

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

LIGHTING; HEATING

F21 LIGHTING (NOTE omitted)

F21S NON-PORTABLE LIGHTING DEVICES; SYSTEMS THEREOF; VEHICLE LIGHTING DEVICES SPECIALLY ADAPTED FOR VEHICLE EXTERIORS

NOTES

1. This subclass covers:
 - devices or systems intended for fixed installation or for use at a permanent location, e.g. free-standing floor- or table-lamps.
 - aspects related to the optical, mechanical, thermal or electrical arrangement of elements in vehicle illuminating devices specially adapted for vehicle exterior, e.g. headlamps.
 - aspects related to the optical, mechanical, thermal or electrical arrangement of elements in vehicle light signalling devices specially adapted for vehicle exterior, e.g. brake lamps or direction indicator lights.
2. This subclass does not cover:
 - devices or systems specially adapted for transportation, which are covered by subclass [F21L](#).
 - aspects related to the vehicles in which lighting devices are arranged, e.g. the arrangement or operation of lighting devices on vehicles, which are covered by [B60Q](#).
 - control of vehicle lighting devices in relation to the vehicle as a whole, e.g. for levelling, swivelling or aiming. Such arrangements are covered by group [B60Q 1/06](#), even if the movement of the lighting device occurs inside the lamp housing.
3. Non-electric lighting devices or systems are classified in groups [F21S 11/00](#) - [F21S 15/00](#) only if a special adaptation related to the use of a non-electric light source is of interest.
4. In this subclass, it is desirable to add the indexing codes of subclasses [F21W](#) and [F21Y](#).

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.

Electric lighting

- | | |
|---|---|
| <p>2/00 Systems of lighting devices, not provided for in main groups F21S 4/00 - F21S 10/00 or F21S 19/00, e.g. of modular construction</p> <p>2/005 . {of modular construction}</p> <p>4/00 Lighting devices or systems using a string or strip of light sources</p> <p>4/10 . with light sources attached to loose electric cables, e.g. Christmas tree lights</p> <p>4/15 . . the cables forming a grid, net or web structure</p> <p>4/20 . with light sources held by or within elongate supports</p> <p>4/22 . . flexible or deformable, e.g. into a curved shape</p> <p>4/24 . . . of ribbon or tape form, e.g. LED tapes</p> <p>4/26 . . . of rope form, e.g. LED lighting ropes, or of tubular form</p> <p>4/28 . . rigid, e.g. LED bars</p> <p>6/00 Lighting devices intended to be free-standing
(F21S 9/00, F21S 10/00, {F21S 13/12} take precedence {lighting devices specially adapted to be transported from place to place, e.g. lighting devices carried on wheeled supports F21L; details of supports for lighting devices F21V 21/00})</p> | <p>6/001 . {being candle-shaped (with varying lighting effect of simulating flames F21S 10/04; string of light sources F21S 4/00)}</p> <p>6/002 . {Table lamps, e.g. for ambient lighting}</p> <p>6/003 . . {for task lighting, e.g. for reading or desk work, e.g. angle poise lamps}</p> <p>6/004 . {with a lamp housing in direct contact with the floor or ground}</p> <p>6/005 . {with a lamp housing maintained at a distance from the floor or ground via a support, e.g. standing lamp for ambient lighting}</p> <p>6/006 . . {for direct lighting only, e.g. task lighting}</p> <p>6/007 . . {for indirect lighting only, e.g. torchiere with reflector bowl directed towards ceiling}</p> <p>6/008 . . {with a combination of direct and indirect lighting}</p> <p>8/00 Lighting devices intended for fixed installation
(F21S 9/00, F21S 10/00 take precedence; using a string or strip of light sources F21S 4/00)</p> <p>8/003 . {Searchlights, i.e. outdoor lighting device producing powerful beam of parallel rays, e.g. for military or attraction purposes (searchlights mounted on a vehicle B60Q 1/245)}</p> |
|---|---|

