Symbol	Typ	Titel
F	**Sektion**	**SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING**
F21	**Untersektion**	**LIGHTING; HEATING**
F21	**Klasse**	**LIGHTING (electric aspects or elements, see section H, e.g. electric light sources H01J, H01K, H05B)**
F21V	**Unterklasse**	**FUNCTIONAL FEATURES OR DETAILS OF LIGHTING DEVICES OR SYSTEMS THEREOF; STRUCTURAL COMBINATIONS OF LIGHTING DEVICES WITH OTHER ARTICLES, NOT OTHERWISE PROVIDED FOR [1, 7]**
		Details of those parts involved in light emission or distribution (optical elements or systems in general G02B)
F21V 1/00	**Hauptgruppe**	**Shades**
F21V 1/02	1-Punkt Untergruppe	. Frames
F21V 1/04	2-Punkt Untergruppe	. . rigid (F21V 1/08 takes precedence)
F21V 1/06	2-Punkt Untergruppe	. . foldable or collapsible
F21V 1/08	2-Punkt Untergruppe	. . adjustable
F21V 1/10	1-Punkt Untergruppe	. Rotating shades
F21V 1/12	1-Punkt Untergruppe	. Composite shades
F21V 1/14	1-Punkt Untergruppe	. Covers for frames; Frameless shades
F21V 1/16	2-Punkt Untergruppe	. . characterised by the material
F21V 1/18	3-Punkt Untergruppe	. . . the material being paper
F21V 1/20	3-Punkt Untergruppe	. . . the material being glass
F21V 1/22	3-Punkt Untergruppe	. . . the material being plastics
F21V 1/24	3-Punkt Untergruppe	. . . the material being metal
F21V 1/26	1-Punkt Untergruppe	. Manufacturing shades
F21V 3/00	**Hauptgruppe**	**Globes; Bowls; Cover glasses (with refracting properties F21V 5/00; with reflecting properties F21V 7/00)**
F21V 3/02	1-Punkt Untergruppe	. characterised by the shape
F21V 3/04	1-Punkt Untergruppe	. characterised by the material; characterised by surface treatments or coatings
F21V 5/00	**Hauptgruppe**	**Refractors**
F21V 5/02	1-Punkt Untergruppe	. of prismatic shape (F21V 5/04 takes precedence)
F21V 5/04	1-Punkt Untergruppe	. of lens shape
F21V 5/06	1-Punkt Untergruppe	. Hanging lustres for chandeliers
F21V 5/08	1-Punkt Untergruppe	. producing an asymmetric light distribution [1, 7]
F21V 7/00	**Hauptgruppe**	**Reflectors**
F21V 7/04	1-Punkt Untergruppe	. Optical design (F21V 7/22 takes precedence) [1, 7]
F21V 7/05	2-Punkt Untergruppe	. . plane [1, 7]

Symbol	Typ	Titel
F21V 7/06	2-Punkt Untergruppe	. . with parabolic curvature [1, 7]
F21V 7/07	2-Punkt Untergruppe	. . with hyperbolic curvature [1, 7]
F21V 7/08	2-Punkt Untergruppe	. . with elliptical curvature [1, 7]
F21V 7/09	2-Punkt Untergruppe	. . with a combination of different curvatures [1, 7]
F21V 7/10	1-Punkt Untergruppe	. Construction (F21V 7/22 takes precedence) [1, 7]
F21V 7/16	2-Punkt Untergruppe	. . with provision for adjusting the curvature [1, 7]
F21V 7/18	2-Punkt Untergruppe	. . with provision for folding or collapsing [1, 7]
F21V 7/20	2-Punkt Untergruppe	. . specially adapted for facilitating cooling, e.g. with fins (cooling by other means, e.g. fluid, F21V 29/00) [1, 7]
F21V 7/22	1-Punkt Untergruppe	. characterised by the material; characterised by surface treatments or coatings
F21V 8/00	**Hauptgruppe**	**Use of light guides, e.g. fibre optic devices, in lighting devices or systems (light guides per se, structural details of arrangements with other optical elements G02B 6/00) [4]**
F21V 9/00	**Hauptgruppe**	**Light filters (coloured shades F21V 1/00); Selection of luminescent materials for light screens (luminescent materials per seC09K 11/00; electroluminescent light sources per seH05B 33/00)**
F21V 9/02	1-Punkt Untergruppe	. for simulating daylight (F21V 9/04, F21V 9/06, F21V 9/16 take precedence)
F21V 9/04	1-Punkt Untergruppe	. for filtering out infra-red radiation (using liquid-filled chambers F21V 9/12)
F21V 9/06	1-Punkt Untergruppe	. for filtering out ultra-violet radiation (F21V 9/16 takes precedence)
F21V 9/08	1-Punkt Untergruppe	. for producing coloured light, e.g. monochromatic; for reducing intensity of light (F21V 9/16 takes precedence)
