ECLA EUROPEAN CLASSIFICATION

G01J MEASUREMENT OF INTENSITY, VELOCITY, SPECTRAL CONTENT, POLARISATION, PHASE OR PULSE CHARACTERISTICS OF INFRA-RED, VISIBLE OR ULTRA-VIOLET LIGHT; COLORIMETRY; RADIATION PYROMETRY (light sources F21, H01J, H01K, H05B; investigating properties of materials by optical means G01N)

Note

1. This subclass covers the detection of the presence or absence of infra-red, visible, or ultra-violet light, not otherwise provided for.

2. Attention is drawn to the Notes following the title of class G01.

G01J1/00 **Photometry, e.g. photographic exposure meter** (spectrophotometry G01J3/00; specially adapted for radiation pyrometry G01J5/00) [N: exposure meters built in cameras G03B17/06]

G01J1/02 . Details
G01J1/02C . . [N: Compact construction] [N1204]
G01J1/02C1 . . . [N: Monolithic] [N1204]
G01J1/02D . . [N: Constructional arrangements for removing stray light] [N1204]
G01J1/02E . . [N: Electrical interface; User interface] [N1204]
G01J1/02F . . [N: Sample holders for photometry] [N1204]
G01J1/02G . . [N: Control of working procedures; Failure detection; Spectral bandwidth calculation] [N1204]
G01J1/02H . . [N: Handheld] [N1204]
G01J1/02J . . [N: making use of sensor-related data, e.g. for identification of sensor or optical parts] [N1204]
G01J1/02K . . [N: Control or determination of height or angle information of sensors or receivers; Goniophotometry] [N1204]
G01J1/02M . . [N: using a charging unit] [N1204]
G01J1/02N . . [N: Constructional arrangements for compensating for fluctuations caused by e.g. temperature, or using cooling or temperature stabilization of parts of the device; Controlling the atmosphere inside a photometer; Purge systems, cleaning devices (protection against electromagnetic interferences S01J1/02S)] [N1204]
G01J1/02Q . . [N: Field-of-view determination; Aiming or pointing of a photometer; Adjusting alignment; Encoding angular position; Size of the measurement area; Position tracking; Photodetection involving different fields of view for a single detector] [N1204]
G01J1/02R . . [N: Housings; Attachments or accessories for photometers] [N1204]
G01J1/02T . . [N: Multi-channel photometry] [N1204]
G01J1/02U . . [N: Constructional arrangements for removing other types of optical noise or for performing calibration] [N1204]
G01J1/04 . . Optical or mechnical part [N: supplementary adjustable parts]
G01J1/04A . . . [N: Mechanical elements; Supports for optical elements; Scanning

arrangements] [N1204]

G01J1/04B . . . [N: Optical elements not provided otherwise, e.g. manifolds, windows, holograms, gratings] [N1204]

G01J1/04B1 . . . . [N: using focussing or collimating elements, i.e. lenses or mirrors; Aberration correction] [N1204]

G01J1/04B2 . . . . [N: using plane or convex mirrors, parallel phase plates, or plane beam-splitters] [N1204]

G01J1/04B3 . . . . [N: using attenuators] [N1204]

G01J1/04B4 . . . . [N: using light concentrators, collectors or condensers] [N1204]

G01J1/04B5 . . . . [N: using optical fibers] [N1204]

G01J1/04B6 . . . . [N: using polarisation elements] [N1204]

G01J1/04B7 . . . . [N: using notch filters] [N1204]

G01J1/04B8 . . . . [N: using masks, aperture plates, spatial light modulators, spatial filters, e.g. reflective filters] [N1204]

G01J1/04B9 . . . . [N: using shutters] [N1204]

G01J1/04B10 . . . . [N: using means for replacing an element by another, e.g. for replacing a filter or grating] [N1204]

G01J1/04B11 . . . . [N: Adjustable, e.g. focussing] [N1204]

G01J1/04B12 . . . . [N: using means for illuminating a slit efficiently, e.g. entrance slit of a photometer or entrance face of fiber] [N1204]

G01J1/04B13 . . . . [N: having a throughhole enabling the optical element to fulfil an additional optical function, e.g. a mirror or grating having a through-hole for a light collecting or light injecting optical fibre] [N1204]