8/006	<ul style="list-style-type: none"> {Solar simulators, e.g. for testing photovoltaic panels} 	9/02	<ul style="list-style-type: none"> the power supply being a battery or accumulator
8/02	<ul style="list-style-type: none"> of recess-mounted type, e.g. downlighters (specially adapted for vehicle exteriors F21S 41/00-F21S 45/00) 	9/022	<ul style="list-style-type: none"> {Emergency lighting devices}
8/022	<ul style="list-style-type: none"> {intended to be recessed in a floor or like ground surface, e.g. pavement or false floor} 	9/024	<ul style="list-style-type: none"> {using a supplementary light source for emergency lighting}
8/024	<ul style="list-style-type: none"> {intended to be recessed in a wall or like vertical structure, e.g. building facade} 	9/026	<ul style="list-style-type: none"> {rechargeable by using wind power, e.g. using wind turbines}
8/026	<ul style="list-style-type: none"> {intended to be recessed in a ceiling or like overhead structure, e.g. suspended ceiling} 	9/028	<ul style="list-style-type: none"> {rechargeable by using hydropower, e.g. using water powered turbines}
8/028	<ul style="list-style-type: none"> {being retractable, i.e. having two fixed positions, one recessed, e.g. in a wall, floor or ceiling, and one extended when in use} 	9/03	<ul style="list-style-type: none"> rechargeable by exposure to light
8/03	<ul style="list-style-type: none"> {of surface-mounted type (F21S 8/02, F21S 8/04 take precedence; details of wall or floor bases F21V 21/02)} 	9/032	<ul style="list-style-type: none"> {the solar unit being separate from the lighting unit}
8/031	<ul style="list-style-type: none"> {the device consisting essentially only of a light source holder with an exposed light source, e.g. a fluorescent tube} 	9/035	<ul style="list-style-type: none"> {the solar unit being integrated within the support for the lighting unit, e.g. within or on a pole}
8/032	<ul style="list-style-type: none"> {the surface being a floor or like ground surface, e.g. pavement} 	9/037	<ul style="list-style-type: none"> {the solar unit and the lighting unit being located within or on the same housing}
8/033	<ul style="list-style-type: none"> {the surface being a wall or like vertical structure, e.g. building facade} 	9/04	<ul style="list-style-type: none"> the power supply being a generator
8/035	<ul style="list-style-type: none"> {by means of plugging into a wall outlet, e.g. night light} 	9/043	<ul style="list-style-type: none"> {driven by wind power, e.g. by wind turbines}
8/036	<ul style="list-style-type: none"> {by means of a rigid support, e.g. bracket or arm} 	9/046	<ul style="list-style-type: none"> {driven by hydropower, e.g. by water powered turbines}
8/037	<ul style="list-style-type: none"> {for mounting in a corner, i.e. between adjacent walls or wall and ceiling} 	10/00	Lighting devices or systems producing a varying lighting effect
8/038	<ul style="list-style-type: none"> {intended to be mounted on a light track (suspended from a light track F21S 8/066; details of supporting elements displaceable along a guiding element F21V 21/34)} 	10/002	<ul style="list-style-type: none"> {using liquids, e.g. water}
8/04	<ul style="list-style-type: none"> intended only for mounting on a ceiling or the like overhead structures (F21S 8/02 takes precedence; {details of ceiling bases F21V 21/03}) 	10/005	<ul style="list-style-type: none"> {using light guides (light guides specially adapted for lighting devices G02B 6/0001)}
8/043	<ul style="list-style-type: none"> {mounted by means of a rigid support, e.g. bracket or arm} 	10/007	<ul style="list-style-type: none"> {using rotating transparent or colored disks, e.g. gobo wheels}
8/046	<ul style="list-style-type: none"> {having multiple lighting devices, e.g. connected to a common ceiling base} 	10/02	<ul style="list-style-type: none"> changing colors (F21S 10/002 - F21S 10/007, F21S 10/04 take precedence)
8/06	<ul style="list-style-type: none"> by suspension 	10/023	<ul style="list-style-type: none"> {by selectively switching fixed light sources}
8/061	<ul style="list-style-type: none"> {with a non-rigid pendant, i.e. a cable, wire or chain} 	10/026	<ul style="list-style-type: none"> {by movement of parts, e.g. by movement of reflectors or light sources (F21S 10/007 takes precedence)}
8/063	<ul style="list-style-type: none"> {with a rigid pendant, i.e. a pipe or rod} 	10/04	<ul style="list-style-type: none"> simulating flames
8/065	<ul style="list-style-type: none"> {multi-branched, e.g. a chandelier} 	10/043	<ul style="list-style-type: none"> {by selectively switching fixed light sources}
8/066	<ul style="list-style-type: none"> {from a light track (details of supporting elements displaceable along a guiding element F21V 21/34)} 	10/046	<ul style="list-style-type: none"> {by movement of parts, e.g. by movement of reflectors or light sources}
8/068	<ul style="list-style-type: none"> {from a stretched wire} 	10/06	<ul style="list-style-type: none"> flashing, e.g. with rotating reflector or light source ({signalling lighting devices mounted on vehicles B60Q 1/26)}
8/08	<ul style="list-style-type: none"> with a standard (F21S 6/00 takes precedence) 	10/063	<ul style="list-style-type: none"> {for providing a rotating light effect}
8/081	<ul style="list-style-type: none"> {of low-built type, e.g. landscape light} 	10/066	<ul style="list-style-type: none"> {by selectively switching fixed light sources}
8/083	<ul style="list-style-type: none"> {of bollard type, i.e. with lighting fixture integrated into the standard or mounted on top of it and having substantially the same diameter} 	Non-electric lighting	
8/085	<ul style="list-style-type: none"> {of high-built type, e.g. street light} 	11/00	Non-electric lighting devices or systems using daylight {(hybrid lighting devices combining artificial and natural light F21S 19/00 ; roofs with sky-light opening E04D 13/03 ; sun blinds for windows with means for redirecting light onto ceiling of a room E06B 9/00 ; solar heat collectors F24S)}
8/086	<ul style="list-style-type: none"> {with lighting device attached sideways of the standard, e.g. for roads and highways} 	11/002	<ul style="list-style-type: none"> {characterised by the means for collecting or concentrating the sunlight, e.g. parabolic reflectors or Fresnel lenses}
8/088	<ul style="list-style-type: none"> {with lighting device mounted on top of the standard, e.g. for pedestrian zones} 	11/005	<ul style="list-style-type: none"> {with tracking means for following the position of the sun}
9/00	Lighting devices with a built-in power supply; Systems employing lighting devices with a built-in power supply	11/007	<ul style="list-style-type: none"> {characterised by the means for transmitting light into the interior of a building}
		13/00	Non-electric lighting devices or systems employing a point-like light source; Non-electric lighting devices or systems employing a light source of unspecified shape