F21V 9/10	2-Punkt Untergruppe	. . with provision for variation of the colour or intensity (F21V 9/12 takes precedence)
F21V 9/12	2-Punkt Untergruppe	. . with liquid-filled chambers
F21V 9/14	1-Punkt Untergruppe	. for producing polarised light
F21V 9/16	1-Punkt Untergruppe	. Selection of luminescent materials for light screens
F21V 11/00	**Hauptgruppe**	**Screens not covered by groups F21V 1/00, F21V 3/00, F21V 7/00, F21V 9/00**
F21V 11/02	1-Punkt Untergruppe	. using parallel laminae or strips, e.g. of Venetian-blind type (F21V 11/06 takes precedence)
F21V 11/04	2-Punkt Untergruppe	. . adjustable
F21V 11/06	1-Punkt Untergruppe	. using crossed laminae or strips; using lattices or honeycombs
F21V 11/08	1-Punkt Untergruppe	. using diaphragms containing one or more apertures
F21V 11/10	2-Punkt Untergruppe	. . of iris type
F21V 11/12	2-Punkt Untergruppe	. . of slot type
F21V 11/14	2-Punkt Untergruppe	. . with many small apertures
F21V 11/16	1-Punkt Untergruppe	. using sheets without apertures, e.g. fixed (F21V 11/02, F21V 11/06 take precedence)
F21V 11/18	2-Punkt Untergruppe	. . movable, e.g. flaps, slides
F21V 13/00	**Hauptgruppe**	**Producing particular characteristics or distribution of the light emitted by means of a combination of elements specified in two or more of main groups F21V 1/00-F21V 11/00 (by means of a combination of two or more elements covered by a single one of main groups F21V 1/00-F21V**

Symbol	Typ	Titel
		11/00, <u>see</u> the relevant group; changing the characteristics or distribution of the light emitted by adjustment of parts F21V 14/00) [1, 7]
F21V 13/02	1-Punkt Untergruppe	. Combinations of only two kinds of elements
F21V 13/04	2-Punkt Untergruppe	. . the elements being reflectors and refractors
F21V 13/06	3-Punkt Untergruppe	. . . a reflector being rotatable
F21V 13/08	2-Punkt Untergruppe	. . the elements being reflectors and filters
F21V 13/10	2-Punkt Untergruppe	. . the elements being reflectors and screens
F21V 13/12	1-Punkt Untergruppe	. Combinations of only three kinds of elements
F21V 13/14	2-Punkt Untergruppe	. . the elements being reflectors, refractors, and filters
F21V 14/00	**Hauptgruppe**	**Changing the characteristics or distribution of the light emitted by adjustment of parts (reflectors with provision for adjusting the curvature F21V 7/16; light filters with provision for variation of colour or intensity F21V 9/10; screens using iris-type diaphragms F21V 11/10; adjustable mountings for lighting devices F21V 21/14) [7]**
F21V 14/02	1-Punkt Untergruppe	. by movement of light sources [7]
F21V 14/04	1-Punkt Untergruppe	. by movement of reflectors [7]
F21V 14/06	1-Punkt Untergruppe	. by movement of refractors [7]
F21V 14/08	1-Punkt Untergruppe	. by movement of screens [7]
		<u>Details of those parts not involved in light emission or distribution, e.g. fittings</u>
F21V 15/00	**Hauptgruppe**	**Protecting lighting devices from damage (cooling or heating arrangements F21V 29/00; gas-tight or water-tight arrangements F21V 31/00)**
F21V 15/01	1-Punkt Untergruppe	. Housings, e.g. material or assembling of housing parts (F21V 15/02 takes precedence) [7]
F21V 15/015	2-Punkt Untergruppe	. . Devices for covering joints between adjacent lighting devices; End coverings [7]
F21V 15/02	1-Punkt Untergruppe	. Cages
F21V 15/04	1-Punkt Untergruppe	. Resilient mountings, e.g. shock-absorbers (in general F16F 15/04)
F21V 15/06	1-Punkt Untergruppe	. Thermal insulation [7]
F21V 17/00	**Hauptgruppe**	**Fastening of component parts of lighting devices, e.g. shades, globes, refractors, reflectors, filters, screens, grids or protective cages (of light sources or light holders F21V 19/00; gas-tight or water-tight arrangements F21V 31/00)**