G01J1/04B14 . . . . [N: using an optical amplifier of light or coatings to improve optical coupling] [N1204]

G01J1/04B15 . . . . [N: Slit arrangements] [N1204]

G01J1/04B16 . . . . [N: with a sighting port] [N1204]

G01J1/04B17 . . . . [N: using extension/expansion of solids or fluids, change of resonant frequency or extinction effect] [N1204]

G01J1/04B18 . . . . [N: Diffusers (cavities S01J1/04C)] [N1204]

G01J1/04B19 . . . . [N: Prisms, wedges] [N1204]

G01J1/04F . . . [N: with spectral filtering] [N1204]

G01J1/04F2 . . . . [N: using at least two different filters] [N1204]

G01J1/06 . . . Restricting the angle of incident light [M1207]

G01J1/08 . . Arrangements of light sources specially adapted for photometry [N: standard sources, also using luminescent or radioactive material]

G01J1/10 . by comparison with reference light or electric value [N: provisionally void]

G01J1/12 . . using wholly visual means (G01J1/20 takes precedence)

G01J1/12A . . . [N: Visual exposure meters for determining the exposure time in photographical recording or reproducing] [M1207]

G01J1/12A1 . . . . [N: based on the comparison of the intensity of measured light with a comparison source or comparison illuminated surface]

G01J1/12A1J . . . . . [N: for enlarging apparatus]

G01J1/12A1K . . . . . [N: for copy- or printing apparatus]

G01J1/14 . . . using comparison with a surface of graded brightness, [N: e.g. for view taking; for analytical applications G01N21/29B]

G01J1/16 . . using electric radiation detectors (G01J1/20 takes precedence)
G01J1/16D . . . [N: Arrangements with two photodetectors, the signals of which are compared]
G01J1/18 . . . using comparison with a reference electric value
G01J1/20 . . intensity of the measured or reference value being varied to equalise their effects at the detectors, e.g. by varying incidence angle
G01J1/22 . . . using a variable element in the light-path, e.g. filter, polarising means (G01J1/34 takes precedence)
G01J1/24 . . . . using electric radiation detectors
G01J1/26 . . . . . adapted for automatic variation of the measured or reference value (regulation of light intensity G05D25/00) [M1207]
G01J1/28 . . . using variation of intensity or distance of source (G01J1/34 takes precedence) [M1207]
G01J1/30 . . . . using electric radiation detectors
G01J1/32 . . . . . adapted for automatic variation of the measured or reference value (regulation of light intensity G05D25/00) [M1207]
G01J1/34 . . . using separate light paths used alternately or sequentially, e.g. flicker
G01J1/36 . . . . using electric radiation detectors

G01J1/38 . using wholly visual means (G01J1/10 takes precedence)
G01J1/40 . . using limit or visibility or extinction effect

G01J1/42 . using electric radiation detectors (optical or mechanical part G01J1/04; by comparison with a reference light or electric value G01J1/10)
G01J1/42A . . [N: with determination of ambient light (solar light S01J1/42S)] [N1204]
G01J1/42C . . [N: Photoelectric exposure meters for determining the exposure time in recording or reproducing]
G01J1/42C1H . . . [N: specially adapted for view-taking apparatus]
G01J1/42C1J . . . [N: specially adapted for enlargers]
G01J1/42C1K . . . [N: specially adapted for copy - or printing apparatus]
G01J1/42D . . [N: arrangements with two or more detectors, e.g. for sensitivity compensation] [M1207]
G01J1/42L . . [N: applied to monitoring the characteristics of a beam, e.g. laser beam, headlamp beam (monitoring arrangements for lasers in general H01S3/00D)]
G01J1/42V . . [N: applied to measurement of ultraviolet light (using counting tubes G01T)]
G01J1/44 . . Electric circuits [N: for command of an exposure part G03B7/02]
G01J1/46 . . . using a capacitor

G01J1/48 . using chemical effects
G01J1/50 . . using change in colour of an indicator, e.g. actinometer
G01J1/52 . . using photographic effects [M1207]
G01J1/54 . . by observing photo-reactions between gases

G01J1/56 . using radiation pressure or radiometer effect [M1207]

