

Symbol	Typ	Titel
G	Sektion	SECTION G — PHYSICS
G02	Klasse	OPTICS (making optical elements or apparatus B24B, B29D 11/00, C03, or other appropriate subclasses or classes; materials <u>per se</u>, <u>see</u> the relevant places, e.g. C03B, C03C)
G02B	Unterklasse	OPTICAL ELEMENTS, SYSTEMS, OR APPARATUS (G02F takes precedence; optical elements specially adapted for use in lighting devices or systems thereof F21V 1/00-F21V 13/00; measuring-instruments, <u>see</u> the relevant subclass of class G01, e.g. optical rangefinders G01C; testing of optical elements, systems, or apparatus G01M 11/00; spectacles G02C; apparatus or arrangements for taking photographs or for projecting or viewing them G03B; sound lenses G10K 11/30; electron and ion "optics" H01J; X-ray "optics" H01J, H05G 1/00; optical elements structurally combined with electric discharge tubes H01J 5/16, H01J 29/89, H01J 37/22; microwave "optics" H01Q; combination of optical elements with television receivers H04N 5/72; optical systems or arrangements in colour television systems H04N 9/00; heating arrangements specially adapted for transparent or reflecting areas H05B 3/84) [1, 7]
G02B 1/00	Hauptgruppe	Optical elements characterised by the material of which they are made (compositions of optical glasses C03C 3/00); Optical coatings for optical elements
G02B 1/02	1-Punkt Untergruppe	. made of crystals, e.g. rock-salt, semiconductors (G02B 1/08 takes precedence)
G02B 1/04	1-Punkt Untergruppe	. made of organic materials, e.g. plastics (G02B 1/08 takes precedence)
G02B 1/06	1-Punkt Untergruppe	. made of fluids in transparent cells
G02B 1/08	1-Punkt Untergruppe	. made of polarising materials
G02B 1/10	1-Punkt Untergruppe	. Optical coatings produced by application to, or surface treatment of, optical elements (G02B 1/08 takes precedence)
G02B 1/11	2-Punkt Untergruppe	. . Anti-reflection coatings [6]
G02B 1/12	2-Punkt Untergruppe	. . by surface treatment, e.g. by irradiation
G02B 3/00	Hauptgruppe	Simple or compound lenses (artificial eyes A61F 2/14; spectacle lenses or contact lenses for the eyes G02C; watch or clock glasses G04B 39/00)
G02B 3/02	1-Punkt Untergruppe	. with non-spherical faces (G02B 3/10 takes precedence)
G02B 3/04	2-Punkt Untergruppe	. . with continuous faces that are rotationally symmetrical but deviate from a true sphere
G02B 3/06	2-Punkt Untergruppe	. . with cylindrical or toric faces
G02B 3/08	2-Punkt Untergruppe	. . with discontinuous faces, e.g. Fresnel lens
G02B 3/10	1-Punkt Untergruppe	. Bifocal lenses; Multifocal lenses
G02B 3/12	1-Punkt Untergruppe	. Fluid-filled or evacuated lenses
G02B 3/14	2-Punkt Untergruppe	. . of variable focal length
G02B 5/00	Hauptgruppe	Optical elements other than lenses (light guides G02B 6/00; optical logic elements G02F 3/00) [4]
G02B 5/02	1-Punkt Untergruppe	. Diffusing elements; Afocal elements
G02B 5/04	1-Punkt Untergruppe	. Prisms
G02B 5/06	2-Punkt Untergruppe	. . Fluid-filled or evacuated prisms
G02B 5/08	1-Punkt Untergruppe	. Mirrors

Symbol	Typ	Titel
G02B 5/09	2-Punkt Untergruppe	. . Multifaceted or polygonal mirrors [6]
G02B 5/10	2-Punkt Untergruppe	. . with curved faces
G02B 5/12	1-Punkt Untergruppe	. Reflex reflectors
G02B 5/122	2-Punkt Untergruppe	. . cube corner, trihedral or triple reflector type [2]
G02B 5/124	3-Punkt Untergruppe	. . . plural reflecting elements forming part of a unitary plate or sheet [2]
G02B 5/126	2-Punkt Untergruppe	. . including curved refracting surface [2]
G02B 5/128	3-Punkt Untergruppe	. . . transparent spheres being embedded in matrix [2]
G02B 5/13	3-Punkt Untergruppe	. . . plural curved refracting elements forming part of a unitary body [2]
G02B 5/132	3-Punkt Untergruppe	. . . with individual reflector mounting means [2]
