving the probe is modified by a signal coming from the probe itself}

20/00 Monitoring the movement or position of the probe

20/02 . by optical means
20/04 . Self-detecting probes, i.e. wherein the probe itself generates a signal representative of its position, e.g. piezoelectric gauge

30/00 Auxiliary means serving to assist or improve the scanning probe techniques or apparatus, e.g. display or data processing devices

30/02 . Non-SPM analysing devices, e.g. SEM [Scanning Electron Microscope], spectrometer or optical microscope
30/025 . . {Optical microscopes coupled with SPM}
30/04 . Display or data processing devices
30/06 . . for error compensation
30/08 . Means for establishing or regulating a desired environmental condition within a sample chamber
30/10 . . Thermal environment
30/12 . . Fluid environment
30/14 . . . Liquid environment
30/16 . . Vacuum environment
30/18 . Means for protecting or isolating the interior of a sample chamber from external environmental conditions or influences, e.g. vibrations or electromagnetic fields
30/20 . Sample handling devices or methods

40/00 Calibration, e.g. of probes

40/02 . Calibration standards and methods of fabrication thereof

60/00 Particular types of SPM [Scanning Probe Microscopy] or microscopes; Essential components thereof

60/02 . Multiple-type SPM, i.e. involving more than one SPM techniques
60/04 . . STM [Scanning Tunnelling Microscopy] combined with AFM [Atomic Force Microscopy]
60/06 . . SNOM [Scanning Near-field Optical Microscopy] combined with AFM [Atomic Force Microscopy]
60/08 . . MFM [Magnetic Force Microscopy] combined with AFM [Atomic Force Microscopy
60/10 . STM [Scanning Tunnelling Microscopy] or apparatus therefor, e.g. STM probes
60/12 . . STS [Scanning Tunnelling Spectroscopy]
60/14 . . STP [Scanning Tunnelling Potentiometry]
60/16 . . Probes, their manufacture, or their related instrumentation, e.g. holders
60/18 . SNOM [Scanning Near-Field Optical Microscopy] or apparatus therefor, e.g. SNOM probes
60/20 . . Fluorescence
60/22 . . Probes, their manufacture, or their related instrumentation, e.g. holders
60/24 . AFM [Atomic Force Microscopy] or apparatus therefor, e.g. AFM probes
60/26 . . Friction force microscopy
60/28 . . Adhesion force microscopy
60/30 . . Scanning potential microscopy
60/32 . . AC mode
60/34 . . . Tapping mode
60/36 . . DC mode
60/363 . . . {Contact-mode AFM}
60/366 . . . {Nanoindenters, i.e. wherein the indenting force is measured}
60/38 . . Probes, their manufacture, or their related instrumentation, e.g. holders
60/40 . . . Conductive probes
60/42 . . . Functionalisation
60/44 . SICM [Scanning Ion-Conductance Microscopy] or apparatus therefor, e.g. SICM probes
60/46 . SCM [Scanning Capacitance Microscopy] or apparatus therefor, e.g. SCM probes
60/48 . . Probes, their manufacture, or their related instrumentation, e.g. holders

60/50 . MFM [Magnetic Force Microscopy] or apparatus therefor, e.g. MFM probes

60/52 . . Resonance

60/54 . . Probes, their manufacture, or their related instrumentation, e.g. holders

60/56 . . . Probes with magnetic coating

60/58 . SThM [Scanning Thermal Microscopy] or apparatus therefor, e.g. SThM probes

60/60 . SECM [Scanning Electro-Chemical Microscopy] or apparatus therefor, e.g. SECM probes

70/00 General aspects of SPM probes, their manufacture or their related instrumentation, insofar as they are not specially adapted to a single SPM technique covered by group G01Q 60/00

70/02 . Probe holders

70/04 . . with compensation for temperature or vibration induced errors

70/06 . Probe tip arrays

70/08 . Probe characteristics

70/10 . . Shape or taper

70/12 . . . Nanotube tips

70/14 . . Particular materials

70/16 . Probe manufacture

70/18 . . Functionalisation

80/00 Applications, other than SPM, of scanning-probe techniques (manufacture or treatment of nanostructures B82B 3/00; recording or reproducing information using near-field interaction G11B 9/12, G11B 11/24, G11B 13/08)

90/00 Scanning-probe techniques or apparatus not otherwise provided for