G01J1/58 . using luminescence generated by light

G01J1/60 . by measuring the pupil of the eye

G01J3/00 **Spectrometry; Spectrophotometry; Monochromators; Measuring colour**

G01J3/02 . Details
G01J3/02A . . [N: Mechanical elements; Supports for optical elements] [N1204]
G01J3/02B . . [N: Optical elements not provided otherwise, e. g. optical manifolds, diffusers, windows] [N1204]
G01J3/02B1 . . . [N: using focussing or collimating elements, e.g. lenses or mirrors; performing aberration correction] [N1204]
G01J3/02B2 . . . [N: using plane or convex mirrors, parallel phase plates, or particular reflectors] [N1204]
G01J3/02B3 . . . [N: using attenuators] [N1204]
G01J3/02B4 . . . [N: using light concentrators or collectors or condensers] [N1204]
G01J3/02B5 . . . [N: using optical fibers] [N1204]
G01J3/02B5A . . . . [N: the fibers defining an entry slit] [N1204]
G01J3/02B6 . . . [N: using polarising or depolarising elements] [N1204]
G01J3/02B7 . . . [N: using notch filters] [N1204]
G01J3/02B8 . . . [N: using masks, aperture plates, spatial light modulators or spatial filters, e.g. reflective filters] [N1204]
G01J3/02B9 . . . [N: using shutters] [N1204]
G01J3/02B10 . . . [N: using means for replacing an element by another, for replacing a filter or a grating] [N1204]
G01J3/02B11 . . . [N: Adjustable, e.g. focussing] [N1204]
G01J3/02B12 . . . [N: using means for illuminating a slit efficiently (e.g. entrance slit of a spectrometer or entrance face of fiber)] [N1204]
G01J3/02B13 . . . [N: having a through-hole enabling the optical element to fulfil an additional optical function, e.g. a mirror or grating having a throughhole for a light collecting or light injecting optical fiber] [N1204]
G01J3/02B14 . . . [N: using an optical amplifier of light, e.g. doped fiber] [N1204]
G01J3/02B16 . . . [N: using a sighting port, e.g. camera or human eye] [N1204]
G01J3/02B18 . . . [N: Colorimeters making use of an integrating sphere] [N1204]
G01J3/02B19 . . . [N: Spectrometers, other than colorimeters, making use of an integrating sphere] [N1204]
G01J3/02C . . [N: Compact construction] [N1204]
G01J3/02C1 . . . [N: Monolithic] [N1204]
G01J3/02D . . [N: Constructional arrangements for removing stray light] [N1204]
G01J3/02E . . [N: Electrical interface; User interface] [N1204]
G01J3/02F . . [N: Sample holders for colorimetry] [N1204]
G01J3/02G . . [N: Control of working procedures of a spectrometer; Failure detection; Bandwidth calculation] [N1204]
G01J3/02H . . [N: Handheld] [N1204]
G01J3/02J . . [N: making use of sensor-related data, e. g. for identification of sensor parts or optical elements] [N1204]
G01J3/02K . . [N: Control or determination of height or angle information for sensors or receivers] [N1204]
G01J3/02M . . [N: using a charging unit] [N1204]

G01J3/02N . . [N: Constructional arrangements for compensating for fluctuations caused by temperature, humidity or pressure, or using cooling or temperature stabilization of parts of the device; Controlling the atmosphere inside a spectrometer, e.g. vacuum] [N1204]

G01J3/02Q . . [N: Field-of-view determination; Aiming or pointing of a spectrometer; Adjusting alignment; Encoding angular position; Size of measurement area; Position tracking] [N1204]

G01J3/02R . . [N: Housings; Spectrometer accessories; Spatial arrangement of elements, e.g. folded path arrangements] [N1204]

G01J3/02T . . [N: Multi-channel spectroscopy] [N1204]

G01J3/02U . . [N: Constructional arrangements for removing other types of optical noise or for performing calibration] [N1204]

G01J3/04 . . Slit arrangements [N: slit adjustment]

G01J3/06 . . Scanning arrangements [N: arrangements for order-selection]

G01J3/08 . . Beam switching arrangements

G01J3/10 . . Arrangements of light sources specially adapted for spectrometry or colorimetry

G01J3/10F . . . [N: for measurement in the infra-red range]

G01J3/12 . Generating the spectrum; Monochromators

G01J3/12G . . [N: using acousto-optic tunable filter; (acousto-optic elements or systems G02F1/11, G02F1/33)]