G02B 5/134	4-Punkt Untergruppe	 including a threaded mounting member [2]
G02B 5/136	2-Punkt Untergruppe	. . plural reflecting elements forming part of a unitary body (G02B 5/124 takes precedence) [2]
G02B 5/18	1-Punkt Untergruppe	. Diffracting gratings
G02B 5/20	1-Punkt Untergruppe	. Filters (polarising elements G02B 5/30; filters specially adapted for photographic purposes G03B 11/00)
G02B 5/22	2-Punkt Untergruppe	. . Absorbing filters
G02B 5/23	3-Punkt Untergruppe	. . . Photochromic filters [2]
G02B 5/24	3-Punkt Untergruppe	. . . Liquid filters (G02B 5/23 takes precedence) [2]
G02B 5/26	2-Punkt Untergruppe	. . Reflecting filters (G02B 5/28 takes precedence)
G02B 5/28	2-Punkt Untergruppe	. . Interference filters
G02B 5/30	1-Punkt Untergruppe	. Polarising elements (light-modulating devices G02F 1/00)
G02B 5/32	1-Punkt Untergruppe	. Holograms used as optical elements (processes or apparatus for producing holograms G03H) [2]
G02B 6/00	Hauptgruppe	Light guides; Structural details of arrangements comprising light guides and other optical elements, e.g. couplings [4, 6]
<i>G02B 6/02</i>	<i>1-Punkt Untergruppe</i>	<i>. Optical fibre with cladding (mechanical structures for providing tensile strength and external protection G02B 6/44) [4, 2006.01]</i>
<i>G02B 6/024</i>	<i>2-Punkt Untergruppe</i>	<i>. . with polarisation-maintaining properties [2006.01]</i>
<i>G02B 6/028</i>	<i>2-Punkt Untergruppe</i>	<i>. . with core or cladding having graded refractive index [2006.01]</i>
<i>G02B 6/032</i>	<i>2-Punkt Untergruppe</i>	<i>. . with non-solid core or cladding [2006.01]</i>
<i>G02B 6/036</i>	<i>2-Punkt Untergruppe</i>	<i>. . core or cladding comprising multiple layers [2006.01]</i>
G02B 6/04	1-Punkt Untergruppe	. formed by bundles of fibres (G02B 6/24 takes precedence) [4]
G02B 6/06	2-Punkt Untergruppe	. . the relative position of the fibres being the same at both ends, e.g. for transporting images [4]
G02B 6/08	3-Punkt Untergruppe	. . . with fibre bundle in form of plate [4]

Symbol	Typ	Titel
G02B 6/10	1-Punkt Untergruppe	. of the optical waveguide type (G02B 6/02 , G02B 6/24 take precedence ; devices or arrangements for the control of light by electric, magnetic, electro-magnetic or acoustic means G02F 1/00 ; transferring the modulation of modulated light G02F 2/00 ; optical logic elements G02F 3/00 ; optical analogue/digital converters G02F 7/00 ; stores using opto-electronic devices G11C 11/42 ; electric waveguides H01P ; transmission of information by optical means H04B 10/00 ; multiplex systems H04J 14/00) [4, 2006.01]
G02B 6/12	2-Punkt Untergruppe	. . of the integrated circuit kind (production or processing of single crystals C30B; electric integrated circuits H01L 27/00) [4]
G02B 6/122	3-Punkt Untergruppe	. . . Basic optical elements, e.g. light-guiding paths [6]
G02B 6/124	4-Punkt Untergruppe	 Geodesic lenses or integrated gratings [6]
G02B 6/125	4-Punkt Untergruppe	 Bends, branchings or intersections [6]
G02B 6/126	3-Punkt Untergruppe	. . . using polarisation effects [6]
G02B 6/13	3-Punkt Untergruppe	. . . Integrated optical circuits characterised by the manufacturing method [6]
G02B 6/132	4-Punkt Untergruppe	 by deposition of thin films [6]
G02B 6/134	4-Punkt Untergruppe	 by substitution by dopant atoms [6]
G02B 6/136	4-Punkt Untergruppe	 by etching [6]
G02B 6/138	4-Punkt Untergruppe	 by using polymerisation [6]
G02B 6/14	2-Punkt Untergruppe	. . Mode converters [4]
G02B 6/16	Gelöscht	(covered by G02B 6/02)
G02B 6/17	Gelöscht	(transferred to G02B 6/024)
G02B 6/18	Gelöscht	(transferred to G02B 6/028)
G02B 6/20	Gelöscht	(transferred to G02B 6/032)
G02B 6/22	Gelöscht	(transferred to G02B 6/036)
G02B 6/24	1-Punkt Untergruppe	. Coupling light guides (for electric waveguides H01P 1/00) [4, 5]
