

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

INSTRUMENTS

G01 MEASURING; TESTING (NOTES omitted)

G01N INVESTIGATING OR ANALYSING MATERIALS BY DETERMINING THEIR CHEMICAL OR PHYSICAL PROPERTIES (measuring or testing processes other than immunoassay, involving enzymes or microorganisms [C12M](#), [C12Q](#))

NOTES

- In this subclass, the following terms are used with the meanings indicated :
 - "investigating" means testing or determining;
 - "materials" includes solid, liquid or gaseous media, e.g. the atmosphere.
- Attention is drawn to the Notes following the title of class [G01](#).
- Investigating the properties of materials, specially adapted for use in processes covered by subclass [B23K](#), is classified in group [B23K 31/12](#).

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00	Sampling; Preparing specimens for investigation	2001/1006	. . . {Dispersed solids}
2001/002	. {Devices for supplying or distributing samples to an analysing apparatus}	2001/1012	. . . . {Suspensions}
2001/005	. . {Packages for mailing or similar transport of samples}	2001/1018	. . . . . {Gas suspensions; Fluidised beds}
2001/007	. . {Devices specially adapted for forensic samples, e.g. tamper-proofing, sample tracking}	2001/1025	. . . . . {Liquid suspensions; Slurries; Mud; Sludge}
1/02	. Devices for withdrawing samples {(sampling of foundation soil E02D 1/04 ; collecting or conveying radioactive samples G01T 7/00 , e.g. G01T 7/02 , G01T 7/08)}	2001/1031	. . . {Sampling from special places}
2001/021	. . {Correlating sampling sites with geographical information, e.g. GPS}	2001/1037	. . . . {from an enclosure (hazardous waste, radioactive)}
2001/022	. . {sampling for security purposes, e.g. contraband, warfare agents}	2001/1043	. . . . {from sewers}
2001/024	. . . {passengers or luggage}	2001/105	. . . . {from high-pressure reactors or lines}
2001/025	. . . {postal items}	2001/1056	. . . {Disposable (single-use) samplers}
2001/027	. . . {field kits / quick test kits}	2001/1062	. . . {Sampling under constant temperature, pressure, or the like}
2001/028	. . {Sampling from a surface, swabbing, vaporising}	2001/1068	. . . . {Cooling sample below melting point}
1/04	. . in the solid state, e.g. by cutting	2001/1075	. . . . {Trapping evaporated liquids by cooling}
2001/045	. . . {Laser ablation; Microwave vaporisation}	2001/1081	. . . . {Storing samples under refrigeration}
1/06	. . . providing a thin slice, e.g. microtome	2001/1087	. . . . {Categories of sampling}
2001/061	. . . . {Blade details}	2001/1093	. . . . {Composite sampling; Cumulative sampling}
2001/063	. . . . . {with sawing action}	1/12	. . . Dippers; Dredgers
2001/065	. . . . . {Drive details}	1/125	. . . . {adapted for sampling molten metals}
2001/066	. . . . . {electric}	1/14	. . . Suction devices, e.g. pumps; Ejector devices
2001/068	. . . . {Illumination means}	1/1409	. . . . {adapted for sampling molten metals}
1/08	. . . involving an extracting tool, e.g. core bit	2001/1418	. . . . {Depression, aspiration}
2001/085	. . . . {Grabs}	2001/1427	. . . . . {Positive displacement, piston, peristaltic}
1/10	. . in the liquid or fluent state {(burettes, pipettes B01L 3/02 ; sampling of ground water E02D 1/06 ; metering by volume of fluids or fluent solid material G01F 11/00 , G01F 13/00)}	2001/1436	. . . . . {Ejector}
		2001/1445	. . . . {Overpressure, pressurisation at sampling point}
		2001/1454	. . . . . {Positive displacement, piston}
		2001/1463	. . . . . {Injector; Air-lift}
		2001/1472	. . . . {Devices not actuated by pressure difference}
		2001/1481	. . . . . {Archimedian screw; Auger}

2001/149	. . . . .	{Capillaries; Sponges}	2001/2282	. . . . .	{with cooling means}
1/16	. . . . .	with provision for intake at several levels (G01N 1/2035) G01N 1/12 , G01N 1/14 take precedence)	2001/2285	. . . . .	{Details of probe structures}
1/18	. . . . .	with provision for splitting samples into portions (G01N 1/12 , G01N 1/14 take precedence; fraction-collection apparatus for chromatography B01D 15/08)	2001/2288	. . . . .	{Filter arrangements}
2001/185	. . . . .	{Conveyor of containers successively filled}	2001/2291	. . . . .	{Movable probes, e.g. swivelling, swinging}
1/20	. . . . .	for flowing or falling materials (G01N 1/2035) G01N 1/12 , G01N 1/14 take precedence)	1/2294	. . . . .	{Sampling soil gases or the like}
2001/2007	. . . . .	{Flow conveyors}	2001/2297	. . . . .	{Timing devices}
2001/2014	. . . . .	{Pneumatic conveyors}	1/24	. . . . .	Suction devices (G01N 1/22 - G01N 1/2294 take precedence)
2001/2021	. . . . .	{falling under gravity}	2001/241	. . . . .	{Bellows}
2001/2028	. . . . .	{Belts}	2001/242	. . . . .	{Injectors or ejectors}
1/2035	. . . . .	{by deviating part of a fluid stream, e.g. by drawing-off or tapping}	2001/244	. . . . .	{using critical flow orifices}
1/2042	. . . . .	{using a piston actuated by the pressure of the liquid to be sampled}	2001/245	. . . . .	{Fans}
2001/205	. . . . .	{using a valve}	2001/247	. . . . .	{Syringes}
2001/2057	. . . . .	{Sample chamber in a valve/piston}	2001/248	. . . . .	{Evacuated containers}
2001/2064	. . . . .	{using a by-pass loop}	1/26	. . . . .	with provision for intake from several spaces
2001/2071	. . . . .	{Removable sample bottle}	1/28	. . . . .	Preparing specimens for investigation {including physical details of (bio-)chemical methods covered elsewhere, e.g. G01N 33/50 , C12Q } (mounting specimens on microscopic slides G02B 21/34 ; means for supporting the objects or the materials to be analysed in electron microscopes H01J 37/20 ; laboratory gas handling apparatus B01L 5/00)
2001/2078	. . . . .	{Pre-evacuated bottle}	1/2806	. . . . .	{Means for preparing replicas of specimens, e.g. for microscopical analysis}
2001/2085	. . . . .	{Non-pre-evacuated septum closed bottles}	1/2813	. . . . .	{Producing thin layers of samples on a substrate, e.g. smearing, spinning-on (G01N 1/30 takes precedence)}
2001/2092	. . . . .	{Cross-cut sampling}	2001/282	. . . . .	{with mapping; Identification of areas; Spatial correlated pattern}
1/22	. . . . .	in the gaseous state {(specially adapted for biological material G01N 33/497 ; measuring breath flow A61B 5/087)}	2001/2826	. . . . .	{Collecting by adsorption or absorption}
1/2202	. . . . .	{involving separation of sample components during sampling}	2001/2833	. . . . .	{Collecting samples on a sticky, tacky, adhesive surface}
1/2205	. . . . .	{with filters}	2001/284	. . . . .	{using local activation of adhesive, i.e. Laser Capture Microdissection}
1/2208	. . . . .	{with impactors}	2001/2846	. . . . .	{Cytocentrifuge method}
1/2211	. . . . .	{with cyclones}	1/2853	. . . . .	{Shadowing samples}
1/2214	. . . . .	{by sorption}	1/286	. . . . .	{involving mechanical work, e.g. chopping, disintegrating, compacting, homogenising (microtomes G01N 1/06 ; pulverising in general B02C ; mixing in general B01F)}
2001/2217	. . . . .	{using a liquid}	2001/2866	. . . . .	{Grinding or homogeneising}
2001/222	. . . . .	{Other features}	2001/2873	. . . . .	{Cutting or cleaving}
2001/2223	. . . . .	{aerosol sampling devices}	2001/288	. . . . .	{Filter punches}
1/2226	. . . . .	{Sampling from a closed space, e.g. food package, head space}	2001/2886	. . . . .	{Laser cutting, e.g. tissue catapult}
2001/2229	. . . . .	{Headspace sampling, i.e. vapour over liquid}	2001/2893	. . . . .	{Preparing calibration standards}
2001/2232	. . . . .	{using a membrane, i.e. pervaporation}	1/30	. . . . .	Staining; Impregnating {Fixation; Dehydration; Multistep processes for preparing samples of tissue, cell or nucleic acid material and the like for analysis}
2001/2235	. . . . .	{over a melt, e.g. furnace}	2001/302	. . . . .	{Stain compositions}
2001/2238	. . . . .	{the gas being compressed or pressurized}	2001/305	. . . . .	{Fixative compositions}
2001/2241	. . . . .	{purpose-built sampling enclosure for emissions}	2001/307	. . . . .	{non-toxic, no Hg, no formaldehyde}
2001/2244	. . . . .	{Exhaled gas, e.g. alcohol detecting}	1/31	. . . . .	Apparatus therefor
1/2247	. . . . .	{Sampling from a flowing stream of gas}	1/312	. . . . .	{for samples mounted on planar substrates}
2001/225	. . . . .	{isokinetic, same flow rate for sample and bulk gas}	2001/315	. . . . .	{Basket-type carriers for tissues}
1/2252	. . . . .	{in a vehicle exhaust}	2001/317	. . . . .	{spraying liquids onto surfaces}
2001/2255	. . . . .	{with dilution of the sample}	1/32	. . . . .	Polishing; Etching
1/2258	. . . . .	{in a stack or chimney}	1/34	. . . . .	Purifying; Cleaning {(processes or apparatus for extracting or separating nucleic acids from biological samples C12N 15/1003)}
2001/2261	. . . . .	{preventing condensation (heating lines)}	1/36	. . . . .	Embedding or analogous mounting of samples
2001/2264	. . . . .	{with dilution}	2001/362	. . . . .	{using continuous plastic film to mount sample}
2001/2267	. . . . .	{separating gas from liquid, e.g. bubbles}			
2001/227	. . . . .	{separating gas from solid, e.g. filter}			
1/2273	. . . . .	{Atmospheric sampling}			
2001/2276	. . . . .	{Personal monitors}			
2001/2279	. . . . .	{high altitude, e.g. rockets, balloons}			

2001/364	. . . {using resins, epoxy}	3/12	. . . Pressure testing
2001/366	. . . {Moulds; Demoulding}	3/14	. . generated by dead weight, e.g. pendulum; generated by springs tension (G01N 3/18 takes precedence)
2001/368	. . . {Mounting multiple samples in one block, e.g. TMA [Tissue Microarrays]}	3/16	. . applied through gearing (G01N 3/18 takes precedence)
1/38	. . Diluting, dispersing or mixing samples	3/165	. . . {generated by rotation, i.e. centrifugal force (for testing structures or apparatus G01M 99/004)}
2001/381	. . . {by membrane diffusion; Permeation tubes}	3/18	. . Performing tests at high or low temperatures
2001/382	. . . {using pistons of different sections}	3/20	. by applying steady bending forces (G01N 3/26 , G01N 3/28 take precedence)
2001/383	. . . {collecting and diluting in a flow of liquid}	3/22	. by applying steady torsional forces (G01N 3/26 , G01N 3/28 take precedence)
2001/385	. . . {diluting by adsorbing a fraction of the sample}	3/24	. by applying steady shearing forces (G01N 3/26 , G01N 3/28 take precedence)
2001/386	. . . {Other diluting or mixing processes}	3/26	. Investigating twisting or coiling properties
2001/387	. . . . {mixing by blowing a gas, bubbling}	3/28	. Investigating ductility, e.g. suitability of sheet metal for deep-drawing or spinning
2001/388	. . . . {mixing the sample with a tracer}	3/30	. by applying a single impulsive force, e.g. by falling weight
1/40	. . Concentrating samples	3/303	. . generated only by free-falling weight
1/4005	. . . {by transferring a selected component through a membrane}	3/307	. . generated by a compressed or tensile-stressed spring; generated by pneumatic or hydraulic means
2001/4011	. . . . {being a ion-exchange membrane}	3/31	. . generated by a rotating fly-wheel
2001/4016	. . . . {being a selective membrane, e.g. dialysis or osmosis}	3/313	. . generated by explosives
1/4022	. . . {by thermal techniques; Phase changes}	3/317	. . generated by electromagnetic means
2001/4027	. . . . {evaporation leaving a concentrated sample}	3/32	. by applying repeated or pulsating forces
2001/4033	. . . . {sample concentrated on a cold spot, e.g. condensation or distillation}	3/34	. . generated by mechanical means, e.g. hammer blows
2001/4038	. . . {electric methods, e.g. electromigration, electrophoresis, ionisation}	3/36	. . generated by pneumatic or hydraulic means
1/4044	. . . {by chemical techniques; Digestion; Chemical decomposition}	3/38	. . generated by electromagnetic means
1/405	. . . {by adsorption or absorption}	3/40	. Investigating hardness or rebound hardness
1/4055	. . . {by solubility techniques}	3/405	. . {by determining the vibration frequency of a sensing element in contact with the specimen}
2001/4061	. . . . {Solvent extraction}	3/42	. . by performing impressions under a steady load by indentors, e.g. sphere, pyramid (G01N 3/54 takes precedence)
2001/4066	. . . . {using difference of solubility between liquid and gas, e.g. bubbling, scrubbing or sparging}	3/44	. . . the indentors being put under a minor load and a subsequent major load, i.e. Rockwell system
2001/4072	. . . . {membraneless transfer of a component between two parallel laminar flows of fluid}	3/46	. . . the indentors performing a scratching movement
1/4077	. . . {by other techniques involving separation of suspended solids}	3/48	. . by performing impressions under impulsive load by indentors, e.g. falling ball (G01N 3/54 takes precedence)
2001/4083	. . . . {sedimentation}	3/50	. . by measuring rolling friction, e.g. by rocking pendulum (G01N 3/54 takes precedence)
2001/4088	. . . . {filtration}	3/52	. . by measuring extent of rebound of a striking body (G01N 3/54 takes precedence)
2001/4094	. . . . {using ultrasound}	3/54	. . Performing tests at high or low temperatures
1/42	. . Low-temperature sample treatment, e.g. cryofixation	3/56	. Investigating resistance to wear or abrasion
1/44	. . Sample treatment involving radiation, e.g. heat	3/562	. . {using radioactive tracers}
3/00	Investigating strength properties of solid materials by application of mechanical stress	3/565	. . {of granular or particulate material}
	NOTE	3/567	. . {by submitting the specimen to the action of a fluid or of a fluidised material, e.g. cavitation, jet abrasion (G01N 3/565 takes precedence)}
	This group covers the stressing of materials not only below but also beyond the elastic limit, e.g. until breaking occurs.	3/58	. Investigating machinability by cutting tools; Investigating the cutting ability of tools
3/02	. Details	3/60	. Investigating resistance of materials, e.g. refractory materials, to rapid heat changes {(thermal testing of structures or apparatus G01M 99/002)}
3/04	. . Chucks		
3/06	. . Special adaptations of indicating or recording means		
3/062	. . . {with mechanical indicating or recording means}		
3/064	. . . {with hydraulic indicating or recording means}		
3/066	. . . {with electrical indicating or recording means}		
3/068	. . . {with optical indicating or recording means}		
3/08	. by applying steady tensile or compressive forces (G01N 3/28 takes precedence)		
3/10	. . generated by pneumatic or hydraulic pressure (G01N 3/18 takes precedence)		

3/62	<ul style="list-style-type: none"> Manufacturing, calibrating, or repairing devices used in investigations covered by the preceding subgroups 	9/12	<ul style="list-style-type: none"> by observing the depth of immersion of the bodies, e.g. hydrometers
5/00	Analysing materials by weighing, e.g. weighing small particles separated from a gas or liquid (G01N 9/00 takes precedence ; weighing per se G01G)	9/14	<ul style="list-style-type: none"> the body being built into a container
5/02	<ul style="list-style-type: none"> by absorbing or adsorbing components of a material and determining change of weight of the adsorbent, e.g. determining moisture content {(absorption bulbs B01D 53/00)} 	9/16	<ul style="list-style-type: none"> the body being pivoted
5/025	<ul style="list-style-type: none"> {for determining moisture content} 	9/18	<ul style="list-style-type: none"> Special adaptations for indicating, recording, or control
5/04	<ul style="list-style-type: none"> by removing a component, e.g. by evaporation, and weighing the remainder 	9/20	<ul style="list-style-type: none"> by balancing the weight of the bodies
5/045	<ul style="list-style-type: none"> {for determining moisture content} 	9/22	<ul style="list-style-type: none"> with continuous circulation of the fluid
7/00	Analysing materials by measuring the pressure or volume of a gas or vapour	9/24	<ul style="list-style-type: none"> by observing the transmission of wave or particle radiation through the material
7/02	<ul style="list-style-type: none"> by absorption, adsorption, or combustion of components and measurement of the change in pressure or volume of the remainder {(absorption bulbs B01D 53/00)} 	9/26	<ul style="list-style-type: none"> by measuring pressure differences
7/04	<ul style="list-style-type: none"> by absorption or adsorption alone 	2009/263	<ul style="list-style-type: none"> {using vertically-movable pressure transducer}
7/06	<ul style="list-style-type: none"> by combustion alone 	9/266	<ul style="list-style-type: none"> {for determining gas density}
7/08	<ul style="list-style-type: none"> by combustion followed by absorption or adsorption of the combustion products 	9/28	<ul style="list-style-type: none"> by measuring the blowing pressure of gas bubbles escaping from nozzles at different depths in a liquid
7/10	<ul style="list-style-type: none"> by allowing diffusion of components through a porous wall and measuring a pressure or volume difference 	9/30	<ul style="list-style-type: none"> by using centrifugal effects
7/12	<ul style="list-style-type: none"> the diffusion being followed by combustion or catalytic oxidation 	9/32	<ul style="list-style-type: none"> by using flow properties of fluids, e.g. flow through tubes or apertures
7/14	<ul style="list-style-type: none"> by allowing the material to emit a gas or vapour, e.g. water vapour, and measuring a pressure or volume difference {(determining urea G01N 33/48742)} 	9/34	<ul style="list-style-type: none"> by using elements moving through the fluid, e.g. vane
7/16	<ul style="list-style-type: none"> by heating the material 	9/36	<ul style="list-style-type: none"> Analysing materials by measuring the density or specific gravity, e.g. determining quantity of moisture (methods of measurement in general G01N 9/02 - G01N 9/32)
7/18	<ul style="list-style-type: none"> by allowing the material to react 	11/00	Investigating flow properties of materials, e.g. viscosity, plasticity; Analysing materials by determining flow properties
7/20	<ul style="list-style-type: none"> the reaction being fermentation 	2011/0006	<ul style="list-style-type: none"> {Calibrating, controlling or cleaning viscometers}
7/22	<ul style="list-style-type: none"> of dough 	2011/0013	<ul style="list-style-type: none"> {Temperature compensation}
9/00	Investigating density or specific gravity of materials; Analysing materials by determining density or specific gravity	2011/002	<ul style="list-style-type: none"> {Controlling sample temperature; Thermal cycling during measurement}
9/002	<ul style="list-style-type: none"> {using variation of the resonant frequency of an element vibrating in contact with the material submitted to analysis (G01N 9/34 takes precedence)} 	2011/0026	<ul style="list-style-type: none"> {Investigating specific flow properties of non-Newtonian fluids}
2009/004	<ul style="list-style-type: none"> {comparing frequencies of two elements} 	2011/0033	<ul style="list-style-type: none"> {Yield stress; Residual stress at zero shear rate}
2009/006	<ul style="list-style-type: none"> {vibrating tube, tuning fork} 	2011/004	<ul style="list-style-type: none"> {Stress relaxation time}
2009/008	<ul style="list-style-type: none"> {Schlatter vibrating vane type} 	2011/0046	<ul style="list-style-type: none"> {In situ measurement during mixing process}
9/02	<ul style="list-style-type: none"> by measuring weight of a known volume 	2011/0053	<ul style="list-style-type: none"> {using ergometry; measuring power consumption}
2009/022	<ul style="list-style-type: none"> {of solids} 	2011/006	<ul style="list-style-type: none"> {Determining flow properties indirectly by measuring other parameters of the system}
2009/024	<ul style="list-style-type: none"> {the volume being determined directly, e.g. by size of container} 	2011/0066	<ul style="list-style-type: none"> {electrical properties}
2009/026	<ul style="list-style-type: none"> {the volume being determined by amount of fluid displaced} 	2011/0073	<ul style="list-style-type: none"> {acoustic properties}
2009/028	<ul style="list-style-type: none"> {a gas being used as displacement fluid} 	2011/008	<ul style="list-style-type: none"> {optical properties}
9/04	<ul style="list-style-type: none"> of fluids 	2011/0086	<ul style="list-style-type: none"> {magnetic properties}
9/06	<ul style="list-style-type: none"> with continuous circulation through a pivotally supported member 	2011/0093	<ul style="list-style-type: none"> {thermal properties}
9/08	<ul style="list-style-type: none"> by measuring buoyant force of solid materials by weighing both in air and in a liquid 	11/02	<ul style="list-style-type: none"> by measuring flow of the material
9/10	<ul style="list-style-type: none"> by observing bodies wholly or partially immersed in fluid materials 	11/04	<ul style="list-style-type: none"> through a restricted passage, e.g. tube, aperture
		11/06	<ul style="list-style-type: none"> by timing the outflow of a known quantity
		11/08	<ul style="list-style-type: none"> by measuring pressure required to produce a known flow
		11/10	<ul style="list-style-type: none"> by moving a body within the material
		11/105	<ul style="list-style-type: none"> {by detecting the balance position of a float moving in a duct conveying the fluid under test}
		11/12	<ul style="list-style-type: none"> by measuring rising or falling speed of the body; by measuring penetration of wedged gauges (G01N 11/16 takes precedence)
		11/14	<ul style="list-style-type: none"> by using rotary bodies, e.g. vane (G01N 11/16 takes precedence)
		11/142	<ul style="list-style-type: none"> {Sample held between two members substantially perpendicular to axis of rotation, e.g. parallel plate viscometer}
		2011/145	<ul style="list-style-type: none"> {both members rotating}

- 2011/147 . . . {Magnetic coupling}
- 11/16 . . by measuring damping effect upon oscillatory body
- 11/162 . . . {Oscillations being torsional, e.g. produced by rotating bodies}
- 11/165 {Sample held between two members substantially perpendicular to axis of rotation, e.g. parallel plate viscometer}
- 11/167 {Sample holder oscillates, e.g. rotating crucible}
- 13/00 Investigating surface or boundary effects, e.g. wetting power; Investigating diffusion effects; Analysing materials by determining surface, boundary, or diffusion effects (scanning-probe techniques or apparatus G01Q)**
- 2013/003 . {Diffusion; diffusivity between liquids}
- 2013/006 . {Dissolution of tablets or the like}
- 13/02 . Investigating surface tension of liquids
- 2013/0208 . . {by measuring contact angle}
- 2013/0216 . . {by measuring skin friction or shear force}
- 2013/0225 . . {of liquid metals or solder}
- 2013/0233 . . {Langmuir troughs; thin-film balances}
- 2013/0241 . . {bubble, pendant drop, sessile drop methods}
- 2013/025 . . . {Measuring foam stability}
- 2013/0258 . . . {Oscillating drop methods}
- 2013/0266 . . . {Bubble methods}
- 2013/0275 . . {involving surface-active agents}
- 2013/0283 . . {methods of calculating surface tension}
- 2013/0291 . . {Wilhelmy plate}
- 13/04 . Investigating osmotic effects
- 15/00 Investigating characteristics of particles; Investigating permeability, pore-volume, or surface-area of porous materials (identification of microorganisms C12Q)**
- 2015/0003 . {Determining electric mobility, velocity profile, average speed or velocity of a plurality of particles}
- 2015/0007 . {Investigating dispersion of gas}
- 2015/0011 . . {in liquids, e.g. bubbles}
- 2015/0015 . . {in solids}
- 2015/0019 . {Means for transferring or separating particles prior to analysis, e.g. hoppers or particle conveyors}
- 2015/0023 . {Investigating dispersion of liquids}
- 2015/0026 . . {in gas, e.g. fog}
- 2015/003 . . {in liquids, e.g. emulsion}
- 2015/0034 . . {in solids}
- 2015/0038 . {Investigating nanoparticles}
- 2015/0042 . {Investigating dispersion of solids}
- 2015/0046 . . {in gas, e.g. smoke}
- 2015/0049 . . . {of filaments in gas}
- 2015/0053 . . {in liquids, e.g. trouble}
- 2015/0057 . . . {of filaments in liquids}
- 2015/0061 . . {in solids, e.g. petrography}
- 2015/0065 . {biological, e.g. blood}
- 2015/0069 . . {with lysing, e.g. of erythrocyts}
- 2015/0073 . . {Red blood cells}
- 2015/0076 . . . {Reticulocytes}
- 2015/008 . . {White cells}
- 2015/0084 . . {Platelets}
- 2015/0088 . . {Biological contaminants; Fouling}
- 2015/0092 . {Monitoring flocculation or agglomeration}
- 2015/0096 . {Investigating consistence of powders, dustability, dustiness}
- 15/02 . Investigating particle size or size distribution ([G01N 15/04](#), [G01N 15/10](#) take precedence; by measuring osmotic pressure [G01N 7/10](#))
- 15/0205 . . {by optical means, e.g. by light scattering, diffraction, holography or imaging}
- 15/0211 . . . {Investigating a scatter or diffraction pattern}
- 2015/0216 {from fluctuations of diffraction pattern}
- 2015/0222 {from dynamic light scattering, e.g. photon correlation spectroscopy}
- 15/0227 . . . {using imaging, e.g. a projected image of suspension; using holography}
- 2015/0233 . . . {using holography}
- 2015/0238 . . . {Single particle scatter}
- 2015/0244 . . . {with cutting-out molecular scatter}
- 2015/025 . . . {Methods for single or grouped particles}
- 15/0255 . . {with mechanical, e.g. inertial, classification, and investigation of sorted collections ([with centrifuges G01N 15/042](#))}
- 2015/0261 . . . {using impactors}
- 15/0266 . . {with electrical classification}
- 15/0272 . . {with screening; with classification by filtering ([B01D](#) takes precedence)}
- 2015/0277 . . {Average size only}
- 2015/0283 . . {using control of suspension concentration}
- 2015/0288 . . {Sorting the particles}
- 2015/0294 . . {Particle shape}
- 2015/03 . {Electro-optical investigation of a plurality of particles, the analyser being characterised by the optical arrangement}
- 2015/035 . . {the optical arrangement forming an integrated apparatus with the sample container}
- 15/04 . Investigating sedimentation of particle suspensions
- 15/042 . . {by centrifuging and investigating centrifugates ([centrifuges per se B04B](#))}
- 2015/045 . . . {by optical analysis}
- 2015/047 {by static multidetectors}
- 15/05 . . in blood
- 2015/055 . . . {for hematocrite determination}
- 15/06 . Investigating concentration of particle suspensions ([G01N 15/04](#), [G01N 15/10](#) take precedence; by weighing [G01N 5/00](#))
- NOTE**
- References listed below indicate CPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group and its subgroups:
- Investigating or analysing materials;
 - by the use of optical means: [G01N 21/00](#), e.g. [G01N 21/47](#), [G01N 21/90](#);
 - by other radiations or by particles: [G01N 23/00](#), e.g. [G01N 23/02](#), [G01N 23/201](#);
 - by measuring impedance: [G01N 27/02](#), e.g. [G01N 27/06](#), [G01N 27/22](#);
 - by electrochemical means: [G01N 27/00](#), e.g. [G01N 27/26](#);
 - by measuring absorption of sonic or ultrasonic vibrations: [G01N 29/00](#), e.g. [G01N 29/02](#)
- 15/0606 . . {by collecting particles on a support}
- 15/0612 . . . {Optical scan of the deposits ([G01N 15/0625](#) takes precedence)}

15/0618	. . . {of the filter type (G01N 15/0643 takes precedence)}	15/1056	. . {Microstructural devices for other than electro-optical measurement (for electro-optical measurement G01N 15/1484)}
15/0625	. . . . {Optical scan of the deposits}	2015/1062	. . {counting the particles by other than electro-optical means (by electro-optical means G01N 2015/1486)}
15/0631	. . . . {Separation of liquids, e.g. by absorption, wicking}	2015/1068	. . {Recognizing failure of the analyser, e.g. bubbles; Quality control for particle analysers}
15/0637	. . . {Moving support}	2015/1075	. . {Determining speed or velocity of a particle}
15/0643	. . . . {of the filter type}	2015/1081	. . {Sorting the particles}
15/065	. . {using condensation nuclei counters}	2015/1087	. . {Particle size}
15/0656	. . {using electric, e.g. electrostatic methods or magnetic methods (by investigating individual particles G01N 15/1031, G01N 15/12)}	2015/1093	. . {Particle shape}
2015/0662	. . {Comparing before/after passage through filter}	15/12	. . Coulter-counters
2015/0668	. . {Comparing properties of sample and carrier fluid, e.g. oil in water}	15/1209	. . . {Details}
2015/0675	. . {Comparing suspension before/after dilution}	15/1218	. . . . {concerning the aperture}
2015/0681	. . {Purposely modifying particles, e.g. humidifying for growing}	15/1227	. . . . {Circuits}
2015/0687	. . {in solutions, e.g. non volatile residue}	2015/1236	. . . . {Flow forming}
2015/0693	. . {by optical means, e.g. by integrated nephelometry}	15/1245	. . . {Devices using more than one aperture}
15/08	. Investigating permeability, pore-volume, or surface area of porous materials	2015/1254	. . . {Electrodes}
15/0806	. . {Details, e.g. sample holders, mounting samples for testing}	2015/1263	. . . . {Scanning electrodes}
2015/0813	. . {Measuring intrusion, e.g. of mercury}	2015/1272	. . . {Cleaning}
15/082	. . {Investigating permeability by forcing a fluid through a sample}	2015/1281	. . . {Detecting blocking debris}
15/0826	. . . {and measuring fluid flow rate, i.e. permeation rate or pressure change}	2015/129	. . . {measuring the ratio of AC/DC impedances}
2015/0833	. . {Pore surface area}	15/14	. . Electro-optical investigation, e.g. flow cytometers
2015/084	. . {Testing filters}	2015/1402	. . . {Data analysis by thresholding or gating operations performed on the acquired signals or stored data}
2015/0846	. . {by use of radiation, e.g. transmitted or reflected light}	15/1404	. . . {Fluid conditioning in flow cytometers, e.g. flow cells; Supply; Control of flow}
2015/0853	. . {by electrical capacitance measurement}	2015/1406	. . . . {Control of droplet point}
2015/086	. . {of films, membranes or pellicules}	2015/1409	. . . . {Control of supply of sheaths fluid, e.g. sample injection control}
2015/0866	. . {Sorption}	2015/1411	. . . . . {Features of sheath fluids}
2015/0873	. . . {Dynamic sorption, e.g. with flow control means}	2015/1413	. . . . . {Hydrodynamic focussing}
15/088	. . {Investigating volume, surface area, size or distribution of pores; Porosimetry}	2015/1415	. . . . . {Control of particle position}
15/0886	. . . {Mercury porosimetry}	2015/1418	. . . . . {Eliminating clogging of debris}
15/0893	. . . {by measuring weight or volume of sorbed fluid, e.g. B.E.T. method}	2015/142	. . . . . {Acoustic or ultrasonic focussing}
15/10	. Investigating individual particles	2015/1422	. . . . . {Electrical focussing}
2015/1006	. . {for cytology}	15/1425	. . . . {using an analyser being characterised by its control arrangement}
15/1012	. . {Calibrating particle analysers; References therefor}	15/1427	. . . . . {with the synchronisation of components, a time gate for operation of components, or suppression of particle coincidences}
2015/1018	. . . {Constitution of reference particles}	15/1429	. . . . {using an analyser being characterised by its signal processing}
2015/1025	. . . {Particle flow simulating, e.g. liquid crystal cell}	15/1431	. . . . . {the electronics being integrated with the analyser, e.g. hand-held devices for on-site investigation}
15/1031	. . {by measuring electrical or magnetic effects thereof, e.g. onconductivity or capacity (using nanoscale size effects, other than for sizing or counting, by translocation through nanopores G01N 33/48721; involving the use of Coulter counters G01N 15/12)}	15/1434	. . . . {using an analyser being characterised by its optical arrangement}
2015/1037	. . {Associating coulter-counter and optical flow cytometer [OFC]}	15/1436	. . . . . {the optical arrangement forming an integrated apparatus with the sample container, e.g. a flow cell}
2015/1043	. . {Measuring mass of individual particles}	2015/1438	. . . . . {Using two lasers in succession}
2015/105	. . {Other than optical measurement of deformation of individual particles (optical measurement G01N 2015/1495)}	2015/144	. . . . . {Imaging characterised by its optical setup}
		2015/1443	. . . . . {Auxiliary imaging}
		2015/1445	. . . . . {Three-dimensional imaging, imaging in different image planes, e.g. under different angles or at different depths, e.g. by a relative motion of sample and detector, for instance by tomography}
		2015/1447	. . . . . {Spatial selection}
		2015/145	. . . . . {by pattern of light, e.g. fringe pattern}

- 2015/1452 {Adjustment of focus; Alignment}
- 2015/1454 {using phase shift or interference, e.g. for improving contrast}
- 15/1456 . . . {without spatial resolution of the texture or inner structure of the particle, e.g. processing of pulse signals}
- 15/1459 {the analysis being performed on a sample stream}
- 2015/1461 {Coincidence detecting; Circuits therefor}
- 15/1463 {using image analysis for extracting features of the particle}

NOTE

References listed below indicate CPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

- counting objects disposed at random with size distinction [G06M 11/04](#)
- extraction of features from image for pattern recognition [G06K 9/46](#)
- specific image analysis method for the recognition of microscopic objects [G06K 9/00127](#)
- image enhancement in general [G06T 5/00](#)
- image analysis in general [G06T 7/00](#)

- 2015/1465 {image analysis on colour image}
- 15/1468 . . . {with spatial resolution of the texture or inner structure of the particle}

NOTE

References listed below indicate CPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

- counting objects disposed at random with size distinction [G06M 11/04](#)
- extraction of features from image for pattern recognition [G06K 9/46](#)
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- image enhancement [G06T 5/00](#)
- image analysis [G06T 7/00](#)

- 15/147 {the analysis being performed on a sample stream}
- 2015/1472 {with colour}
- 15/1475 {using image analysis for extracting features of the particle}
- 2015/1477 . . . {Multiparameters}
- 2015/1479 {Using diffuse illumination or excitation}
- 2015/1481 . . . {Optical analysis of particle in droplet}
- 15/1484 . . . {microstructural devices}
- 2015/1486 . . . {Counting the particles}
- 2015/1488 . . . {Methods for deciding}
- 2015/149 . . . {Sorting the particles}
- 2015/1493 . . . {Particle size}
- 2015/1495 {Deformation of particles}
- 2015/1497 . . . {Particle shape}

17/00 Investigating resistance of materials to the weather, to corrosion, or to light

- 17/002 . {Test chambers}
- 17/004 . {to light}
- 17/006 . {of metals}
- 17/008 . {Monitoring fouling}
- 17/02 . Electrochemical measuring systems for weathering, corrosion or corrosion-protection measurement
- 17/04 . Corrosion probes
- 17/043 . . {Coupons}
- 17/046 . . . {Means for supporting or introducing coupons}

19/00 Investigating materials by mechanical methods
([G01N 3/00](#) - [G01N 17/00](#) take precedence)

- 19/02 . Measuring coefficient of friction between materials
{(testing of tyres [G01M 17/02](#); determinations of friction coefficient used in vehicle braking or traction control systems [B60T 8/172](#))}
- 19/04 . Measuring adhesive force between materials, e.g. of sealing tape, of coating
- 19/06 . Investigating by removing material, e.g. spark-testing
- 19/08 . Detecting presence of flaws or irregularities
- 19/10 . Measuring moisture content, e.g. by measuring change in length of hygroscopic filament; Hygrometers

21/00 Investigating or analysing materials by the use of optical means, i.e. using sub-millimetre waves, infrared, visible or ultraviolet light
([G01N 3/00](#) - [G01N 19/00](#) take precedence)**NOTE**

This group does not cover the investigation of spectral properties of light per se, or measurements of the properties of materials where spectral properties of light are sensed and primary emphasis is placed on creating, detecting or analysing the spectrum providing that the properties of the materials to be investigated are of minor importance. Those subjects are covered by group [G01J 3/00](#).