F21V 17/02	1-Punkt Untergruppe	. with provision for adjustment (F21V 17/04-F21V 17/08 take precedence; changing the characteristics or distribution of the light emitted by adjustment of parts F21V 14/00) [1, 7]
F21V 17/04	1-Punkt Untergruppe	. onto or by the light source
F21V 17/06	1-Punkt Untergruppe	. onto or by the lamp holder
F21V 17/08	1-Punkt Untergruppe	. onto the supporting or suspending arrangements of the lighting device, e.g. power cords, standards [7]
F21V 17/10	1-Punkt Untergruppe	. characterised by specific fastening means or way of fastening (F21V 17/02-F21V 17/08 take precedence) [7]
F21V 17/12	2-Punkt Untergruppe	. . by screwing [7]
F21V 17/14	2-Punkt Untergruppe	. . Bayonet-type fastening [7]
F21V 17/16	2-Punkt Untergruppe	. . by deformation of parts of the lighting device; Snap action mounting [7]

Symbol	Typ	Titel
F21V 17/18	2-Punkt Untergruppe	. . Latch-type fastening, e.g. with rotary action [7]
F21V 17/20	2-Punkt Untergruppe	. . by toggle-action levers [7]
F21V 19/00	**Hauptgruppe**	**Fastening of light sources or lamp holders (fastening electric light source solely by the coupling device H01R 33/00)**
F21V 19/02	1-Punkt Untergruppe	. with provision for adjustment, e.g. for focusing (changing the characteristics or distribution of the light emitted by adjustment of parts F21V 14/00) [1, 7]
F21V 19/04	1-Punkt Untergruppe	. with provision for changing light source, e.g. turret
F21V 19/06	1-Punkt Untergruppe	. Fastening incandescent mantles or other incandescent bodies to lamp parts; Suspension devices for incandescent mantles or other incandescent bodies [1, 7]
F21V 21/00	**Hauptgruppe**	**Supporting, suspending, or attaching arrangements for lighting devices (F21V 17/00, F21V 19/00 take precedence; arrangement of signalling or lighting devices, the mounting or supporting thereof or circuits therefor, for vehicles in general B60Q; stands for supporting apparatus or articles in general F16M 11/00); Hand grips [1, 7]**
F21V 21/002	1-Punkt Untergruppe	. making direct electrical contact, e.g. by piercing (F21V 21/35 takes precedence) [7]
F21V 21/005	1-Punkt Untergruppe	. for several lighting devices in an end-to-end arrangement, i.e. light tracks [7]
F21V 21/008	1-Punkt Untergruppe	. Suspending from a cable or suspension line [7]
F21V 21/02	1-Punkt Untergruppe	. Wall, ceiling, or floor bases; Fixing pendants or arms to the bases (F21V 21/08 takes precedence; bases for movable standing lamps F21V 21/06)
F21V 21/03	2-Punkt Untergruppe	. . Ceiling bases, e.g. ceiling roses (F21V 21/04 takes precedence) [7]
F21V 21/04	2-Punkt Untergruppe	. . Recessed bases
F21V 21/06	1-Punkt Untergruppe	. Bases for movable standing lamps; Fixing standards to the bases (F21V 21/08 takes precedence)
F21V 21/08	1-Punkt Untergruppe	. Devices for easy attachment to a desired place
F21V 21/084	2-Punkt Untergruppe	. . Head fittings (for medical purposes A61B 1/06) [7]
F21V 21/088	2-Punkt Untergruppe	. . Clips; Clamps [7]
F21V 21/092	2-Punkt Untergruppe	. . Suction devices [7]
F21V 21/096	2-Punkt Untergruppe	. . Magnetic devices [7]
F21V 21/10	1-Punkt Untergruppe	. Pendants, arms, or standards; Fixing lighting devices to pendants, arms, or standards (adjustable mounting F21V 21/14; construction of posts not peculiar to use with lighting devices E04H 12/00)
F21V 21/104	2-Punkt Untergruppe	. . Pendants [7]
F21V 21/108	2-Punkt Untergruppe	. . Arms [7]
F21V 21/112	2-Punkt Untergruppe	. . Fixing lighting devices to pendants (F21V 21/002 takes precedence) [7]
F21V 21/116	2-Punkt Untergruppe	. . Fixing lighting devices to arms or standards (F21V 21/002 takes precedence) [7]
F21V 21/12	2-Punkt Untergruppe	. . capable of being elongated or shortened by the insertion or removal of intermediate pieces
F21V 21/13	1-Punkt Untergruppe	. Spring-loaded poles fixed at both ends [7]
F21V 21/14	1-Punkt Untergruppe	. Adjustable mountings