G02B 6/245	2-Punkt Untergruppe	. . Removing protective coverings of light guides before coupling [5]
G02B 6/25	2-Punkt Untergruppe	. . Preparing the ends of light guides for coupling, e.g. cutting [5]
G02B 6/255	2-Punkt Untergruppe	. . Splicing of light guides, e.g. by fusion or bonding [5]
G02B 6/26	2-Punkt Untergruppe	. . Optical coupling means (G02B 6/36, G02B 6/42 take precedence) [4]
G02B 6/27	3-Punkt Untergruppe	. . . with polarisation selective and adjusting means (polarisation elements in general G02B 5/30; polarisation systems in general G02B 27/28; optical polarisation multiplex systems H04J 14/06) [6]
G02B 6/28	3-Punkt Untergruppe	. . . having data bus means, i.e. plural waveguides interconnected and providing an inherently bidirectional system by mixing and splitting signals [4]
G02B 6/287	4-Punkt Untergruppe	 Structuring of light guides to shape optical elements with heat application (G02B 6/255 takes precedence) [6]
G02B 6/293	4-Punkt Untergruppe	 with wavelength selective means (for optical elements in use, <u>see</u> the relevant subgroups of this subclass; optical wavelength-division multiplexing systems H04J 14/02) [6]
G02B 6/30	3-Punkt Untergruppe	. . . for use between fibre and thin-film device [4]
G02B 6/32	3-Punkt Untergruppe	. . . having lens focusing means [4]
G02B 6/34	3-Punkt Untergruppe	. . . utilising prism or grating [4]

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G02B 6/35	3-Punkt Untergruppe	. . . having switching means (optical switching in general G02B 26/08; by changing the optical properties of the medium G02F 1/00) [6]
G02B 6/36	2-Punkt Untergruppe	. . Mechanical coupling means (G02B 6/255, G02B 6/42 take precedence) [4, 5]
G02B 6/38	3-Punkt Untergruppe	. . . having fibre to fibre mating means [4]
G02B 6/40	3-Punkt Untergruppe	. . . having fibre bundle mating means [4]
G02B 6/42	2-Punkt Untergruppe	. . Coupling light guides with opto-electronic elements [4]
G02B 6/43	3-Punkt Untergruppe	. . . Arrangements comprising a plurality of opto-electronic elements and associated optical interconnections (light-emissive or light-sensitive semiconductor devices H01L 27/00, H01L 31/00, H01L 33/00; semiconductor lasers monolithically integrated with other components H01S 5/026) [6]
G02B 6/44	1-Punkt Untergruppe	. Mechanical structures for providing tensile strength and external protection for fibres, e.g. optical transmission cables (cables incorporating electric conductors and optical fibres H01B 11/22) [4]
G02B 6/46	1-Punkt Untergruppe	. Processes or apparatus adapted for installing optical fibres or optical cables (installation of cables containing electric conductors and optical fibres H02G) [6]
G02B 6/48	2-Punkt Untergruppe	. . Overhead installation [6]
G02B 6/50	2-Punkt Untergruppe	. . Underground or underwater installation; Installation through tubing, conduits or ducts [6]
G02B 6/52	3-Punkt Untergruppe	. . . using fluid, e.g. air [6]
G02B 6/54	3-Punkt Untergruppe	. . . using mechanical means, e.g. pulling or pushing devices [6]
G02B 7/00	Hauptgruppe	Mountings, adjusting means, or light-tight connections, for optical elements
G02B 7/02	1-Punkt Untergruppe	. for lenses
G02B 7/04	2-Punkt Untergruppe	. . with mechanism for focusing or varying magnification [2]
G02B 7/06	3-Punkt Untergruppe	. . . Focusing binocular pairs
G02B 7/08	3-Punkt Untergruppe	. . . adapted to co-operate with a remote control mechanism
G02B 7/09	3-Punkt Untergruppe	. . . adapted for automatic focusing or varying magnification (automatic generation of focusing signals G02B 7/28) [5]
G02B 7/10	3-Punkt Untergruppe	. . . by relative axial movement of several lenses, e.g. of varifocal objective lens