- 21/01 . Arrangements or apparatus for facilitating the optical investigation
- 2021/0106 . . {General arrangement of respective parts}
- 2021/0112 . . . {Apparatus in one mechanical, optical or electronic block}
- 2021/0118 . . . {Apparatus with remote processing}
- 2021/0125 {with stored program or instructions}
- 2021/0131 {being externally stored}
- 2021/0137 {with PC or the like}
- 2021/0143 {with internal and external computer}
- 2021/015 . . . {Apparatus with interchangeable optical heads or interchangeable block of optics and detector}
- 2021/0156 {with optics only in separate head, e.g. connection by optical fibres}
- 2021/0162 . . {using microprocessors for control of a sequence of operations, e.g. test, powering, switching, processing}
- 2021/0168 . . . {for the measurement cycle}
- 2021/0175 . . . {for selecting operating means}
- 2021/0181 . . {Memory or computer-assisted visual determination}

2021/0187	. . .	{Mechanical sequence of operations}	2021/152	. . .	{Scraping; Brushing; Moving band}
2021/0193	. . .	{the sample being taken from a stream or flow to the measurement cell}	2021/154	. . .	{Ultrasonic cleaning}
21/03	. . .	Cuvette constructions	2021/155	. . .	{Monitoring cleanness of window, lens, or other parts}
21/0303	. . .	{Optical path conditioning in cuvettes, e.g. windows; adapted optical elements or systems; path modifying or adjustment (G01N 21/031 - G01N 21/15 take precedence)}	2021/157	. . .	{Monitoring by optical means}
2021/0307	. . .	{Insert part in cell}	2021/158	. . .	{Eliminating condensation}
21/031	. . .	{Multipass arrangements}	21/17	. . .	Systems in which incident light is modified in accordance with the properties of the material investigated (where the material investigated is optically excited causing a change in wavelength of the incident light G01N 21/63)
2021/0314	. . .	{Double pass, autocollimated path}	21/1702	. . .	{with opto-acoustic detection, e.g. for gases or analysing solids}
21/0317	. . .	{High pressure cuvettes; (G01N 21/0332 - G01N 21/15 take precedence)}	2021/1704	. . .	{in gases}
2021/0321	. . .	{One time use cells, e.g. integrally moulded}	2021/1706	. . .	{in solids}
2021/0325	. . .	{Cells for testing reactions, e.g. containing reagents}	2021/1708	. . .	{with piezotransducers (probes for investigating or analysing materials by the use of ultrasonic, sonic or infrasonic waves G01N 29/24)}
2021/0328	. . .	{Arrangement of two or more cells having different functions for the measurement of reactions}	21/171	. . .	{with calorimetric detection, e.g. with thermal lens detection}
21/0332	. . .	{with temperature control (control of temperature G05D 23/00 ; cryostats F17C 3/08)}	2021/1712	. . .	{Thermal lens, mirage effect}
2021/0335	. . .	{Refrigeration of cells; Cold stages}	2021/1714	. . .	{Photothermal radiometry with measurement of emission}
2021/0339	. . .	{Holders for solids, powders}	21/1717	. . .	{with a modulation of one or more physical properties of the sample during the optical investigation, e.g. electro-reflectance}
2021/0342	. . .	{Solid sample being immersed, e.g. equiindex fluid}	2021/1719	. . .	{Carrier modulation in semiconductors}
2021/0346	. . .	{Capillary cells; Microcells}	2021/1721	. . .	{Electromodulation}
2021/035	. . .	{Supports for sample drops}	2021/1723	. . .	{Fluid modulation}
2021/0353	. . .	{Conveyor of successive sample drops}	2021/1725	. . .	{Modulation of properties by light, e.g. photorefectance}
2021/0357	. . .	{Sets of cuvettes}	2021/1727	. . .	{Magnetomodulation}
2021/036	. . .	{transformable, modifiable}	2021/1729	. . .	{Piezomodulation}
2021/0364	. . .	{flexible, compressible}	2021/1731	. . .	{Temperature modulation}
2021/0367	. . .	{Supports of cells, e.g. pivotable}	2021/1734	. . .	{Sequential different kinds of measurements; Combining two or more methods}
2021/0371	. . .	{Supports combined with sample intake}	2021/1736	. . .	{with two or more light sources}
2021/0375	. . .	{Slidable cells}	2021/1738	. . .	{Optionally different kinds of measurements; Method being valid for different kinds of measurement}
2021/0378	. . .	{Shapes}	2021/174	. . .	{either absorption-reflection or emission-fluorescence}
2021/0382	. . .	{Frustoconical, tapered cell}	2021/1742	. . .	{either absorption or reflection}
2021/0385	. . .	{Diffusing membrane; Semipermeable membrane}	2021/1744	. . .	{either absorption or scatter}
2021/0389	. . .	{Windows}	2021/1746	. . .	{Method using tracers}
2021/0392	. . .	{Nonplanar windows}	2021/1748	. . .	{Comparative step being essential in the method}
2021/0396	. . .	{Oblique incidence}	2021/1751	. . .	{Constructive features therefore, e.g. using two measurement cells}
21/05	. . .	Flow-through cuvettes (G01N 21/09 takes precedence; handling fluid samples G01N 1/10)	2021/1753	. . .	{and using two light sources}
2021/052	. . .	{Tubular type; cavity type; multireflective}	2021/1755	. . .	{and using two apparatus or two probes}
2021/054	. . .	{Bubble trap; Debubbling}	2021/1757	. . .	{Time modulation of light being essential to the method of light modification, e.g. using single detector (circuits for photometry with modulation, using one detector G01J 1/44)}
2021/056	. . .	{Laminated construction}	2021/1759	. . .	{Jittering, dithering, optical path modulation}
2021/058	. . .	{Flat flow cell}	2021/1761	. . .	{A physical transformation being implied in the method, e.g. a phase change}
21/07	. . .	Centrifugal type cuvettes (G01N 21/09 takes precedence)	2021/1763	. . .	{Gas to liquid phase change}
21/09	. . .	adapted to resist hostile environments or corrosive or abrasive materials	2021/1765	. . .	{Method using an image detector and processing of image signal}
21/11	. . .	Filling or emptying of cuvettes	2021/1768	. . .	{using photographic film}
2021/115	. . .	{Washing; Purging}	2021/177	. . .	{Detector of the video camera type}
21/13	. . .	Moving of cuvettes or solid samples to or from the investigating station (handling materials for automatic analysis G01N 35/00)			
2021/135	. . .	{Sample holder displaceable (in automatised apparatus G01N 35/02)}			
21/15	. . .	Preventing contamination of the components of the optical system or obstruction of the light path			
2021/151	. . .	{Gas blown}			

2021/1772	. . . . {Array detector}	21/31	. . . Investigating relative effect of material at wavelengths characteristic of specific elements or molecules, e.g. atomic absorption spectrometry (G01N 21/72 takes precedence)
2021/1774	. . . . {Line array detector}	21/3103	. . . . {Atomic absorption analysis}
2021/1776	. . . . {Colour camera}	2021/3107	. . . . {Cold vapor, e.g. determination of Hg}
2021/1778	. . . . {IIT [intensified image tube]}	2021/3111	. . . . {using Zeeman split}
2021/178	. . {Methods for obtaining spatial resolution of the property being measured}	2021/3114	. . . . {Multi-element AAS arrangements}
2021/1782	. . . {In-depth resolution}	2021/3118	. . . . {Commutating sources, e.g. line source/ broad source, chopping for comparison of broad/narrow regimes}
2021/1785	. . . {Three dimensional}	2021/3122	. . . . {using a broad source with a monochromator}
2021/1787	. . . . {Tomographic, i.e. computerised reconstruction from projective measurements}	2021/3125	. . . . {Measuring the absorption by excited molecules}
2021/1789	. . {Time resolved}	2021/3129	. . . . {Determining multicomponents by multiwavelength light}
2021/1791	. . . {stroboscopic; pulse gated; time range gated}	2021/3133	. . . . {with selection of wavelengths before the sample}
2021/1793	. . {Remote sensing}	2021/3137	. . . . {with selection of wavelengths after the sample}
2021/1795	. . . {Atmospheric mapping of gases}	21/314	. . . . {with comparison of measurements at specific and non-specific wavelengths (dual wavelength spectrometry G01J 3/427)}
2021/1797	. . . {in landscape, e.g. crops}	2021/3144	. . . . {for oxymetry}
21/19	. . Dichroism	2021/3148	. . . . {using three or more wavelengths}
21/21	. . Polarisation-affecting properties (G01N 21/19 takes precedence)	21/3151	. . . . {using two sources of radiation of different wavelengths (G01N 21/33 - G01N 21/39 take precedence)}
21/211	. . . {Ellipsometry (optical thickness measurement G01B 11/06)}	2021/3155	. . . . {Measuring in two spectral ranges, e.g. UV and visible}
2021/212	. . . . {Arrangement with total internal reflection}	2021/3159	. . . . {Special features of multiplexing circuits}
2021/213	. . . . {Spectrometric ellipsometry}	2021/3162	. . . . {with offset adjustment between filters}
2021/214	. . . . {Variance incidence arrangement}	2021/3166	. . . . {using separate detectors and filters}
2021/215	. . . . {Brewster incidence arrangement}	2021/317	. . . . {Special constructive features}
2021/216	. . . {using circular polarised light}	2021/3174	. . . . {Filter wheel}
2021/217	. . . {Measuring depolarisation or comparing polarised and depolarised parts of light}	2021/3177	. . . . {Use of spatially separated filters in simultaneous way}
2021/218	. . . {Measuring properties of electrooptical or magneto-optical media}	2021/3181	. . . . {using LEDs}
21/23	. . . Bi-refringence	2021/3185	. . . . {typically monochromatic or band-limited}
21/25	. . Colour; Spectral properties, i.e. comparison of effect of material on the light at two or more different wavelengths or wavelength bands	2021/3188	. . . . {band-limited}
21/251	. . . {Colorimeters; Construction thereof}	2021/3192	. . . . {Absorption edge variation is measured}
21/253	. . . . {for batch operation, i.e. multisample apparatus (analytical automats G01N 35/00)}	2021/3196	. . . . {Correlating located peaks in spectrum with reference data, e.g. fingerprint data}
21/255	. . . {Details, e.g. use of specially adapted sources, lighting or optical systems}	21/33	. . . . using ultra-violet light (G01N 21/39 takes precedence)
21/256	. . . {Arrangements using two alternating lights and one detector}	2021/335	. . . . {Vacuum UV}
2021/258	. . . {Surface plasmon spectroscopy, e.g. micro- or nanoparticles in suspension}	21/35	. . . . using infra-red light (G01N 21/39 takes precedence)
21/27	. . . using photo-electric detection (G01N 21/31 takes precedence); circuits for computing concentration (logarithmic circuits G06G 7/24; photometric circuits in general G01J)	21/3504	. . . . for analysing gases, e.g. multi-gas analysis
21/272	. . . . {for following a reaction, e.g. for determining photometrically a reaction rate (photometric kinetic analysis)}	2021/3509	. . . . {Correlation method, e.g. one beam alternating in correlator/sample field}
21/274	. . . . {Calibration, base line adjustment, drift correction}	2021/3513	. . . . {Open path with an instrumental source}
21/276	. . . . {with alternation of sample and standard in optical path}	21/3518	. . . . Devices using gas filter correlation techniques; Devices using gas pressure modulation techniques
21/278	. . . . {Constitution of standards}		
21/29	. . . using visual detection (G01N 21/31 takes precedence)		
21/293	. . . . {with colour charts, graduated scales or turrets}		
2021/296	. . . . {Visually measuring scintillation effect}		

NOTE

This group also covers devices without instrumental sources, e.g. radiometric-type devices using ambient infra-red light.

2021/3522	. . . . .	{balancing by two filters on two detectors}	2021/4193	. . . .	{using a PSD}
2021/3527	. . . . .	{and using one filter cell as attenuator}	21/43	. . .	by measuring critical angle
2021/3531	. . . . .	{without instrumental source, i.e. radiometric}	21/431	. . . .	{Dip refractometers, e.g. using optical fibres}
2021/3536	. . . . .	{using modulation of pressure or density}	2021/432	. . . . .	{comprising optical fibres}
2021/354	. . . . .	{Hygrometry of gases}	2021/433	. . . . .	{with an unclad part on the fibre}
2021/3545	. . . . .	{Disposition for compensating effect of interfering gases}	2021/434	. . . .	{Dipping block in contact with sample, e.g. prism}
2021/355	. . . . .	{by using a third optical path, e.g. interference cuvette}	2021/435	. . . . .	{Sensing drops on the contact surface}
21/3554	. . . . .	for determining moisture content	2021/436	. . . . .	{Sensing resonant reflection}
21/3559	. . . . .	in sheets, e.g. in paper	2021/437	. . . . .	{with investigation of angle}
21/3563	. . . . .	for analysing solids; Preparation of samples therefor	2021/438	. . . . .	{with investigation of wavelength}
2021/3568	. . . . .	{applied to semiconductors, e.g. Silicon}	21/45	. . .	using interferometric methods; using Schlieren methods
2021/3572	. . . . .	{Preparation of samples, e.g. salt matrices}	2021/451	. . . .	{for determining the optical absorption}
21/3577	. . . . .	for analysing liquids, e.g. polluted water	21/453	. . . .	{Holographic interferometry (for dimensional measurements G01B 9/021 - G01B 9/029)}
21/3581	. . . . .	using far infra-red light; using Terahertz radiation	21/455	. . . .	{Schlieren methods, e.g. for gradient index determination; Shadowgraph}
21/3586	. . . . .	by Terahertz time domain spectroscopy [THz-TDS]	2021/456	. . . . .	{Moire deflectometry}
21/359	. . . . .	using near infra-red light	2021/458	. . . . .	{using interferential sensor, e.g. sensor fibre, possibly on optical waveguide}
2021/3595	. . . . .	{using FTIR}	21/47	. .	Scattering, i.e. diffuse reflection (G01N 21/25, G01N 21/41 take precedence G01N 21/55 takes precedence)
21/37	. . . . .	using pneumatic detection (opto-acoustic detection G01N 21/1702)}	2021/4702	. . .	{Global scatter; Total scatter, excluding reflections}
21/39	. . . . .	using tunable lasers	2021/4704	. . .	{Angular selective}
2021/391	. . . . .	{Intracavity sample}	2021/4707	. . . . .	{Forward scatter; Low angle scatter}
2021/392	. . . . .	{Measuring reradiation, e.g. fluorescence, backscatter}	2021/4709	. . . . .	{Backscatter}
2021/393	. . . . .	{and using a spectral variation of the interaction of the laser beam and the sample}	2021/4711	. . . . .	{Multiangle measurement}
2021/394	. . . . .	{DIAL method}	2021/4714	. . . . .	{Continuous plural angles}
2021/395	. . . . .	{using a topographic target}	2021/4716	. . . . .	{Using a ring of sensors, or a combination of diaphragm and sensors; Annular sensor}
2021/396	. . . . .	{Type of laser source}	2021/4719	. . . . .	{using a optical fibre array}
2021/397	. . . . .	{Dye laser}	2021/4721	. . . . .	{using a PSD}
2021/398	. . . . .	{CO ₂ laser}	2021/4723	. . . . .	{Scanning scatter angles}
2021/399	. . . . .	{Diode laser}	2021/4726	. . . . .	{Detecting scatter at 90°}
21/41	. .	Refractivity; Phase-affecting properties, e.g. optical path length (G01N 21/21 takes precedence)	2021/4728	. . . . .	{Optical definition of scattering volume}
2021/4106	. . .	{Atmospheric distortion; Turbulence}	2021/473	. . .	{Compensating for unwanted scatter, e.g. reliefs, marks}
2021/4113	. . . .	{Atmospheric dispersion}	2021/4733	. . .	{Discriminating different types of scatterers}
21/412	. . .	{Index profiling of optical fibres}	2021/4735	. . .	{Solid samples, e.g. paper, glass}
2021/4126	. . .	{Index of thin films}	21/4738	. . .	{Diffuse reflection (precedence is given to G01N 21/55 - G01N 21/57 if specular component is taken into consideration), e.g. also for testing fluids, fibrous materials}
21/4133	. . .	{Refractometers, e.g. differential}	21/474	. . . .	{Details of optical heads therefor, e.g. using optical fibres}
2021/414	. . . .	{Correcting temperature effect in refractometers}	2021/4742	. . . . .	{comprising optical fibres}
2021/4146	. . . .	{Differential cell arrangements}	2021/4745	. . . . .	{Fused bundle, i.e. for backscatter}
2021/4153	. . . .	{Measuring the deflection of light in refractometers}	2021/4747	. . . . .	{Concentric bundles}
2021/416	. . .	{Visualising flow by index measurement}	2021/475	. . . . .	{Bifurcated bundle}
2021/4166	. . .	{Methods effecting a waveguide mode enhancement through the property being measured}	2021/4752	. . . . .	{Geometry}
2021/4173	. . .	{Phase distribution}	2021/4754	. . . . .	{Diffuse illumination}
2021/418	. . . .	{Frequency/phase diagrams}	2021/4757	. . . . .	{Geometry 0/45° or 45/0°}
2021/4186	. . . .	{Phase modulation imaging}	2021/4759	. . . . .	{Annular illumination}
			2021/4761	. . . . .	{Mirror arrangements, e.g. in IR range}
			2021/4764	. . . .	{Special kinds of physical applications}
			2021/4766	. . . . .	{Sample containing fluorescent brighteners}

2021/4769	. . . . .	{Fluid samples, e.g. slurries, granulates; Compressible powdery of fibrous samples}	2021/5919	. . . . .	{Determining total density of a zone}
2021/4771	. . . . .	{Matte surfaces with reflecting particles}	2021/5923	. . . . .	{Determining zones of density; quantitating spots}
2021/4773	. . . . .	{Partly or totally translucent samples}	2021/5926	. . . . .	{Isodensitometers}
2021/4776	. . . . .	{Miscellaneous in diffuse reflection devices}	2021/593	. . . . .	{Correcting from the background density}
2021/4778	. . . . .	{Correcting variations in front distance}	2021/5934	. . . . .	{Averaging on a zone}
2021/478	. . . . .	{Correcting in testing analytical test strips}	2021/5938	. . . . .	{Features of monitor, display}
2021/4783	. . . . .	{Examining under varying incidence; Angularly adjustable head}	2021/5942	. . . . .	{for dot area ratio in printing applications}
21/4785	. . .	{Standardising light scatter apparatus; Standards therefor}	2021/5946	. . . . .	{for binary signal}
21/4788	. . .	{Diffraction (for sizing particles G01N 15/0205)}	2021/5949	. . . . .	{Correcting nonlinearity of signal, e.g. in measurement of photomedium}
2021/479	. . . . .	{Speckle}	2021/5953	. . . . .	{for detecting a spatial spectrum}
2021/4792	. . .	{Polarisation of scatter light}	2021/5957	. . . . .	{using an image detector type detector, e.g. CCD}
21/4795	. . .	{spatially resolved investigating of object in scattering medium (in vivo A61B)}	2021/5961	. . . . .	{using arrays of sources and detectors}
2021/4797	. . . . .	{time resolved, e.g. analysis of ballistic photons}	2021/5965	. . . . .	{using selected detectors in an array}
21/49	. . .	within a body or fluid	2021/5969	. . . . .	{Scanning of a tube, a cuvette, a volume of sample}
2021/495	. . . . .	{the fluid being adsorbed, e.g. in porous medium}	2021/5973	. . . . .	{where the cuvette or tube is moved}
21/51	. . . . .	inside a container, e.g. in an ampoule (G01N 21/53 takes precedence)	2021/5976	. . . . .	{Image projected and scanning projected image}
2021/513	. . . . .	{Cuvettes for scattering measurements}	2021/598	. . . . .	{Features of mounting, adjusting}
2021/516	. . . . .	{Multiple excitation of scattering medium, e.g. by retro-reflected or multiply reflected excitation rays}	2021/5984	. . . . .	{height adjustable}
21/53	. . . . .	within a flowing fluid, e.g. smoke	2021/5988	. . . . .	{Fluid mounting or the like, e.g. vortex}
21/532	. . . . .	{with measurement of scattering and transmission}	2021/5992	. . . . .	{Double pass}
21/534	. . . . .	{by measuring transmission alone, i.e. determining opacity}	2021/5996	. . . . .	{Positioning the head}
2021/536	. . . . .	{Measurement device mounted at stack}	21/61	. . .	Non-dispersive gas analysers (G01N 21/3504 takes precedence)
21/538	. . . . .	{for determining atmospheric attenuation and visibility}	21/62	. . .	Systems in which the material investigated is excited whereby it emits light or causes a change in wavelength of the incident light
21/55	. .	Specular reflectivity	2021/625	. . .	{Excitation by energised particles such as metastable molecules}
2021/551	. . .	{Retroreflectance}	21/63	. .	optically excited
21/552	. . .	Attenuated total reflection	21/631	. . .	{using photolysis and investigating photolysed fragments}
21/553	. . . . .	{and using surface plasmons (fluorescence excitation G01N 21/648 ; enhanced Raman G01N 21/658)}	2021/632	. . . . .	{Predissociation, e.g. for fluorescence of transient excited radicals}
21/554	. . . . .	{detecting the surface plasmon resonance of nanostructured metals, e.g. localised surface plasmon resonance}	2021/633	. . .	{Photoinduced grating used for analysis}
2021/555	. . .	{Measuring total reflection power, i.e. scattering and specular}	2021/634	. . .	{Photochromic material analysis}
2021/556	. . .	{Measuring separately scattering and specular}	2021/635	. . .	{Photosynthetic material analysis, e.g. chlorophyll}
2021/557	. . .	{Detecting specular reflective parts on sample}	21/636	. . .	{using an arrangement of pump beam and probe beam; using the measurement of optical non-linear properties; (non-linear optics per se G02F 1/35)}
2021/558	. . .	{Measuring reflectivity and transmission}	2021/637	. . . . .	{Lasing effect used for analysis}
2021/559	. . .	{Determining variation of specular reflection within diffusively reflecting sample}	2021/638	. . . . .	{Brillouin effect, e.g. stimulated Brillouin effect}
21/57	. . .	Measuring gloss	21/64	. . .	Fluorescence; Phosphorescence
2021/575	. . . . .	{Photogoniometering}	21/6402	. . . . .	{Atomic fluorescence; Laser induced fluorescence}
21/59	. .	Transmissivity (G01N 21/25 takes precedence)	21/6404	. . . . .	{Atomic fluorescence}
2021/5903	. . .	{using surface plasmon resonance [SPR], e.g. extraordinary optical transmission [EOT]}	2021/6406	. . . . .	{multi-element}
21/5907	. . .	{Densitometers}	21/6408	. . . . .	{with measurement of decay time, time resolved fluorescence}
21/5911	. . . . .	{of the scanning type (scanning per se G02B)}	2021/641	. . . . .	{Phosphorimetry, gated}
2021/5915	. . . . .	{Processing scan data in densitometry}	2021/6413	. . . . .	{Distinction short and delayed fluorescence or phosphorescence}
			2021/6415	. . . . .	{with two excitations, e.g. strong pump/probe flash}
			2021/6417	. . . . .	{Spectrofluorimetric devices}
			2021/6419	. . . . .	{Excitation at two or more wavelengths}

2021/6421	. . . . .	{Measuring at two or more wavelengths}	21/67	. . .	using electric arcs or discharges
2021/6423	. . . . .	{Spectral mapping, video display}	21/68	. . .	using high frequency electric fields
2021/6426	. . . . .	{Determining Fraunhofer lines}	21/69	. . .	specially adapted for fluids {, e.g. molten metal}
21/6428	. . . . .	{Measuring fluorescence of fluorescent products of reactions or of fluorochrome labelled reactive substances, e.g. measuring quenching effects, using measuring "optrodes" (in vivo A61B 5/00; immunoassay G01N 33/53)}	2021/695	. . . . .	{Molten metals}
21/643	. . . . .	{non-biological material}	21/70	. .	mechanically excited, e.g. triboluminescence
2021/6432	. . . . .	{Quenching}	21/71	. .	thermally excited
2021/6434	. . . . .	{Optrodes}	2021/712	. . .	{using formation of volatile hydride}
2021/6436	. . . . .	{for analysing tapes}	21/714	. . .	{Sample nebulisers for flame burners or plasma burners (nebulizers per se B05B)}
2021/6439	. . . . .	{with indicators, stains, dyes, tags, labels, marks}	21/716	. . .	{by measuring the radiation emitted by a test object treated by combustion gases for investigating the composition of gas mixtures}
2021/6441	. . . . .	{with two or more labels}	21/718	. . .	{Laser microanalysis, i.e. with formation of sample plasma}
2021/6443	. . . . .	{Fluorimetric titration}	21/72	. . .	using flame burners
21/6445	. . . . .	{Measuring fluorescence polarisation}	2021/725	. . . . .	{for determining of metalloids, using Beilstein type reaction}
21/6447	. . . . .	{by visual observation}	21/73	. . .	using plasma burners or torches
21/645	. . . . .	{Specially adapted constructive features of fluorimeters}	21/74	. . .	using flameless atomising, e.g. graphite furnaces
21/6452	. . . . .	{Individual samples arranged in a regular 2D-array, e.g. multiwell plates}	2021/745	. . . . .	{Control of temperature, heating, ashing}
21/6454	. . . . .	{using an integrated detector array}	21/75	. .	Systems in which material is subjected to a chemical reaction, the progress or the result of the reaction being investigated (systems in which material is burnt in a flame or plasma G01N 21/72, G01N 21/73)
21/6456	. . . . .	{Spatial resolved fluorescence measurements; Imaging}	2021/751	. .	{Comparing reactive/non reactive substances}
21/6458	. . . . .	{Fluorescence microscopy (fluorescence microscopes per se G02B 21/0076 and G02B 21/16)}	2021/752	. .	{Devices comprising reaction zones}
2021/646	. . . . .	{Detecting fluorescent inhomogeneities at a position, e.g. for detecting defects}	2021/754	. .	{Reagent flow and intermittent injection of sample or <i>vice versa</i> }
2021/6463	. . . . .	{Optics}	2021/755	. .	{Comparing readings with/without reagents, or before/after reaction}
2021/6465	. . . . .	{Angular discrimination}	2021/757	. .	{using immobilised reagents}
2021/6467	. . . . .	{Axial flow and illumination}	2021/758	. .	{using reversible reaction}
2021/6469	. . . . .	{Cavity, e.g. ellipsoid}	21/76	. .	Chemiluminescence; Bioluminescence
2021/6471	. . . . .	{Special filters, filter wheel}	21/763	. . .	{Bioluminescence}
2021/6473	. . . . .	{In-line geometry}	21/766	. . .	{of gases}
2021/6476	. . . . .	{Front end, i.e. backscatter, geometry}	21/77	. .	by observing the effect on a chemical indicator
2021/6478	. . . . .	{Special lenses}	21/7703	. . .	{using reagent-clad optical fibres or optical waveguides (using measurement of total internal reflection or attenuated total reflection G01N 21/552; optical fibres or waveguides per se G02B)}
21/648	. . . . .	{using evanescent coupling or surface plasmon coupling for the excitation of fluorescence}	2021/7706	. . . . .	{Reagent provision}
2021/6482	. . . . .	{Sample cells, cuvettes}	2021/7709	. . . . .	{Distributed reagent, e.g. over length of guide}
2021/6484	. . . . .	{Optical fibres}	2021/7713	. . . . .	{in core}
21/6486	. . . . .	{Measuring fluorescence of biological material, e.g. DNA, RNA, cells (G01N 21/6428 takes precedence)}	2021/7716	. . . . .	{in cladding}
21/6489	. . . . .	{Photoluminescence of semiconductors}	2021/772	. . . . .	{Tip coated light guide}
2021/6491	. . . . .	{Measuring fluorescence and transmission; Correcting inner filter effect}	2021/7723	. . . . .	{Swelling part, also for adsorption sensor, i.e. without chemical reaction}
2021/6493	. . . . .	{by alternating fluorescence/transmission or fluorescence/reflection}	2021/7726	. . . . .	{Porous glass}
2021/6495	. . . . .	{Miscellaneous methods}	2021/773	. . . . .	{Porous polymer jacket; Polymer matrix with indicator}
2021/6497	. . . . .	{Miscellaneous applications}	2021/7733	. . . . .	{Reservoir, liquid reagent}
21/65	. . .	Raman scattering	2021/7736	. . . . .	{exposed, cladding free}
2021/651	. . . . .	{Cuvettes therefore}	21/774	. . . . .	{the reagent being on a grating or periodic structure}
2021/653	. . . . .	{Coherent methods [CARS]}	21/7743	. . . . .	{the reagent-coated grating coupling light in or out of the waveguide}
2021/655	. . . . .	{Stimulated Raman}	21/7746	. . . . .	{the waveguide coupled to a cavity resonator}
2021/656	. . . . .	{Raman microprobe}			
21/658	. . . . .	{enhancement Raman, e.g. surface plasmons}			
21/66	. .	electrically excited, e.g. electroluminescence			