13/02	• Devices intended to be fixed, e.g. ceiling lamp, wall lamp	41/176	• • • Light sources where the light is generated by photoluminescent material spaced from a primary light generating element
13/04	• • with a pendant	41/18	• • • {Combination of light sources of different types or shapes}
13/06	• • • multi-branched, e.g. chandelier	41/19	• • Attachment of light sources or lamp holders (achieving variable light distribution by movable light sources F21S 41/657)
13/08	• • with suspension from a stretched wire	41/192	• • • {Details of lamp holders, terminals or connectors}
13/10	• • with a standard, e.g. street lamp	41/194	• • • {Bayonet attachments}
13/12	• Devices intended to be free-standing, e.g. table lamp, floor lamp	41/196	• • • {Wire spring attachments}
13/14	• Lighting systems	41/198	• • • {Snap-fit attachments}
15/00	Non-electric lighting devices or systems employing light sources not covered by main groups F21S 11/00, F21S 13/00 or F21S 19/00	41/20	• characterised by refractors, transparent cover plates, light guides or filters
<hr/>			
2017/00	Details solely applicable to the devices covered by groups F21S 13/00 and F21S 15/00	41/24	• • Light guides
2017/02	• Fastening and lifting of the lamp-glass	41/25	• • Projection lenses
19/00	Lighting devices or systems employing combinations of electric and non-electric light sources; Replacing or exchanging electric light sources with non-electric light sources or vice versa	41/255	• • • Lenses with a front view of circular or truncated circular outline
19/005	• {Combining sunlight and electric light sources for indoor illumination}	41/26	• • • Elongated lenses
		41/265	• • • Composite lenses; Lenses with a patch-like shape
		41/27	• • • Thick lenses
		41/275	• • • Lens surfaces, e.g. coatings or surface structures
		41/28	• • {Cover glass}
		(Frozen)	WARNING
			Group F21S 41/28 is no longer used for the classification of documents as of May 1, 2024. The content of this group is being reclassified into groups F21S 41/2805 and F21S 43/2651.
			All groups listed in this Warning should be considered in order to perform a complete search.
Vehicle lighting devices specially adapted for vehicle exteriors			
41/00	Illuminating devices specially adapted for vehicle exteriors, e.g. headlamps (reversing lights F21S 43/00)		
41/10	• characterised by the light source		
41/12	• • characterised by the type of emitted light		
41/125	• • • Coloured light		
41/13	• • • Ultraviolet light; Infrared light		
41/135	• • • Polarised		
41/14	• • characterised by the type of light source		
41/141	• • • Light emitting diodes [LED]		
41/143	• • • • the main emission direction of the LED being parallel to the optical axis of the illuminating device		
41/145	• • • • the main emission direction of the LED being opposite to the main emission direction of the illuminating device		
41/147	• • • • the main emission direction of the LED being angled to the optical axis of the illuminating device		
41/148	• • • • the main emission direction of the LED being perpendicular to the optical axis		
41/151	• • • • arranged in one or more lines		
41/153	• • • • arranged in a matrix		
41/155	• • • • Surface emitters, e.g. organic light emitting diodes [OLED]		
41/16	• • • Laser light sources		
41/162	• • • Incandescent light sources, e.g. filament or halogen lamps		
41/164	• • • • having two or more filaments		
41/166	• • • • characterised by the shape of the filament		
41/168	• • • • having a filament arranged transversally to the optical axis of the illuminating device		
41/17	• • • Discharge light sources		
41/172	• • • • High-intensity discharge light sources		
41/173	• • • • Fluorescent light sources		
		41/2805	• • {Cover glass}
			WARNING
			Group F21S 41/2805 is incomplete pending reclassification of documents from group F21S 41/28.
			All groups listed in this Warning should be considered in order to perform a complete search.
		41/285	• • {Refractors, transparent cover plates, light guides or filters not provided in groups F21S 41/24 - F21S 41/2805}
		41/29	• • Attachment thereof (for achieving variable light distribution F21S 41/63)
		41/295	• • • {specially adapted to projection lenses}
		41/30	• characterised by reflectors
		41/32	• • Optical layout thereof
		41/321	• • • {the reflector being a surface of revolution or a planar surface, e.g. truncated}
		41/322	• • • {the reflector using total internal reflection}
		41/323	• • • {the reflector having two perpendicular cross sections having regular geometrical curves of a distinct nature}
		41/33	• • • Multi-surface reflectors, e.g. reflectors with facets or reflectors with portions of different curvature
		41/331	• • • • {the reflector consisting of complete annular areas}