G02B 7/105	4-Punkt Untergruppe	 with movable lens means specially adapted for focusing at close distances [4]
G02B 7/12	2-Punkt Untergruppe	. . Adjusting pupillary distance of binocular pairs
G02B 7/14	2-Punkt Untergruppe	. . adapted to interchange lenses
G02B 7/16	3-Punkt Untergruppe	. . . Rotatable turrets
G02B 7/18	1-Punkt Untergruppe	. for prisms; for mirrors
G02B 7/182	2-Punkt Untergruppe	. . for mirrors (optical devices or arrangements using movable or deformable optical elements for controlling the intensity, colour, phase, polarisation or direction of light G02B 26/00) [5]
G02B 7/183	3-Punkt Untergruppe	. . . specially adapted for very large mirrors, e.g. for astronomy (G02B 7/185, G02B 7/192, G02B 7/198 take precedence) [6]
G02B 7/185	3-Punkt Untergruppe	. . . with means for adjusting the shape of the mirror surface (mirrors with curved faces G02B 5/10) [5]
G02B 7/188	4-Punkt Untergruppe	 Membrane mirrors [5]

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G02B 7/192	3-Punkt Untergruppe	. . . with means for minimising internal mirror stresses [5]
G02B 7/195	4-Punkt Untergruppe	 Fluid-cooled mirrors [5]
G02B 7/198	3-Punkt Untergruppe	. . . with means for adjusting the mirror relative to its support [5]
G02B 7/20	1-Punkt Untergruppe	. Light-tight connections for movable optical elements
G02B 7/22	2-Punkt Untergruppe	. . Extensible connections, e.g. bellows
G02B 7/24	2-Punkt Untergruppe	. . Pivoted connections
G02B 7/28	1-Punkt Untergruppe	. Systems for automatic generation of focusing signals (measuring distance <u>per se</u> G01C, G01S; using such signals to control focus of particular apparatus, <u>see</u> the subclasses for the apparatus, e.g. G03B, G03F) [5]
G02B 7/30	2-Punkt Untergruppe	. . using parallactic triangle with a base line [5]
G02B 7/32	3-Punkt Untergruppe	. . . using active means, e.g. light emitter [5]
G02B 7/34	2-Punkt Untergruppe	. . using different areas in a pupil plane [5]
G02B 7/36	2-Punkt Untergruppe	. . using image sharpness techniques [5]
G02B 7/38	3-Punkt Untergruppe	. . . measured at different points on the optical axis [5]
G02B 7/40	2-Punkt Untergruppe	. . using time delay of the reflected waves, e.g. of ultrasonic waves [5]
G02B 9/00	Hauptgruppe	Optical objectives characterised both by the number of the components and their arrangements according to their sign, i.e. + or - (G02B 13/00, G02B 15/00 take precedence)
G02B 9/02	1-Punkt Untergruppe	. having one + component only (simple lenses G02B 3/00)
G02B 9/04	1-Punkt Untergruppe	. having two components only
G02B 9/06	2-Punkt Untergruppe	. . two + components
G02B 9/08	3-Punkt Untergruppe	. . . arranged about a stop
G02B 9/10	2-Punkt Untergruppe	. . one + and one - component
G02B 9/12	1-Punkt Untergruppe	. having three components only
G02B 9/14	2-Punkt Untergruppe	. . arranged + - +
G02B 9/16	3-Punkt Untergruppe	. . . all the components being simple
G02B 9/18	3-Punkt Untergruppe	. . . only one component having a compound lens (G02B 9/30 takes precedence)
G02B 9/20	4-Punkt Untergruppe	 the rear component having the compound
G02B 9/22	4-Punkt Untergruppe	 the middle component having the compound
G02B 9/24	3-Punkt Untergruppe	. . . two of the components having compound lenses (G02B 9/30 takes precedence)
G02B 9/26	4-Punkt Untergruppe	 the front and rear components having compound lenses
G02B 9/28	4-Punkt Untergruppe	 the middle and rear components having compound lenses
G02B 9/30	3-Punkt Untergruppe	. . . the middle component being a - compound meniscus having a + lens
G02B 9/32	4-Punkt Untergruppe	 the + lens being a meniscus
G02B 9/34	1-Punkt Untergruppe	. having four components only

Symbol	Typ	Titel
G02B 9/36	2-Punkt Untergruppe	. . arranged + -- +