2021/775	. . . {Indicator and selective membrane}	2021/855	. . . . {Underground probe, e.g. with provision of a penetration tool}
2021/7753	. . . {Reagent layer on photoelectrical transducer}	2021/8557	. . . {Special shaping of flow, e.g. using a by-pass line, jet flow, curtain flow}
2021/7756	. . . {Sensor type}	2021/8564	. . . . {Sample as drops}
2021/7759	. . . . {Dipstick; Test strip}	2021/8571	. . . {using filtering of sample fluid}
2021/7763	. . . . {Sample through flow}	2021/8578	. . . {Gaseous flow (IR analysers G01N 21/8507)}
2021/7766	. . . . {Capillary fill}	2021/8585	. . . . {using porous sheets, e.g. for separating aerosols}
2021/7769	. . . {Measurement method of reaction-produced change in sensor}	2021/8592	. . . {Grain or other flowing solid samples}
2021/7773	. . . . {Reflection}	21/86	. . Investigating moving sheets (G01N 21/89 takes precedence)
2021/7776	. . . . {Index}	2021/8609	. . . {Optical head specially adapted}
2021/7779	. . . . {interferometric}	2021/8618	. . . . {with an optically integrating part, e.g. hemisphere}
2021/7783	. . . . {Transmission, loss}	2021/8627	. . . . {with an illuminator over the whole width}
2021/7786	. . . . {Fluorescence}	2021/8636	. . . . . {Detecting arrangement therefore, e.g. collimators, screens}
2021/7789	. . . . {Cavity or resonator}	2021/8645	. . . {using multidetectors, detector array}
2021/7793	. . . {Sensor comprising plural indicators}	2021/8654	. . . {Mechanical support; Mounting of sheet}
2021/7796	. . . {Special mountings, packaging of indicators}	2021/8663	. . . {Paper, e.g. gloss, moisture content (inspecting the presence of flaws in moving materials, e.g. paper G01N 21/89; measurement of gloss in general G01N 21/57)}
21/78	. . . producing a change of colour	2021/8672	. . . . {Paper formation parameter}
21/783	. . . . {for analysing gases}	2021/8681	. . . . {Paper fibre orientation}
2021/786	. . . . {with auxiliary heating for reaction}	2021/869	. . . {Plastics or polymeric material, e.g. polymers orientation in plastic, adhesive imprinted band}
21/79	. . . . Photometric titration	21/87	. . Investigating jewels (G01N 21/88 takes precedence)
21/80	. . . . Indicating pH value	21/88	. . Investigating the presence of flaws or contamination
21/81	. . . . Indicating humidity	21/8803	. . . {Visual inspection (measuring projectors G01B 9/08)}
21/82	. . . producing a precipitate or turbidity	21/8806	. . . {Specially adapted optical and illumination features}
2021/825	. . . . {Agglutination}	2021/8809	. . . . {Adjustment for highlighting flaws}
21/83	. . . . Turbidimetric titration	2021/8812	. . . . {Diffuse illumination, e.g. "sky"}
21/84	. Systems specially adapted for particular applications	2021/8816	. . . . . {by using multiple sources, e.g. LEDs}
2021/8405	. . {Application to two-phase or mixed materials, e.g. gas dissolved in liquids}	2021/8819	. . . . . {by using retroreflecting screen}
2021/8411	. . {Application to online plant, process monitoring}	2021/8822	. . . . {Dark field detection}
2021/8416	. . . {and process controlling, not otherwise provided for}	2021/8825	. . . . . {Separate detection of dark field and bright field}
21/8422	. . {Investigating thin films, e.g. matrix isolation method}	2021/8829	. . . . {Shadow projection or structured background, e.g. for deflectometry (three-dimensional metrology of surfaces G01B 11/25)}
2021/8427	. . . {Coatings}	2021/8832	. . . . . {Structured background, e.g. for transparent objects}
2021/8433	. . . . {Comparing coated/uncoated parts}	2021/8835	. . . . {Adjustable illumination, e.g. software adjustable screen}
2021/8438	. . . {Multilayers}	2021/8838	. . . . {Stroboscopic illumination; synchronised illumination}
2021/8444	. . {Fibrous material}	2021/8841	. . . . {Illumination and detection on two sides of object}
2021/845	. . {Objects on a conveyor}	2021/8845	. . . . {Multiple wavelengths of illumination or detection}
2021/8455	. . . {and using position detectors}	2021/8848	. . . . {Polarisation of light}
2021/8461	. . {Investigating impurities in semiconductor, e.g. Silicon}		
2021/8466	. . {Investigation of vegetal material, e.g. leaves, plants, fruits}		
2021/8472	. . {Investigation of composite materials}		
2021/8477	. . {Investigating crystals, e.g. liquid crystals}		
21/8483	. . {Investigating reagent band (test-element handling not specific to a test method G01N 33/4875; analytical elements specific to chemical analysis of biological material G01N 33/52; autometer with reagent band G01N 35/04)}		
2021/8488	. . . {the band presenting reference patches}		
2021/8494	. . . {Measuring or storing parameters of the band}		
21/85	. . Investigating moving fluids or granular solids		
21/8507	. . . {Probe photometers, i.e. with optical measuring part dipped into fluid sample}		
2021/8514	. . . . {with immersed mirror}		
2021/8521	. . . . . {with a combination mirror cell-cuvette}		
2021/8528	. . . . {Immersed light conductor}		
2021/8535	. . . . . {presenting a cut}		
2021/8542	. . . . . {presenting an exposed part of the core}		

21/8851	. . .	{Scan or image signal processing specially adapted therefor, e.g. for scan signal adjustment, for detecting different kinds of defects, for compensating for structures, markings, edges (G01N 21/8806 and G01N 21/93 - G01N 21/95692 take precedence; optical measurement of dimensions G01B 11/00 ; optical scanning G02B 26/10 ; image transformation G06T 3/00 ; computerised image enhancement G06T 5/00 ; image processing per se for flaw detection G06T 7/0002)}	2021/8927	. . . . .	{Defects in a structured web}
2021/8854	. . . .	{Grading and classifying of flaws}	2021/8928	. . . . .	{Haze defects, i.e. with a part of diffracted light}
2021/8858	. . . . .	{Flaw counting}	21/894	. . . . .	Pinholes
2021/8861	. . . . .	{Determining coordinates of flaws}	21/896	. . . . .	Optical defects in or on transparent materials, e.g. distortion, surface flaws {in conveyed flat sheet or rod (for other objects G01N 21/958)}
2021/8864	. . . . .	{Mapping zones of defects}	2021/8962	. . . . .	{for detecting separately opaque flaws and refracting flaws}
2021/8867	. . . . .	{using sequentially two or more inspection runs, e.g. coarse and fine, or detecting then analysing}	2021/8965	. . . . .	{using slant illumination, using internally reflected light}
2021/887	. . . . .	{the measurements made in two or more directions, angles, positions}	2021/8967	. . . . .	{Discriminating defects on opposite sides or at different depths of sheet or rod}
2021/8874	. . . . .	{Taking dimensions of defect into account}	21/898	. . . . .	Irregularities in textured or patterned surfaces, e.g. textiles, wood
2021/8877	. . . . .	{Proximity analysis, local statistics}	21/8983	. . . . .	{for testing textile webs, i.e. woven material}
2021/888	. . . . .	{Marking defects}	21/8986	. . . . .	{Wood}
2021/8883	. . . .	{involving the calculation of gauges, generating models}	21/90	. . .	in a container or its contents (G01N 21/91 takes precedence)
2021/8887	. . . . .	{based on image processing techniques}	21/9009	. . . .	{Non-optical constructional details affecting optical inspection, e.g. cleaning mechanisms for optical parts, vibration reduction}
2021/889	. . . . .	{providing a bare video image, i.e. without visual measurement aids}	21/9018	. . . . .	{Dirt detection in containers}
2021/8893	. . . . .	{providing a video image and a processed signal for helping visual decision}	21/9027	. . . . .	{in containers after filling}
2021/8896	. . . . .	{Circuits specially adapted for system specific signal conditioning}	21/9036	. . . . .	{using arrays of emitters or receivers}
21/89	. . .	in moving material, e.g. running paper or textiles (G01N 21/90 , G01N 21/91 , G01N 21/94 take precedence)	21/9045	. . . . .	{Inspection of ornamented or stippled container walls}
21/8901	. . . . .	{Optical details; Scanning details (per se G02B)}	21/9054	. . . . .	{Inspection of sealing surface and container finish}
2021/8902	. . . . .	{Anamorphic spot}	2021/9063	. . . . .	{Hot-end container inspection}
21/8903	. . . . .	{using a multiple detector array}	21/9072	. . . . .	{with illumination or detection from inside the container}
2021/8904	. . . . .	{Sheetwide light conductor on detecting side, e.g. fluorescing light rod}	21/9081	. . . . .	{Inspection especially designed for plastic containers, e.g. preforms}
2021/8905	. . . . .	{Directional selective optics, e.g. slits, spatial filters}	21/909	. . . . .	{in opaque containers or opaque container parts, e.g. cans, tins, caps, labels}
2021/8907	. . . . .	{Cylindrical optics}	21/91	. . .	using penetration of dyes, e.g. fluorescent ink
2021/8908	. . . . .	{Strip illuminator, e.g. light tube}	21/93	. . .	Detection standards; Calibrating {baseline adjustment, drift correction}
2021/8909	. . . . .	{Scan signal processing specially adapted for inspection of running sheets}	2021/933	. . . . .	{Adjusting baseline or gain (also for web inspection)}
2021/891	. . . . .	{Edge discrimination, e.g. by signal filtering}	2021/936	. . . . .	{Adjusting threshold, e.g. by way of moving average}
2021/8911	. . . . .	{Setting scan-width signals}	21/94	. . .	Investigating contamination, e.g. dust (G01N 21/85 takes precedence)
2021/8912	. . . . .	{Processing using lane subdivision}	2021/945	. . . . .	{Liquid or solid deposits of macroscopic size on surfaces, e.g. drops, films, or clustered contaminants (dust particles and microscopic contaminants in G01N 21/94)}
21/8914	. . . . .	{characterised by the material examined}	21/95	. . .	characterised by the material or shape of the object to be examined (G01N 21/89 - G01N 21/91 , G01N 21/94 take precedence)
21/8915	. . . . .	{non-woven textile material}	21/9501	. . . . .	{Semiconductor wafers (manufacturing processes per se of semiconductor devices implementing a measuring step H01L 22/10)}
21/8916	. . . . .	{for testing photographic material}	21/9503	. . . . .	{Wafer edge inspection}
2021/8917	. . . . .	{Paper, also undulated}	21/9505	. . . . .	{Wafer internal defects, e.g. microcracks}
2021/8918	. . . . .	{Metal}	21/9506	. . . . .	{Optical discs}
21/892	. . . . .	characterised by the flaw, defect or object feature examined	21/9508	. . . . .	{Capsules; Tablets}
21/8921	. . . . .	{Streaks}			
21/8922	. . . . .	{Periodic flaws}			
2021/8924	. . . . .	{Dents; Relief flaws}			
2021/8925	. . . . .	{Inclusions}			

- 21/951 {Balls}
- 2021/9511 {Optical elements other than lenses, e.g. mirrors (testing of optical apparatus in [G01M 11/00](#))}
- 2021/9513 {Liquid crystal panels}
- 21/9515 {Objects of complex shape, e.g. examined with use of a surface follower device (measuring contours and curvatures [G01B 11/24](#))}
- 2021/9516 {whereby geometrical features are being masked}
- 2021/9518 {using a surface follower, e.g. robot}
- 21/952 Inspecting the exterior surface of cylindrical bodies or wires ([G01N 21/956](#) takes precedence)
- 21/954 Inspecting the inner surface of hollow bodies, e.g. bores
- 2021/9542 {using a probe}
- 2021/9544 {with emitter and receiver on the probe}
- 2021/9546 {with remote light transmitting, e.g. optical fibres}
- 2021/9548 {Scanning the interior of a cylinder}
- 21/956 Inspecting patterns on the surface of objects (contactless testing of electronic circuits [G01R 31/308](#); testing currency [G07D](#) {manufacturing processes per se of semiconductor devices implementing a measuring step [H01L 22/10](#)})
- 21/95607 {using a comparative method}
- 2021/95615 {with stored comparison signal}
- 21/95623 {using a spatial filtering method (per se [G02B](#))}
- 2021/9563 {and suppressing pattern images}
- 2021/95638 {for PCB's}
- 2021/95646 {Soldering}
- 2021/95653 {Through-holes}
- 2021/95661 {for leads, e.g. position, curvature}
- 2021/95669 {for solder coating, coverage}
- 2021/95676 {Masks, reticles, shadow masks}
- 21/95684 {Patterns showing highly reflecting parts, e.g. metallic elements}
- 21/95692 {Patterns showing hole parts, e.g. honeycomb filtering structures}
- 21/958 Inspecting transparent materials {or objects, e.g. windscreens (for conveyed flat sheet or rod [G01N 21/896](#))}
- 2021/9583 {Lenses}
- 2021/9586 {Windscreens}
- 22/00** **Investigating or analysing materials by the use of microwaves or radio waves, i.e. electromagnetic waves with a wavelength of one millimetre or more ([G01N 3/00](#) - [G01N 17/00](#), [G01N 24/00](#) take precedence)**
 - 22/005 . {and using Stark effect modulation}
 - 22/02 . Investigating the presence of flaws
 - 22/04 . Investigating moisture content
- 23/00** **Investigating or analysing materials by the use of wave or particle radiation, e.g. X-rays or neutrons, not covered by groups [G01N 3/00](#) – [G01N 17/00](#), [G01N 21/00](#) or [G01N 22/00](#)**
 - 23/005 . {by using neutrons ([G01N 23/02](#) - [G01N 23/227](#) take precedence)}
 - 23/02 . by transmitting the radiation through the material

- 23/025 . . {using neutrons}
- 23/04 . . and forming images of the material

WARNING

Group [G01N 23/04](#) is impacted by reclassification into groups [G01N 23/041](#) and [G01N 23/044](#).

Groups [G01N 23/04](#), [G01N 23/041](#), and [G01N 23/044](#) should be considered in order to perform a complete search.

- 23/041 . . . Phase-contrast imaging, e.g. using grating interferometers

WARNING

Group [G01N 23/041](#) is incomplete pending reclassification of documents from groups [G01N 23/04](#) and [G01N 23/043](#).

Groups [G01N 23/04](#), [G01N 23/043](#), and [G01N 23/041](#) should be considered in order to perform a complete search.

- 23/043 . . . {using fluoroscopic examination, with visual observation or video transmission of fluoroscopic images}

WARNING

Group [G01N 23/043](#) is impacted by reclassification into groups [G01N 23/041](#) and [G01N 23/044](#).

Groups [G01N 23/043](#), [G01N 23/041](#), and [G01N 23/044](#) should be considered in order to perform a complete search.

- 23/044 . . . using laminography or tomosynthesis

WARNING

Group [G01N 23/044](#) is incomplete pending reclassification of documents from groups [G01N 23/04](#) and [G01N 23/043](#).

Groups [G01N 23/04](#), [G01N 23/043](#), and [G01N 23/044](#) should be considered in order to perform a complete search.

- 23/046 . . . using tomography, e.g. computed tomography [CT]

- 23/05 . . . using neutrons

- 23/06 . . and measuring the absorption

WARNING

Group [G01N 23/06](#) is impacted by reclassification into group [G01N 23/083](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/083 . . . the radiation being X-rays

WARNING

Group [G01N 23/083](#) is incomplete pending reclassification of documents from groups [G01N 23/06](#) and [G01N 23/10](#) – [G01N 23/185](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/085 X-ray absorption fine structure [XAFS], e.g. extended XAFS [EXAFS]
- 23/087 using polyenergetic X-rays
- 23/09 the radiation being neutrons

WARNING

Group [G01N 23/09](#) is impacted by reclassification into groups [G01N 23/10](#), [G01N 23/12](#), [G01N 23/125](#), [G01N 23/16](#), and [G01N 23/18](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/095 Gamma-ray resonance absorption, e.g. using the Mössbauer effect
- 23/10 the material being confined in a container, e.g. in a luggage X-ray scanners

WARNING

Group [G01N 23/10](#) is incomplete pending reclassification of documents from group [G01N 23/09](#).

Group [G01N 23/10](#) is also impacted by reclassification into group [G01N 23/083](#).

Groups [G01N 23/09](#), [G01N 23/10](#), and [G01N 23/083](#) should be considered in order to perform a complete search.

- 23/12 the material being a flowing fluid or a flowing granular solid

WARNING

Group [G01N 23/12](#) is incomplete pending reclassification of documents from group [G01N 23/09](#).

Group [G01N 23/12](#) is also impacted by reclassification into group [G01N 23/083](#).

Groups [G01N 23/09](#), [G01N 23/12](#), and [G01N 23/083](#) should be considered in order to perform a complete search.

- 23/125 {with immersed detecting head}

WARNING

Group [G01N 23/125](#) is incomplete pending reclassification of documents from group [G01N 23/09](#).

Group [G01N 23/125](#) is also impacted by reclassification into group [G01N 23/083](#).

Groups [G01N 23/09](#), [G01N 23/125](#), and [G01N 23/083](#) should be considered in order to perform a complete search.

- 23/16 the material being a moving sheet or film

WARNING

Group [G01N 23/16](#) is incomplete pending reclassification of documents from groups [G01N 23/09](#), [G01N 23/18](#), and [G01N 23/185](#).

Group [G01N 23/16](#) is also impacted by reclassification into group [G01N 23/083](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/18 Investigating the presence of flaws defects or foreign matter

WARNING

Group [G01N 23/18](#) is incomplete pending reclassification of documents from group [G01N 23/09](#).

Group [G01N 23/18](#) is also impacted by reclassification into groups [G01N 23/083](#), and [G01N 23/16](#).

Groups [G01N 23/09](#), [G01N 23/18](#), and [G01N 23/16](#) should be considered in order to perform a complete search.

- 23/185 {in tyres}

WARNING

Group [G01N 23/185](#) is impacted by reclassification into groups [G01N 23/083](#), and [G01N 23/16](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/20 by using diffraction of the radiation by the materials, e.g. for investigating crystal structure; by using scattering of the radiation by the materials, e.g. for investigating non-crystalline materials; by using reflection of the radiation by the materials

- 23/20008 Constructional details of analysers, e.g. characterised by X-ray source, detector or optical system; Accessories therefor; Preparing specimens therefor ([monochromators for X-rays using crystals G21K 1/06](#))

- 23/20016 Goniometers

- 23/20025 Sample holders or supports therefor

- 23/20033 provided with temperature control or heating means

- 23/20041 for high pressure testing, e.g. anvil cells

- 23/2005 Preparation of powder samples therefor

- 23/20058 Measuring diffraction of electrons, e.g. low energy electron diffraction [LEED] method or reflection high energy electron diffraction [RHEED] method

- 23/20066 Measuring inelastic scatter of gamma rays, e.g. Compton effect

- 23/20075 {by measuring interferences of X-rays, e.g. Borrmann effect}

- 23/20083 {by using a combination of at least two measurements at least one being a transmission measurement and one a scatter measurement}

- 23/20091 Measuring the energy-dispersion spectrum [EDS] of diffracted radiation

- 23/201 . . . by measuring small-angle scattering

WARNING

Group [G01N 23/201](#) is impacted by reclassification into groups [G01N 23/205](#), [G01N 23/207](#), and [G01N 23/2073](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/202 . . . using neutrons

WARNING

Group [G01N 23/202](#) is impacted by reclassification into groups [G01N 23/205](#), [G01N 23/207](#), and [G01N 23/2073](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 23/203 . . Measuring back scattering

- 23/204 . . . using neutrons

- 23/205 . . using diffraction cameras

WARNING

Group [G01N 23/205](#) is incomplete pending reclassification of documents from groups [G01N 23/201](#) and [G01N 23/202](#).

Groups [G01N 23/201](#), [G01N 23/202](#) and [G01N 23/205](#) should be considered in order to perform a complete search.

- 23/2055 . . Analysing diffraction patterns

- 23/207 . . Diffractometry using detectors, e.g. using a probe in a central position and one or more displaceable detectors in circumferential positions

WARNING

Group [G01N 23/207](#) is incomplete pending reclassification of documents from groups [G01N 23/201](#) and [G01N 23/202](#).

Groups [G01N 23/201](#), [G01N 23/202](#) and [G01N 23/207](#) should be considered in order to perform a complete search.

- 23/2073 . . . {using neutron detectors ([neutron spectrometry G01T 3/00](#))}

WARNING

Group [G01N 23/2073](#) is incomplete pending reclassification of documents from groups [G01N 23/201](#) and [G01N 23/202](#).

Groups [G01N 23/201](#), [G01N 23/202](#) and [G01N 23/2073](#) should be considered in order to perform a complete search.

- 23/2076 . . . {for spectrometry, i.e. using an analysing crystal, e.g. for measuring X-ray fluorescence spectrum of a sample with wavelength-dispersion, i.e. WDXFS}

WARNING

Group [G01N 23/2076](#) is impacted by reclassification into group [G01N 23/223](#).

Groups [G01N 23/2076](#) and [G01N 23/223](#) should be considered in order to perform a complete search.

- 23/22 . . by measuring secondary emission from the material

NOTE

Devices *per se* are classified in the relevant places, e.g. [H01J 37/00](#), [H01J 49/00](#)

WARNING

Group [G01N 23/22](#) is impacted by reclassification into group [G01N 23/2209](#).

Groups [G01N 23/22](#) and [G01N 23/2209](#) should be considered in order to perform a complete search.

- 23/2202 . . Preparing specimens therefor

- 23/2204 . . Specimen supports therefor; Sample conveying means therefore

- 23/2206 . . Combination of two or more measurements, at least one measurement being that of secondary emission, e.g. combination of secondary electron [SE] measurement and back-scattered electron [BSE] measurement

- 23/2208 . . . all measurements being of a secondary emission, e.g. combination of SE measurement and characteristic X-ray measurement

- 23/2209 . . using wavelength dispersive spectroscopy [WDS]

WARNING

Group [G01N 23/2209](#) is incomplete pending reclassification of documents from group [G01N 23/22](#).

Groups [G01N 23/22](#) and [G01N 23/2209](#) should be considered in order to perform a complete search.

- 23/221 . . by activation analysis

- 23/222 . . . using neutron activation analysis [NAA]

- 23/223 . . by irradiating the sample with X-rays or gamma-rays and by measuring X-ray fluorescence

WARNING

Group [G01N 23/223](#) is incomplete pending reclassification of documents from group [G01N 23/2076](#).

Groups [G01N 23/2076](#) and [G01N 23/223](#) should be considered in order to perform a complete search.

- 23/225 . . using electron or ion

- 23/2251 . . . using incident electron beams, e.g. scanning electron microscopy [SEM]

- 23/2252 Measuring emitted X-rays, e.g. electron probe microanalysis [EPMA]

- 23/2254 Measuring cathodoluminescence

- 23/2255 . . . using incident ion beams, e.g. proton beams

- 23/2257 Measuring excited X-rays, i.e. particle-induced X-ray emission [PIXE]
- 23/2258 Measuring secondary ion emission, e.g. secondary ion mass spectrometry [SIMS] (mass-to-charge ratio analysis aspects of SIMS for material analysis [G01N 27/62](#))
- WARNING**
- Group [G01N 23/2258](#) is impacted by reclassification into group [G01N 27/62](#).
- Groups [G01N 23/2258](#) and [G01N 27/62](#) should be considered in order to perform a complete search.
- 23/227 . . Measuring photoelectric effect, e.g. photoelectron emission microscopy [PEEM]
- 23/2273 . . . Measuring photoelectron spectrum, e.g. electron spectroscopy for chemical analysis [ESCA] or X-ray photoelectron spectroscopy [XPS]
- 23/2276 . . . using the Auger effect, e.g. Auger electron spectroscopy [AES]
- 24/00 Investigating or analyzing materials by the use of nuclear magnetic resonance, electron paramagnetic resonance or other spin effects**
- 24/002 . {Using resonance on molecular beams (atomic clocks [G04F 5/14](#); beam masers [H01S 1/06](#))}
- 24/004 . {Using acoustical resonance, i.e. phonon interactions}
- 24/006 . {using optical pumping (magnetometers using optical pumping [G01R 33/26](#), optical pumping of lasers [H01S 3/091](#))}
- 24/008 . {by using resonance effects in zero field, e.g. in microwave, submillimetric region (by measuring absorption of microwaves by the material [G01N 22/00](#))}
- 24/08 . by using nuclear magnetic resonance ([G01N 24/12](#) takes precedence)
- 24/081 . . {Making measurements of geologic samples, e.g. measurements of moisture, pH, porosity, permeability, tortuosity or viscosity}
- 24/082 . . {Measurement of solid, liquid or gas content}
- 24/084 . . {Detection of potentially hazardous samples, e.g. toxic samples, explosives, drugs, firearms, weapons}
- 24/085 . . {Analysis of materials for the purpose of controlling industrial production systems}
- 24/087 . . {Structure determination of a chemical compound, e.g. of a biomolecule such as a protein}
- 24/088 . . {Assessment or manipulation of a chemical or biochemical reaction, e.g. verification whether a chemical reaction occurred or whether a ligand binds to a receptor in drug screening or assessing reaction kinetics}
- 24/10 . by using electron paramagnetic resonance ([G01N 24/12](#) takes precedence)
- 24/12 . by using double resonance
- 24/14 . by using cyclotron resonance
- 25/00 Investigating or analyzing materials by the use of thermal means ([G01N 3/00](#) - [G01N 23/00](#) take precedence)**
- 25/005 . {by investigating specific heat}
- 25/02 . by investigating changes of state or changes of phase; by investigating sintering ({[investigating or analysing oils or hydrocarbon fluids by measuring cloud point or pour point \[G01N 33/2811\]\(#\)](#)})
- 25/04 . . of melting point; of freezing point; of softening point
- 25/06 . . . Analysis by measuring change of freezing point
- 25/08 . . of boiling point
- 25/085 . . . {Investigating nucleation}
- 25/10 . . . Analysis by measuring change of boiling point
- 25/12 . . of critical point; of other phase change
- 25/14 . by using distillation, extraction, sublimation, condensation, freezing, or crystallisation ([G01N 25/02](#) takes precedence)
- 25/142 . . {by condensation}
- 25/145 . . {Accessories, e.g. cooling devices (in general [B01L](#), [F25D](#))}
- 25/147 . . {by crystallisation}
- 25/16 . by investigating thermal coefficient of expansion
- 25/18 . by investigating thermal conductivity (by calorimetry [G01N 25/20](#); by measuring change of resistance of an electrically-heated body [G01N 27/18](#))
- 25/20 . by investigating the development of heat, i.e. calorimetry, e.g. by measuring specific heat, by measuring thermal conductivity (calorimeters [per se \[G01K\]\(#\)](#))
- 25/22 . . on combustion or catalytic oxidation, e.g. of components of gas mixtures
- 25/24 . . . using combustion tubes, e.g. for microanalysis
- 25/26 . . . using combustion with oxygen under pressure, e.g. in bomb calorimeter
- 25/28 . . . the rise in temperature of the gases resulting from combustion being measured directly
- 25/30 using electric temperature-responsive elements
- 25/32 using thermoelectric elements
- 25/34 using mechanical temperature-responsive elements, e.g. bimetallic (bimetallic elements [per se \[G12B 1/02\]\(#\)](#))
- 25/36 for investigating the composition of gas mixtures
- 25/38 using the melting or combustion of a solid
- 25/385 {for investigating the composition of gas mixtures}
- 25/40 . . . the heat developed being transferred to a flowing fluid
- 25/42 continuously
- 25/44 . . . the heat developed being transferred to a fixed quantity of fluid
- 25/46 for investigating the composition of gas mixtures
- 25/48 . . on solution, sorption, or a chemical reaction not involving combustion or catalytic oxidation
- 25/4806 . . . {Details not adapted to a particular type of sample}
- 25/4813 {concerning the measuring means}
- 25/482 {concerning the temperature responsive elements (measuring temperature or quantity of heat, thermally-sensitive elements [G01K](#); thermoelectric devices [H01L 35/00](#), [H01L 37/00](#))}

- 25/4826 {concerning the heating or cooling arrangements (heating apparatus for chemical or physical laboratory apparatus in general [B01L 7/00](#))}
- 25/4833 {specially adapted for temperature scanning}
- 25/484 {Heat insulation}
- 25/4846 . . . {for a motionless, e.g. solid sample}
- 25/4853 {Details}
- 25/486 {Sample holders}
- 25/4866 {by using a differential method}
- 25/4873 . . . {for a flowing, e.g. gas sample}
- 25/488 {Details}
- 25/4886 {concerning the circulation of the sample}
- 25/4893 {by using a differential method}
- 25/50 . by investigating flash-point; by investigating explosibility
- 25/52 . . by determining flash-point of liquids
- 25/54 . . by determining explosibility
- 25/56 . by investigating moisture content
- 25/58 . . by measuring changes of properties of the material due to heat, cold or expansion
- 25/60 . . . for determining the wetness of steam
- 25/62 . . by psychrometric means, e.g. wet-and-dry bulb thermometers
- 25/64 . . . using electric temperature-responsive elements
- 25/66 . . by investigating dew-point
- 25/68 . . . by varying the temperature of a condensing surface
- 25/70 . . . by varying the temperature of the material, e.g. by compression, by expansion
- 25/72 . Investigating presence of flaws
- 27/00 Investigating or analysing materials by the use of electric, electrochemical, or magnetic means ([G01N 3/00](#) – [G01N 25/00](#) take precedence; measurement or testing of electric or magnetic variables or of electric or magnetic properties of materials [G01R](#))**
- 27/002 . {by investigating the work function voltage}
- 27/005 . . {by determining the work function in vacuum}
- 27/007 . {by investigating the electric dipolar moment (measuring piezo-electric properties [G01R 29/22](#))}
- 27/02 . by investigating impedance
- 27/021 . . {before and after chemical transformation of the material}
- 27/023 . . {where the material is placed in the field of a coil}
- 27/025 . . . {a current being generated within the material by induction}
- 27/026 . . {Dielectric impedance spectroscopy (electrochemical impedance spectroscopy for measuring corrosion [G01N 17/02](#))}
- 27/028 . . {Circuits therefor (measuring impedance [per se](#) [G01R 27/02](#))}
- 27/04 . . by investigating resistance
- 27/041 . . . {of a solid body}
- 27/043 . . . {of a granular material}
- 27/045 . . . {Circuits (measuring resistance [per se](#) [G01R 27/00](#), e.g. [G01R 27/22](#))}
- 27/046 {provided with temperature compensation}
- 27/048 . . . {for determining moisture content of the material}
- 27/06 . . . of a liquid (involving electrolysis [G01N 27/26](#))
- 27/07 Construction of measuring vessels; Electrodes therefor
- 27/08 which is flowing continuously
- 27/10 Investigation or analysis specially adapted for controlling or monitoring operations or for signalling
- 27/12 . . . of a solid body in dependence upon absorption of a fluid; of a solid body in dependence upon reaction with a fluid {, for detecting components in the fluid}
- 27/121 {for determining moisture content, e.g. humidity, of the fluid (moisture content of the tested material [G01N 27/048](#))}
- 27/122 {Circuits particularly adapted therefor, e.g. linearising circuits}
- 27/123 {for controlling the temperature (temperature control [per se](#) [G05D 23/00](#))}
- 27/124 {varying the temperature, e.g. in a cyclic manner}
- 27/125 {Composition of the body, e.g. the composition of its sensitive layer}
- 27/126 {comprising organic polymers}
- 27/127 {comprising nanoparticles}
- 27/128 {Microapparatus}
- 27/129 {Diode type sensors, e.g. gas sensitive Schottky diodes (capacitor type sensors [G01N 27/227](#); field-effect transistor type sensors [G01N 27/414](#))}
- 27/14 . . . of an electrically-heated body in dependence upon change of temperature
- 27/16 caused by burning or catalytic oxidation of surrounding material to be tested, e.g. of gas
- 27/18 caused by changes in the thermal conductivity of a surrounding material to be tested ([G01N 27/20](#) takes precedence)
- 27/185 {using a catharometer}
- 27/20 . . . Investigating the presence of flaws
- 27/205 {in insulating materials}
- 27/22 . . by investigating capacitance
- 27/221 . . . {by investigating the dielectric properties (using microwaves [G01N 22/00](#); measuring loss factors or dielectric constants [per se](#) [G01R 27/26](#))}
- 2027/222 {for analysing gases}
- 27/223 . . . {for determining moisture content, e.g. humidity (rain detectors on vehicle windows [B60S 1/0825](#))}
- 27/225 {by using hygroscopic materials}
- 27/226 . . . {Construction of measuring vessels; Electrodes therefor}
- 27/227 . . . {Sensors changing capacitance upon adsorption or absorption of fluid components, e.g. electrolyte-insulator-semiconductor sensors, MOS capacitors ([G01N 27/225](#) takes precedence)}
- 27/228 {Circuits therefor (measuring capacitance [per se](#) [G01R 27/26](#))}
- 27/24 . . . Investigating the presence of flaws
- 27/26 . by investigating electrochemical variables; by using electrolysis or electrophoresis