G01J3/14 . . using refracting elements, e.g. prisms (G01J3/18, G01J3/26 take precedence) [N: prisms per se G02B5/04]

G01J3/16 . . . with autocollimation

G01J3/18 . . using diffraction elements, e.g. grating (gratings per se G02B)

G01J3/18B . . . [N: Plane gratings]

G01J3/18C . . . [N: Echelle gratings]

G01J3/18G . . . [N: Grazing incidence]

G01J3/18H . . . [N: Holographic gratings]

G01J3/18P . . . [N: using at least one grating in an off-plane configuration] [N1204]

G01J3/18W . . . [N: using fiber Bragg gratings or gratings integrated in a waveguide] [N1204]

G01J3/20 . . . Rowland circle spectrometers

G01J3/22 . . . Littrow mirror spectrometers

[N: **WARNING**
material provisionally in G01J3/18
]

G01J3/24 . . . using gratings profiled to favour a specific order

G01J3/26 . . using multiple reflection, e.g. Fabry-Perot interferometer, variable interference filters

G01J3/28 . Investigating the spectrum (using colour filters G01J3/51)

G01J3/28B . . [N: using photoelectric array detector]

G01J3/28D . . [N: Imaging spectrometer]

G01J3/28G . . [N: using modulation grid; Grid spectrometers]

G01J3/28S . . [N: Rapid scan spectrometers; Time resolved spectrometry]

G01J3/30 . . Measuring the intensity of spectral line directly on the spectrum itself (G01J3/42,

G01J3/44 take precedence)

G01J3/32 . . . Investigating bands of a spectrum in sequence by a single detector

G01J3/36 . . . Investigating two or more bands of a spectrum by separate detectors

G01J3/40 . . Measuring the intensity of spectral lines by determining density of a photograph of the spectrum; Spectrography (G01J3/42, G01J3/44 take precedence)

G01J3/42 . . Absorption spectrometry; Double beam spectrometry; Flicker spectrometry; Reflection spectrometry (beam switching arrangements G01J3/08)

G01J3/427 . . . Dual wavelengths spectrometry

G01J3/433 . . . Modulation spectrometry; Derivative spectrometry

G01J3/433K . . . . [N: Frequency modulated spectrometry]

G01J3/44 . . Raman spectrometry; Scattering spectrometry; [N: Fluorescence spectrometry]

G01J3/44B . . . [N: Fluorescence spectrometry]

G01J3/44C . . . [N: Scattering spectrometry (particle sizing by light scattering G01N15/02B; optical velocimetry of particles G01P5/00D)]

G01J3/443 . . Emission spectrometry

G01J3/447 . . Polarisation spectrometry

G01J3/45 . . Interferometric spectrometry

G01J3/453 . . . by correlation of the amplitudes

G01J3/453B . . . . [N: Devices without moving parts] [N9412]

G01J3/453C . . . . [N: Devices of compact or symmetric construction (G01J3/453B takes precedence)] [N9412]

G01J3/453M . . . . [N: Devices with moving mirror (G01J3/453C takes precedence)] [N9412]

G01J3/453R . . . . [N: Devices with refractive scan] [N9412]

G01J3/457 . . Correlation spectrometry, e.g. of the intensity (G01J3/453 takes precedence)

G01J3/46 . Measurement of colour; Colour measuring devices, e.g. colorimeters (measuring colour temperature G01J5/60)

G01J3/46B . . [N: with colour spinners]

G01J3/46C . . [N: Computing operations in or between colour spaces; Colour management systems] [N1204]

G01J3/46D . . [N: Colour matching] [N1204]

G01J3/46E . . [N: taking into account the colour perception of the eye; using tristimulus detection] [N1204]

G01J3/50 . . using electric radiation detectors

G01J3/50B . . . [N: Colorimeters using spectrally-selective light sources, e.g. LEDs] [N1204]

G01J3/50C . . . [N: using a dispersive element, e.g. grating, prism] [N1204]

G01J3/50G . . . [N: Goniometric colour measurements, for example measurements of metallic or flake based paints] [N1204]

G01J3/50L . . . [N: measuring the colour produced by lighting fixtures other than screens, monitors, displays or CRTs] [N1204]

G01J3/50M . . . [N: measuring the colour produced by screens, monitors, displays or CRTs] [N1204]