G02B 9/38	3-Punkt Untergruppe	. . . both - components being meniscus
G02B 9/40	4-Punkt Untergruppe	 one - component being compound
G02B 9/42	4-Punkt Untergruppe	 two - components being compound
G02B 9/44	3-Punkt Untergruppe	. . . both - components being biconcave
G02B 9/46	4-Punkt Untergruppe	 one - component being compound
G02B 9/48	4-Punkt Untergruppe	 two - components being compound
G02B 9/50	3-Punkt Untergruppe	. . . both + components being meniscus
G02B 9/52	3-Punkt Untergruppe	. . . the rear + component being compound
G02B 9/54	3-Punkt Untergruppe	. . . the front + component being compound
G02B 9/56	3-Punkt Untergruppe	. . . all components being simple lenses
G02B 9/58	2-Punkt Untergruppe	. . arranged - + + -
G02B 9/60	1-Punkt Untergruppe	. having five components only
G02B 9/62	1-Punkt Untergruppe	. having six components only
G02B 9/64	1-Punkt Untergruppe	. having more than six components
G02B 11/00	Hauptgruppe	Optical objectives characterised by the total number of simple and compound lenses forming the objective and their arrangement (G02B 9/00 takes precedence; having only one simple lens G02B 3/00)
G02B 11/02	1-Punkt Untergruppe	. having two lenses only
G02B 11/04	2-Punkt Untergruppe	. . arranged C C
G02B 11/06	1-Punkt Untergruppe	. having three lenses only
G02B 11/08	2-Punkt Untergruppe	. . arranged L L L
G02B 11/10	2-Punkt Untergruppe	. . arranged L C L
G02B 11/12	2-Punkt Untergruppe	. . arranged L L C
G02B 11/14	2-Punkt Untergruppe	. . arranged C L C
G02B 11/16	2-Punkt Untergruppe	. . arranged C C L
G02B 11/18	2-Punkt Untergruppe	. . arranged C C C
G02B 11/20	1-Punkt Untergruppe	. having four lenses only
G02B 11/22	2-Punkt Untergruppe	. . arranged L L L L
G02B 11/24	2-Punkt Untergruppe	. . arranged C L L C
G02B 11/26	2-Punkt Untergruppe	. . arranged L C C L
G02B 11/28	2-Punkt Untergruppe	. . arranged C C C C
G02B 11/30	1-Punkt Untergruppe	. having five lenses only

Symbol	Typ	Titel
G02B 11/32	1-Punkt Untergruppe	. having six lenses only
G02B 11/34	1-Punkt Untergruppe	. having more than six lenses
G02B 13/00	Hauptgruppe	Optical objectives specially designed for the purposes specified below (with variable magnification G02B 15/00)
G02B 13/02	1-Punkt Untergruppe	. Telephoto objectives, i.e. systems of the type + - in which the distance from the front vertex to the image plane is less than the equivalent focal length
G02B 13/04	1-Punkt Untergruppe	. Reversed telephoto objectives
G02B 13/06	1-Punkt Untergruppe	. Panoramic objectives; So-called "sky lenses"
G02B 13/08	1-Punkt Untergruppe	. Anamorphic objectives
G02B 13/10	2-Punkt Untergruppe	. . involving prisms (G02B 13/12 takes precedence)
G02B 13/12	2-Punkt Untergruppe	. . with variable magnification
G02B 13/14	1-Punkt Untergruppe	. for use with infra-red or ultra-violet radiation (G02B 13/16 takes precedence)
G02B 13/16	1-Punkt Untergruppe	. for use in conjunction with image converters or intensifiers
G02B 13/18	1-Punkt Untergruppe	. with lenses having one or more non-spherical faces, e.g. for reducing geometrical aberration
G02B 13/20	1-Punkt Untergruppe	. Soft-focus objectives (diffusing elements in general G02B 5/02)
G02B 13/22	1-Punkt Untergruppe	. Telecentric objectives or lens systems
G02B 13/24	1-Punkt Untergruppe	. for reproducing or copying at short object distances
G02B 13/26	2-Punkt Untergruppe	. . for reproducing with unit magnification [3]
G02B 15/00	Hauptgruppe	Optical objectives with means for varying the magnification (anamorphic objectives G02B 13/08)
G02B 15/02	1-Punkt Untergruppe	. by changing, adding, or subtracting a part of the objective, e.g. convertible objective
G02B 15/04	2-Punkt Untergruppe	. . by changing a part
G02B 15/06	3-Punkt Untergruppe	. . . by changing the front part