- 27/27 . . Association of two or more measuring systems or cells, each measuring a different parameter, where the measurement results may be either used independently, the systems or cells being physically associated, or combined to produce a value for a further parameter
- 27/28 . . Electrolytic cell components
- 27/283 . . . {Means for supporting or introducing electrochemical probes}
- 27/286 {Power or signal connectors associated therewith}
- 27/30 . . . Electrodes, e.g. test electrodes; Half-cells ([G01N 27/414](#) takes precedence)
- 27/301 {Reference electrodes}
- 27/302 {pH sensitive, e.g. quinhydrone, antimony or hydrogen electrodes ([ion selective electrodes G01N 27/333](#), [glass electrodes G01N 27/36](#))}
- 27/304 {Gas permeable electrodes}
- 27/305 {optically transparent or photoresponsive electrodes}
- 27/307 {Disposable laminated or multilayered electrodes ([G01N 27/3272](#) takes precedence)}
- 27/308 {at least partially made of carbon}
- 27/31 Half-cells with permeable membranes, e.g. semi-porous or perm-selective membranes
- 27/32 Calomel electrodes
- 27/327 Biochemical electrodes {, e.g. electrical or mechanical details for [in vitro](#) measurements}
- 27/3271 {Amperometric enzyme electrodes for analytes in body fluids, e.g. glucose in blood ([amperometry per se G01N 27/49](#); aspects concerning the enzyme reagent [C12Q 1/001](#))}
- 27/3272 {Test elements therefor, i.e. disposable laminated substrates with electrodes, reagent and channels ([optical biosensors G01N 33/52](#))}
- 27/3273 {Devices therefor, e.g. test element readers, circuitry ([details not specific to biochemical electrodes G01N 33/4875](#))}
- 27/3274 {Corrective measures, e.g. error detection, compensation for temperature or hematocrit, calibration ([coding of calibration information G01N 33/4871](#))}
- 27/3275 {Sensing specific biomolecules, e.g. nucleic acid strands, based on an electrode surface reaction}
- 27/3276 {being a hybridisation with immobilised receptors ([using a FET type sensor G01N 27/4145](#); concerning the hybridisation [C12Q 1/68](#))}
- 27/3277 {being a redox reaction, e.g. detection by cyclic voltammetry ([voltammetry per se G01N 27/42](#), [G01N 27/48](#))}
- 27/3278 {involving nanosized elements, e.g. nanogaps or nanoparticles ([nanopores G01N 33/48721](#); [magnetic beads G01N 27/745](#))}
- 27/333 Ion-selective electrodes or membranes ([glass electrodes G01N 27/36](#))
- 27/3335 {the membrane containing at least one organic component ([G01N 27/3271](#) takes precedence; aspects concerning the enzyme reagent in enzyme electrodes [C12Q 1/001](#))}
- 27/34 Dropping-mercury electrodes
- 27/36 Glass electrodes
- 27/38 Cleaning of electrodes
- 27/40 . . . Semi-permeable membranes or partitions
- 27/401 . . . Salt-bridge leaks; Liquid junctions
- 27/403 . . Cells and electrode assemblies
- 27/4035 . . . {Combination of a single ion-sensing electrode and a single reference electrode ([G01N 27/406](#) and [G01N 27/413](#) take precedence)}
- 27/404 . . . Cells with anode, cathode and cell electrolyte on the same side of a permeable membrane which separates them from the sample fluid {, e.g. Clark-type oxygen sensors}
- 27/4045 {for gases other than oxygen}
- 27/406 . . . Cells and probes with solid electrolytes
- 27/4062 {Electrical connectors associated therewith}
- 27/4065 {Circuit arrangements specially adapted therefor}
- 27/4067 {Means for heating or controlling the temperature of the solid electrolyte}
- 27/407 for investigating or analysing gases ([G01N 27/411](#) takes precedence)}
- 27/4071 {using sensor elements of laminated structure}
- 27/4072 {characterized by the diffusion barrier}
- 27/4073 {Composition or fabrication of the solid electrolyte}
- 27/4074 {for detection of gases other than oxygen}
- 27/4075 {Composition or fabrication of the electrodes and coatings thereon, e.g. catalysts}
- 27/4076 {Reference electrodes or reference mixtures}
- 27/4077 {Means for protecting the electrolyte or the electrodes}
- 27/4078 {Means for sealing the sensor element in a housing}
- 27/409 Oxygen concentration cells
- 27/41 Oxygen pumping cells
- 27/411 for investigating or analysing of liquid metals
- 27/4111 {using sensor elements of laminated structure}
- 27/4112 {Composition or fabrication of the solid electrolyte}
- 27/4114 {for detection of gases other than oxygen}
- 27/4115 {Composition or fabrication of the electrodes and coatings thereon, e.g. catalysts}
- 27/4117 {Reference electrodes or reference mixtures}
- 27/4118 {Means for protecting the electrolyte or the electrodes}
- 27/413 . . . Concentration cells using liquid electrolytes {measuring currents or voltages in voltaic cells}

- 27/414 . . . Ion-sensitive or chemical field-effect transistors, i.e. ISFETs or CHEMFETs
- 27/4141 {specially adapted for gases}
- 27/4143 {Air gap between gate and channel, i.e. suspended gate [SG] FETs ([work function measurement per se G01N 27/002](#))}
- 27/4145 {specially adapted for biomolecules, e.g. gate electrode with immobilised receptors}
- 27/4146 {involving nanosized elements, e.g. nanotubes, nanowires}
- 27/4148 {Integrated circuits therefor, e.g. fabricated by CMOS processing ([CMOS processing per se H01L 21/82](#))}
- 27/416 . . Systems ([G01N 27/27 takes precedence](#))
- 27/4161 . . . {measuring the voltage and using a constant current supply, e.g. chronopotentiometry}
- 27/4162 . . . {investigating the composition of gases, by the influence exerted on ionic conductivity in a liquid ([conductometry in general G01N 27/06; amperometric gas sensors G01N 27/404](#))}
- 27/4163 . . . {checking the operation of, or calibrating, the measuring apparatus ([G01N 27/3274, G01N 27/4175 and G01N 33/0006 take precedence](#))}
- 27/4165 {for pH meters}
- 27/4166 . . . {measuring a particular property of an electrolyte}
- 27/4167 {pH (electrodes therefor [G01N 27/302, G01N 27/36](#))}
- 27/4168 {Oxidation-reduction potential, e.g. for chlorination of water ([water analysis G01N 33/18](#))}
- 27/417 . . . using cells {, i.e. more than one cell} and probes with solid electrolytes
- 27/4175 {Calibrating or checking the analyser}
- 27/419 Measuring voltages or currents with a combination of oxygen pumping cells and oxygen concentration cells
- 27/42 . . . Measuring deposition or liberation of materials from an electrolyte; Coulometry, i.e. measuring coulomb-equivalent of material in an electrolyte
- 27/423 {Coulometry}
- 27/426 {by weighing}
- 27/44 using electrolysis to generate a reagent, e.g. for titration
- 27/447 . . . using electrophoresis
- 27/44704 {Details; Accessories}
- 27/44708 {Cooling}
- 27/44713 {Particularly adapted electric power supply}
- 27/44717 {Arrangements for investigating the separated zones, e.g. localising zones}
- 27/44721 {by optical means}
- 27/44726 {using specific dyes, markers or binding molecules}
- 27/4473 {by electric means}
- 27/44734 {by thermal means}
- 27/44739 {Collecting the separated zones, e.g. blotting to a membrane or punching of gel spots}
- 27/44743 {Introducing samples}
- 27/44747 {Composition of gel or of carrier mixture}
- 27/44752 {Controlling the zeta potential, e.g. by wall coatings}
- 27/44756 {Apparatus specially adapted therefor}
- 27/4476 {of the density gradient type}
- 27/44765 {of the counter-flow type}
- 27/44769 {Continuous electrophoresis, i.e. the sample being continuously introduced, e.g. free flow electrophoresis [FFE]}
- 27/44773 {Multi-stage electrophoresis, e.g. two-dimensional electrophoresis}
- 27/44778 {on a common gel carrier, i.e. 2D gel electrophoresis}
- 27/44782 {of a plurality of samples}
- 27/44786 {of the magneto-electrophoresis type}
- 27/44791 {Microapparatus ([sample containers with integrated microfluidic structures B01L 3/5027](#))}
- 27/44795 {Isoelectric focusing}
- 27/453 Cells therefor
- 27/48 . . . using polarography, i.e. measuring changes in current under a slowly-varying voltage
- 27/49 . . . Systems involving the determination of the current at a single specific value, or small range of values, of applied voltage for producing selective measurement of one or more particular ionic species
- 27/60 . . by investigating electrostatic variables {, e.g. electrographic flaw testing ([G01N 27/007 takes precedence](#))}
- 27/605 . . {for determining moisture content, e.g. humidity}
- 27/61 . . Investigating the presence of flaws
- 27/62 . . by investigating the ionisation of gases, e.g. aerosols; by investigating electric discharges, e.g. emission of cathode

WARNINGS

1. Group [G01N 27/62](#) is incomplete pending reclassification of documents from group [G01N 23/2258](#).
Groups [G01N 23/2258](#) and [G01N 27/62](#) should be considered in order to perform a complete search.
2. Group [G01N 27/62](#) is impacted by reclassification into group [G01N 27/623](#).
Groups [G01N 27/62](#) and [G01N 27/623](#) should be considered in order to perform a complete search.

- 27/622 . . . Ion mobility spectrometry

WARNING

Group [G01N 27/622](#) is impacted by reclassification into group [G01N 27/623](#).
Groups [G01N 27/622](#) and [G01N 27/623](#) should be considered in order to perform a complete search.

- 27/623 . . . combined with mass spectrometry

WARNING

Group [G01N 27/623](#) is incomplete pending reclassification of documents from groups [G01N 27/62](#) and [G01N 27/622](#).

Groups [G01N 27/62](#), [G01N 27/622](#), and [G01N 27/623](#) should be considered in order to perform a complete search.

- 27/624 . . . Differential mobility spectrometry [DMS]; Field asymmetric-waveform ion mobility spectrometry [FAIMS]
- 27/626 . . using heat to ionise a gas
- 27/628 . . . {and a beam of energy, e.g. laser enhanced ionisation}
- 27/64 . . using wave or particle radiation to ionise a gas, e.g. in an ionisation chamber
- 27/66 . . . and measuring current or voltage
- 27/68 . . using electric discharge to ionise a gas
- 27/70 . . . and measuring current or voltage
- 27/72 . by investigating magnetic variables
- 27/725 . . {by using magneto-acoustical effects or the Barkhausen effect}
- 27/74 . . of fluids ([G01N 24/00](#) takes precedence)
- 27/745 . . . {for detecting magnetic beads used in biochemical assays (concerning the assays [G01N 33/54326](#); sensors therefor [G01R 33/1269](#); automatic analysers therefor [G01N 35/0098](#))}
- 27/76 . . . by investigating susceptibility
- 27/80 . . for investigating mechanical hardness, e.g. by investigating saturation or remanence of ferromagnetic material
- 27/82 . . for investigating the presence of flaws
- 27/825 . . . {by using magnetic attraction force ([G01N 27/84](#) takes precedence)}
- 27/83 . . . by investigating stray magnetic fields
- 27/84 by applying magnetic powder or magnetic ink
- 27/85 using magnetographic methods
- 27/87 using probes
- 27/90 . . . using eddy currents
- 27/9006 {Details, e.g. in the structure or functioning of sensors}
- 27/9013 Arrangements for scanning
- 27/902 {by moving the sensors}
- 27/9026 {by moving the material}
- 27/904 with two or more sensors
- 27/9046 {by analysing electrical signals}
- 27/9053 {Compensating for probe to workpiece spacing}
- 27/906 {Compensating for velocity}
- 27/9066 {by measuring the propagation time, or delaying the signals}
- 27/9073 {Recording measured data}
- 27/908 {synchronously with scanning}
- 27/9086 {Calibrating of recording device}
- 27/9093 Arrangements for supporting the sensor; Combinations of eddy-current sensors and auxiliary arrangements for marking or for rejecting

- 27/92 . by investigating breakdown voltage ([G01N 27/60](#), [G01N 27/62](#) take precedence)

- 29/00 Investigating or analysing materials by the use of ultrasonic, sonic or infrasonic waves; Visualisation of the interior of objects by transmitting ultrasonic or sonic waves through the object** ([G01N 3/00](#), [G01N 5/00](#), [G01N 7/00](#), [G01N 9/00](#), [G01N 11/00](#), [G01N 13/00](#), [G01N 15/00](#), [G01N 17/00](#), [G01N 19/00](#), [G01N 21/00](#), [G01N 22/00](#), [G01N 23/00](#), [G01N 24/00](#), [G01N 25/00](#), [G01N 27/00](#) take precedence)
- 29/02 . Analysing fluids (using acoustic emission techniques [G01N 29/14](#) {; constructional or flow details for analysing fluids [G01N 29/222](#); optoacoustic fluid cells [G01N 29/2425](#)})
- 29/022 . . {Fluid sensors based on microsensors, e.g. quartz crystal-microbalance [QCM], surface acoustic wave [SAW] devices, tuning forks, cantilevers, flexural plate wave [FPW] devices ([microdevices per se B81B](#))}
- 29/024 . . by measuring propagation velocity or propagation time of acoustic waves
- 29/028 . . by measuring mechanical or acoustic impedance
- 29/032 . . by measuring attenuation of acoustic waves
- 29/036 . . by measuring frequency or resonance of acoustic waves
- 29/04 . Analysing solids (using acoustic emission techniques [G01N 29/14](#))
- 29/041 . . {on the surface of the material, e.g. using Lamb, Rayleigh or shear waves}
- 29/043 . . {in the interior, e.g. by shear waves}
- 29/045 . . {by imparting shocks to the workpiece and detecting the vibrations or the acoustic waves caused by the shocks (measuring resonant frequency [G01H 13/00](#); measuring strength properties by application of mechanical stress [G01N 3/00](#))}
- 29/046 . . . {using the echo of particles imparting on a surface; using acoustic emission of particles (investigating concentration of particle suspensions [G01N 15/06](#); devices for measuring flow of solids in suspension [G01F 1/74](#))}
- 29/048 . . {Marking the faulty objects}
- 29/06 . Visualisation of the interior, e.g. acoustic microscopy {(medical or veterinary diagnosis using sonic waves [A61B 8/00](#); representation of acoustic wave distribution [G01H 3/125](#), [G01H 9/002](#); short-range imaging systems using reflection of acoustic waves [G01S 15/8906](#))}
- 29/0609 . . . {Display arrangements, e.g. colour displays (indicating or recording in connection with measuring in general [G01D](#))}
- 29/0618 {synchronised with scanning, e.g. in real-time}
- 29/0627 {Cathode-ray tube displays (in general [G01R 13/20](#))}
- 29/0636 {with permanent recording}
- 29/0645 {Display representation or displayed parameters, e.g. A-, B- or C-Scan}
- 29/0654 . . . {Imaging}
- 29/0663 {by acoustic holography (acoustical holography [per se G03H 3/00](#))}
- 29/0672 {by acoustic tomography (medical tomography [A61B 8/13](#))}

- 29/0681 {by acoustic microscopy, e.g. scanning acoustic microscopy}
- 29/069 {Defect imaging, localisation and sizing using, e.g. time of flight diffraction [TOFD], synthetic aperture focusing technique [SAFT], Amplituden-Laufzeit-Ortskurven [ALOK] technique}
- 29/07 . . by measuring propagation velocity or propagation time of acoustic waves
- 29/075 . . . {by measuring or comparing phase angle (measuring frequencies or phase angles [per se G01R 23/00, G01R 25/00](#))}
- 29/09 . . by measuring mechanical or acoustic impedance
- 29/11 . . by measuring attenuation of acoustic waves
- 29/12 . . by measuring frequency or resonance of acoustic waves {(measuring frequency or resonant frequency of mechanical vibrations or acoustic waves in general [G01H 1/06, G01H 3/04, G01H 13/00](#); acoustic resonators [G10K 11/04](#); vibration or shock testing of structures [G01M 7/00](#))}
- 29/14 . . using acoustic emission techniques {(echo of particles [G01N 29/046](#); measuring mechanical vibrations or acoustic waves in solids in general [G01H 1/00](#))}
- 29/22 . . Details {, e.g. general constructional or apparatus details}
- 29/221 . . {Arrangements for directing or focusing the acoustical waves (electronic orientation or focusing [G01N 29/262](#); sound directing or focusing [G10K 11/26](#); mechanical steering of sound transducers or their beams [G10K 11/35](#))}
- 29/222 . . {Constructional or flow details for analysing fluids (optoacoustic fluid cells [G01N 29/2425](#))}
- 29/223 . . {Supports, positioning or alignment in fixed situation (mounting transducers [per se G10K 11/004](#))}
- 29/225 . . {Supports, positioning or alignment in moving situation}
- 29/226 . . . {Handheld or portable devices}
- 29/227 . . {related to high pressure, tension or stress conditions}
- 29/228 . . {related to high temperature conditions}
- 29/24 . . Probes {(transducers for acoustic waves [B06B, G10K](#); for measuring [G01H](#))}
- 29/2406 . . . {Electrostatic or capacitive probes, e.g. electret or cMUT-probes}
- 29/2412 . . . {using the magnetostrictive properties of the material to be examined, e.g. electromagnetic acoustic transducers [EMAT]; (investigating the presence of flaws using eddy currents [G01N 27/90](#), magnetostrictive transducers [B06B 1/08](#), measuring magnetostrictive properties [G01R 33/18](#))}
- 29/2418 . . . {using optoacoustic interaction with the material, e.g. laser radiation, photoacoustics (photoacoustic cells [G01N 21/1702](#); measuring characteristics of vibrations by using radiation-sensitive means [G01H 9/00](#); acousto-optical conversion techniques for short-range imaging [G01S 15/8965](#); sound-producing devices using laser bundle [G10K 15/046](#))}
- 29/2425 {optoacoustic fluid cells therefor}
- 29/2431 . . . {using other means for acoustic excitation, e.g. heat, microwaves, electron beams (sound producing devices not otherwise provided for [G10K 15/04](#))}
- 29/2437 . . . {Piezoelectric probes}
- 29/2443 {Quartz crystal probes}
- 29/245 {Ceramic probes, e.g. lead zirconate titanate [PZT] probes}
- 29/2456 . . . {Focusing probes (focusing arrangements [G01N 29/221](#))}
- 29/2462 . . . {Probes with waveguides, e.g. SAW devices}
- 29/2468 . . . {Probes with delay lines}
- 29/2475 . . . {Embedded probes, i.e. probes incorporated in objects to be inspected}
- 29/2481 . . . {Wireless probes, e.g. with transponders or radio links}
- 29/2487 . . . {Directing probes, e.g. angle probes (directing arrangements [G01N 29/221](#))}
- 29/2493 . . . {Wheel shaped probes}
- 29/26 . . Arrangements for orientation or scanning {by relative movement of the head and the sensor (mechanical steering of sound transducers or their beams [G10K 11/35](#))}
- 29/262 . . . {by electronic orientation or focusing, e.g. with phased arrays (phased arrays [per se G10K 11/34](#))}
- 29/265 . . . by moving the sensor relative to a stationary material
- 29/27 . . . by moving the material relative to a stationary sensor
- 29/275 . . . by moving both the sensor and the material
- 29/28 . . providing acoustic coupling {, e.g. water (impedance matching [G10K 11/02](#))}
- 29/30 . . Arrangements for calibrating or comparing, e.g. with standard objects
- 29/32 . . Arrangements for suppressing undesired influences, e.g. temperature or pressure variations {, compensating for signal noise}
- 29/323 . . . {compensating for pressure or tension variations}
- 29/326 . . . {compensating for temperature variations}
- 29/34 . . Generating the ultrasonic, sonic or infrasonic waves {, e.g. electronic circuits specially adapted therefor}
- 29/341 . . {with time characteristics}
- 29/343 . . . {pulse waves, e.g. particular sequence of pulses, bursts}
- 29/345 . . . {continuous waves}
- 29/346 . . {with amplitude characteristics, e.g. modulated signal}
- 29/348 . . {with frequency characteristics, e.g. single frequency signals, chirp signals (measuring frequency of mechanical vibrations or acoustic waves in general [G01H 1/06, G01H 3/04](#); measuring frequency or analysing frequency spectra [G01R 23/00](#))}
- 29/36 . . Detecting the response signal {, e.g. electronic circuits specially adapted therefor}
- 29/38 . . by time filtering, e.g. using time gates
- 29/40 . . by amplitude filtering, e.g. by applying a threshold {or by gain control}
- 29/42 . . by frequency filtering {or by tuning to resonant frequency}

29/44	. Processing the detected response signal {, e.g. electronic circuits specially adapted therefor (digital signal processing per se G06F 17/00)}	2030/007	. . {programming of driving force (carrier programming G01N 30/02)}
29/4409	. . {by comparison}	2030/0075	. {Separation due to differential desorption}
29/4418	. . . {with a model, e.g. best-fit, regression analysis}	2030/008	. . {Thermal desorption}
29/4427	. . . {with stored values, e.g. threshold values}	2030/0085	. . {the desorption energy being adapted to sample, e.g. laser tuned to molecular bonds}
29/4436	. . . {with a reference signal (amplitude comparison G01N 29/48)}	2030/009	. {Extraction}
29/4445	. . {Classification of defects}	2030/0095	. {Separation specially adapted for use outside laboratory, e.g. field sampling, portable equipments}
29/4454	. . {Signal recognition, e.g. specific values or portions, signal events, signatures}	30/02	. Column chromatography
29/4463	. . {Signal correction, e.g. distance amplitude correction [DAC], distance gain size [DGS], noise filtering}	2030/022	. . {characterised by the kind of separation mechanism}
29/4472	. . {Mathematical theories or simulation}	2030/025	. . . {Gas chromatography}
29/4481	. . {Neural networks}	2030/027	. . . {Liquid chromatography}
29/449	. . {Statistical methods not provided for in G01N 29/4409 , e.g. averaging, smoothing and interpolation}	30/04	. . Preparation or injection of sample to be analysed
29/46	. . by spectral analysis, e.g. Fourier analysis {or wavelet analysis (spectral signal processing per se G06F 17/14)}	2030/042	. . . {Standards}
29/48	. . by amplitude comparison	2030/045	. . . . {internal}
29/50	. . using auto-correlation techniques or cross-correlation techniques	2030/047	. . . . {external}
29/52	. . using inversion methods other than spectral analysis, e.g. conjugated gradient inversion	30/06	. . . Preparation
30/00	Investigating or analysing materials by separation into components using adsorption, absorption or similar phenomena or using ion-exchange, e.g. chromatography {or field flow fractionation} (G01N 3/00, G01N 5/00, G01N 7/00, G01N 9/00, G01N 11/00, G01N 13/00, G01N 15/00, G01N 17/00, G01N 19/00, G01N 21/00, G01N 22/00, G01N 23/00, G01N 24/00, G01N 25/00, G01N 27/00, G01N 29/00 take precedence)	2030/062	. . . . {extracting sample from raw material}
	NOTE	2030/065	. . . . {using different phases to separate parts of sample}
	In this group, the following term is used with the meaning indicated:	2030/067	. . . . {by reaction, e.g. derivatising the sample}
	. "conditioning" refers to the adjustment or control of environmental parameters, e.g. temperature or pressure.	30/08	. . . . using an enricher
30/0005	. {Field flow fractionation}	2030/085	. . . . . {using absorbing precolumn}
2030/001	. . {hydrodynamic fractionation, e.g. CHDF or HDC}	30/10	. . . . using a splitter
2030/0015	. . {characterised by driving force}	30/12	. . . . by evaporation
2030/002	. . . {sedimentation or centrifugal FFF}	2030/121	. . . . . {cooling; cold traps}
2030/0025	. . . {cross flow FFF}	2030/122	. . . . . {cryogenic focusing}
2030/003	. . . . {Asymmetrical flow}	2030/123	. . . . . {using more than one trap}
2030/0035	. . . . {electrical field}	2030/125	. . . . . {pyrolysing}
2030/004	. . {characterised by opposing force}	2030/126	. . . . . {evaporating sample}
2030/0045	. . . {normal, i.e. diffusion or thermal FFF}	2030/127	. . . . . {PTV evaporation}
2030/005	. . . {steric FFF, i.e. diffusion negligible for larger particles; separation due to protrusion depth into carrier flow profile}	2030/128	. . . . . {Thermal desorption analysis}
2030/0055	. . . {hyperlayer, i.e. different particle populations in hyperlayers elevated above wall}	30/14	. . . . by elimination of some components
2030/006	. . . . {lift hyperlayer, i.e. hydrodynamic lift forces dominate steric effect}	2030/143	. . . . . {selective absorption}
2030/0065	. . . {Dielectric FFF, i.e. opposing forces dominate hydrodynamic lift forces and steric effects}	2030/146	. . . . . {using membranes}
		30/16	. . . Injection (G01N 30/24 takes precedence)
		2030/162	. . . . {electromigration}
		2030/165	. . . . {retention gaps}
		2030/167	. . . . {on-column injection}
		30/18	. . . . using a septum or microsyringe
		2030/185	. . . . . {specially adapted to seal the inlet}
		30/20	. . . . using a sampling valve
		2030/201	. . . . . {multiport valves, i.e. having more than two ports}
		2030/202	. . . . . {rotary valves}
		2030/204	. . . . . {Linearly moving valves, e.g. sliding valves}
		2030/205	. . . . . {Diaphragm valves, e.g. deformed member closing the passage}
		2030/207	. . . . . {with metering cavity, e.g. sample loop}
		2030/208	. . . . . {with more than one cavity}
		30/22	. . . . in high pressure liquid systems
		30/24	. . . Automatic injection systems
		30/26	. . Conditioning of the fluid carrier; Flow patterns
		30/28	. . . Control of physical parameters of the fluid carrier
		2030/285	. . . . {electrically driven carrier}
		30/30	. . . . of temperature
		2030/3007	. . . . . {same temperature for whole column}

2030/3015	. . . . .	{temperature gradients along column}	30/482	. . .	{Solid sorbents}
2030/3023	. . . . .	{using cryogenic fluids}	2030/484	. . .	{Solid sorbents}
2030/303	. . . . .	{using peltier elements}	2030/486	. . .	{gels}
2030/3038	. . . . .	{temperature control of column exit, e.g. of restrictors}	2030/488	. . .	{liquid sorbents}
2030/3046	. . . . .	{temperature control of column inlet}	30/50	. .	Conditioning of the sorbent material or stationary liquid
2030/3053	. . . . .	{using resistive heating}	30/52	. . .	Physical parameters
2030/3061	. . . . .	{column or associated structural member used as heater}	2030/521	. . . .	{form}
2030/3069	. . . . .	{electrical resistance used to determine control temperature}	2030/522	. . . .	{pressure}
2030/3076	. . . . .	{using specially adapted T(t) profile}	2030/524	. . . .	{structural properties}
2030/3084	. . . . .	{ovens}	2030/525	. . . . .	{surface properties, e.g. porosity}
2030/3092	. . . . .	{Heat exchange between incoming and outgoing mobile phase}	2030/527	. . . . .	{sorbent material in form of a membrane}
30/32	. . . .	of pressure or speed (G01N 30/36 takes precedence)	2030/528	. . . . .	{Monolithic sorbent material}
2030/322	. . . . .	{pulse dampers}	30/54	. . . .	Temperature
2030/324	. . . . .	{speed, flow rate}	30/56	. . .	Packing methods or coating methods
2030/326	. . . . .	{pumps}	2030/562	. . . .	{packing}
2030/328	. . . . .	{valves, e.g. check valves of pumps}	2030/565	. . . . .	{slurry packing}
30/34	. . . .	of fluid composition, e.g. gradient (G01N 30/36 takes precedence)	2030/567	. . . .	{coating}
2030/342	. . . . .	{fluid composition fixed during analysis}	30/58	. . .	the sorbent moving as a whole
2030/345	. . . . .	{fluid electrical conductivity fixed during analysis}	2030/582	. . . .	{micellar electrokinetic capillary chromatography [MECC]}
2030/347	. . . . .	{mixers}	2030/585	. . . . .	{Parallel current chromatography}
30/36	. . . .	in high pressure liquid systems	2030/587	. . . . .	{Continuous annular chromatography}
30/38	. . .	Flow patterns	30/60	. .	Construction of the column
2030/381	. . . . .	{centrifugal chromatography}	30/6004	. . . .	{end pieces}
2030/382	. . . . .	{flow switching in a single column}	2030/6008	. . . . .	{capillary restrictors}
2030/383	. . . . .	{by using auxiliary fluid}	2030/6013	. . . . .	{interfaces to detectors}
2030/385	. . . . .	{by switching valves}	30/6017	. . . . .	{Fluid distributors}
2030/386	. . . . .	{Radial chromatography, i.e. with mobile phase traversing radially the stationary phase}	30/6021	. . . . .	{Adjustable pistons}
2030/387	. . . . .	{Turbulent flow of mobile phase}	30/6026	. . . . .	{Fluid seals}
2030/388	. . . . .	{Elution in two different directions on one stationary phase}	30/603	. . . . .	{retaining the stationary phase, e.g. Frits}
30/40	. . . .	using back flushing	30/6034	. . . .	{joining multiple columns}
2030/402	. . . . .	{purging a device}	30/6039	. . . . .	{in series}
2030/405	. . . . .	{re-concentrating or inverting previous separation}	30/6043	. . . . .	{in parallel}
2030/407	. . . . .	{carrying out another separation}	30/6047	. . .	{with supporting means; Holders}
30/42	. . . .	using counter-current	30/6052	. . . .	{body}
30/44	. . . .	using recycling of the fraction to be distributed	30/606	. . . . .	{with fluid access or exit ports}
2030/445	. . . . .	{heart cut}	30/6065	. . . . .	{with varying cross section}
30/46	. . . .	using more than one column (G01N 30/44 takes precedence)	30/6069	. . . . .	{with compartments or bed substructure}
30/461	. . . . .	{with serial coupling of separation columns}	30/6073	. . . . .	{in open tubular form}
30/462	. . . . .	{with different eluents or with eluents in different states (G01N 30/463 takes precedence)}	30/6078	. . . . .	{Capillaries}
30/463	. . . . .	{for multidimensional chromatography}	30/6082	. . . . .	{transparent to radiation}
30/465	. . . . .	{with specially adapted interfaces between the columns}	30/6086	. . . . .	{form designed to optimise dispersion}
30/466	. . . . .	{with separation columns in parallel}	30/6091	. . . .	{Cartridges}
30/467	. . . . .	{all columns being identical}	30/6095	. . .	{Micromachined or nanomachined, e.g. micro- or nanosize}
30/468	. . . . .	{involving switching between different column configurations}	NOTE		
30/48	. .	{Sorbent materials therefor}	Attention is drawn to the Notes following the titles of class B81 and subclass B81B relating to "microstructural devices" and "microstructural systems" and the Notes following the title of subclass B82B relating to "nanostructures"		
			30/62	. .	Detectors specially adapted therefor
			2030/621	. . .	{signal-to-noise ratio}
			2030/623	. . . .	{by modulation of sample feed or detector response}
			2030/625	. . . .	{by measuring reference material, e.g. carrier without sample}
			2030/626	. . .	{calibration, baseline}

2030/628	. . . {Multiplexing, i.e. several columns sharing a single detector}	2030/8452	. . . . {Generation of electrically charged aerosols or ions}
30/64	. . . Electrical detectors	2030/8458	. . . . {of ions or clusters of individual ions}
2030/642	. . . . {photoionisation detectors}	2030/8464	. . . . {Uncharged atoms or aerosols}
2030/645	. . . . {electrical conductivity detectors}	2030/847	. . . . {by pneumatic means}
2030/647	. . . . {surface ionisation}	2030/8476	. . . . {by thermal means}
30/66	. . . . Thermal conductivity detectors	2030/8482	. . . . {by electrical or glow discharge}
30/68	. . . . Flame ionisation detectors	2030/8488	. . . . {by electric field}
2030/685	. . . . {flame photometry}	2030/8494	. . . . {Desolvation chambers}
30/70	. . . . Electron capture detectors	30/86	. . Signal analysis
30/72	. . . Mass spectrometers {(mass spectrometers per se H01J 49/00)}	30/8603	. . . {with integration or differentiation}
30/7206	. . . . {interfaced to gas chromatograph (interfaces in general for introducing or extracting samples to be analysed with specially adapted mass spectrometer, see H01J 49/04)}	30/8606	. . . . {Integration}
30/7213	. . . . {splitting of the gaseous effluent}	30/861	. . . . {Differentiation}
30/722	. . . . {through a gas permeable barrier (membranes, porous layers)}	30/8613	. . . . {Dividing or multiplying by a constant}
2030/7226	. . . . {OWTC, short capillaries or transfer line used as column}	30/8617	. . . . {Filtering, e.g. Fourier filtering}
30/7233	. . . . {interfaced to liquid or supercritical fluid chromatograph (interfaces in general for introducing or extracting samples to be analysed with specially adapted mass spectrometer, see H01J 49/04)}	2030/862	. . . . {Other mathematical operations for data preprocessing}
30/724	. . . . {Nebulising, aerosol formation or ionisation (spraying or atomising in general B05B)}	30/8624	. . . {Detection of slopes or peaks; baseline correction}
30/7246	. . . . {by pneumatic means}	30/8627	. . . . {Slopes}
30/7253	. . . . {by thermal means, e.g. thermospray}	30/8631	. . . . {Peaks}
30/726	. . . . {by electrical or glow discharge}	30/8634	. . . . {Peak quality criteria}
30/7266	. . . . {by electric field, e.g. electrospray}	30/8637	. . . . {Peak shape}
30/7273	. . . . {Desolvation chambers}	30/8641	. . . . {Baseline}
30/728	. . . . {Intermediate storage of effluent, including condensation on surface}	30/8644	. . . . {Data segmentation, e.g. time windows}
30/7286	. . . . {the store moving as a whole, e.g. moving wire}	2030/8648	. . . . {Feature extraction not otherwise provided for}
30/7293	. . . . {Velocity or momentum separators}	30/8651	. . . {Recording, data acquisition, archiving and storage}
30/74	. . . Optical detectors {(measurement of intensity, velocity, spectral content, polarisation, or phase of infra-red, visible or ultra-violet light G01J)}	30/8655	. . . . {Details of data formats}
2030/743	. . . . {FTIR}	30/8658	. . . {Optimising operation parameters}
2030/746	. . . . {detecting along the line of flow, e.g. axial}	30/8662	. . . . {Expert systems; optimising a large number of parameters}
30/76	. . . Acoustical detectors {(measurement of mechanical vibrations or ultrasonic, sonic or infrasonic waves G01H)}	30/8665	. . . {for calibrating the measuring apparatus}
2030/765	. . . . {for measuring mechanical vibrations}	30/8668	. . . . {using retention times}
2030/77	. . . {detecting radioactive properties}	30/8672	. . . . {not depending on an individual instrument, e.g. retention time indexes or calibration transfer}
30/78	. . . using more than one detector	30/8675	. . . {Evaluation, i.e. decoding of the signal into analytical information (for analysis of specific compounds see also G01N 30/88 and subgroups of G01N 33/00 ; chemical libraries per se C40B)}
30/80	. . Fraction collectors	30/8679	. . . . {Target compound analysis, i.e. whereby a limited number of peaks is analysed}
30/82	. . . Automatic means therefor	30/8682	. . . . {Group type analysis, e.g. of components having structural properties in common}
30/84	. . Preparation of the fraction to be distributed	30/8686	. . . . {Fingerprinting, e.g. without prior knowledge of the sample components}
2030/8405	. . . {using pyrolysis}	30/8689	. . . . {Peak purity of co-eluting compounds}
2030/8411	. . . {Intermediate storage of effluent, including condensation on surface}	30/8693	. . . {Models, e.g. prediction of retention times, method development and validation}
2030/8417	. . . . {the store moving as a whole, e.g. moving wire}	30/8696	. . . {Details of Software}
2030/8423	. . . {using permeable separator tubes}	30/88	. . Integrated analysis systems specially adapted therefor, not covered by a single one of the groups G01N 30/04 - G01N 30/86
2030/8429	. . . {adding modifying material}	2030/8804	. . . {automated systems}
2030/8435	. . . . {for chemical reaction}	2030/8809	. . . {analysis specially adapted for the sample}
2030/8441	. . . . {to modify physical properties}	2030/8813	. . . . {biological materials}
2030/8447	. . . {Nebulising, aerosol formation or ionisation}	2030/8818	. . . . {involving amino acids}
		2030/8822	. . . . {involving blood}
		2030/8827	. . . . {involving nucleic acids}
		2030/8831	. . . . {involving peptides or proteins}