G01J3/50T . . . [N: measuring the colour of teeth] [N1204]

G01J3/51 . . . using colour filters

G01J3/51A . . . . [N: having fixed filter-detector pairs] [N1204]

G01J3/52 . . using colour charts
G01J3/52B . . . [N: circular colour charts]
G01J3/52C . . . [N: Calibration of colorimeters] [N1204]
G01J3/52D . . . [N: for choosing a combination of different colours, e.g. to produce a pleasing effect for an observer] [C1207]
G01J3/52D2 . . . . [N: using colour harmony theory] [N1204]

G01J4/00 **Measuring polarisation of light** (investigating or analysing materials by measuring rotation of plane of polarised light G01N21/21)

G01J4/02 . Polarimeters of separated-field type; Polarimeters of half-shadow type

G01J4/04 . Polarimeters using electric detection means (G01J4/02 takes precedence)

G01J5/00 **Radiation pyrometry** (photometry in general G01J1/00; spectrometry in general G01J3/00) [N: measuring temperature in general, i.e. with a contacting sensor G01K; calorimetry of radiation beams G01K17/00; direction finders for radiant sources G01S; intrusion detection by radiation G08B]

G01J5/00B . [N: for sensing the radiant heat transfer of samples, e.g. emittance meter]
G01J5/00B1 . . [N: of wafers or semiconductor substrates, e.g. using Rapid Thermal Processing] [N1204]
G01J5/00B2 . . [N: Ear thermometers (G01J5/02B and G01J5/04T take precedence)] [N1204]

G01J5/00C . [N: for sensing the radiation from gases, flames]
G01J5/00C1 . . [N: Flames, plasma or welding] [N1204]

G01J5/00D . [N: for sensing the radiation of moving bodies]
G01J5/00D1 . . [N: Living bodies (ear thermometers G01J5/00B2; detecting, measuring or recording for diagnostic purposes A61B5)] [N1204]

G01J5/00E . [N: for sensing the heat emitted by liquids] [N1204]
G01J5/00E1 . . [N: by molten metals] [N1204]

G01J5/00F . [N: Furnaces, ovens, kilns (G01J5/00B1, G01J5/00E1 take precedence)] [N1204]

G01J5/00H . [N: for hot spots detection] [N1204]

G01J5/00J . [N: for earth observation] [N1204]

G01J5/00U . [N: in turbines] [N1204]

G01J5/00W . [N: for measuring wires, electrical contacts or electronic systems] [N1204]

G01J5/02 . Details
G01J5/02A . . [N: Mechanical elements; Supports for optical elements] [N1204]
G01J5/02B . . [N: Probe covers for thermometers, e.g. tympanic thermometers; Containers for probe covers; Disposable probes] [N1204]
G01J5/02C . . [N: Compact construction] [N1204]

G01J5/02C1 . . . [N: Monolithic] [N1204]

G01J5/02D . . [N: Shape of the cavity itself or of elements contained in or suspended over the cavity] [N1204]

G01J5/02D1 . . . [N: Particular leg structure or construction or shape; Nanotubes] [N1204]

G01J5/02D2 . . . [N: Spacers, e.g. for avoidance of stiction] [N1204]

G01J5/02D3 . . . [N: Special manufacturing steps or sacrificial layers or layer structures] [N1204]

G01J5/02D4 . . . [N: for performing thermal shunt] [N1204]

G01J5/02E . . [N: Interfacing a pyrometer to an external device or network; User interface] [N1204]

G01J5/02F . . [N: Sample holders for pyrometry; Cleaning of sample (using a gas purge G01J5/02P)] [N1204]

G01J5/02G . . [N: Control of working procedures of a pyrometer, other than calibration (calibration S01J5/00G and G01J5/52B); Detecting failures in the functioning of a pyrometer; Bandwidth calculation; Gain control; Security control] [N1204]

G01J5/02H . . [N: Handheld, portable (ear thermometers G01J5/04T)] [N1204]

G01J5/02J . . [N: making use of sensor-related data, e.g. for identification of sensor parts or optical elements] [N1204]

G01J5/02K . . [N: Control or determination of height or distance or angle information for sensors or receivers] [N1204]

G01J5/02M . . [N: using a charging unit or battery] [N1204]