G02B 15/08	3-Punkt Untergruppe	. . . by changing the rear part
G02B 15/10	2-Punkt Untergruppe	. . by adding a part, e.g. close-up attachment
G02B 15/12	3-Punkt Untergruppe	. . . by adding telescopic attachments (G02B 15/14 takes precedence)
G02B 15/14	1-Punkt Untergruppe	. by axial movement of one or more lenses or groups of lenses relative to the image plane for continuously varying the equivalent focal length of the objective [4]
G02B 15/15	2-Punkt Untergruppe	. . compensation by means of only one movement or by means of only linearly related movements, e.g. optical compensation [4]
G02B 15/16	2-Punkt Untergruppe	. . with interdependent non-linearly related movements between one lens or lens group, and another lens or lens group (G02B 15/22 takes precedence) [4]
G02B 15/163	3-Punkt Untergruppe	. . . having a first movable lens or lens group and a second movable lens or lens group, both in front of a fixed lens or lens group (G02B 15/177 takes precedence) [4]
G02B 15/167	4-Punkt Untergruppe	 having an additional fixed front lens or group of lenses [4]
G02B 15/17	5-Punkt Untergruppe	 arranged + -- [4]

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G02B 15/173	5-Punkt Untergruppe	 arranged + - + [4]
G02B 15/177	3-Punkt Untergruppe	. . . having a negative front lens or group of lenses [4]
G02B 15/20	3-Punkt Untergruppe	. . . having an additional movable lens or lens group for varying the objective focal length [4]
G02B 15/22	2-Punkt Untergruppe	. . with movable lens means specially adapted for focusing at close distances [4]
G02B 15/24	3-Punkt Untergruppe	. . . having a front fixed lens or lens group and two movable lenses or lens groups in front of a fixed lens or lens group [4]
G02B 15/26	4-Punkt Untergruppe	 arranged + -- [4]
G02B 15/28	4-Punkt Untergruppe	 arranged + - + [4]
G02B 17/00	Hauptgruppe	Systems with reflecting surfaces, with or without refracting elements (microscopes G02B 21/00; telescopes, periscopes G02B 23/00; beam shaping not otherwise provided for G02B 27/09; for beam splitting or combining G02B 27/10; for optical projection G02B 27/18) [6]
G02B 17/02	1-Punkt Untergruppe	. Catoptric systems, e.g. image erecting and reversing system
G02B 17/04	2-Punkt Untergruppe	. . using prisms only
G02B 17/06	2-Punkt Untergruppe	. . using mirrors only
G02B 17/08	1-Punkt Untergruppe	. Catadioptric systems
G02B 19/00	Hauptgruppe	Condensers (for microscopes G02B 21/08)
G02B 21/00	Hauptgruppe	Microscopes (eyepieces G02B 25/00; polarising systems G02B 27/28; measuring microscopes G01B 9/04; microtomes G01N 1/06; investigating or analysing surface structures in atomic ranges using scanning-probe techniques, e.g. techniques employing scanning tunnelling or scanning near-field optical microscopes G01N 13/10; details of scanning-probe apparatus, in general G12B 21/00) [1, 7]
G02B 21/02	1-Punkt Untergruppe	. Objectives
G02B 21/04	2-Punkt Untergruppe	. . involving mirrors
G02B 21/06	1-Punkt Untergruppe	. Means for illuminating specimen
G02B 21/08	2-Punkt Untergruppe	. . Condensers
G02B 21/10	3-Punkt Untergruppe	. . . affording dark-field illumination (G02B 21/14 takes precedence)
G02B 21/12	3-Punkt Untergruppe	. . . affording bright-field illumination (G02B 21/14 takes precedence)
G02B 21/14	3-Punkt Untergruppe	. . . affording illumination for phase-contrast observation
G02B 21/16	1-Punkt Untergruppe	. adapted for ultra-violet illumination
G02B 21/18	1-Punkt Untergruppe	. Arrangements with more than one light-path, e.g. for comparing two specimens
G02B 21/20	2-Punkt Untergruppe	. . Binocular arrangements
G02B 21/22	3-Punkt Untergruppe	. . . Stereoscopic arrangements
G02B 21/24	1-Punkt Untergruppe	. Base structure
G02B 21/26	2-Punkt Untergruppe	. . Stages; Adjusting means therefor