2030/8836	. . . . . {involving saccharides}	31/168	. . {Determining water content by using Karl Fischer reagent}
2030/884	. . . . {organic compounds}	31/18	. . Burettes specially adapted for titration
2030/8845	. . . . . {involving halogenated organic compounds}	31/20	. . using microanalysis, e.g. drop reaction
2030/885	. . . . . {involving polymers}	31/22	. . using chemical indicators (G01N 31/02 takes precedence)
2030/8854	. . . . . {involving hydrocarbons}	31/221	. . {for investigating pH value}
2030/8859	. . . . {inorganic compounds}	31/222	. . {for investigating moisture content}
2030/8863	. . . . . {Fullerenes}	31/223	. . {for investigating presence of specific gases or aerosols (G01N 31/221 , G01N 31/222 take precedence; actuation of fire alarm by presence of smoke or gases G08B 17/10)}
2030/8868	. . . . {elemental analysis, e.g. isotope dilution analysis}	31/224	. . . {for investigating presence of dangerous gases}
2030/8872	. . . . {impurities}	31/225	. . . {for oxygen, e.g. including dissolved oxygen}
2030/8877	. . . . {optical isomers}	31/226	. . {for investigating the degree of sterilisation}
2030/8881	. . . {Modular construction, specially adapted therefor}	31/227	. . {for nitrates or nitrites}
2030/8886	. . . {Analysis of industrial production processes}	31/228	. . {for peroxides}
2030/889	. . . {monitoring the quality of the stationary phase; column performance}	31/229	. . {for investigating time/temperature history}
2030/8895	. . . {Independent juxtaposition of embodiments; Reviews}	33/00	Investigating or analysing materials by specific methods not covered by groups G01N 1/00 - G01N 31/00
30/89	. Inverse chromatography		NOTE
30/90	. Plate chromatography, e.g. thin layer or paper chromatography		In groups G01N 33/52 - G01N 33/98 , the last 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 last appropriate place.
2030/903	. . {centrifugal chromatography}		{This Note corresponds to IPC Note (1) relating to G01N 33/52 - G01N 33/98 .}
2030/906	. . {pressurised fluid phase}		
30/91	. . Application of the sample		
30/92	. . Construction of the plate		
30/93	. . . Application of the sorbent layer		
30/94	. . Development		
2030/945	. . . {Application of reagents to undeveloped plate}		
30/95	. . Detectors specially adapted therefor; Signal analysis		
30/96	. using ion-exchange (G01N 30/02 , G01N 30/90 take precedence)	33/0001	. {by organoleptic means}
2030/965	. . {suppressor columns}	2033/0003	. {Composite materials}
31/00	Investigating or analysing non-biological materials by the use of the chemical methods specified in the subgroup; Apparatus specially adapted for such methods	33/0004	. {Gaseous mixtures, e.g. polluted air (gaseous biological material G01N 33/497; exhaust gas of internal combustion engines G01M 15/102)}
31/002	. {Determining nitrogen by transformation into ammonia, e.g. KJELDAHL method}	33/0006	. . {Calibrating gas analysers}
31/005	. {investigating the presence of an element by oxidation (G01N 31/12 takes precedence)}	33/0008	. . . {Details concerning storage of calibration data, e.g. in EEPROM}
31/007	. . {by measuring the quantity of water resulting therefrom (G01N 31/12 takes precedence)}	33/0009	. . {General constructional details of gas analysers, e.g. portable test equipment (G01N 1/22 takes precedence)}
	NOTE	33/0011	. . . {Sample conditioning (in general G01N 1/28)}
	The observation of the progress of the reaction specified below by any of the methods specified in groups G01N 3/00 - G01N 3/00 - G01N 29/00 , if this is of major importance, is dealt with in the group concerned.	33/0013	. . . . {by a chemical reaction (G01N 33/0024 takes precedence)}
31/02	. using precipitation {(measuring deposition or liberation of materials from an electrolyte G01N 27/42)}	33/0014	. . . . {by eliminating a gas (G01N 33/0013 and G01N 33/0024 take precedence)}
31/10	. using catalysis	33/0016	. . . . {by regulating a physical variable, e.g. pressure, temperature}
31/12	. using combustion (G01N 25/20 takes precedence)	33/0018	. . . . {by diluting a gas}
31/16	. using titration	2033/0019	. . . . {by preconcentration}
31/162	. . {Determining the equivalent point by means of a discontinuity}	33/0021	. . . . {involving the use of a carrier gas for transport to the sensor}
31/164	. . . {by electrical or electrochemical means}	33/0022	. . . {using a number of analysing channels}
31/166	. . {Continuous titration of flowing liquids}	33/0024	. . . . {a chemical reaction taking place or a gas being eliminated in one or more channels}
		33/0026	. . . {use of an alternating circulation of another gas (calibrating gas analysers G01N 33/0006)}
		33/0027	. . . {concerning the detector}
		33/0029	. . . . {cleaning}
		33/0031	. . . . {comprising two or more sensors, e.g. a sensor array (electrochemical electrode arrays G01N 27/27)}

33/0032	. . . . . {using two or more different physical functioning modes}	33/03	. . Edible oils or edible fats
33/0034	. . . . . {comprising neural networks or related mathematical techniques}	33/04	. . Dairy products
33/0036	. . . . . {Specially adapted to detect a particular component (all the other sub-groups of G01N 33/0004 take precedence)}	33/06	. . . Determining fat content, e.g. by butyrometer
33/0037	. . . . . {for NO _x }	33/08	. . Eggs, e.g. by candling
33/0039	. . . . . {for O ₃ }	33/085	. . . {by candling}
33/004	. . . . . {for CO, CO ₂ }	33/10	. . Starch-containing substances, e.g. dough
33/0042	. . . . . {for SO ₂ , SO ₃ }	2033/105	. . . {Pasta}
33/0044	. . . . . {for H ₂ S, sulfides}	33/12	. . Meat; fish
33/0045	. . . . . {for Hg}	33/14	. . Beverages
33/0047	. . . . . {for organic compounds}	33/143	. . . {containing sugar}
33/0049	. . . . . {for halogenated organic compounds}	33/146	. . . {containing alcohol}
33/005	. . . . . {for H ₂ }	33/15	. Medicinal preparations {; Physical properties thereof, e.g. dissolubility (drug screening with animal cells G01N 33/5008)}
33/0052	. . . . . {for gaseous halogens}	33/18	. Water
33/0054	. . . . . {for ammonia}	33/1806	. . {biological or chemical oxygen demand (BOD or COD)}
33/0055	. . . . . {for radionuclides}	33/1813	. . {specific cations in water, e.g. heavy metals (electrochemical analysis G01N 27/26 ; detection of ions by colorimetry G01N 31/22)}
33/0057	. . . . . {for warfare agents or explosives (properties of explosives G01N 33/227)}	33/182	. . {specific anions in water (electrochemical analysis G01N 27/26 ; detection of ions by colorimetry G01N 31/22)}
33/0059	. . . . . {avoiding interference of a gas with the gas to be measured}	33/1826	. . {organic contamination in water}
33/006	. . . . . {avoiding interference of water vapour with the gas to be measured}	33/1833	. . . {Oil in water (water in oil G01N 33/2847)}
33/0062	. . . {concerning the measuring method, e.g. intermittent, or the display, e.g. digital}	2033/184	. . . {herbicides, pesticides, fungicides, insecticides, or the like}
33/0063	. . . . . {using a threshold to release an alarm or displaying means (alarm arrangements G08B , e.g. fire alarm actuated by the presence of smoke or gases G08B 17/10 , for other abnormal conditions G08B 21/00)}	33/1846	. . . {Total carbon analysis}
33/0065	. . . . . {using more than one threshold}	33/1853	. . {hardness of water}
33/0067	. . . . . {by measuring the rate of variation of the concentration}	33/186	. . {using one or more living organisms, e.g. a fish}
2033/0068	. . . . . {using a computer specifically programmed}	33/1866	. . . {using microorganisms (G01N 33/1806 takes precedence)}
33/007	. . . {Arrangements to check the analyser (calibrating G01N 33/0006)}	2033/1873	. . {ice or snow}
2033/0072	. . . . . {by generating a test gas}	33/188	. . {Determining the state of nitrification (biological treatment of water by aerobic or anaerobic processes for denitrification of water C02F 3/305)}
33/0073	. . . {Control unit therefor}	33/1886	. . {using probes, e.g. submersible probes, buoys}
33/0075	. . . . . {for multiple spatially distributed sensors, e.g. for environmental monitoring (transmission systems for measured values G08C)}	33/1893	. . {using flow cells}
2033/0077	. {testing material properties on individual granules or tablets}	33/20	. Metals
2033/0078	. {testing material properties on manufactured objects}	WARNING	
2033/008	. . {sport articles (balls, skis, rackets)}	Group G01N 33/20 is impacted by reclassification into groups G01N 33/202 , G01N 33/2022 , G01N 33/2028 , G01N 33/204 , G01N 33/2045 , G01N 33/207 , and G01N 33/208 .	
2033/0081	. . {containers; packages; bottles}	All groups listed in this Warning should be considered in order to perform a complete search.	
2033/0083	. . {vehicle parts}		
2033/0085	. . . {wheels}		
2033/0086	. . {clothes; hosiery}		
2033/0088	. . {other articles}		
2033/009	. . . {seals}		
2033/0091	. {Powders}		
2033/0093	. {radioactive materials}		
2033/0095	. {Semiconductive materials}		
2033/0096	. {testing material properties on thin layers or coatings}		
33/0098	. {Plants or trees (wood G01N 33/46)}		
33/02	. Food		
33/025	. . {Fruits or vegetables}		
		33/202	. . Constituents thereof
		WARNING	
		Group G01N 33/202 is incomplete pending reclassification of documents from group G01N 33/20 .	
		Groups G01N 33/20 and G01N 33/202 should be considered in order to perform a complete search.	

- 33/2022 . . . Non-metallic constituents
- WARNING**
- Group [G01N 33/2022](#) is incomplete pending reclassification of documents from group [G01N 33/20](#).
- Groups [G01N 33/20](#) and [G01N 33/2022](#) should be considered in order to perform a complete search.
- 33/2025 Gaseous constituents
- 33/2028 Metallic constituents
- WARNING**
- Group [G01N 33/2028](#) is incomplete pending reclassification of documents from group [G01N 33/20](#).
- Groups [G01N 33/20](#) and [G01N 33/2028](#) should be considered in order to perform a complete search.
- 33/204 . . . Structure thereof, e.g. crystal structure
- WARNING**
- Group [G01N 33/204](#) is incomplete pending reclassification of documents from group [G01N 33/20](#).
- Groups [G01N 33/20](#) and [G01N 33/204](#) should be considered in order to perform a complete search.
- 33/2045 Defects
- WARNING**
- Group [G01N 33/2045](#) is incomplete pending reclassification of documents from group [G01N 33/20](#).
- Groups [G01N 33/20](#) and [G01N 33/2045](#) should be considered in order to perform a complete search.
- 33/205 . . . in liquid state, e.g. molten metals
- 33/207 . . . Welded or soldered joints; Solderability
- WARNING**
- Group [G01N 33/207](#) is incomplete pending reclassification of documents from group [G01N 33/20](#).
- Groups [G01N 33/20](#) and [G01N 33/207](#) should be considered in order to perform a complete search.
- 33/208 . . . Coatings, e.g. platings
- WARNING**
- Group [G01N 33/208](#) is incomplete pending reclassification of documents from group [G01N 33/20](#).
- Groups [G01N 33/20](#) and [G01N 33/208](#) should be considered in order to perform a complete search.
- 33/22 . . . Fuels, explosives {(liquid hydrocarbons [G01N 33/28](#))}
- 33/222 . . . {Solid fuels, e.g. coal}
- 33/225 . . . {Gaseous fuels, e.g. natural gas}
- 33/227 . . . {Explosives, e.g. combustive properties thereof ([detecting explosives in air G01N 33/0057](#))}
- 33/24 . . . Earth materials ([G01N 33/42](#) takes precedence)
- 33/241 . . . {for hydrocarbon content ([drilling mud G01N 33/2823](#); [drilling per se E21B](#); [prospecting G01V](#))}
- 2033/243 . . . {for determining biological parameters concerning composting, biodegradability or bioavailability}
- 2033/245 . . . {for agricultural purposes}
- 33/246 . . . {for water content ([for control of watering A01G 25/167](#))}
- 2033/248 . . . {related to manure as a biological product, i.e. excluding artificial fertilizers}
- 33/26 . . . Oils; viscous liquids; paints; inks ([G01N 33/22](#) takes precedence)
- 33/28 . . . Oils {, i.e. hydrocarbon liquids} ({gaseous fuels [G01N 33/225](#); } edible oils or edible fats [G01N 33/03](#))}
- 33/2805 {investigating the resistance to heat or oxidation ([to the weather, to corrosion, or to light G01N 17/00](#))}
- 33/2811 {by measuring cloud point or pour point of oils}
- 33/2817 {using a test engine ([testing of engines G01M 15/00](#))}
- 33/2823 {raw oil, drilling fluid or polyphasic mixtures ([hydrocarbon content of earth materials G01N 33/241](#); [prospecting G01V](#); [drilling per se E21B](#))}
- 33/2829 {mixtures of fuels, e.g. determining the RON-number}
- 33/2835 {specific substances contained in the oil or fuel}
- 33/2841 {gas in oil, e.g. hydrogen in insulating oil}
- 33/2847 {Water in oil ([basic sediment and water G01N 33/2823](#); [oil in water G01N 33/1833](#))}
- 33/2852 {alcohol/fuel mixtures}
- 33/2858 {metal particles}
- 33/2864 {lead content}
- 33/287 {Sulfur content}
- 33/2876 {Total acid number}
- 33/2882 {Markers ([marking of fuels C10L 1/003](#))}
- 33/2888 {Lubricating oil characteristics, e.g. deterioration ([lubricating properties G01N 33/30](#))}
- 33/2894 {for metal working or machining}
- 33/30 for lubricating properties
- 33/32 Paints; inks {([investigating resistance to the weather, to corrosion, to light G01N 17/00](#))}
- 33/34 . . . Paper
- 33/343 . . . {paper pulp}
- 33/346 . . . {paper sheets}
- 33/36 . . . Textiles
- 33/362 . . . {material before processing, e.g. bulk cotton or wool}
- 33/365 . . . {filiform textiles, e.g. yarns ([for measuring diameter G01B](#))}
- 33/367 . . . {Fabric or woven textiles ([optical analysis of moving sheets G01N 21/86](#))}
- 33/38 . . . Concrete; ceramics; glass; bricks
- 33/381 . . . {precious stones; pearls}
- 33/383 . . . {Concrete, cement}

- 33/385 . . {Crystals}
- 33/386 . . {Glass}
- 33/388 . . {Ceramics}
- 33/40 . Grinding-materials
- 33/42 . Road-making materials ([G01N 33/38](#) takes precedence)
- 33/44 . Resins; rubber; leather
- 33/442 . . {Resins, plastics}
- 33/445 . . {Rubber}
- 33/447 . . {Leather}
- 33/46 . Wood
- 33/48 . Biological material, e.g. blood, urine ([G01N 33/02](#), [G01N 33/26](#), [G01N 33/44](#), [G01N 33/46](#) take precedence); Haemocytometers (counting blood corpuscles distributed over a surface by scanning the surface [G06M 11/02](#))
- 33/483 . . Physical analysis of biological material
- 33/4833 . . . {of solid biological material, e.g. tissue samples, cell cultures (tissue [in vivo](#) [A61B 5/00](#); cell suspensions [G01N 33/48735](#))}
- 33/4836 {using multielectrode arrays}
- 33/487 . . . of liquid biological material
- 33/48707 {by electrical means ([G01N 33/49](#), [G01N 33/493](#) take precedence)}
- 33/48714 {for determining substances foreign to the organism, e.g. drugs or heavy metals (drugs by chemical analysis [G01N 33/94](#))}
- 33/48721 {Investigating individual macromolecules, e.g. by translocation through nanopores (Coulter counters in general [G01N 15/12](#); fabrication methods for nanoscale apertures [B81B 1/00](#); sequencing of nucleic acids [C12Q 1/68](#))}
- 33/48728 {Investigating individual cells, e.g. by patch clamp, voltage clamp (investigating individual particles in general [G01N 15/10](#))}
- 33/48735 {Investigating suspensions of cells, e.g. measuring microbe concentration (by chemical means [C12Q 1/04](#); colony counters [C12M 1/34](#); concentration of particle suspensions in general [G01N 15/06](#))}
- 33/48742 {Determining urea by measuring the volume of a gas (in general [G01N 7/14](#) - [G01N 7/18](#))}
- 33/4875 {Details of handling test elements, e.g. dispensing or storage, not specific to a particular test method (test-elements [per se](#) [B01L](#), automatic analysers [G01N 35/00](#), [in vivo](#) analysis on the human body for medical diagnosis [A61B](#))}
- 33/48757 {Test elements dispensed from a stack}
- 33/48764 {Test tape taken off a spool}
- 33/48771 {Coding of information, e.g. calibration data, lot number}
- 33/48778 {Containers specially adapted therefor, e.g. for dry storage}
- 33/48785 {Electrical and electronic details of measuring devices for physical analysis of liquid biological material not specific to a particular test method, e.g. user interface or power supply}
- 33/48792 {Data management, e.g. communication with processing unit (for [in vivo](#) diagnostics [A61B 5/0002](#); transmission systems for measured values [G08C](#))}
- 33/49 Blood {(chemical methods for determining blood cell populations [G01N 33/5094](#); chemical analysis of blood groups or blood types [G01N 33/80](#))}
- 33/4905 {Determining clotting time of blood (by chemical methods [G01N 33/86](#), [C12Q 1/54](#))}
- 33/491 {by separating the blood components ([G01N 15/05](#) takes precedence)}
- 33/4915 {using flow cells (flow cytometry [G01N 15/14](#))}
- 33/492 {Determining multiple analytes}
- 33/4925 {measuring blood gas content, e.g. O₂, CO₂, HCO₃}
- 33/493 urine
- 33/497 . . . of gaseous biological material, e.g. breath
- 33/4972 {Determining alcohol content (for vehicle safety devices [B60K 28/06](#))}
- 2033/4975 {other than oxygen, carbon dioxide or alcohol, e.g. organic vapours}
- 2033/4977 {metabolic gass from microbes, cell cultures, plant tissues and the like}
- 33/50 . . Chemical analysis of biological material, e.g. blood, urine; Testing involving biospecific ligand binding methods; Immunological testing (measuring or testing processes involving enzymes or microorganisms, compositions or test papers therefor; processes for forming such compositions, condition responsive control in microbiological or enzymological processes [C12Q](#))

NOTES

1. In this group, the following expression is used with the meaning indicated: "involving", when used in relation to a material, includes the testing for the material as well as employing the material as a determinant or reactant in a test for a different material.
2. In groups [G01N 33/52](#) – [G01N 33/98](#), the last 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 last appropriate place.
3. Documents relating to new peptides or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing processes are classified in subclass [C07K](#) or in group [C12N 9/00](#) according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However, if the investigating or analysing aspects are of interest, the documents are classified in this group.

- 33/5002 . . . {Partitioning blood components}
- 33/5005 . . . {involving human or animal cells (immunoassay [G01N 33/56966](#); immunoassays of protozoa [G01N 33/56905](#); protozoa in screening assays [C12Q 1/025](#))}

- 33/5008 {for testing or evaluating the effect of chemical or biological compounds, e.g. drugs, cosmetics}
- 33/5011 {for testing antineoplastic activity}
- 33/5014 {for testing toxicity}
- 33/5017 {for testing neoplastic activity}
- 33/502 {for testing non-proliferative effects}
- 33/5023 {on expression patterns}
- 33/5026 {on cell morphology}
- 33/5029 {on cell motility}
- 33/5032 {on intercellular interactions}
- 33/5035 {on sub-cellular localization}
- 33/5038 {involving detection of metabolites *per se*}
- 33/5041 {involving analysis of members of signalling pathways}
- 33/5044 {involving specific cell types}
- 33/5047 {Cells of the immune system}
- 33/505 {involving T-cells}
- 33/5052 {involving B-cells}
- 33/5055 {involving macrophages}
- 33/5058 {Neurological cells}
- 33/5061 {Muscle cells}
- 33/5064 {Endothelial cells}
- 33/5067 {Liver cells}
- 33/507 {Pancreatic cells}
- 33/5073 {Stem cells}
- 33/5076 {involving cell organelles, e.g. Golgi complex, endoplasmic reticulum}
- 33/5079 {Mitochondria}
- 33/5082 {Supracellular entities, e.g. tissue, organisms}
- 33/5085 {of invertebrates}
- 33/5088 {of vertebrates}
- 33/5091 {for testing the pathological state of an organism}
- 33/5094 {for blood cell populations (red blood cells [G01N 33/80](#))}
- 33/5097 . . . {involving plant cells (immunoassays of plant cells [G01N 33/56961](#); unicellular algae, phytoplankton and photosynthetic bacteria in screening assays [C12Q 1/025](#))}
- 33/52 . . . Use of compounds or compositions for colorimetric, spectrophotometric or fluorometric investigation, e.g. use of reagent paper {and including single- and multilayer analytical elements (immunological elements [G01N 33/54386](#); involving labelled immunochemicals [G01N 33/58](#); for haemoglobin or occult blood [G01N 33/72](#))}
- 33/521 {Single-layer analytical elements}
- 33/523 {the element being adapted for a specific analyte}
- 33/525 {Multi-layer analytical elements}
- 33/526 {the element being adapted for a specific analyte}
- 33/528 {Atypical element structures, e.g. gloves, rods, tampons, toilet paper}
- 33/53 . . . Immunoassay; Biospecific binding assay; Materials therefor
- 33/5302 {Apparatus specially adapted for immunological test procedures}
- 33/5304 {Reaction vessels, e.g. agglutination plates (for solid-phase systems [G01N 33/543](#))}
- 33/5306 {Improving reaction conditions, e.g. reduction of non-specific binding, promotion of specific binding}
- 33/5308 {for analytes not provided for elsewhere, e.g. nucleic acids, uric acid, worms, mites}
- 33/531 Production of immunochemical test materials
- 33/532 Production of labelled immunochemicals
- 33/533 with fluorescent label
- 33/534 with radioactive label
- 33/535 with enzyme label {or co-enzymes, co-factors, enzyme inhibitors or enzyme substrates}
- 33/536 with immune complex formed in liquid phase
- 33/537 with separation of immune complex from unbound antigen or antibody
- 33/5375 {by changing the physical or chemical properties of the medium or immunochemicals, e.g. temperature, density, pH, partitioning}
- 33/538 by sorbent column, particles or resin strip {, i.e. sorbent materials}
- 33/539 involving precipitating reagent {, e.g. ammonium sulfate}
- 33/541 Double or second antibody {, i.e. precipitating antibody}
- 33/542 with steric inhibition or signal modification, e.g. fluorescent quenching
- 33/543 with an insoluble carrier for immobilising immunochemicals
- 33/54306 {Solid-phase reaction mechanisms}
- 33/54313 {the carrier being characterised by its particulate form}
- 33/5432 {Liposomes or microcapsules}
- 33/54326 {Magnetic particles}
- 33/54333 {Modification of conditions of immunological binding reaction, e.g. use of more than one type of particle, use of chemical agents to improve binding, choice of incubation time or application of magnetic field during binding reaction}
- 33/5434 {using magnetic particle immunoreagent carriers which constitute new materials *per se*}
- 33/54346 {Nanoparticles}
- 33/54353 {with ligand attached to the carrier via a chemical coupling agent (coatings [G01N 33/54393](#))}
- 33/5436 {with ligand physically entrapped within the solid phase (liposomes [G01N 33/5432](#); immunological test elements [G01N 33/54386](#))}
- 33/54366 {Apparatus specially adapted for solid-phase testing}
- 33/54373 {involving physiochemical end-point determination, e.g. wave-guides, FETS, gratings}
- 33/5438 {Electrodes}
- 33/54386 {Analytical elements}

33/54393	. . . . .	{Improving reaction conditions or stability, e.g. by coating or irradiation of surface, by reduction of non-specific binding, by promotion of specific binding}	33/5735	. . . . .	{co-enzymes or co-factors, e.g. NAD, ATP}
33/544	. . . . .	the carrier being organic	33/574	. . . . .	for cancer
33/545	. . . . .	Synthetic resin	NOTE		
33/546	. . . . .	as water suspendable particles	In this group:		
33/547	. . . . .	with antigen or antibody attached to the carrier via a bridging agent	<ul style="list-style-type: none"> relevant features relating to a specifically defined cancer are only classified in groups G01N 33/57407 - G01N 33/57449 relevant features describing cancer markers related to multiple forms of cancer are classified in groups G01N 33/57484 - G01N 33/57496 		
33/548	. . . . .	Carbohydrates, e.g. dextran	33/57407	. . . . .	{Specifically defined cancers}
33/549	. . . . .	with antigen or antibody entrapped within the carrier	33/57411	. . . . .	{of cervix}
33/551	. . . . .	the carrier being inorganic	33/57415	. . . . .	{of breast}
33/552	. . . . .	Glass or silica	33/57419	. . . . .	{of colon}
33/553	. . . . .	Metal or metal coated	33/57423	. . . . .	{of lung}
33/554	. . . . .	the carrier being a biological cell or cell fragment, e.g. bacteria, yeast cells	33/57426	. . . . .	{leukemia}
33/555	. . . . .	Red blood cell	33/5743	. . . . .	{of skin, e.g. melanoma}
33/556	. . . . .	Fixed or stabilised red blood cell	33/57434	. . . . .	{of prostate}
33/557	. . . . .	using kinetic measurement, i.e. time rate of progress of an antigen-antibody interaction	33/57438	. . . . .	{of liver, pancreas or kidney}
33/558	. . . . .	using diffusion or migration of antigen or antibody	33/57442	. . . . .	{of the uterus and endometrial}
33/559	. . . . .	through a gel, e.g. Ouchterlony technique	33/57446	. . . . .	{of stomach or intestine}
33/561	. . . . .	Immunoelectrophoresis	33/57449	. . . . .	{of ovaries}
33/563	. . . . .	involving antibody fragments	33/57469	. . . . .	{involving tumor associated glycolinkage, i.e. TAG}
33/564	. . . . .	for pre-existing immune complex or autoimmune disease {, i.e. systemic lupus erythematosus, rheumatoid arthritis, multiple sclerosis, rheumatoid factors or complement components C1-C9}	33/57473	. . . . .	{involving carcinoembryonic antigen, i.e. CEA}
33/566	. . . . .	using specific carrier or receptor proteins as ligand binding reagents {where possible specific carrier or receptor proteins are classified with their target compounds}	33/57476	. . . . .	{involving oncofetal proteins}
33/567	. . . . .	utilising isolate of tissue or organ as binding agent	33/5748	. . . . .	{involving oncogenic proteins}
33/569	. . . . .	for microorganisms, e.g. protozoa, bacteria, viruses	33/57484	. . . . .	{involving compounds serving as markers for tumor, cancer, neoplasia, e.g. cellular determinants, receptors, heat shock/stress proteins, A-protein, oligosaccharides, metabolites}
33/56905	. . . . .	{Protozoa}	33/57488	. . . . .	{involving compounds identifiable in body fluids}
33/56911	. . . . .	{Bacteria}	33/57492	. . . . .	{involving compounds localized on the membrane of tumor or cancer cells}
33/56916	. . . . .	{Enterobacteria, e.g. shigella, salmonella, klebsiella, serratia}	33/57496	. . . . .	{involving intracellular compounds}
33/56922	. . . . .	{Campylobacter}	33/576	. . . . .	for hepatitis
33/56927	. . . . .	{Chlamydia}	33/5761	. . . . .	{Hepatitis B}
33/56933	. . . . .	{Mycoplasma}	33/5762	. . . . .	{Hepatitis B core antigen}
33/56938	. . . . .	{Staphylococcus}	33/5764	. . . . .	{Hepatitis B surface antigen}
33/56944	. . . . .	{Streptococcus}	33/5765	. . . . .	{Hepatitis delta antigen}
33/5695	. . . . .	{Mycobacteria}	33/5767	. . . . .	{non-A, non-B hepatitis}
33/56955	. . . . .	{involved in periodontal diseases}	33/5768	. . . . .	{Hepatitis A}
33/56961	. . . . .	{Plant cells or fungi}	33/577	. . . . .	involving monoclonal antibodies {binding reaction mechanisms characterised by the use of monoclonal antibodies; monoclonal antibodies per se are classified with their corresponding antigens; (G01N 33/53 - G01N 33/576 take precedence)}
33/56966	. . . . .	{Animal cells}	33/579	. . . . .	involving limulus lysate
33/56972	. . . . .	{White blood cells}	33/58	. . . . .	involving labelled substances (G01N 33/53 takes precedence)
33/56977	. . . . .	{HLA or MHC typing}	33/581	. . . . .	{with enzyme label (including co-enzymes, co-factors, enzyme inhibitors or substrates)}
33/56983	. . . . .	{Viruses}	33/582	. . . . .	{with fluorescent label}
33/56988	. . . . .	{AIDS or HTLV}	33/583	. . . . .	{with non-fluorescent dye label}
33/56994	. . . . .	{Herpetoviridae, e.g. cytomegalovirus, Epstein-Barr virus}			
33/571	. . . . .	for venereal disease, e.g. syphilis, gonorrhoea { (herpes G01N 33/56994 ; chlamydia G01N 33/56927)}			
33/573	. . . . .	for enzymes or isoenzymes			

- 33/585 {with a particulate label, e.g. coloured latex}
- 33/586 {Liposomes, microcapsules or cells}
- 33/587 {Nanoparticles}
- 33/588 {with semiconductor nanocrystal label, e.g. quantum dots}
- 33/60 involving radioactive labelled substances
- 33/62 involving urea
- 33/64 involving ketones
- 33/66 involving blood sugars, e.g. galactose
- 33/68 involving proteins, peptides or amino acids
{(involving lipoproteins [G01N 33/92](#))}
- 33/6803 {General methods of protein analysis not limited to specific proteins or families of proteins}
- 33/6806 {Determination of free amino acids}
- 33/6809 {involving fluorescent derivatizing reagents reacting non-specifically with all amino acids}
- 33/6812 {Assays for specific amino acids}
- 33/6815 {containing sulfur, e.g. cysteine, cystine, methionine, homocysteine}
- 33/6818 {Sequencing of polypeptides}
- 33/6821 {involving C-terminal degradation}
- 33/6824 {involving N-terminal degradation, e.g. Edman degradation}
- 33/6827 {Total protein determination, e.g. albumin in urine}
- 33/683 {involving metal ions}
- 33/6833 {Copper, e.g. Folin-, Lowry-, biuret methods}
- 33/6836 {Silver staining}
- 33/6839 {involving dyes, e.g. Coomassie blue, bromocresol green}
- 33/6842 {Proteomic analysis of subsets of protein mixtures with reduced complexity, e.g. membrane proteins, phosphoproteins, organelle proteins}
- 33/6845 {Methods of identifying protein-protein interactions in protein mixtures}
- 33/6848 {Methods of protein analysis involving mass spectrometry}
- 33/6851 {Methods of protein analysis involving laser desorption ionisation mass spectrometry}
- 33/6854 {Immunoglobulins}
- 33/6857 {Antibody fragments}
- 33/686 {Anti-idiotypic}
- 33/6863 {Cytokines, i.e. immune system proteins modifying a biological response such as cell growth proliferation or differentiation, e.g. TNF, CNF, GM-CSF, lymphotoxin, MIF or their receptors}
- 33/6866 {Interferon}
- 33/6869 {Interleukin}
- 33/6872 {Intracellular protein regulatory factors and their receptors, e.g. including ion channels}
- 33/6875 {Nucleoproteins}
- 33/6878 {in epitope analysis}
- 33/6881 {from skin}
- 33/6884 {from lung}
- 33/6887 {from muscle, cartilage or connective tissue}
- 33/689 {related to pregnancy or the gonads}
- 33/6893 {related to diseases not provided for elsewhere}
- 33/6896 {Neurological disorders, e.g. Alzheimer's disease}
- 33/70 involving creatine or creatinine
- 33/72 involving blood pigments, e.g. haemoglobin, bilirubin {or other porphyrins; involving occult blood}
- 33/721 {Haemoglobin}
- 33/723 {Glycosylated haemoglobin}
- 33/725 {using peroxidative activity}
- 33/726 {Devices}
- 33/728 {Bilirubin; including biliverdin}
- 33/74 involving hormones {or other non-cytokine intercellular protein regulatory factors such as growth factors, including receptors to hormones and growth factors}
- 33/743 {Steroid hormones}
- 33/746 {Erythropoietin}
- 33/76 Human chorionic gonadotropin {including luteinising hormone, follicle stimulating hormone, thyroid stimulating hormone or their receptors}
- 33/78 Thyroid gland hormones {, e.g. T3, T4, TBH, TBG or their receptors}
- 33/80 involving blood groups or blood types {or red blood cells ([white blood cells](#) [G01N 33/56972](#))}
- 33/82 involving vitamins {or their receptors}
- 33/84 involving inorganic compounds or pH
- 33/86 involving blood coagulating time {or factors, or their receptors}
- 33/88 involving prostaglandins {or their receptors}
- 33/90 involving iron binding capacity of blood
- 33/92 involving lipids, e.g. cholesterol {, lipoproteins, or their receptors ([steroid hormones](#) [G01N 33/743](#))}
- 33/94 involving narcotics {or drugs or pharmaceuticals, neurotransmitters or associated receptors}
- 33/9406 {Neurotransmitters}
- 33/9413 {Dopamine}
- 33/942 {Serotonin, i.e. 5-hydroxy-tryptamine}
- 33/9426 {GABA, i.e. gamma-amino-butyrate}
- 33/9433 {(Nor)adrenaline}
- 33/944 {Acetylcholine}
- 33/9446 {Antibacterials}
- 33/9453 {Cardioregulators, e.g. antihypotensives, antiarrhythmics}
- 33/946 {CNS-stimulants, e.g. cocaine, amphetamines}
- 33/9466 {Antidepressants}
- 33/9473 {Anticonvulsants, e.g. phenobarbitol, phenytoin}
- 33/948 {Sedatives, e.g. cannabinoids, barbiturates ([opiates](#) [G01N 33/9486](#))}
- 33/9486 {Analgesics, e.g. opiates, aspirine}
- 33/9493 {Immunosuppressants}
- 33/96 involving blood or serum control standard
- 33/98 involving alcohol, e.g. ethanol in breath