F21V 21/15	2-Punkt Untergruppe	. . specially adapted for power operation, e.g. by remote control [7]
F21V 21/16	2-Punkt Untergruppe	. . using wires or cords

Symbol	Typ	Titel
F21V 21/18	3-Punkt Untergruppe	. . . operated by springs
F21V 21/20	3-Punkt Untergruppe	. . . operated by weights
F21V 21/22	2-Punkt Untergruppe	. . telescopic
F21V 21/24	2-Punkt Untergruppe	. . Lazy-tongs
F21V 21/26	2-Punkt Untergruppe	. . Pivoted arms
F21V 21/28	3-Punkt Untergruppe	. . . adjustable in more than one plane
F21V 21/29	4-Punkt Untergruppe	. . . . employing universal joints
F21V 21/30	2-Punkt Untergruppe	. . Pivoted housings or frames
F21V 21/32	2-Punkt Untergruppe	. . Flexible tubes
F21V 21/34	1-Punkt Untergruppe	. Supporting elements displaceable along a guiding element
F21V 21/35	2-Punkt Untergruppe	. . with direct electrical contact between the supporting element and electric conductors running along the guiding element [7]
F21V 21/36	1-Punkt Untergruppe	. Hoisting or lowering devices, e.g. for maintenance (F21V 21/14 takes precedence)
F21V 21/38	2-Punkt Untergruppe	. . with a cable
F21V 21/40	1-Punkt Untergruppe	. Hand grips [7]
F21V 23/00	**Hauptgruppe**	**Arrangement of electric circuit elements in or on lighting devices (electric circuits per seH05B 39/00)**
F21V 23/02	1-Punkt Untergruppe	. the elements being transformers or impedances
F21V 23/04	1-Punkt Untergruppe	. the elements being switches (safety devices F21V 25/00)
F21V 23/06	1-Punkt Untergruppe	. the elements being coupling devices
F21V 25/00	**Hauptgruppe**	**Safety devices structurally associated with lighting devices (gas-tight or water-tight arrangements F21V 31/00; in general F16P; protective circuit arrangements per seH02H 7/00)**
F21V 25/02	1-Punkt Untergruppe	. coming into action when lighting device is disturbed, dismounted, or broken
F21V 25/04	2-Punkt Untergruppe	. . breaking the electric circuit
F21V 25/06	2-Punkt Untergruppe	. . feeding a quenching fluid to the light source
F21V 25/08	2-Punkt Untergruppe	. . cutting the incandescent filament
F21V 25/10	1-Punkt Untergruppe	. coming into action when lighting device is over-loaded, e.g. thermal switch
F21V 25/12	1-Punkt Untergruppe	. Flameproof or explosion-proof arrangements
F21V 27/00	**Hauptgruppe**	**Cable-stowing arrangements structurally associated with lighting devices, e.g. reels (storing lengths of cable in general B65H)**
F21V 27/02	1-Punkt Untergruppe	. Cable inlets [7]
F21V 29/00	**Hauptgruppe**	**Cooling or heating arrangements (air-treatment systems with air-flow over lighting fixtures F24F 3/056; lighting fixtures combined with outlets for air-treatment systems F24F 13/078) [1, 7]**
F21V 29/02	1-Punkt Untergruppe	. Cooling by forcing air over or around the light source (cooling arrangements structurally associated with electric lamps H01J 61/52, H01K 1/58) [7]
F21V 31/00	**Hauptgruppe**	**Gas-tight or water-tight arrangements**

Symbol	Typ	Titel
F21V 31/03	1-Punkt Untergruppe	. with provision for venting [7]
F21V 31/04	1-Punkt Untergruppe	. Provision of filling media (safety devices F21V 25/00; cooling arrangements F21V 29/00)
F21V 33/00	**Hauptgruppe**	**Structural combinations of lighting devices with other articles, not otherwise provided for [1, 7]**
F21V 35/00	**Hauptgruppe**	**Candle holders**
F21V 36/00	**Hauptgruppe**	**Arrangements of mantles or other incandescent bodies on burners (attaching to lamp parts F21V 19/06)**
F21V 36/02	1-Punkt Untergruppe	. in ceiling lamps
F21V 37/00	**Hauptgruppe**	**Details of lighting devices employing combustion as light source, not otherwise provided for [1, 7]**
F21V 37/02	1-Punkt Untergruppe	. Special adaptation for protection against draughts [7]
F21V 99/00	***Hauptgruppe***	***Subject matter not provided for in other groups of this subclass [2006.01]***