G02B 21/28	2-Punkt Untergruppe	. . with cooling device
G02B 21/30	2-Punkt Untergruppe	. . with heating device
G02B 21/32	1-Punkt Untergruppe	. Micromanipulators structurally combined with microscopes

Symbol	Typ	Titel
G02B 21/33	1-Punkt Untergruppe	. Immersion oils [6]
G02B 21/34	1-Punkt Untergruppe	. Microscope slides, e.g. mounting specimens on microscope slides (preparing specimens for investigation G01N 1/28; means for supporting the objects or the materials to be analysed in electron microscopes H01J 37/20)
G02B 21/36	1-Punkt Untergruppe	. arranged for photographic purposes or projection purposes (G02B 21/18 takes precedence)
G02B 23/00	Hauptgruppe	Telescopes, e.g. binoculars (measuring telescopes G01B 9/06); Periscopes; Instruments for viewing the inside of hollow bodies (diagnostic instruments A61B); Viewfinders (objectives G02B 9/00, G02B 11/00, G02B 15/00, G02B 17/00; eyepieces G02B 25/00); Optical aiming or sighting devices (non-optical aspects of weapon aiming or sighting devices F41G) [4]
G02B 23/02	1-Punkt Untergruppe	. involving prisms or mirrors (G02B 23/14 takes precedence)
G02B 23/04	2-Punkt Untergruppe	. . for the purpose of beam splitting or combining, e.g. fitted with eyepieces for more than one observer (G02B 23/10 takes precedence)
G02B 23/06	2-Punkt Untergruppe	. . having a focusing action, e.g. parabolic mirror
G02B 23/08	2-Punkt Untergruppe	. . Periscopes
G02B 23/10	2-Punkt Untergruppe	. . reflecting into the field of view additional indications, e.g. from collimator (collimators in general G02B 27/30; graticules G02B 27/34)
G02B 23/12	1-Punkt Untergruppe	. with means for image conversion or intensification (objectives for image conversion or intensification G02B 13/16; electrical image converters with optical input and optical output H01J 31/50)
G02B 23/14	1-Punkt Untergruppe	. Viewfinders (for photographic apparatus G03B 13/02)
G02B 23/16	1-Punkt Untergruppe	. Housings; Caps; Mountings; Supports, e.g. with counterweight (cases or receptacles A45C)
G02B 23/18	2-Punkt Untergruppe	. . for binocular arrangements
G02B 23/20	2-Punkt Untergruppe	. . Collapsible housings (G02B 23/18 takes precedence)
G02B 23/22	2-Punkt Untergruppe	. . Underwater equipments, e.g. for submarine periscope
G02B 23/24	1-Punkt Untergruppe	. Instruments for viewing the inside of hollow bodies, e.g. fibrescopes [4]
G02B 23/26	2-Punkt Untergruppe	. . using light guides [4]
G02B 25/00	Hauptgruppe	Eyepieces; Magnifying glasses (simple lenses G02B 3/00)
G02B 25/02	1-Punkt Untergruppe	. with means for illuminating object viewed
G02B 25/04	1-Punkt Untergruppe	. affording a wide-angle view, e.g. through a spy-hole
G02B 26/00	Hauptgruppe	Optical devices or arrangements using movable or deformable optical elements for controlling the intensity, colour, phase, polarisation or direction of light, e.g. switching, gating, modulating (mechanically operable parts of lighting devices for the control of light order F21V; specially adapted for measuring characteristics of light G01J; devices or arrangements, the optical operation of which is modified by changing the optical properties of the medium of the devices or arrangements G02F 1/00; control of light in general G05D 25/00; control of light sources H01S 3/10, H05B 37/00-H05B 43/00) [4]
G02B 26/02	1-Punkt Untergruppe	. for controlling the intensity of light [4]
G02B 26/04	2-Punkt Untergruppe	. . by periodically varying the intensity of light, e.g. using choppers [4]
G02B 26/06	1-Punkt Untergruppe	. for controlling the phase of light (G02B 26/08 takes precedence) [4]
G02B 26/08	1-Punkt Untergruppe	. for controlling the direction of light (in light guides G02B 6/35) [4]

Symbol	Typ	Titel