35/00	Automatic analysis not limited to methods or materials provided for in any single one of groups G01N 1/00 - G01N 33/00; Handling materials therefor	
35/00009	. {provided with a sample supporting tape, e.g. with absorbent zones}	2035/00455 . . {Controlling humidity in analyser}
2035/00019	. . {cassette structures}	2035/00465 . {Separating and mixing arrangements}
35/00029	. {provided with flat sample substrates, e.g. slides (G01N 35/028 takes precedence)}	2035/00475 . . {Filters}
2035/00039	. . {Transport arrangements specific to flat sample substrates, e.g. pusher blade}	2035/00485 . . . {combined with sample carriers}
2035/00049	. . . {for loading/unloading a carousel}	2035/00495 . . {Centrifuges}
2035/00059	. . . {vacuum chucks}	2035/00504 . . . {combined with carousels}
35/00069	. . {whereby the sample substrate is of the bio-disk type, i.e. having the format of an optical disk}	2035/00514 . . {Stationary mixing elements}
2035/00079	. . {Evaporation covers for slides}	2035/00524 . . {Mixing by agitating sample carrier}
2035/00089	. . {Magazines}	2035/00534 . . {Mixing by a special element, e.g. stirrer}
2035/00099	. . {Characterised by type of test elements}	2035/00544 . . . {using fluid flow}
2035/00108	. . . {Test strips, e.g. paper}	2035/00554 . . . {using ultrasound}
2035/00118	. . . . {for multiple tests}	2035/00564 . . {Handling or washing solid phase elements, e.g. beads}
2035/00128	. . . . {with pressing or squeezing devices}	2035/00574 . . . {Means for distributing beads}
2035/00138	. . . {Slides}	35/00584 . {Control arrangements for automatic analysers}
2035/00148	. . . {Test cards, e.g. Biomerieux or McDonnell multiwell test cards}	35/00594 . . {Quality control, including calibration or testing of components of the analyser}
2035/00158	. . . {Elements containing microarrays, i.e. "biochip"}	35/00603 . . . {Reinspection of samples}
2035/00168	. . {Manufacturing or preparing test elements}	35/00613 . . . {Quality control}
2035/00178	. {Special arrangements of analysers}	35/00623 {of instruments}
2035/00188	. . {the analyte being in the solid state}	2035/00633 {logging process history of individual samples}
2035/00198	. . . {Dissolution analysers}	2035/00643 {detecting malfunctions in conveying systems}
2035/00207	. . {Handling bulk quantities of analyte}	2035/00653 {statistical methods comparing labs or apparatuses}
2035/00217	. . . {involving measurement of weight}	35/00663 {of consumables}
2035/00227	. . . {Monitoring a process (online)}	2035/00673 {of reagents}
2035/00237	. . {Handling microquantities of analyte, e.g. microvalves, capillary networks}	2035/00683 {of detectors}
2035/00247	. . . {Microvalves}	35/00693 . . . {Calibration}
2035/00257	. . . . {Capillary stop flow circuits}	2035/00702 {Curve-fitting; Parameter matching; Calibration constants}
2035/00267	. . . . {Melttable plugs}	35/00712 . . . {Automatic status testing, e.g. at start-up or periodic}
2035/00277	. . {Special precautions to avoid contamination (e.g. enclosures, glove- boxes, sealed sample carriers, disposal of contaminated material)}	35/00722 . . {Communications; Identification}
2035/00287	. . . {movable lid/cover for sample or reaction tubes}	35/00732 . . . {Identification of carriers, materials or components in automatic analysers}
2035/00297	. . . {Antistatic arrangements}	2035/00742 {Type of codes}
2035/00306	. . {Housings, cabinets, control panels (details)}	2035/00752 {bar codes}
2035/00316	. . . {Detecting door closure}	2035/00762 {magnetic code}
2035/00326	. . {Analysers with modular structure}	2035/00772 {mechanical or optical code other than bar code}
2035/00336	. . . {Analysers adapted for operation in microgravity, i.e. spaceflight}	2035/00782 {reprogrammable code}
2035/00346	. {Heating or cooling arrangements}	2035/00792 {Type of components bearing the codes, other than sample carriers}
2035/00356	. . {Holding samples at elevated temperature (incubation)}	2035/00801 {Holders for sample carriers, e.g. trays, carousel, racks}
2035/00366	. . . {Several different temperatures used}	2035/00811 {consumable or exchangeable components other than sample carriers, e.g. detectors, flow cells}
2035/00376	. . . {Conductive heating, e.g. heated plates}	2035/00821 {nature of coded information}
2035/00386	. . . {using fluid heat transfer medium}	2035/00831 {identification of the sample, e.g. patient identity, place of sampling}
2035/00396	. . . . {where the fluid is a liquid}	2035/00841 {results of the analyses}
2035/00405	. . . {Microwaves}	2035/00851 {process control parameters}
2035/00415	. . . {Other radiation}	2035/00861 {printing and sticking of identifiers}
2035/00425	. . {Heating or cooling means associated with pipettes or the like, e.g. for supplying sample/reagent at given temperature}	35/00871 . . . {Communications between instruments or with remote terminals}
2035/00435	. . {Refrigerated reagent storage}	2035/00881 {network configurations}
2035/00445	. . {Other cooling arrangements}	2035/00891 . . . {Displaying information to the operator}
		2035/009 {alarms, e.g. audible}
		2035/0091 {GUI [graphical user interfaces]}
		35/0092 . . {Scheduling}

2035/0093	. . . {random access not determined by physical position}	2035/0443	. . . . {for reagents}
2035/0094	. . . {optimisation; experiment design}	2035/0444	. . . . {for cuvettes or reaction vessels}
35/0095	. . . {introducing urgent samples with priority, e.g. Short Turn Around Time Samples [STATS]}	2035/0446	. . . . {Combinations of the above}
2035/0096	. . . {post analysis management of samples, e.g. marking, removing, storing}	2035/0448	. . . . {composed of interchangeable ring elements}
2035/0097	. . {monitoring reactions as a function of time}	2035/0449	. . . . {using centrifugal transport of liquid}
35/0098	. {involving analyte bound to insoluble magnetic carrier, e.g. using magnetic separation (magnetic particles used in immunoassays G01N 33/54326 ; magnetic separation in general B03C)}	2035/0451	. . . . {composed of interchangeable sectors}
35/0099	. {comprising robots or similar manipulators (robots per se B25J)}	2035/0453	. . . . {Multiple carousels working in parallel}
35/02	. using a plurality of sample containers moved by a conveyor system past one or more treatment or analysis stations {(G01N 35/0098 and G01N 35/0099 take precedence)}	2035/0455	. . . . {Coaxial carousels}
35/021	. . {having a flexible chain, e.g. "cartridge belt", conveyor for reaction cells or cuvettes}	2035/0456	. . . . {Spiral tracks}
2035/023	. . . {forming cuvettes <u>in situ</u> , e.g. from plastic strip}	2035/0458	. . . . {Multiple concentric rows of wells}
35/025	. . {having a carousel or turntable for reaction cells or cuvettes}	2035/046	. . . {General conveyor features}
35/026	. . {having blocks or racks of reaction cells or cuvettes}	2035/0462	. . . . {Buffers [FIFO] or stacks [LIFO] for holding carriers between operations}
35/028	. . {having reaction cells in the form of microtitration plates}	2035/0463	. . . . {in incubators}
35/04	. . Details of the conveyor system {(G01N 35/021 - G01N 35/028 take precedence)}	2035/0465	. . . . {Loading or unloading the conveyor}
2035/0401	. . . {Sample carriers, cuvettes or reaction vessels}	2035/0467	. . . . {Switching points ("aiguillages")}
2035/0403	. . . . {Sample carriers with closing or sealing means}	2035/0468	. . . . {converging, e.g. selecting carriers from multiple incoming streams}
2035/0405	. . . . {manipulating closing or opening means, e.g. stoppers, screw caps, lids or covers}	2035/047	. . . . {diverging, e.g. sending carriers to different analysers}
2035/0406	. . . . {Individual bottles or tubes}	2035/0472	. . . . {for selective recirculation of carriers}
2035/0408	. . . . {connected in a flexible chain}	2035/0474	. . . {Details of actuating means for conveyors or pipettes}
2035/041	. . . . {lifting items out of a rack for access}	2035/0475	. . . . {electric, e.g. stepper motor, solenoid}
2035/0412	. . . . {Block or rack elements with a single row of samples}	2035/0477	. . . . {Magnetic}
2035/0413	. . . . {moving in one dimension}	2035/0479	. . . . {hydraulic or pneumatic}
2035/0415	. . . . {moving in two dimensions in a horizontal plane}	2035/0481	. . . . {Pneumatic tube conveyors; Tube mails; "Rohrpost"}
2035/0417	. . . . {forming an endless chain in a vertical plane}	2035/0482	. . . . {Transmission}
2035/0418	. . . . {Plate elements with several rows of samples}	2035/0484	. . . . {Belt or chain}
2035/042	. . . . {moved independently, e.g. by fork manipulator}	2035/0486	. . . . {Gearing, cams}
2035/0422	. . . . {carried on a linear conveyor}	2035/0487	. . . . {Helix or lead screw}
2035/0424	. . . . {Two or more linear conveyors}	2035/0489	. . . . {Self-propelled units}
2035/0425	. . . . {Stacks, magazines or elevators for plates}	2035/0491	. . . . {Position sensing, encoding; closed-loop control}
2035/0427	. . . . {nestable or stockable}	2035/0493	. . . . {Locating samples; identifying different tube sizes}
2035/0429	. . . . {Sample carriers adapted for special purposes}	2035/0494	. . . . {Detecting or compensating positioning errors}
2035/0431	. . . . {characterised by material of construction}	2035/0496	. . . {Other details}
2035/0432	. . . . {integrated with measuring devices}	2035/0498	. . . . {Drawers used as storage or dispensing means for vessels or cuvettes}
2035/0434	. . . . {in the form of a syringe or pipette tip}	35/08	. using a stream of discrete samples flowing along a tube system, e.g. flow injection analysis
2035/0436	. . . . {with pre-packaged reagents, i.e. test-packs}	35/085	. . {Flow Injection Analysis}
2035/0437	. . . . {Cleaning cuvettes or reaction vessels}	35/10	. Devices for transferring samples {or any liquids} to, in, or from, the analysis apparatus, e.g. suction devices, injection devices {(G01N 35/0099 takes precedence)}
2035/0439	. . . {Rotary sample carriers, i.e. carousels}	35/1002	. . {Reagent dispensers}
2035/0441	. . . . {for samples}	35/1004	. . {Cleaning sample transfer devices}
		2035/1006	. . . {Rinsing only the inside of the tip}
		35/1009	. . {Characterised by arrangements for controlling the aspiration or dispense of liquids}
		35/1011	. . . {Control of the position or alignment of the transfer device}
		2035/1013	. . . . {Confirming presence of tip}
		35/1016	. . . {Control of the volume dispensed or introduced}
		2035/1018	. . . . {Detecting inhomogeneities, e.g. foam, bubbles, clots}

2035/102	. . . . {Preventing or detecting loss of fluid by dripping}	2201/0221	. . . Portable; cableless; compact; hand-held
2035/1023	. . . . . {using a valve in the tip or nozzle}	2201/0222	. . . Pocket size
2035/1025	. . . {Fluid level sensing}	2201/0224	. . . Pivoting casing
2035/1027	. . {General features of the devices}	2201/0225	. . . Part of casing being slidable, telescopic
2035/103	. . . {using disposable tips}	2201/0227	. . . Sealable enclosure
2035/1032	. . . {Dilution or aliquotting}	2201/0228	. . . Moulded parts
2035/1034	. . . {Transferring microquantities of liquid}	2201/023	. . Controlling conditions in casing
2035/1037	. . . . {Using surface tension, e.g. pins or wires}	2201/0231	. . . Thermostating
2035/1039	. . . . {Micropipettes, e.g. microcapillary tubes}	2201/0233	. . . Gas purge
2035/1041	. . . . {Ink-jet like dispensers}	2201/0235	. . . . with gas filters in casing
2035/1044	. . . . {Using pneumatic means}	2201/0236	. . . Explosion proof
2035/1046	. . . . {Levitated, suspended drops}	2201/0238	. . . Moisture monitoring or controlling
2035/1048	. . . {using the transfer device for another function}	2201/024	. . Modular construction
2035/1051	. . . . {for transporting containers, e.g. retained by friction}	2201/0245	. . . with insertable-removable part
2035/1053	. . . . {for separating part of the liquid, e.g. filters, extraction phase}	2201/025	. . Mechanical control of operations
2035/1055	. . . . {for immobilising reagents, e.g. dried reagents}	2201/0253	. . . Switches mounted at the casing
2035/1058	. . . . {for mixing}	2201/0256	. . . Sensor for insertion of sample, cuvette, test strip
2035/106	. . . . . {by sucking and blowing}	2201/04	. Batch operation; multisample devices
2035/1062	. . . . {for testing the liquid while it is in the transfer device}	2201/0407	. . with multiple optical units, e.g. one per sample
35/1065	. . {Multiple transfer devices}	2201/0415	. . Carrusel, sequential
35/1067	. . . {for transfer to or from containers having different spacing}	2201/0423	. . . with rotating optics
2035/1069	. . . . {by adjusting the spacing between multiple probes of a single transferring head}	2201/043	. . . . optics constituted by optical fibre multiplex selector
35/1072	. . . {with provision for selective pipetting of individual channels}	2201/0438	. . Linear motion, sequential
35/1074	. . . {arranged in a two-dimensional array}	2201/0446	. . Multicell plate, sequential
2035/1076	. . . {plurality or independently movable heads}	2201/0453	. . Multicell sequential and multitest, e.g. multiwavelength
35/1079	. . {with means for piercing stoppers or septums}	2201/0461	. . Simultaneous, e.g. video imaging
35/1081	. . {characterised by the means for relatively moving the transfer device and the containers in an horizontal plane (G01N 35/1011 takes precedence)}	2201/0469	. . One cell, sequential, e.g. successive samples
35/1083	. . . {with one horizontal degree of freedom}	2201/0476	. . Keyboard controlled, e.g. for plural analysis at one sample, channel selection, coding
2035/1086	. . . . {Cylindrical, e.g. variable angle}	2201/0484	. . Computer controlled
2035/1088	. . . . . {Coaxial with a carousel}	2201/0492	. . Automatised microscope
35/109	. . . {with two horizontal degrees of freedom}	2201/06	. Illumination; Optics
2035/1093	. . . . {Cylindrical, e.g. variable radius and angle}	2201/061	. . Sources
35/1095	. . {for supplying the samples to flow-through analysers (for a specific analyser see relevant groups, e.g. under G01N 15/00 , G01N 21/00 , G01N 27/00 , G01N 30/00 , H01J 49/00)}	2201/06106	. . . Plural sources used for calibration
35/1097	. . . {characterised by the valves (valves in general F16K)}	2201/06113	. . . Coherent sources; lasers
37/00	Details not covered by any other group of this subclass	2201/0612	. . . . Laser diodes
37/005	. {Measurement methods not based on established scientific theories}	2201/06126	. . . Large diffuse sources
2201/00	Features of devices classified in G01N 21/00	2201/06133	. . . . Light tables
2201/02	. Mechanical	2201/0614	. . . . Diffusing light tube with sample within
2201/021	. . Special mounting in general	2201/06146	. . . Multisources for homogeneity, as well sequential as simultaneous operation
2201/0212	. . . Liquid borne; swimming apparatus	2201/06153	. . . . the sources being LED's
2201/0214	. . . Airborne	2201/0616	. . . Ambient light is used
2201/0216	. . . Vehicle borne	2201/06166	. . . Line selective sources
2201/0218	. . . Submersible, submarine	2201/06173	. . . . IR sources from heated molecular species
2201/022	. . Casings	2201/0618	. . . . Halogene sources
		2201/06186	. . . Resistance heated; wire sources; lamelle sources
		2201/06193	. . . Secondary <i>in-situ</i> sources, e.g. fluorescent particles
		2201/062	. . LED's
		2201/0621	. . . Supply
		2201/0622	. . . Use of a compensation LED
		2201/0623	. . . Use of a reference LED
		2201/0624	. . . Compensating variation in output of LED source
		2201/0625	. . . Modulated LED
		2201/0626	. . . Use of several LED's for spatial resolution
		2201/0627	. . . Use of several LED's for spectral resolution

2201/0628	. . . Organic LED [OLED]	2201/102	. . Video camera
2201/063	. . Illuminating optical parts	2201/103	. . Scanning by mechanical motion of stage
2201/0631	. . . Homogeneising elements	2201/1035	. . . 3D motion
2201/0632	. . . . homogeneising by integrating sphere	2201/104	. . Mechano-optical scan, i.e. object and beam moving
2201/0633	. . . Directed, collimated illumination	2201/1042	. . . X, Y scan, i.e. object moving in X, beam in Y
2201/0634	. . . Diffuse illumination	2201/1045	. . . Spiral scan
2201/0635	. . . Structured illumination, e.g. with grating	2201/1047	. . . with rotating optics and moving stage
2201/0636	. . . Reflectors	2201/105	. . Purely optical scan
2201/0637	. . . . Elliptic	2201/1053	. . . System of scan mirrors for composite motion of beam
2201/0638	. . . Refractive parts	2201/1056	. . . Prism scan, diasporameter
2201/0639	. . . . Sphere lens	2201/106	. . Acousto-optical scan
2201/064	. . Stray light conditioning	2201/107	. . CRT flying spot scan
2201/0642	. . . Light traps; baffles	2201/108	. . Miscellaneous
2201/0644	. . . . Simple baffled tube construction	2201/1082	. . . Descanning
2201/0646	. . . Light seals	2201/1085	. . . Using optical fibre array and scanner
2201/0648	. . . Shutters	2201/1087	. . . Focussed scan beam, e.g. laser
2201/065	. . Integrating spheres	2201/11	. . Monitoring and controlling the scan
2201/0655	. . . Hemispheres	2201/112	. . . Grating pulse time encoder
2201/066	. . Modifiable path; multiple paths in one sample	2201/115	. . . Optical equalisation of scan intensity
2201/0662	. . . Comparing measurements on two or more paths in one sample	2201/117	. . . Indexed, memorised or programmed scan
2201/0664	. . . Using two ways, i.e. two devices in same path in one sample	2201/12	. Circuits of general importance; Signal processing
2201/0666	. . . Selectable paths; insertable multiple sources	2201/121	. . Correction signals
2201/0668	. . . Multiple paths; optimisable path length	2201/1211	. . . for temperature
2201/067	. . Electro-optic, magneto-optic, acousto-optic elements	2201/1212	. . . . and switch-off from upwarming
2201/0675	. . . SLM	2201/1214	. . . for humidity
2201/068	. . Optics, miscellaneous	2201/1215	. . . for interfering gases
2201/0683	. . . Brewster plate; polarisation controlling elements	2201/1217	. . . for index of solution, carrying fluids
2201/0686	. . . Cold filter; IR filter	2201/1218	. . . for pressure variations
2201/069	. . Supply of sources	2201/122	. . Kinetic analysis; determining reaction rate
2201/0691	. . . Modulated (not pulsed supply)	2201/1222	. . . Endpoint determination; reaction time determination
2201/0692	. . . Regulated sources; stabilised supply	2201/1224	. . . Polymerisation
2201/0693	. . . Battery powered circuitry	2201/1226	. . . Relaxation methods, e.g. temperature jump, field jump
2201/0694	. . . Microprocessor controlled supply	2201/1228	. . . Reading time being controlled, e.g. by microprocessor
2201/0695	. . . Supply to maintain constant beam intensity	2201/123	. . Conversion circuit
2201/0696	. . . Pulsed	2201/1232	. . . Log representation, e.g. for low transmittance
2201/0697	. . . . Pulsed lasers	2201/1235	. . . Measuring or displaying selectably absorbance or density
2201/0698	. . . . Using reference pulsed source	2201/1237	. . . Measuring extrema
2201/0699	. . . . Randomly pulsed source	2201/124	. . Sensitivity
2201/08	. Optical fibres; light guides	2201/1241	. . . Multirange
2201/0806	. . Light rod	2201/1242	. . . Validating, e.g. range invalidation, suspending operation
2201/0813	. . Arrangement of collimator tubes, glass or empty	2201/1244	. . . Ambient light detector, e.g. for invalidating
2201/082	. . Fibres for a reference path	2201/1245	. . . Averaging several measurements
2201/0826	. . Fibre array at source, distributing	2201/1247	. . . Thresholding
2201/0833	. . Fibre array at detector, resolving	2201/1248	. . . Validating from signal shape, slope, peak
2201/084	. . Fibres for remote transmission	2201/125	. . Digital circuitry
2201/0846	. . Fibre interface with sample, e.g. for spatial resolution	2201/126	. . Microprocessor processing
2201/0853	. . Movable fibre optical member, e.g. for scanning or selecting	2201/1263	. . . Microprocessor is used as variant to separate part circuits
2201/086	. . Modular construction, e.g. disconnectable fibre parts	2201/1266	. . . Interface card
2201/0866	. . Use of GRIN elements	2201/127	. . Calibration; base line adjustment; drift compensation
2201/0873	. . Using optically integrated constructions	2201/12707	. . . Pre-test of apparatus, e.g. dark test, sensor test
2201/088	. . Using a sensor fibre	2201/12715	. . . Zero adjustment, i.e. to verify calibration
2201/0886	. . . and using OTDR	2201/12723	. . . Self check capacity; automatic, periodic step of checking
2201/0893	. . Using fibres for resolution in time		
2201/10	. Scanning		
2201/101	. . Scanning measuring head		

2201/1273	. . . Check triggered by sensing conditions, e.g. ambient changes	2203/006	. . Crack, flaws, fracture or rupture
2201/12738	. . . Selectively initiating check	2203/0062	. . . Crack or flaws
2201/12746	. . . Calibration values determination	2203/0064	. . . . Initiation of crack
2201/12753	. . . . and storage	2203/0066	. . . . Propagation of crack
2201/12761	. . . . Precalibration, e.g. for a given series of reagents	2203/0067	. . . Fracture or rupture
2201/12769	. . . . and adjusting controls, e.g. zero and 100 %	2203/0069	. . Fatigue, creep, strain-stress relations or elastic constants
2201/12776	. . . . Automatic scaling up	2203/0071	. . . Creep
2201/12784	. . . . Base line obtained from computation, histogram	2203/0073	. . . Fatigue
2201/12792	. . . Compensating own radiation in apparatus	2203/0075	. . . Strain-stress relations or elastic constants
2201/128	. . Alternating sample and standard or reference part in one path	2203/0076	. . Hardness, compressibility or resistance to crushing
2201/1281	. . . Reflecting part, i.e. for autocollimation	2203/0078	. . . using indentation
2201/1283	. . . Opaque part	2203/008	. . . . Residual indentation measurement
2201/1285	. . . Standard cuvette	2203/0082	. . . . Indentation characteristics measured during load
2201/1286	. . . . More than one cuvette	2203/0083	. . . Rebound strike or reflected energy
2201/1288	. . . Calibration medium periodically inserted in one cell	2203/0085	. . . Compressibility
2201/129	. . Using chemometrical methods	2203/0087	. . . Resistance to crushing
2201/1293	. . . resolving multicomponent spectra	2203/0089	. . Biorheological properties
2201/1296	. . . using neural networks	2203/0091	. . Peeling or tearing
2201/13	. . Standards, constitution	2203/0092	. . Visco-elasticity, solidification, curing, cross-linking degree, vulcanisation or strength properties of semi-solid materials
2203/00	Investigating strength properties of solid materials by application of mechanical stress	2203/0094	. . . Visco-elasticity
2203/0001	. Type of application of the stress	2203/0096	. . Fibre-matrix interaction in composites
2203/0003	. . Steady	2203/0098	. Tests specified by its name, e.g. Charpy, Brinell, Mullen
2203/0005	. . Repeated or cyclic	2203/02	. Details not specific for a particular testing method
2203/0007	. . . Low frequencies up to 100 Hz	2203/0202	. . Control of the test
2203/0008	. . . High frequencies from 10 000 Hz	2203/0204	. . . Safety arrangements, e.g. remote control, emergency stop
2203/001	. . Impulsive	2203/0206	. . . Means for supplying or positioning specimens or exchangeable parts of the machine such as indenters...
2203/0012	. . Constant speed test	2203/0208	. . . Specific programs of loading, e.g. incremental loading or pre-loading
2203/0014	. Type of force applied	2203/021	. . . Treatment of the signal; Calibration
2203/0016	. . Tensile or compressive	2203/0212	. . . Theories, calculations
2203/0017	. . . Tensile	2203/0214	. . . . Calculations a priori without experimental data
2203/0019	. . . Compressive	2203/0216	. . . . Finite elements
2203/0021	. . Torsional	2203/0218	. . . . Calculations based on experimental data
2203/0023	. . Bending	2203/022	. . Environment of the test
2203/0025	. . Shearing	2203/0222	. . . Temperature
2203/0026	. . Combination of several types of applied forces	2203/0224	. . . . Thermal cycling
2203/0028	. . . Rotation and bending	2203/0226	. . . . High temperature; Heating means
2203/003	. Generation of the force	2203/0228	. . . . Low temperature; Cooling means
2203/0032	. . using mechanical means	2203/023	. . . Pressure
2203/0033	. . . Weight	2203/0232	. . . . High pressure
2203/0035	. . . Spring	2203/0234	. . . . Low pressure; Vacuum
2203/0037	. . . involving a rotating movement, e.g. gearing, cam, eccentric, or centrifuge effects	2203/0236	. . . Other environments
2203/0039	. . . Hammer or pendulum	2203/0238	. . . . Inert
2203/0041	. . . Human or animal power	2203/024	. . . . Corrosive
2203/0042	. . Pneumatic or hydraulic means	2203/0242	. . . . With circulation of a fluid
2203/0044	. . . Pneumatic means	2203/0244	. . . Tests performed " <u>in situ</u> " or after " <u>in situ</u> " use
2203/0046	. . . . Vacuum	2203/0246	. . . . Special simulation of " <u>in situ</u> " conditions, scale models or dummies
2203/0048	. . . Hydraulic means	2203/0248	. . . Tests "on-line" during fabrication
2203/005	. . Electromagnetic means	2203/025	. . Geometry of the test
2203/0051	. . . Piezoelectric means	2203/0252	. . . Monoaxial, i.e. the forces being applied along a single axis of the specimen
2203/0053	. . Cutting or drilling tools		
2203/0055	. . using mechanical waves, e.g. acoustic		
2203/0057	. . using stresses due to heating, e.g. conductive heating, radiative heating		
2203/0058	. Kind of property studied		

2203/0254	. . .	Biaxial, the forces being applied along two normal axes of the specimen	2203/0647	. . . .	Image analysis
2203/0256	. . .	Triaxial, i.e. the forces being applied along three normal axes of the specimen	2203/0652	. . . .	using contrasting ink, painting, staining
2203/0258	. . .	Non axial, i.e. the forces not being applied along an axis of symmetry of the specimen	2203/0658	. . .	using acoustic or ultrasonic detectors
2203/026	. .	Specifications of the specimen	2203/0664	. . .	using witness specimens
2203/0262	. . .	Shape of the specimen	2203/067	. . .	Parameter measured for estimating the property
2203/0264	. . . .	Beam	2203/0676	. . . .	Force, weight, load, energy, speed or acceleration
2203/0266	. . . .	Cylindrical specimens	2203/0682	. . . .	Spatial dimension, e.g. length, area, angle
2203/0268	. . . .	Dumb-bell specimens	2203/0688	. . . .	Time or frequency
2203/027	. . . .	Specimens with holes or notches	2203/0694	. . . .	Temperature
2203/0272	. . . .	Cruciform specimens	2223/00		Investigating materials by wave or particle radiation
2203/0274	. . . .	Tubular or ring-shaped specimens	2223/01	. . .	by radioactivity, nuclear decay
2203/0276	. . . .	Spherical specimens	2223/03	. . .	by transmission
2203/0278	. . . .	Thin specimens	2223/04	. . .	and measuring absorption
2203/028	. . . . .	One dimensional, e.g. filaments, wires, ropes or cables	2223/041	. . .	X-ray absorption fine structure [EXAFS]
2203/0282	. . . . .	Two dimensional, e.g. tapes, webs, sheets, strips, disks or membranes	2223/043	. . .	gamma ray resonance absorption (Mossbauer effect)
2203/0284	. . .	Bulk material, e.g. powders	2223/045	. . .	combination of at least 2 measurements (transmission and scatter)
2203/0286	. . .	Miniature specimen; Testing on microregions of a specimen	2223/05	. . .	by diffraction, scatter or reflection
2203/0288	. . .	Springs	2223/051	. . .	correcting for scatter
2203/029	. . . .	Leaf spring	2223/052	. . .	reflection
2203/0292	. . . .	Coil spring	2223/053	. . .	back scatter
2203/0294	. . . .	Airs-spring, air bag spring or bellows	2223/054	. . .	small angle scatter
2203/0296	. . .	Welds	2223/055	. . .	scatter raster collimator
2203/0298	. . .	Manufacturing or preparing specimens	2223/056	. . .	diffraction
2203/04	. .	Chucks, fixtures, jaws, holders or anvils	2223/0561	. . .	diffraction cameras
2203/0405	. . .	Features allowing alignment between specimen and chucks	2223/0563	. . .	measure of energy-dispersion spectrum of diffracted radiation
2203/0411	. . .	using pneumatic or hydraulic pressure	2223/0565	. . .	diffraction of electrons, e.g. LEED
2203/0417	. . .	using vacuum	2223/0566	. . .	analysing diffraction pattern
2203/0423	. . .	using screws	2223/0568	. . .	spectro-diffractometry
2203/0429	. . .	using adhesive bond; Gluing	2223/063	. . .	inelastic scatter, e.g. Compton effect
2203/0435	. . .	modifying the type of the force applied, e.g. the chuck transforms a compressive machine for applying a bending test	2223/064	. . .	interference of radiation, e.g. Borrmann effect
2203/0441	. . .	with dampers or shock absorbing means	2223/07	. . .	secondary emission
2203/0447	. . .	Holders for quick insertion/removal of test pieces	2223/071	. . .	combination of measurements, at least 1 secondary emission
2203/0452	. . .	Cushioning layer between test piece and grip	2223/072	. . .	combination of measurements, 2 kinds of secondary emission
2203/0458	. . .	characterised by their material	2223/073	. . .	use of a laser
2203/0464	. . .	with provisions for testing more than one specimen at the time	2223/074	. . .	activation analysis
2203/047	. . . .	in series	2223/0745	. . .	neutron-gamma activation analysis
2203/0476	. . . .	in parallel	2223/076	. . .	X-ray fluorescence
2203/0482	. . .	comprising sensing means	2223/0763	. . .	Compton background correcting
2203/0488	. . . .	Diamond anvil cells	2223/0766	. . .	X-ray fluorescence with indicator, tags
2203/0494	. . . .	Clamping ring, "whole periphery" clamping	2223/079	. . .	incident electron beam and measuring excited X-rays
2203/06	. .	Indicating or recording means; Sensing means	2223/08	. . .	incident electron beam and measuring cathode luminescence (U.V.)
2203/0605	. . .	Mechanical indicating, recording or sensing means	2223/081	. . .	incident ion beam, e.g. proton
2203/0611	. . .	Hydraulic or pneumatic indicating, recording or sensing means	2223/0813	. . .	incident ion beam and measuring X-rays [PIXE]
2203/0617	. . .	Electrical or magnetic indicating, recording or sensing means	2223/0816	. . .	incident ion beam and measuring secondary ion beam [SIMS]
2203/0623	. . . .	using piezo-electric gauges	2223/084	. . .	photo-electric effect
2203/0629	. . . .	using thin films, paintings	2223/085	. . .	photo-electron spectrum [ESCA, XPS]
2203/0635	. . . .	using magnetic properties	2223/086	. . .	Auger electrons
2203/0641	. . .	using optical, X-ray, ultra-violet, infrared or similar detectors	2223/09	. . .	exo-electron emission
			2223/095	. . .	tribo-emission
			2223/10	. . .	Different kinds of radiation or particles
			2223/1003	. . .	monochromatic