G01J5/02N . . [N: Constructional arrangements for compensating for fluctuations caused by humidity, pressure or electromagnetic waves; Controlling the atmosphere inside a pyrometer (G01J5/02P takes precedence)] [N1204]

G01J5/02P . . [N: using a gas purge] [N1204]

G01J5/02Q . . [N: Nulling devices or absolute detection] [N1204]

G01J5/04 . . Casings [N: Mountings]

G01J5/04B . . . [N: Mountings in enclosures or in a particular environment]

G01J5/04B1 . . . . [N: High-temperature environment (G01J5/00B1, G01J5/00F, G01J5/00U and G01J5/00E1 take precedence)] [N1204]

G01J5/04B2 . . . . [N: Prevention or determination of dust, smog or clogging (G01J5/02P takes precedence)] [N1204]

G01J5/04B3 . . . . [N: Environment with strong vibrations or shocks] [N1204]

G01J5/04B4 . . . . [N: Sealings; Vacuum enclosures; Encapsulated packages; Wafer bonding structures; Getter arrangements (getter arrangements per se H01L23/26 and H01L31/0203B)] [N1204]

G01J5/04D . . . [N: Materials; Selection of thermal materials] [N1204]

G01J5/04M . . . [N: Mobile mounting; Scanning arrangements] [N1204]

G01J5/04P . . . [N: Protective parts] [N1204]

G01J5/04T . . . [N: Casings for tympanic thermometers] [N1204]

G01J5/06 . . Arrangements for eliminating effects of disturbing radiation

G01J5/06B . . . [N: using cooling or thermostating of parts of the apparatus (cooling techniques in general F17C, F25J)]

G01J5/08 . . Optical features [N: optical-mechanical scanning H04N5/33, G02B26/10]

G01J5/08B . . . [N: Optical elements not provided otherwise, e.g. optical manifolds, gratings, holograms, cubic beamsplitters, prisms, particular coatings] [N1204]

G01J5/08B1 . . . . [N: using focussing or collimating elements,e.g. lenses or mirrors] [N1204]

G01J5/08B2 . . . . [N: using plane or convex mirrors, parallel phase plates or particular

flectors] [N1204]

G01J5/08B3 . . . . [N: using attenuators] [N1204]

G01J5/08B4 . . . . [N: using light concentrators, collectors or condensers] [N1204]

G01J5/08B5 . . . . [N: using waveguides, rods or tubes] [N1204]

G01J5/08B5A . . . . . [N: using optical fibers] [N1204]

G01J5/08B6 . . . . [N: using polarizing elements] [N1204]

G01J5/08B7 . . . . [N: using notch filters] [N1204]

G01J5/08B8 . . . . [N: using masks, e.g. structured apertures, using aperture plates or using spatial light modulators or spatial filters, e.g. reflective filters] [N1204]

G01J5/08B9 . . . . [N: using shutters or modulators] [N1204]

G01J5/08B10 . . . . [N: using micro-antennas, e.g. bow-tie] [N1204]

G01J5/08B11 . . . . [N: Adjustable, slidable] [N1204]

G01J5/08B11A . . . . . [N: Manually adjustable] [N1204]

G01J5/08B12 . . . . [N: using multiple detectors for performing different types of detection, e.g. radiometry and reflectometry channels] [N1204]

G01J5/08B13 . . . . [N: having a throughhole enabling the optical element to fulfil an additional optical function, e.g. a mirror or grating having a throughhole for a light collecting or light injecting optical fiber] [N1204]

G01J5/08B14 . . . . [N: using infrared absorbers other than the usual absorber layers deposited on infrared detectors like bolometers, wherein the heat propagation between the absorber and the detecting element occurs within a solid] [N1204]

G01J5/08B15 . . . . [N: Slit arrangements] [N1204]

G01J5/08B16 . . . . [N: using a sighting arrangement, or a camera for the same purpose] [N1204]

G01J5/08B17 . . . . [N: using optical filters (G01J5/60C, G01J5/08B7 take precedence)] [N1204]

G01J5/08B18 . . . . [N: using means for replacing an element by another, e.g. for replacing a filter] [N1204]

G01J5/08B19 . . . . [N: using means for illuminating a slit or a surface efficiently, e.g. entrance slit of a pyrometer or entrance face of a fiber] [N1204]

G01J5/08B20 . . . . [N: Beam switching arrangements; Photodetection involving different fields of view for a single detector] [N1204]