G02B 26/10	2-Punkt Untergruppe	. . Scanning systems (for special applications, <u>see</u> the relevant places, e.g. G03B 27/32, G03F 3/08, G03G 15/04, G09G 3/00, H04N) [4]
G02B 26/12	3-Punkt Untergruppe	. . . using multifaceted mirrors [6]
G02B 27/00	Hauptgruppe	Other optical systems; Other optical apparatus (means for bringing-about special optical effects in shop-windows, showcases A47F, e.g. A47F 11/06; optical toys A63H 33/22; designs or pictures characterised by special light effects B44F 1/00)
G02B 27/01	1-Punkt Untergruppe	. Head-up displays [6]
G02B 27/02	1-Punkt Untergruppe	. Viewing or reading apparatus (stereoscopic systems G02B 27/22; of the projection type G03B; slide-changing apparatus G03B)
G02B 27/04	2-Punkt Untergruppe	. . having collapsible parts
G02B 27/06	2-Punkt Untergruppe	. . with moving-picture effect
G02B 27/08	2-Punkt Untergruppe	. . Kaleidoscopes
G02B 27/09	1-Punkt Untergruppe	. Beam shaping, e.g. changing the cross-sectioned area, not otherwise provided for [6]
G02B 27/10	1-Punkt Untergruppe	. Beam splitting or combining systems (mixing and splitting light signals using optical waveguides G02B 6/28; polarising systems G02B 27/28) [4]
G02B 27/12	2-Punkt Untergruppe	. . operating by refraction only
G02B 27/14	2-Punkt Untergruppe	. . operating by reflection only
G02B 27/16	2-Punkt Untergruppe	. . used as aids for focusing
G02B 27/18	1-Punkt Untergruppe	. for optical projection, e.g. combination of mirror and condenser and objective
G02B 27/20	2-Punkt Untergruppe	. . for imaging minute objects, e.g. light-pointer
G02B 27/22	1-Punkt Untergruppe	. for producing stereoscopic or other three-dimensional effects (in microscopes G02B 21/22; viewing apparatus G02B 27/02)
G02B 27/24	2-Punkt Untergruppe	. . involving reflecting prisms and mirrors only
G02B 27/26	2-Punkt Untergruppe	. . involving polarising means
G02B 27/28	1-Punkt Untergruppe	. for polarising (used in stereoscopes G02B 27/26)
G02B 27/30	1-Punkt Untergruppe	. Collimators
G02B 27/32	1-Punkt Untergruppe	. Fiducial marks or measuring scales within the optical system
G02B 27/34	2-Punkt Untergruppe	. . illuminated
G02B 27/36	2-Punkt Untergruppe	. . adjustable
G02B 27/40	1-Punkt Untergruppe	. Optical focusing aids (beam splitting or combining systems G02B 27/10)
G02B 27/42	1-Punkt Untergruppe	. Diffraction optics (G02B 27/60 takes precedence) [3]
G02B 27/44	2-Punkt Untergruppe	. . Grating systems; Zone plate systems (G02B 27/46 takes precedence; spectrometry G01J) [3]
G02B 27/46	2-Punkt Untergruppe	. . Systems using spatial filters (character recognition G06K 9/00) [3]
G02B 27/48	1-Punkt Untergruppe	. Laser speckle optics (speckle suppression in holography G03H 1/32) [3]
G02B 27/50	1-Punkt Untergruppe	. Optics for phase object visualisation (in microscopes G02B 21/14) [3]

Symbol	Typ	Titel
G02B 27/52	2-Punkt Untergruppe	. . Phase contrast optics [3]
G02B 27/54	2-Punkt Untergruppe	. . Schlieren-optical systems [3]
G02B 27/56	1-Punkt Untergruppe	. Optics using evanescent waves, i.e. inhomogeneous waves [3]
G02B 27/58	1-Punkt Untergruppe	. Optics for apodization or superresolution; Optical synthetic aperture systems [3]
G02B 27/60	1-Punkt Untergruppe	. Systems using moire fringes (means for converting the output of a sensing member using diffraction gratings G01D 5/38) [3]
G02B 27/62	1-Punkt Untergruppe	. Optical apparatus specially adapted for adjusting optical elements during the assembly of optical systems (adjusting means being part of the system to be assembled G02B 7/00) [3]
G02B 27/64	1-Punkt Untergruppe	. Imaging systems using optical elements for stabilisation of the lateral and angular position of the image (focusing systems G02B 7/04; adjustment of optical system relative to image or object surface G03B 5/00) [3]