2223/1006	. . different radiations, e.g. X and alpha	2223/3307	. . . source and detector fixed; object moves
2223/101	. . electromagnetic radiation	2223/3308	. . . object translates
2223/1013	. . . gamma	2223/331	. . rocking curve analysis
2223/1016	. . . X-ray	2223/335	. . electronic scanning
2223/102	. . beta or electrons	2223/34	. . sensing means for gap between source and detector
2223/104	. . ions	2223/345	. . mathematical transformations on beams or signals, e.g. Fourier
2223/1045	. . . alpha	2223/348	. . ellipsoidal collector
2223/105	. . molecular or atomic beams	2223/351	. . prohibiting charge accumulation on sample substrate
2223/106	. . neutrons	2223/40	. Imaging
2223/1063	. . . fast	2223/401	. . image processing
2223/1066	. . . thermal	2223/402	. . mapping distribution of elements
2223/107	. . protons	2223/403	. . mapping with false colours
2223/108	. . positrons; electron-positron annihilation	2223/404	. . contrast medium
2223/11	. . neutrino	2223/405	. . mapping of a material property
2223/20	. Sources of radiation	2223/406	. . fluoroscopic image
2223/201	. . betatron	2223/407	. . stimuable phosphor sheet
2223/202	. . isotopes	2223/408	. . display on monitor
2223/203	. . synchrotron	2223/409	. . embedding or impregnating the object
2223/204	. . source created from radiated target	2223/41	. . imaging specifically internal structure
2223/205	. . natural source	2223/411	. . tv imaging from fluorescent screen
2223/206	. . sources operating at different energy levels	2223/412	. . use of image converter tube [PMT]
2223/30	. Accessories, mechanical or electrical features	2223/413	. . sensor array [CCD]
2223/301	. . portable apparatus	2223/414	. . stereoscopic system
2223/302	. . comparative arrangements	2223/415	. . radiographic film
2223/303	. . calibrating, standardising	2223/416	. . wrap around
2223/3032	. . . periodic calibration, e.g. with filter wheel	2223/417	. . recording with co-ordinate markings
2223/3035	. . . phantom	2223/418	. . electron microscope
2223/3037	. . . standards (constitution)	2223/419	. . computed tomograph
2223/304	. . electric circuits, signal processing	2223/42	. . image digitised, -enhanced in an image processor
2223/305	. . computer simulations	2223/421	. . digitised image, analysed in real time (recognition algorithms)
2223/306	. . computer control	2223/422	. . windows within the image
2223/307	. . cuvettes-sample holders	2223/423	. . multispectral imaging-multiple energy imaging
2223/3075	. . . correcting for the properties of the container, e.g. empty	2223/424	. . energy subtraction image processing (dual energy processing)
2223/308	. . support of radiation source	2223/425	. . temporal (time difference) subtraction processing
2223/309	. . support of sample holder	2223/426	. . image comparing, unknown with known substance
2223/31	. . temperature control	2223/427	. . stepped imaging (selected area of sample is changed)
2223/3103	. . . cooling, cryostats	2223/50	. Detectors
2223/3106	. . . heating, furnaces	2223/501	. . array
2223/311	. . high pressure testing, anvil cells	2223/5015	. . . linear array
2223/312	. . powder preparation	2223/502	. . ionisation chamber
2223/313	. . filters, rotating filter disc	2223/503	. . auxiliary reference detector
2223/314	. . chopper	2223/504	. . pin-diode
2223/315	. . monochromators	2223/505	. . scintillation
2223/316	. . collimators	2223/5055	. . . scintillation crystal coupled to PMT
2223/317	. . windows	2223/506	. . time-of-flight
2223/318	. . protective films	2223/507	. . secondary-emission detector
2223/319	. . using opaque penetrant medium	2223/508	. . photo-acoustic
2223/32	. . adjustments of elements during operation	2223/509	. . infra-red
2223/321	. . manipulator for positioning a part	2223/60	. Specific applications or type of materials
2223/322	. . immersed detecting head	2223/601	. . density profile
2223/323	. . irradiation range monitor, e.g. light beam	2223/602	. . crystal growth
2223/33	. . scanning, i.e. relative motion for measurement of successive object-parts	2223/603	. . superlattices
2223/3301	. . . beam is modified for scan, e.g. moving collimator	2223/604	. . monocrystal
2223/3302	. . . object and detector fixed	2223/605	. . phases
2223/3303	. . . object fixed; source and detector move		
2223/3304	. . . helicoidal scan		
2223/3305	. . . detector fixed; source and body moving		
2223/3306	. . . object rotates		

2223/606	. . texture	2291/012	. . Phase angle
2223/607	. . strain	2291/014	. . Resonance or resonant frequency
2223/608	. . superconductors	2291/015	. . Attenuation, scattering
2223/61	. . thin films, coatings	2291/017	. . Doppler techniques
2223/611	. . patterned objects; electronic devices	2291/018	. . Impedance
2223/6113	. . . printed circuit board [PCB]	2291/02	. Indexing codes associated with the analysed material
2223/6116	. . . semiconductor wafer	2291/021	. . Gases
2223/612	. . biological material	2291/0212	. . . Binary gases
2223/6123	. . . bone mineral	2291/0215	. . . Mixtures of three or more gases, e.g. air
2223/6126	. . . tissue	2291/0217	. . . Smoke, combustion gases
2223/613	. . moisture	2291/022	. . Liquids
2223/614	. . road surface	2291/0222	. . . Binary liquids
2223/615	. . composite materials, multilayer laminates	2291/0224	. . . Mixtures of three or more liquids
2223/616	. . earth materials	2291/0226	. . . Oils, e.g. engine oils
2223/617	. . ash in coal	2291/0228	. . . Aqueous liquids
2223/618	. . food	2291/023	. . Solids
2223/619	. . wood	2291/0231	. . . Composite or layered materials
2223/62	. . powders	2291/0232	. . . Glass, ceramics, concrete or stone
2223/621	. . tobacco	2291/0234	. . . Metals, e.g. steel
2223/622	. . paper	2291/0235	. . . Plastics; polymers; soft materials, e.g. rubber
2223/623	. . plastics	2291/0237	. . . Thin materials, e.g. paper, membranes, thin films
2223/624	. . steel, castings	2291/0238	. . . Wood
2223/625	. . nuclear fuels, laser imploded targets	2291/024	. . Mixtures
2223/626	. . radioactive material	2291/02408	. . . Solids in gases, e.g. particle suspensions
2223/6265	. . . sample with radioactive tracer, tag, label	2291/02416	. . . Solids in liquids
2223/627	. . tyres	2291/02425	. . . Liquids in gases, e.g. sprays
2223/628	. . tubes, pipes	2291/02433	. . . Gases in liquids, e.g. bubbles, foams
2223/629	. . welds, bonds, sealing compounds	2291/02441	. . . Liquids in porous solids
2223/63	. . turbine blades	2291/0245	. . . Gases in porous solids
2223/631	. . large structures, walls	2291/02458	. . . Solids in solids, e.g. granules
2223/632	. . residual life, life expectancy	2291/02466	. . . Biological material, e.g. blood
2223/633	. . thickness, density, surface weight (unit area)	2291/02475	. . . Tissue characterisation
2223/634	. . wear behaviour, roughness	2291/02483	. . . Other human or animal parts, e.g. bones
2223/635	. . fluids, granulates	2291/02491	. . . Materials with nonlinear acoustic properties
2223/636	. . fluid sample with radioactive sources	2291/025	. . Change of phase or condition
2223/637	. . liquid	2291/0251	. . . Solidification, icing, curing composites, polymerisation
2223/638	. . gas	2291/0252	. . . Melting, molten solids
2223/639	. . material in a container	2291/0253	. . . Condensation
2223/64	. . multiple-sample chamber, multiplicity of materials	2291/0254	. . . Evaporation
2223/641	. . particle sizing	2291/0255	. . . (Bio)chemical reactions, e.g. on biosensors
2223/642	. . moving sheet, web	2291/0256	. . . Adsorption, desorption, surface mass change, e.g. on biosensors
2223/6425	. . . correcting for web flutter	2291/0257	. . . . with a layer containing at least one organic compound
2223/643	. . object on conveyor	2291/0258	. . . Structural degradation, e.g. fatigue of composites, ageing of oils
2223/645	. . quality control	2291/028	. . Material parameters
2223/646	. . flaws, defects	2291/02809	. . . Concentration of a compound, e.g. measured by a surface mass change
2223/6462	. . . microdefects	2291/02818	. . . Density, viscosity
2223/6464	. . . radioactive substance into defect site	2291/02827	. . . Elastic parameters, strength or force
2223/6466	. . . flaws comparing to predetermined standards	2291/02836	. . . Flow rate, liquid level
2223/6468	. . . at different temperatures	2291/02845	. . . Humidity, wetness
2223/647	. . leak detection	2291/02854	. . . Length, thickness
2223/648	. . voids	2291/02863	. . . Electric or magnetic parameters
2223/649	. . porosity	2291/02872	. . . Pressure
2223/65	. . cavitation pits	2291/02881	. . . Temperature
2223/651	. . dust	2291/0289	. . . Internal structure, e.g. defects, grain size, texture
2223/652	. . impurities, foreign matter, trace amounts		
2223/66	. . multiple steps inspection, e.g. coarse/fine		
2291/00	Indexing codes associated with group G01N 29/00		
2291/01	. Indexing codes associated with the measuring variable		
2291/011	. . Velocity or travel time		

2291/04	. Wave modes and trajectories	chemical nature of the materials irrespective of the source organism.
2291/042	. . Wave modes	
2291/0421	. . . Longitudinal waves	
2291/0422	. . . Shear waves, transverse waves, horizontally polarised waves	
2291/0423	. . . Surface waves, e.g. Rayleigh waves, Love waves	
2291/0425	. . . Parallel to the surface, e.g. creep waves	
2291/0426	. . . Bulk waves, e.g. quartz crystal microbalance, torsional waves	
2291/0427	. . . Flexural waves, plate waves, e.g. Lamb waves, tuning fork, cantilever	
2291/0428	. . . Mode conversion	
2291/043	. . Complex trajectories	
2291/044	. . Internal reflections (echoes), e.g. on walls or defects	
2291/045	. . External reflections, e.g. on reflectors	
2291/048	. . Transmission, i.e. analysed material between transmitter and receiver	
2291/051	. . Perpendicular incidence, perpendicular propagation	
2291/052	. . Perpendicular incidence, angular propagation	
2291/055	. . Angular incidence, perpendicular propagation	
2291/056	. . Angular incidence, angular propagation	
2291/057	. . Angular incidence, parallel to surface propagation	
2291/10	. Number of transducers	
2291/101	. . one transducer	
2291/102	. . one emitter, one receiver	
2291/103	. . one emitter, two or more receivers	
2291/104	. . two or more emitters, one receiver	
2291/105	. . two or more emitters, two or more receivers	
2291/106	. . one or more transducer arrays	
2291/26	. Scanned objects	
2291/262	. . Linear objects	
2291/2623	. . . Rails; Railroads	
2291/2626	. . . Wires, bars, rods	
2291/263	. . Surfaces	
2291/2632	. . . flat	
2291/2634	. . . cylindrical from outside	
2291/2636	. . . cylindrical from inside	
2291/2638	. . . Complex surfaces	
2291/265	. . Spherical objects	
2291/267	. . Welds	
2291/2672	. . . Spot welding	
2291/2675	. . . Seam, butt welding	
2291/2677	. . . Lapp welding	
2291/269	. . Various geometry objects	
2291/2691	. . . Bolts, screws, heads	
2291/2692	. . . Tyres	
2291/2693	. . . Rotor or turbine parts	
2291/2694	. . . Wings or other aircraft parts	
2291/2695	. . . Bottles, containers	
2291/2696	. . . Wheels, Gears, Bearings	
2291/2697	. . . Wafer or (micro)electronic parts	
2291/2698	. . . Other discrete objects, e.g. bricks	
2333/00	Assays involving biological materials from specific organisms or of a specific nature	
NOTE		
In groups G01N 2333/47 - G01N 2333/994 indexing codes are assigned according to the		
2333/001	. by chemical synthesis	
2333/003	. . of Peptide-nucleic acids (PNAs)	
2333/005	. from viruses	
2333/01	. . DNA viruses	
2333/015	. . . Parvoviridae, e.g. feline panleukopenia virus, human Parvovirus	
2333/02	. . . Hepadnaviridae, e.g. hepatitis B virus	
2333/025	. . . Papovaviridae, e.g. papillomavirus, polyomavirus, SV40, BK virus, JC virus	
2333/03	. . . Herpetoviridae, e.g. pseudorabies virus	
2333/032	. . . . Pseudorabies virus, i.e. Aujeszky virus	
2333/035	. . . . Herpes simplex virus I or II	
2333/04	. . . . Varicella-zoster virus	
2333/045	. . . . . Cytomegalovirus	
2333/05	. . . . Epstein-Barr virus	
2333/055	. . . . Marek's disease virus	
2333/06	. . . . Infectious bovine rhinotracheitis virus	
2333/065	. . . Poxviridae, e.g. avipoxvirus	
2333/07	. . . . Vaccinia virus; Variola virus	
2333/075	. . . Adenoviridae	
2333/08	. . RNA viruses	
2333/085	. . . Picornaviridae, e.g. coxsackie virus, echovirus, enterovirus	
2333/09	. . . . Foot-and-mouth disease virus	
2333/095	. . . . Rhinovirus	
2333/10	. . . . Hepatitis A virus	
2333/105	. . . . Poliovirus	
2333/11	. . . Orthomyxoviridae, e.g. influenza virus	
2333/115	. . . Paramyxoviridae, e.g. parainfluenza virus	
2333/12	. . . . Mumps virus; Measles virus	
2333/125	. . . . Newcastle disease virus	
2333/13	. . . . Canine distemper virus	
2333/135	. . . . Respiratory syncytial virus	
2333/14	. . . Reoviridae, e.g. rotavirus, bluetongue virus, Colorado tick fever virus	
2333/145	. . . Rhabdoviridae, e.g. rabies virus, Duvenhage virus, Mokda virus, vesicular stomatitis virus	
2333/15	. . . Retroviridae, e.g. bovine leukaemia virus, feline leukaemia virus, feline leukaemia virus, human T-cell leukaemia-lymphoma virus	
2333/155	. . . . Lentiviridae, e.g. visna-maedi virus, equine infectious virus, FIV, SIV	
2333/16	. . . . . HIV-1, HIV-2	
2333/161	. . . . . gag-pol, e.g. p55, p24/25, p17/18, p.7, p6, p66/68, p51/52, p31/34, p32, p40	
2333/162	. . . . . env, e.g. gp160, gp110/120, gp41, V3, peptid T, DC4-Binding site	
2333/163	. . . . . Regulatory proteins, e.g. tat, nef, rev, vif, vpu, vpr, vpt, vpx	
2333/165	. . . Coronaviridae, e.g. avian infectious bronchitis virus	
2333/17	. . . . Porcine transmissible gastroenteritis virus	
2333/175	. . . Bunyaviridae, e.g. California encephalitis virus, Rift valley fever virus, Hantaan virus	
2333/18	. . . Togaviridae; Flaviviridae	
2333/181	. . . . Alphaviruses or Group A arboviruses, e.g. sindbis, VEE, EEE, WEE or semliki forest virus (rubella virus G01N 2333/19)	

2333/183	. . . .	Flaviviridae, e.g. pestivirus, mucosal disease virus, bovine viral diarrhoea virus, classical swine fever virus (hog cholera virus) or border disease virus	2333/36	. .	from Actinomyces; from Streptomyces (G)
2333/185	. . . . .	Flaviviruses or Group B arboviruses, e.g. yellow fever virus, japanese encephalitis, tick-borne encephalitis, dengue	2333/365	. .	from Actinoplanes (G)
2333/186	. . . . .	Hepatitis C; Hepatitis NANB	2333/37	. .	from fungi
2333/188	. . . . .	Hepatitis G; Hepatitis NANBNCNDNE	2333/375	. .	from Basidiomycetes
2333/19	. . . .	Rubella virus	2333/38	. .	from Aspergillus
2333/195	. .	from bacteria	2333/385	. .	from Penicillium
NOTE			2333/39	. .	from yeasts
In groups G01N 2333/20 - G01N 2333/365 , where appropriate, after the bacteria terminology, the indication of the order (O), family (F) or genus (G) of the bacteria is given in brackets.			2333/395	. . .	from Saccharomyces
2333/20	. .	from Spirochaetales (O), e.g. Treponema, Leptospira	2333/40	. . .	from Candida
2333/205	. .	from Campylobacter (G)	2333/405	. .	from algae
2333/21	. .	from Pseudomonadaceae (F)	2333/41	. .	from lichens
2333/212	. . .	Moraxellaceae, e.g. Acinetobacter, Moraxella, Oligella or Psychrobacter	2333/415	. .	from plants
2333/215	. .	from Halobacteriaceae (F)	2333/42	. .	Lectins, e.g. concanavalin, phytohaemagglutinin
2333/22	. .	from Neisseriaceae (F), e.g. Acinetobacter	2333/425	. .	Zeins
2333/225	. .	from Alcaligenes (G)	2333/43	. .	Sweetening agents, e.g. thaumatin, monellin
2333/23	. .	from Brucella (G)	2333/435	. .	from animals; from humans
2333/235	. .	from Bordetella (G)	2333/43504	. . .	from invertebrates
2333/24	. .	from Enterobacteriaceae (F), e.g. Citrobacter, Serratia, Proteus, Providencia, Morganella, Yersinia	2333/43508	. . .	from crustaceans
2333/245	. . .	Escherichia (G)	2333/43513	. . .	from arachnidae
2333/25	. . .	Shigella (G)	2333/43517	. . . .	from spiders
2333/255	. . .	Salmonella (G)	2333/43521	. . . .	from scorpions
2333/26	. . .	Klebsiella (G)	2333/43526	. . .	from worms
2333/265	. . .	Enterobacter (G)	2333/4353	. . . .	from nematodes
2333/27	. . .	Erwinia (G)	2333/43534	. . . . .	from Caenorhabditis
2333/275	. . .	Hafnia (G)	2333/43539	. . . .	from cestodes
2333/28	. .	from Vibrionaceae (F)	2333/43543	. . . . .	from Taenia
2333/285	. .	from Pasteurellaceae (F), e.g. Haemophilus influenza	2333/43547	. . . .	from trematodes
2333/29	. .	from Richettsiales (o)	2333/43552	. . .	from insects
2333/295	. .	from Chlamydiales (o)	2333/43556	. . . .	from ticks
2333/30	. .	from Mycoplasmatales, e.g. Pleuropneumonia-like organisms [PPLO]	2333/4356	. . . .	from wasps
2333/305	. .	from Micrococcaceae (F)	2333/43565	. . . .	from bees
2333/31	. . .	from Staphylococcus (G)	2333/43569	. . . .	from flies
2333/315	. .	from Streptococcus (G), e.g. Enterococci	2333/43573	. . . . .	from Drosophila
2333/3153	. . .	Streptokinase	2333/43578	. . . .	from silkworm
2333/3156	. . .	from Streptococcus pneumoniae (Pneumococcus) (Streptokinase G01N 2333/3153)	2333/43582	. . . .	from mites
2333/32	. .	from Bacillus (G)	2333/43586	. . . .	from fleas
2333/325	. . .	Bacillus thuringiensis crystal protein (delta-endotoxin)	2333/43591	. . . .	from mosquitoes
2333/33	. .	from Clostridium (G)	2333/43595	. . .	from coelenteratae, e.g. medusae
2333/335	. .	from Lactobacillus (G)	2333/44	. .	from protozoa
2333/34	. .	from Corynebacterium (G)	2333/445	. . .	Plasmodium
2333/345	. .	from Brevibacterium (G)	2333/45	. . .	Toxoplasma
2333/35	. .	from Mycobacteriaceae (F)	2333/455	. . .	Eimeria
2333/355	. .	from Nocardia (G)	2333/46	. .	from vertebrates
			2333/4603	. . .	from fish
			2333/4606	. . .	from amphibians
			2333/4609	. . .	from reptiles
			2333/4613	. . . .	Snake venom
			2333/4616	. . . . .	from Russell's viper
			2333/462	. . . . .	from Agkistrodon sp., e.g. acutase, ACTE
			2333/4623	. . . . .	from Agkistrodon rhodostoma (Malayan pit viper); Arvin (R); Batroboxin; Ancrod
			2333/4626	. . . . .	from Agkistrodon contortrix contortrix (copperhead snake); Protac (R)
			2333/463	. . . . .	from Croatalus adamanteus (Eastern Diamondback rattlesnake); Crotolase
			2333/4633	. . . . .	from Echis carinatus; Ecarin
			2333/4636	. . . . .	from Bothrops sp.
			2333/464	. . . . .	from Bothrops atrox; Reptilase; Atroxin
			2333/4643	. . . . .	from Bothrops jararaca; Botrocetin
			2333/4646	. . . . .	from Oxyuran(eo)us scutellatus (Taipan snake of Elapidae family)

2333/465	. . .	from birds	2333/521	. . .	Chemokines
2333/47	. . .	Assays involving proteins of known structure or function as defined in the subgroups	2333/522	. . . .	Alpha-chemokines, e.g. NAP-2, ENA-78, GRO-alpha/MGSA/NAP-3, GRO-beta/MIP-2alpha, GRO-gamma/MIP-2beta, IP-10, GCP-2, MIG, PBSF, PF-4 or KC
2333/4701	. . . .	Details	2333/523	. . . .	Beta-chemokines, e.g. RANTES, I-309/TCA-3, MIP-1alpha, MIP-1beta/ACT-2/LD78/SCIF, MCP-1/MCAF, MCP-2, MCP-3, LDCF-1 or LDCF-2
2333/4703	. . . . .	Regulators; Modulating activity	2333/524	. . .	Thrombopoietin, i.e. C-MPL ligand
2333/4704	. . . . .	Inhibitors; Suppressors	2333/525	. . .	Tumor necrosis factor [TNF]
2333/4706	. . . . .	stimulating, promoting or activating activity	2333/5255	. . . .	Lymphotoxin [LT]
2333/4707	. . . . .	Guanosine triphosphatase activating protein, GAP	2333/53	. . .	Colony-stimulating factor [CSF]
2333/4709	. . . . .	Amyloid plaque core protein	2333/535	. . . .	Granulocyte CSF; Granulocyte-macrophage CSF
2333/471	. . . . .	Pregnancy proteins, e.g. placenta proteins, alpha-feto-protein, pregnancy specific beta glycoprotein	2333/54	. . .	Interleukins [IL]
2333/4712	. . . . .	Muscle proteins, e.g. myosin, actin, protein	2333/5403	. . . .	IL-3
2333/4713	. . . . .	Plasma globulins, lactoglobulin	2333/5406	. . . .	IL-4
2333/4715	. . . . .	Cytokine-induced proteins	2333/5409	. . . .	IL-5
2333/4716	. . . . .	Complement proteins, e.g. anaphylatoxin, C3a, C5a	2333/5412	. . . .	IL-6
2333/4718	. . . . .	Lipocortins	2333/5415	. . . .	Leukaemia inhibitory factor [LIF]
2333/4719	. . . . .	G-proteins	2333/5418	. . . .	IL-7
2333/4721	. . . . .	Cationic antimicrobial peptides, e.g. defensins	2333/5421	. . . .	IL-8
2333/4722	. . . . .	Proteoglycans, e.g. aggrecan	2333/5425	. . . .	IL-9
2333/4724	. . . . .	Lectins	2333/5428	. . . .	IL-10
2333/4725	. . . . .	Mucins, e.g. human intestinal mucin	2333/5431	. . . .	IL-11
2333/4727	. . . . .	Calcium binding proteins, e.g. calmodulin	2333/5434	. . . .	IL-12
2333/4728	. . . . .	alpha-Glycoproteins	2333/5437	. . . .	IL-13
2333/473	. . . . .	Recognins, e.g. malignin	2333/544	. . . .	IL-14
2333/4731	. . . . .	Casein	2333/5443	. . . .	IL-15
2333/4733	. . . . .	Acute pancreatitis-associated protein	2333/5446	. . . .	IL-16
2333/4734	. . . . .	Villin	2333/545	. . . .	IL-1
2333/4736	. . . . .	Retinoblastoma protein	2333/55	. . . .	IL-2
2333/4737	. . . . .	C-reactive protein	2333/555	. . .	Interferons [IFN]
2333/4739	. . . . .	Cyclin; Prad 1	2333/56	. . . .	IFN-alpha
2333/474	. . . . .	Pancreatic thread protein; Reg protein	2333/565	. . . .	IFN-beta
2333/4742	. . . . .	Keratin; Cytokeratin	2333/57	. . . .	IFN-gamma
2333/4743	. . . . .	Bactericidal/Permeability-increasing protein BPI	2333/575	. .	Hormones (derived from pro-opiomelanocortin, pro-enkephalin or pro-dynorphin G01N 2333/665, corticotropin G01N 2333/695)
2333/4745	. . . . .	Insulin-like growth factor binding protein	2333/5751	. . .	Corticotropin releasing factor [CRF] (Urotensin)
2333/4746	. . . . .	Cancer-associated SCM-recognition factor, CRISPP	2333/5752	. . .	Placental lactogen; Chorionic Somatomammotropin
2333/4748	. . . . .	p53	2333/5753	. . .	Calcitonin gene related peptide
2333/475	. .	Assays involving growth factors	2333/5754	. . .	Endothelin, vasoactive intestinal contractor [VIC]
2333/4753	. . .	Hepatocyte growth factor; Scatter factor; Tumor cytotoxic factor II	2333/5755	. . .	Neuropeptide Y
2333/4756	. . .	Neuregulins, i.e. p185erbB2 ligands, glial growth factor, heregulin, ARIA, neu differentiation factor	2333/5756	. . .	Prolactin
2333/48	. . .	Nerve growth factor [NGF]	2333/5757	. . .	Vasoactive intestinal peptide [VIP] or related peptides
2333/485	. . .	Epidermal growth factor [EGF] (urogastrone)	2333/5758	. . .	Gastrin releasing peptide
2333/49	. . .	Platelet-derived growth factor [PDGF]	2333/5759	. . .	Thymosin or related peptides
2333/495	. . .	Transforming growth factor [TGF]	2333/58	. . .	Atrial natriuretic factor complex; Atriopeptin; Atrial natriuretic peptide [ANP]; Brain natriuretic peptide [BNP, proBNP]; Cardionatrin; Cardiodilatin
2333/50	. . .	Fibroblast growth factors [FGF]	2333/585	. . .	Calcitonins
2333/501	. . . .	acidic FGF [aFGF]	2333/59	. . .	Follicle-stimulating hormone [FSH]; Chorionic gonadotropins, e.g. HCG; Luteinising hormone [LH]; Thyroid-stimulating hormone [TSH]
2333/503	. . . .	basic FGF [bFGF]	2333/595	. . .	Gastrins; Cholecystokinins [CCK]
2333/505	. . .	Erythropoietin [EPO]			
2333/51	. . .	Bone morphogenetic factor; Osteogenins; Osteogenic factor; Bone-inducing factor			
2333/515	. . .	Angiogenesis factors; Angiogenin			
2333/52	. .	Assays involving cytokines			

2333/60	. . .	Growth-hormone releasing factors (GH-RF) (Somatoliberin)	2333/70585	. . .	CD44
2333/605	. . .	Glucagons	2333/70589	. . .	CD45
2333/61	. . .	Growth hormones [GH] (Somatotropin)	2333/70592	. . .	CD52
2333/62	. . .	Insulins	2333/70596	. . .	Molecules with a "CD"-designation not provided for elsewhere in G01N 2333/705
2333/63	. . .	Motilins	2333/71	. . .	for growth factors; for growth regulators
2333/635	. . .	Parathyroid hormone (parathormone); Parathyroid hormone-related peptides	2333/715	. . .	for cytokines; for lymphokines; for interferons
2333/64	. . .	Relaxins	2333/7151	. . . .	for tumor necrosis factor [TNF]; for lymphotoxin [LT]
2333/645	. . .	Secretins	2333/7153	. . . .	or colony-stimulating factors [CSF]
2333/65	. . .	Insulin-like growth factors (Somatomedins), e.g. IGF-1, IGF-2	2333/7155	. . . .	for interleukins [IL]
2333/655	. . .	Somatostatins	2333/7156	. . . .	for interferons [IFN]
2333/66	. . .	Thymopoiетins	2333/7158	. . . .	for chemokines
2333/665	. .	Assays involving proteins derived from pro-opiomelanocortin, pro-enkephalin or pro-dynorphin	2333/72	. . .	for hormones (for neuromediators G01N 2333/70571)
2333/67	. . .	Lipotropins, e.g. beta, gamma lipotropin	2333/723	. . . .	Steroid/thyroid hormone superfamily, e.g. GR, EcR, androgen receptor, oestrogen receptor
2333/675	. . .	beta-Endorphins	2333/726	. . . .	G protein coupled receptor, e.g. TSHR-thyrotropin-receptor, LH/hCG receptor, FSH
2333/68	. . .	Melanocyte-stimulating hormone [MSH]	2333/745	. .	Assays involving non-enzymic blood coagulation factors
2333/685	. . . .	alpha-Melanotropin	2333/7452	. . .	Thrombomodulin
2333/69	. . . .	beta-Melanotropin	2333/7454	. . .	Tissue factor (tissue thromboplastin, Factor III)
2333/695	. . .	Corticotropin [ACTH]	2333/7456	. . .	Factor V
2333/70	. . .	Enkephalins	2333/7458	. . .	Protein S
2333/705	. .	Assays involving receptors, cell surface antigens or cell surface determinants	2333/75	. . .	Fibrin; Fibrinogen
2333/70503	. . .	Immunoglobulin superfamily, e.g. VCAMs, PECAM, LFA-3	2333/755	. . .	Factors VIII, e.g. factor VIII C [AHF], factor VIII Ag [VWF]
2333/70507	. . . .	C2D	2333/76	. .	Assays involving albumins other than in routine use for blocking surfaces or for anchoring haptens during immunisation
2333/7051	. . . .	T-cell receptor (TcR)-CD3 complex	2333/765	. . .	Serum albumin, e.g. HSA
2333/70514	. . . .	CD4	2333/77	. . .	Ovalbumin
2333/70517	. . . .	CD8	2333/775	. .	Apolipopptides
2333/70521	. . . .	CD28, CD152	2333/78	. .	Connective tissue peptides, e.g. collagen, elastin, laminin, fibronectin, vitronectin, cold insoluble globulin [CIG]
2333/70525	. . . .	ICAM molecules, e.g. CD50, CD54, CD102	2333/785	. .	Alveolar surfactant peptides; Pulmonary surfactant peptides
2333/70528	. . . .	CD58	2333/79	. .	Transferrins, e.g. lactoferrins, ovotransferrins
2333/70532	. . . .	B7 molecules, e.g. CD80, CD86	2333/795	. .	Porphyryn- or corrin-ring-containing peptides
2333/70535	. . . .	Fc-receptors, e.g. CD16, CD32, CD64 (CD2314/705F)	2333/80	. .	Cytochromes
2333/70539	. . . .	MHC-molecules, e.g. HLA-molecules	2333/805	. .	Haemoglobins; Myoglobins
2333/70542	. . . .	CD106	2333/81	. .	Protease inhibitors
2333/70546	. . .	Integrin superfamily, e.g. VLAs, leuCAM, GPIIb/GPIIIa, LPAM	2333/8103	. .	Exopeptidase (E.C. 3.4.11-19) inhibitors
2333/7055	. . . .	Integrin beta1-subunit-containing molecules, e.g. CD29, CD49	2333/8107	. .	Endopeptidase (E.C. 3.4.21-99) inhibitors
2333/70553	. . . .	Integrin beta2-subunit-containing molecules, e.g. CD11, CD18	2333/811	. . .	Serine protease (E.C. 3.4.21) inhibitors
2333/70557	. . . .	Integrin beta3-subunit-containing molecules, e.g. CD41, CD51, CD61	2333/8114	. . . .	Kunitz type inhibitors
2333/7056	. . .	Selectin superfamily, e.g. LAM-1, GlyCAM, ELAM-1, PADGEM	2333/8117	. . . .	Bovine/basic pancreatic trypsin inhibitor (BPTI, aprotinin)
2333/70564	. . . .	Selectins, e.g. CD62	2333/8121	. . . .	Serpins
2333/70567	. . .	Nuclear receptors, e.g. retinoic acid receptor [RAR], RXR, nuclear orphan receptors	2333/8125	. . . .	Alpha-1-antitrypsin
2333/70571	. . .	for neuromediators, e.g. serotonin receptor, dopamine receptor	2333/8128	. . . .	Antithrombin III
2333/70575	. . .	NGF/TNF-superfamily, e.g. CD70, CD95L, CD153 or CD154 (NGF G01N 2333/48 , TNF G01N 2333/525)	2333/8132	. . . .	Plasminogen activator inhibitors
2333/70578	. . .	NGF-receptor/TNF-receptor superfamily, e.g. CD27, CD30 CD40 or CD95 (NGF-receptor G01N 2333/71 , TNF-receptor G01N 2333/7151)	2333/8135	. . . .	Kazal type inhibitors, e.g. pancreatic secretory inhibitor or ovomucoid
2333/70582	. . .	CD71	2333/8139	. . .	Cysteine protease (E.C. 3.4.22) inhibitors, e.g. cystatin
			2333/8142	. . .	Aspartate protease (E.C. 3.4.23) inhibitors, e.g. HIV protease inhibitors
			2333/8146	. . .	Metalloprotease (E.C. 3.4.24) inhibitors, e.g. tissue inhibitor of metallo proteinase, TIMP