G01J5/08B21 . . . . [N: Windows or their fastening arrangements] [N1204]

G01J5/08B22 . . . . [N: Diffusers] [N1204]

G01J5/08C . . . [N: Compact construction] [N1204]

G01J5/08C1 . . . . [N: Monolithic] [N1204]

G01J5/08L . . . [N: Integrating cavities mimicking black bodies, wherein the heat propagation between the black body and the measuring element does not occur within a solid; Use of bodies placed inside the fluid stream for measurement of the temperature of gases; Use of the reemission from a surface, e.g. reflective surface; Emissivity enhancement by multiple reflections] [N1204]

G01J5/08Q . . . [N: Field-of-view determination; Aiming or pointing of a pyrometer; Adjusting alignment; Encoding angular position; Size of the measuring area; Position tracking] [N1204]

G01J5/08R . . . [N: Arrangements to attach devices to a pyrometer, i.e. attaching an optical interface; Spatial relative arrangement of optical elements, e.g. folded beam path (G01J5/04T takes precedence)] [N1204]

G01J5/08S . . . [N: using a light source, e.g. for illuminating a surface] [N1204]

G01J5/10 . using electric radiation detectors

G01J5/12 . . using thermoelectric elements, e.g. thermocouples (thermoelectric elements per se H01L35/00, H01L37/00)
G01J5/14 . . . Electrical features
G01J5/16 . . . . Arrangements with respect to the cold junction; Compensating influence of ambient temperature or other variables
G01J5/18 . . . . Special adaptation for indicating or recording (indicating or recording measured values in general G01D)
G01J5/20 . . using resistors, thermistors, or semi-conductors sensitive to radiation
G01J5/22 . . . Electrical features
G01J5/24 . . . . Use of a specially-adapted circuit, e.g. bridge circuit
G01J5/26 . . . . Special adaptation for indicating or recording (indicating or recording measured values in general G01D)
G01J5/28 . . using photo-emissive, photo-conductive, or photo-voltaic cells
G01J5/30 . . . Electrical features
G01J5/32 . . . . Special adaptation for indicating or recording (indicating or recording measured values in general G01D)
G01J5/34 . . using capacitors [N: e.g. pyroelectric elements]
G01J5/36 . . using ionisation of gases

G01J5/38 . using extension or expansion of solids or fluids
G01J5/40 . . using bimetallic elements
G01J5/42 . . using Golay cells
G01J5/44 . . using change of resonant frequency, e.g. of piezo-electric crystal

G01J5/46 . using radiation pressure or radiometer effect

G01J5/48 . using wholly visual means

G01J5/50 . using techniques specified in the subgroups below
G01J5/50B . . [N: using photographic recording]
G01J5/52 . . using comparison with reference sources, e.g. disappearing-filament pyrometer
G01J5/52B . . . [N: Reference sources, e.g. standard lamps; Black bodies]
G01J5/52C . . . [N: using a reference heater of the emissive surface type, e.g. for selectively absorbing materials]
G01J5/54 . . . Optical features
G01J5/56 . . . Electrical features
G01J5/58 . . using absorption; using polarisation; using extinction effect
G01J5/60 . . using determination of colour temperature [N: Pyrometry using two wavelengths filtering; using selective, monochromatic or bandpass filtering; using spectral scanning]
G01J5/60B . . . [N: using spectral scanning]
G01J5/60C . . . [N: using selective, monochromatic or bandpass filtering]
G01J5/60D . . . [N: using visual determination]
G01J5/62 . . using means for chopping the light [N: Compensation for background radiation of chopper element]

G01J7/00 Measuring velocity of light

G01J9/00 **Measuring optical phase difference** (devices or arrangements for controlling the phase of light beams G02F1/01)**; Determining degree of coherence; Measuring optical wavelength** (spectrometry G01J3/00)

G01J9/02 . by interferometric methods (using interferometers for measuring optically the linear dimensions of objects G01B9/02)

G01J9/02D . . [N: by shearing interferometric methods]

G01J9/02L . . [N: Measuring optical wavelength]

G01J9/04 . by beating two waves of a same source but of different frequency and measuring the phase shift of the lower frequency obtained

G01J11/00 **Measuring the characteristics of individual optical pulses or of optical pulse trains**