2333/815	. . from leeches, e.g. hirudin, eglin
2333/82	. Translation products from oncogenes
2333/825	. Metallothioneins
2333/90	. Enzymes; Proenzymes
NOTE	
Enzymes are generally categorised below according to the "Nomenclature and Classification of Enzymes" of the International Commission on Enzymes. Where appropriate, this designation appears in the groups below in parenthesis.	
2333/9005	. . Enzymes with nucleic acid structure; e.g. ribozymes
2333/901	. . Antibodies with enzymatic activity; e.g. abzymes
2333/9015	. . Ligases (6)
2333/902	. . Oxidoreductases (1.)
2333/90203	. . . acting on the aldehyde or oxo group of donors (1.2)
2333/90206	. . . acting on the CH-CH group of donors (1.3)
2333/90209	. . . acting on NADH or NADPH (1.6), e.g. those with a heme protein as acceptor (1.6.2) (general), Cytochrome-b5 reductase (1.6.2.2) or NADPH-cytochrome P450 reductase (1.6.2.4)
2333/90212	. . . acting on a sulfur group of donors (1.8)
2333/90216	. . . acting on a heme group of donors (1.9)
2333/90219	. . . acting on diphenols and related substances as donors (1.10)
2333/90222	. . . . with oxygen as acceptor (1.10.3) in general
2333/90225	. . . . with a definite EC number (1.10.3.-)
2333/90229	. . . . . Catechol oxidase, i.e. Tyrosinase (1.10.3.1)
2333/90232	. . . . . Laccase (1.10.3.2)
2333/90235	. . . . . Ascorbate oxidase (1.10.3.3)
2333/90238	. . . acting on hydrogen as donor (1.12)
2333/90241	. . . acting on single donors with incorporation of molecular oxygen, i.e. oxygenases (1.13)
2333/90245	. . . acting on paired donors with incorporation of molecular oxygen (1.14)
2333/90248	. . . . with NADH or NADPH as one of the donors, and incorporation of one atom of oxygen 1.14.13
2333/90251	. . . . . with a definite EC number (1.14.13.-)
2333/90254	. . . . . Nitric-oxide synthase (NOS; 1.14.13.39)
2333/90258	. . . . with a reduced iron-sulfur protein as one donor (1.14.15) in general
2333/90261	. . . . . with a definite EC number (1.14.15.-)
2333/90264	. . . . . Steroid 11 beta monooxygenase (P-450 protein)(1.14.15.4)
2333/90267	. . . . . Cholesterol monooxygenase (cytochrome P 450sc)(1.14.15.6)
2333/9027	. . . . . Miscellaneous (1.14.99)
2333/90274	. . . . . with a definite EC number (1.14.99.-)
2333/90277	. . . . . Steroid 17 alpha-monooxygenase (1.14.99.9)
2333/9028	. . . . . Steroid 21-monooxygenase (1.14.99.10)
2333/90283	. . . acting on superoxide radicals as acceptor (1.15)
2333/90287	. . . oxidising metal ions (1.16)
2333/9029	. . . acting on -CH ₂ - groups (1.17)
2333/90293	. . . acting on reduced ferredoxin as donor (1.18)
2333/90296	. . . acting on reduced flavodoxin as donor (1.19)
2333/904	. . . acting on CHOH groups as donors, e.g. glucose oxidase, lactate dehydrogenase (1.1)

2333/906	. . . acting on nitrogen containing compounds as donors (1.4, 1.5, 1.7)
2333/90605	. . . . acting on the CH-NH ₂ group of donors (1.4)
2333/90611	. . . . . with NAD or NADP as acceptor (1.4.1) in general
2333/90616	. . . . . with a definite EC number (1.4.1.-)
2333/90622	. . . . . Phenylalanine dehydrogenase (1.4.1.20)
2333/90627	. . . . . with a cytochrome as acceptor (1.4.2)
2333/90633	. . . . . with oxygen as acceptor (1.4.3) in general
2333/90638	. . . . . with a definite EC number (1.4.3.-)
2333/90644	. . . . . D-Amino acid oxidase (1.4.3.3)
2333/9065	. . . . acting on CH-NH groups of donors (1.5)
2333/90655	. . . . . with NAD or NADP as acceptor (1.5.1) in general
2333/90661	. . . . . with a definite EC number (1.5.1.-)
2333/90666	. . . . . Dihydrofolate reductase [DHFR] (1.5.1.3)
2333/90672	. . . . . with oxygen as acceptor (1.5.3) in general
2333/90677	. . . . . with a definite EC number (1.5.3.-)
2333/90683	. . . . . Sarcosine oxidase (1.5.3.1)
2333/90688	. . . . acting on other nitrogen compounds as donors (1.7)
2333/90694	. . . . . with oxygen as acceptor (1.7.3), e.g. uricase (1.7.3.3)
2333/908	. . . acting on hydrogen peroxide as acceptor (1.11)
2333/91	. . Transferases (2.)
2333/91005	. . . transferring one-carbon groups (2.1)
2333/91011	. . . . Methyltransferases (general) (2.1.1.)
2333/91017	. . . . . with definite EC number (2.1.1.-)
2333/91022	. . . . . Catechilmethyltransferases (2.1.1.6)
2333/91028	. . . . Hydroxymethyl-, formyl-transferases (2.1.2)
2333/91034	. . . . Carboxyl- and carbamoyl transferases (2.1.3)
2333/9104	. . . Aldehyde and ketone transferases (2.2)
2333/91045	. . . Acyltransferases (2.3)
2333/91051	. . . . Acyltransferases other than aminoacyltransferases (general) (2.3.1)
2333/91057	. . . . . with definite EC number (2.3.1.-)
2333/91062	. . . . . Chloramphenicol-acetyltransferases (2.3.1.28)
2333/91068	. . . . . Chalcone synthases (2.3.1.74)
2333/91074	. . . . Aminoacyltransferases (general) (2.3.2)
2333/9108	. . . . . with definite EC number (2.3.2.-)
2333/91085	. . . . . Transglutaminases; Factor XIIIq (2.3.2.13)
2333/91091	. . . Glycosyltransferases (2.4)
2333/91097	. . . . Hexosyltransferases (general) (2.4.1)
2333/91102	. . . . . with definite EC number (2.4.1.-)
2333/91108	. . . . . Levansucrases (2.4.1.10)
2333/91114	. . . . . Cellulose synthases (2.4.1.12)
2333/9112	. . . . . Sucrose synthases (2.4.1.13)
2333/91125	. . . . . Sucrose phosphate synthases (2.4.1.14)
2333/91131	. . . . . Glucan branching enzymes (2.4.1.18)
2333/91137	. . . . . Cyclomalto dextrin glucano transferases (2.4.1.19)
2333/91142	. . . . Pentosyltransferases (2.4.2)
2333/91148	. . . . transferring other glycosyl groups (2.4.99)
2333/91154	. . . . transferring alkyl or aryl groups other than methyl groups (2.5)
2333/9116	. . . transferring alkyl or aryl groups other than methyl groups (2.5)
2333/91165	. . . . general (2.5.1)

2333/91171	. . . . .	with definite EC number (2.5.1.-)	2333/942	. . . . .	acting on beta-1, 4-glucosidic bonds, e.g. cellulase
2333/91177	. . . . .	Glutathione transferases (2.5.1.18)	2333/944	. . . . .	acting on alpha-1, 6-glucosidic bonds, e.g. isoamylase, pullulanase
2333/91182	. . . . .	Enolpyruvylshikimate-phosphate synthases (2.5.1.19)	2333/946	. . . . .	Dextranase
2333/91188	. . . . .	transferring nitrogenous groups (2.6)	2333/948	. . . . .	acting on peptide bonds (3.4)
2333/91194	. . . . .	transferring sulfur containing groups (2.8)	2333/95	. . . . .	Proteinases, i.e. endopeptidases (3.4.21-3.4.99)
2333/912	. . . . .	transferring phosphorus containing groups, e.g. kinases (2.7)	2333/9506	. . . . .	derived from viruses
2333/91205	. . . . .	Phosphotransferases in general	2333/9513	. . . . .	derived from RNA viruses
2333/9121	. . . . .	with an alcohol group as acceptor (2.7.1), e.g. general tyrosine, serine or threonine kinases	2333/952	. . . . .	derived from bacteria
2333/91215	. . . . .	with a definite EC number (2.7.1.-)	2333/954	. . . . .	bacteria being <i>Bacillus</i>
2333/9122	. . . . .	Thymidine kinase (2.7.1.21)	2333/956	. . . . .	<i>Bacillus subtilis</i> or <i>Bacillus licheniformis</i>
2333/91225	. . . . .	with a carboxyl group as acceptor (2.7.2)	2333/958	. . . . .	derived from fungi
2333/9123	. . . . .	with a nitrogenous group as acceptor (2.7.3), e.g. histidine kinases	2333/96	. . . . .	from yeast
2333/91235	. . . . .	with a phosphate group as acceptor (2.7.4)	2333/962	. . . . .	from <i>Aspergillus</i>
2333/9124	. . . . .	Diphosphotransferases (2.7.6)	2333/964	. . . . .	derived from animal tissue
2333/91245	. . . . .	Nucleotidyltransferases (2.7.7)	2333/96402	. . . . .	from non-mammals
2333/9125	. . . . .	with a definite EC number (2.7.7.-)	2333/96405	. . . . .	in general
2333/91255	. . . . .	DNA-directed RNA polymerase (2.7.7.6)	2333/96408	. . . . .	with EC number
2333/9126	. . . . .	DNA-directed DNA polymerase (2.7.7.7)	2333/96411	. . . . .	Serine endopeptidases (3.4.21)
2333/91265	. . . . .	Polyribonucleotide nucleotidyl transferases, i.e. polynucleotide phosphorylase (2.7.7.8)	2333/96413	. . . . .	Cysteine endopeptidases (3.4.22)
2333/9127	. . . . .	DNA nucleotidyl-exotransferases, i.e. terminal nucleotidyl transferases (2.7.7.31)	2333/96416	. . . . .	Aspartic endopeptidases (3.4.23)
2333/91275	. . . . .	RNA-directed RNA polymerases, e.g. replicases (2.7.7.48)	2333/96419	. . . . .	Metalloendopeptidases (3.4.24)
2333/9128	. . . . .	RNA-directed DNA polymerases, e.g. RT (2.7.7.49)	2333/96422	. . . . .	from snakes
2333/91285	. . . . .	RNA uridylyltransferases (2.7.7.52)	2333/96425	. . . . .	from mammals
2333/9129	. . . . .	Transferases for other substituted phosphate groups (2.7.8)	2333/96427	. . . . .	in general
2333/91295	. . . . .	with paired acceptors (2.7.9)	2333/9643	. . . . .	with EC number
2333/914	. . . . .	Hydrolases (3)	2333/96433	. . . . .	Serine endopeptidases (3.4.21)
2333/916	. . . . .	acting on ester bonds (3.1), e.g. phosphatases (3.1.3), phospholipases C or phospholipases D (3.1.4)	2333/96436	. . . . .	Granzymes
2333/918	. . . . .	Carboxylic ester hydrolases (3.1.1)	2333/96438	. . . . .	Dibasic site splicing serine proteases, e.g. furin
2333/92	. . . . .	Triglyceride splitting, e.g. by means of lipase	2333/96441	. . . . .	with definite EC number
2333/922	. . . . .	Ribonucleases (RNAses); Deoxyribonucleases (DNAses)	2333/96444	. . . . .	Factor X (3.4.21.6)
2333/924	. . . . .	acting on glycosyl compounds (3.2)	2333/96447	. . . . .	Factor VII (3.4.21.21)
2333/926	. . . . .	acting on alpha -1, 4-glucosidic bonds, e.g. hyaluronidase, invertase, amylase	2333/9645	. . . . .	Factor IX (3.4.21.22)
2333/928	. . . . .	acting on alpha -1, 4-glucosidic bonds, e.g. hyaluronidase, invertase, amylase	2333/96452	. . . . .	Factor XI (3.4.21.27)
2333/93	. . . . .	Fungal source	2333/96455	. . . . .	Kallikrein (3.4.21.34; 3.4.21.35)
2333/932	. . . . .	alpha-amylase from plant source	2333/96458	. . . . .	Factor XII (3.4.21.38)
2333/934	. . . . .	Glucoamylase	2333/96461	. . . . .	Protein C (3.4.21.69)
2333/936	. . . . .	acting on beta-1, 4 bonds between N-acetylmuramic acid and 2-acetyl-amino 2-deoxy-D-glucose, e.g. lysozyme	2333/96463	. . . . .	Blood coagulation factors not provided for in a preceding group or according to more than one of the proceeding groups
2333/938	. . . . .	acting on beta-galactose-glycoside bonds, e.g. beta-galactosidase	2333/96466	. . . . .	Cysteine endopeptidases (3.4.22)
2333/94	. . . . .	acting on alpha-galactose-glycoside bonds, e.g. alpha-galactosidase	2333/96469	. . . . .	Interleukin 1-beta convertase-like enzymes
			2333/96472	. . . . .	Aspartic endopeptidases (3.4.23)
			2333/96475	. . . . .	with definite EC number
			2333/96477	. . . . .	Pepsin (3.4.23.1; 3.4.23.2; 3.4.23.3)
			2333/9648	. . . . .	Chymosin, i.e. rennin (3.4.23.4)
			2333/96483	. . . . .	Renin (3.4.23.15)
			2333/96486	. . . . .	Metalloendopeptidases (3.4.24)
			2333/96488	. . . . .	Phosphoramidon sensitive endothelin converting enzymes
			2333/96491	. . . . .	with definite EC number
			2333/96494	. . . . .	Matrix metalloproteases, e. g. 3.4.24.7

- 2333/96497 Enkephalinase (3.4.24.11)
- 2333/966 Elastase
- 2333/968 Plasmin, i.e. fibrinolysin
- 2333/972 Plasminogen activators
- 2333/9723 Urokinase
- 2333/9726 Tissue plasminogen activator
- 2333/974 Thrombin
- 2333/976 Trypsin; Chymotrypsin
- 2333/978 . . . acting on carbon to nitrogen bonds other than peptide bonds (3.5)
- 2333/98 acting on amide bonds in linear amides (3.5.1)
- 2333/982 Asparaginase
- 2333/984 Penicillin amidase
- 2333/986 acting on amide bonds in cyclic amides (3.5.2), e.g. beta-lactamase (penicillinase, 3.5.2.6), creatinine amidohydrolase (creatininase, EC 3.5.2.10), N-methylhydantoinase (3.5.2.6)
- 2333/988 . . . Lyases (4.), e.g. aldolases, heparinase, enolases, fumarase
- 2333/99 . . . Isomerases (5.)
- 2333/992 . . . Glucose isomerase; Xylose isomerase; Glucose-6-phosphate isomerase
- 2333/994 . . . Pancreatin
- 2400/00 Assays, e.g. immunoassays or enzyme assays, involving carbohydrates**
- 2400/02 . . . involving antibodies to sugar part of glycoproteins ([lectins from plants G01N 2333/42](#), [lectins from mammals G01N 2333/4724](#))
- 2400/10 . . . Polysaccharides, i.e. having more than five saccharide radicals attached to each other by glycosidic linkages; Derivatives thereof, e.g. ethers, esters
- 2400/12 . . . Homoglycans, i.e. polysaccharides having a main chain consisting of one single sugar
- 2400/14 . . . alpha-D-Glucans, i.e. having alpha 1,n (n=3,4,6) linkages between saccharide units, e.g. pullulan
- 2400/16 Starch, amylose, amylopectin
- 2400/18 Cyclodextrin
- 2400/22 Dextran
- 2400/24 . . . beta-D-Glucans, i.e. having beta 1,n (n=3,4,6) linkages between saccharide units, e.g. xanthan
- 2400/26 Cellulose
- 2400/28 Chitin, chitosan
- 2400/32 . . . Galactans, e.g. agar, agarose, agarpectin, carrageenan
- 2400/34 . . . alpha-D-Galacturonans, e.g. pectin
- 2400/36 . . . beta-D-Fructofuranans, e.g. levan, insulin
- 2400/38 . . . Heteroglycans, i.e. polysaccharides having more than one sugar residue in the main chain in either alternating or less regular sequence, e.g. gluco- or galactomannans, e.g. Konjac gum, Locust bean gum, Guar gum ([proteoglycans G01N 2333/4722](#))
- 2400/40 . . . Glycosaminoglycans, i.e. GAG or mucopolysaccharides, e.g. chondroitin sulfate, dermatan sulfate, hyaluronic acid, heparin, heparan sulfate, and related sulfated polysaccharides
- 2400/44 . . . Guluromannuronans, e.g. alginic acid
- 2400/46 . . . Pectin
- 2400/48 . . . Reserve carbohydrates, e.g. glycogen
- 2400/50 . . . Lipopolysaccharides; LPS
- 2405/00 Assays, e.g. immunoassays or enzyme assays, involving lipids (lipopolysaccharides G01N 2400/50)**
- 2405/02 . . . Triacylglycerols
- 2405/04 . . . Phospholipids, i.e. phosphoglycerides
- 2405/06 . . . Glycophospholipids, e.g. phosphatidyl inositol
- 2405/08 . . . Sphingolipids
- 2405/10 . . . Glycosphingolipids, e.g. cerebrosides, gangliosides
- 2407/00 Assays, e.g. immunoassays or enzyme assays, involving terpenes**
- 2407/02 . . . Taxol; Taxanes
- 2410/00 Assays, e.g. immunoassays or enzyme assays, involving peptides of less than 20 amino acids**
- 2410/02 . . . Angiotensins; Related peptides
- 2410/04 . . . Oxytocins; Vasopressins; Related peptides
- 2410/06 . . . Kallidins; Bradykinins; Related peptides
- 2410/08 . . . Cyclosporins and related peptides
- 2410/10 . . . Valinomycins and derivatives thereof
- 2415/00 Assays, e.g. immunoassays or enzyme assays, involving penicillins or cephalosporins**
- 2430/00 Assays, e.g. immunoassays or enzyme assays, involving synthetic organic compounds as analytes**
- 2430/10 . . . Insecticides
- 2430/12 . . . Pyrethroids
- 2430/20 . . . Herbicides, e.g. DDT
- 2430/30 . . . Polychlorinated biphenyls (PCBs)
- 2430/40 . . . Dioxins
- 2430/50 . . . Polyaromatic hydrocarbons (PAHs)
- 2430/60 . . . Synthetic polymers other than synthetic polypeptides as analytes
- 2440/00 Post-translational modifications [PTMs] in chemical analysis of biological material**
- 2440/10 . . . acylation, e.g. acetylation, formylation, lipoylation, myristoylation, palmitoylation
- 2440/12 . . . alkylation, e.g. methylation, (iso-)prenylation, farnesylation
- 2440/14 . . . phosphorylation
- 2440/16 . . . (de-)amidation
- 2440/18 . . . citrullination
- 2440/20 . . . formation of disulphide bridges
- 2440/22 . . . iodination
- 2440/24 . . . hydroxylation
- 2440/26 . . . nitrosylation
- 2440/28 . . . PEGylation
- 2440/30 . . . sulphation
- 2440/32 . . . biotinylation
- 2440/34 . . . addition of amino acid(s), e.g. arginylation, (poly-)glutamylolation, (poly-)glycylation
- 2440/36 . . . addition of addition of other proteins or peptides, e.g. SUMOylation, ubiquitination
- 2440/38 . . . addition of carbohydrates, e.g. glycosylation, glycation
- 2440/40 . . . addition of nucleotides or derivatives, e.g. adenylation, flavin attachment
- 2446/00 Magnetic particle immunoreagent carriers**
- 2446/10 . . . the magnetic material being used to coat a pre-existing polymer particle but not being present in the particle core

- 2446/20 . the magnetic material being present in the particle core
 - 2446/30 . the magnetic material being dispersed in the polymer composition before their conversion into particulate form
 - 2446/40 . the magnetic material being dispersed in the monomer composition prior to polymerisation
 - 2446/60 . the magnetic material being dispersed in a medium other than the main solvent prior to incorporation into the polymer particle
 - 2446/62 . . Magnetic material dispersed in water drop
 - 2446/64 . . Magnetic material dispersed in oil drop
 - 2446/66 . . Magnetic material dispersed in surfactant
 - 2446/80 . characterised by the agent used to coat the magnetic particles, e.g. lipids
 - 2446/84 . . Polymer coating, e.g. gelatin
 - 2446/86 . . the coating being pre-functionalised for attaching immunoreagents, e.g. aminodextran
 - 2446/90 . . characterised by small molecule linker used to couple immunoreagents to magnetic particles

 - 2458/00 Labels used in chemical analysis of biological material**
 - 2458/10 . Oligonucleotides as tagging agents for labelling antibodies
 - 2458/15 . Non-radioactive isotope labels, e.g. for detection by mass spectrometry
 - 2458/20 . Labels for detection by gas chromatography, e.g. haloaryl systems
 - 2458/30 . Electrochemically active labels
 - 2458/40 . Rare earth chelates

 - 2469/00 Immunoassays for the detection of microorganisms**
 - 2469/10 . Detection of antigens from microorganism in sample from host
 - 2469/20 . Detection of antibodies in sample from host which are directed against antigens from microorganisms

 - 2496/00 Reference solutions for assays of biological material**
 - 2496/05 . containing blood cells or plasma
 - 2496/10 . containing particles to mimic blood cells
 - 2496/15 . containing dyes to mimic optical absorption of, e.g. hemoglobin
 - 2496/25 . containing added polymers to stabilise biological material against degradation or maintain viscosity or density, e.g. gelatin, polyacrylamides, polyvinyl alcohol ([casein G01N 2333/4731](#), [albumins G01N 2333/76](#), [polysaccharides G01N 2400/10](#))
 - 2496/30 . . Polyethylene glycol, e.g. PEG
 - 2496/35 . . Polyvinylpyrrolidone, e.g. PVP
 - 2496/45 . containing protease inhibitors, e.g. sulfonylfluorides, chloromethylketones, organophosphates ([peptide-based protease inhibitors G01N 2333/81](#))
 - 2496/70 . Blood gas control solutions containing dissolved oxygen, bicarbonate and the like
 - 2496/80 . Multi-analyte reference solutions containing cholesterol, glucose and the like

 - 2500/00 Screening for compounds of potential therapeutic value**
 - 2500/02 . Screening involving studying the effect of compounds C on the interaction between interacting molecules A and B (e.g. A = enzyme and B = substrate for A, or A = receptor and B = ligand for the receptor)
 - 2500/04 . Screening involving studying the effect of compounds C directly on molecule A (e.g. C are potential ligands for a receptor A, or potential substrates for an enzyme A)
 - 2500/10 . involving cells
 - 2500/20 . cell-free systems

 - 2510/00 Detection of programmed cell death, i.e. apoptosis**
 - 2520/00 Use of whole organisms as detectors of pollution**
 - 2550/00 Electrophoretic profiling, e.g. for proteome analysis**
 - 2560/00 Chemical aspects of mass spectrometric analysis of biological material**
- NOTES**
1. Analysis of proteins, peptides or amino acids by mass spectrometry is classified in [G01N 33/6848](#) and [G01N 33/6851](#).
 2. Analysis of nucleic acids by mass spectrometry is classified in [C12Q 1/6872](#), [C12Q 2563/167](#) and [C12Q 2565/627](#).
- 2570/00 **Omics, e.g. proteomics, glycomics or lipidomics; Methods of analysis focusing on the entire complement of classes of biological molecules or subsets thereof, i.e. focusing on proteomes, glycomes or lipidomes**
 - 2600/00 **Assays involving molecular imprinted polymers/ polymers created around a molecular template**
 - 2610/00 **Assays involving self-assembled monolayers [SAMs]**
 - 2650/00 **Assays involving polymers whose constituent monomers bore biological functional groups before polymerization, i.e. vinyl, acryl derivatives of amino acids, sugars**
 - 2800/00 **Detection or diagnosis of diseases**
- NOTES**
1. The indexing codes [G01N 2800/02](#) - [G01N 2800/44](#) are based on The Merck Manual of Diagnosis and Therapy (17th. Edition, Mark Beers and Robert Berkow).
 2. For diseases caused by microorganism where the microorganism is detected, which subject matter is classified in [G01N 33/569](#) and subgroups, [G01N 33/571](#) or [G01N 33/576](#), the present indexing scheme is not used.
 3. For cancers, which subject matter is classified in [G01N 33/574](#) and subgroups, the present indexing scheme is not used.
 4. When indexing in the following scheme, the organ takes precedence, e.g. inflammation of the skin is indexed with dermatological disorders and not with immunology or allergic disorders, asthma with pulmonary disorders and not with immunology or allergic disorders. Exception

G01N

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(continued)

is made for thrombosis which is indexed with haematological disorders.

more of groups [G01N 33/569](#) and subgroups, [G01N 33/571](#) or [G01N 33/576](#) and subgroups

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|----------|--|-----------|--|
| 2800/02 | . Nutritional disorders | 2800/28 | . Neurological disorders |
| 2800/04 | . Endocrine or metabolic disorders | 2800/2807 | . . Headache; Migraine |
| 2800/042 | . . Disorders of carbohydrate metabolism, e.g. diabetes, glucose metabolism | 2800/2814 | . . Dementia; Cognitive disorders |
| 2800/044 | . . Hyperlipemia or hypolipemia, e.g. dyslipidaemia, obesity | 2800/2821 | . . . Alzheimer |
| 2800/046 | . . Thyroid disorders | 2800/2828 | . . . Prion diseases |
| 2800/048 | . . Pituitary or hypothalamic - pituitary relationships, e.g. vasopressin or ADH related | 2800/2835 | . . Movement disorders, e.g. Parkinson, Huntington, Tourette |
| 2800/06 | . Gastro-intestinal diseases | 2800/2842 | . . Pain, e.g. neuropathic pain, psychogenic pain |
| 2800/062 | . . Gastritis or peptic ulcer disease | 2800/285 | . . Demyelinating diseases; Multiple sclerosis |
| 2800/065 | . . Bowel diseases, e.g. Crohn, ulcerative colitis, IBS | 2800/2857 | . . Seizure disorders; Epilepsy |
| 2800/067 | . . Pancreatitis or colitis | 2800/2864 | . . Sleep disorders |
| 2800/08 | . Hepato-biliary disorders other than hepatitis | 2800/2871 | . . Cerebrovascular disorders, e.g. stroke, cerebral infarct, cerebral haemorrhage, transient ischemic event |
| 2800/085 | . . Liver diseases, e.g. portal hypertension, fibrosis, cirrhosis, bilirubin | 2800/2878 | . . Muscular dystrophy |
| 2800/10 | . Musculoskeletal or connective tissue disorders | 2800/2885 | . . . Duchenne dystrophy |
| 2800/101 | . . Diffuse connective tissue disease, e.g. Sjögren, Wegener's granulomatosis | 2800/2892 | . . . Myotonic dystrophy |
| 2800/102 | . . . Arthritis; Rheumatoid arthritis, i.e. inflammation of peripheral joints | 2800/30 | . Psychoses; Psychiatry |
| 2800/104 | . . . Lupus erythematosus [SLE] | 2800/301 | . . Anxiety or phobic disorders |
| 2800/105 | . . Osteoarthritis, e.g. cartilage alteration, hypertrophy of bone | 2800/302 | . . Schizophrenia |
| 2800/107 | . . Crystal induced conditions; Gout | 2800/303 | . . Eating disorders, e.g. anorexia, bulimia |
| 2800/108 | . . Osteoporosis | 2800/304 | . . Mood disorders, e.g. bipolar, depression |
| 2800/12 | . Pulmonary diseases | 2800/305 | . . Attention deficit disorder; Hyperactivity |
| 2800/122 | . . Chronic or obstructive airway disorders, e.g. asthma COPD | 2800/306 | . . Chronic fatigue syndrome |
| 2800/125 | . . Adult respiratory distress syndrome | 2800/307 | . . Drug dependency, e.g. alcoholism |
| 2800/127 | . . Bronchitis | 2800/308 | . . Psychosexual disorders, e.g. sexual arousal disorder |
| 2800/14 | . Disorders of ear, nose or throat | 2800/32 | . Cardiovascular disorders |
| 2800/16 | . Ophthalmology | 2800/321 | . . Arterial hypertension |
| 2800/162 | . . Conjunctival disorders, e.g. conjunctivitis | 2800/322 | . . Orthostatic hypertension or syncope |
| 2800/164 | . . Retinal disorders, e.g. retinopathy | 2800/323 | . . Arteriosclerosis, Stenosis |
| 2800/166 | . . Cataract | 2800/324 | . . Coronary artery diseases, e.g. angina pectoris, myocardial infarction |
| 2800/168 | . . Glaucoma | 2800/325 | . . Heart failure or cardiac arrest, e.g. cardiomyopathy, congestive heart failure |
| 2800/18 | . Dental and oral disorders | 2800/326 | . . Arrhythmias, e.g. ventricular fibrillation, tachycardia, atrioventricular block, torsade de pointes |
| 2800/20 | . Dermatological disorders | 2800/327 | . . Endocarditis |
| 2800/202 | . . Dermatitis | 2800/328 | . . Vasculitis, i.e. inflammation of blood vessels |
| 2800/205 | . . Scaling palmar diseases, e.g. psoriasis, pityriasis | 2800/329 | . . Diseases of the aorta or its branches, e.g. aneurysms, aortic dissection |
| 2800/207 | . . Pigmentation disorders | 2800/34 | . Genitourinary disorders |
| 2800/22 | . Haematology | 2800/341 | . . Urinary incontinence |
| 2800/222 | . . Platelet disorders | 2800/342 | . . Prostate diseases, e.g. BPH, prostatitis |
| 2800/224 | . . Haemostasis or coagulation | 2800/344 | . . Disorders of the penis and the scrotum and erectile dysfunction |
| 2800/226 | . . Thrombotic disorders, i.e. thrombo-embolism irrespective of location/organ involved, e.g. renal vein thrombosis, venous thrombosis | 2800/345 | . . Urinary calculi |
| 2800/228 | . . Disorders of the spleen, e.g. splenic rupture, splenomegaly | 2800/347 | . . Renal failures; Glomerular diseases; Tubulointerstitial diseases, e.g. nephritic syndrome, glomerulonephritis; Renovascular diseases, e.g. renal artery occlusion, nephropathy |
| 2800/24 | . Immunology or allergic disorders (SLE G01N 2800/104) | 2800/348 | . . Urinary tract infections |
| 2800/245 | . . Transplantation related diseases, e.g. graft versus host disease | 2800/36 | . Gynecology or obstetrics |
| 2800/26 | . Infectious diseases, e.g. generalised sepsis | 2800/361 | . . Menstrual abnormalities or abnormal uterine bleeding, e.g. dysmenorrhea |

NOTE

Indexing code [G01N 2800/26](#) is not used for documents already classified in one or

G01N

2800/365	. . Breast disorders, e.g. mastalgia, mastitis, Paget's disease
2800/367	. . Infertility, e.g. sperm disorder, ovulatory dysfunction
2800/368	. . Pregnancy complicated by disease or abnormalities of pregnancy, e.g. preeclampsia, preterm labour
2800/38	. Pediatrics
2800/382	. . Cystic fibrosis
2800/385	. . Congenital anomalies
2800/387	. . . Down syndrome; Trisomy 18; Trisomy 13
2800/40	. Disorders due to exposure to physical agents, e.g. heat disorders, motion sickness, radiation injuries, altitude sickness, decompression illness
2800/42	. Poisoning, e.g. from bites or stings
2800/44	. Multiple drug resistance
2800/50	. Determining the risk of developing a disease
2800/52	. Predicting or monitoring the response to treatment; Prognosis
2800/54	. Determining the risk of relapse
2800/56	. Staging of a disease; Further complications associated with the disease
2800/60	. Complex ways of combining multiple protein biomarkers for diagnosis
2800/70	. Mechanisms involved in disease identification (G01N 2800/02 - G01N 2800/44 take precedence)
2800/7004	. . Stress
2800/7009	. . . Oxidative stress
2800/7014	. . (Neo)vascularisation - Angiogenesis
2800/7019	. . Ischaemia
2800/7023	. . (Hyper)proliferation
2800/7028	. . . Cancer
2800/7033	. . Non-proliferative mechanisms
2800/7038	. . Hypoxia
2800/7042	. . Aging, e.g. cellular aging
2800/7047	. . Fibrils-Filaments-Plaque formation
2800/7052	. . Fibrosis
2800/7057	. . (Intracellular) signaling and trafficking pathways
2800/7061	. . . Endoplasmic reticulum to Golgi trafficking
2800/7066	. . . Metabolic pathways
2800/7071	. . . . Carbohydrate metabolism, e.g. glycolysis, gluconeogenesis
2800/7076	. . . . Amino acid metabolism
2800/708	. . . . Nitrogen metabolism, e.g. urea cycle
2800/7085	. . . . Lipogenesis or lipolysis, e.g. fatty acid metabolism
2800/709	. . Toxin induced
2800/7095	. . Inflammation