- 41/332 {with continuity at the junction between adjacent areas}
- 41/333 {with discontinuity at the junction between adjacent areas}
- 41/334 {the reflector consisting of patch like sectors}
- 41/335 {with continuity at the junction between adjacent areas}
- 41/336 {with discontinuity at the junction between adjacent areas}
- 41/337 {the reflector having a structured surface, e.g. with facets or corrugations}
- 41/338 {the reflector having surface portions added to its general concavity}
- 41/36 . . . Combinations of two or more separate reflectors
- 41/365 successively reflecting the light
- 41/37 . . characterised by their material, surface treatment or coatings
- 41/39 . . Attachment thereof (achieving variable light distribution by movable reflectors [F21S 41/675](#))
- 41/395 . . . {specially adapted to extension reflectors}
- 41/40 . . characterised by screens, non-reflecting members, light-shielding members or fixed shades
- 41/43 . . characterised by the shape thereof
- 41/435 . . . {Hoods or cap-shaped}
- 41/47 . . Attachment thereof (achieving variable light distribution by movable screens [F21S 41/683](#))
- 41/50 . . characterised by aesthetic components not otherwise provided for, e.g. decorative trim, partition walls or covers
- 41/55 . . Attachment thereof
- 41/60 . . characterised by a variable light distribution
- 41/62 . . for adaptation between right-hand and left-hand traffic
- 41/63 . . by acting on refractors, filters or transparent cover plates
- 41/635 . . . {by moving refractors, filters or transparent cover plates}
- 41/64 . . . by changing their light transmissivity, e.g. by liquid crystal or electrochromic devices
- 41/645 {by electro-optic means, e.g. liquid crystal or electrochromic devices}
- 41/65 . . by acting on light sources
- 41/657 . . . by moving light sources
- 41/663 . . . by switching light sources (by switching incandescent light sources [F21S 41/162](#))
- 41/67 . . by acting on reflectors
- 41/675 . . . by moving reflectors
- 41/68 . . by acting on screens
- 41/683 . . . by moving screens
- 41/686 Blades, i.e. screens moving in a vertical plane
- 41/689 Flaps, i.e. screens pivoting around one of their edges
- 41/692 Shields, i.e. screens not creating an image meant to be projected
- 41/695 Screens rotating around a vertical axis (rotating flaps [F21S 41/689](#))
- 41/698 Shaft-shaped screens rotating along its longitudinal axis

43/00**Signalling devices specially adapted for vehicle exteriors, e.g. brake lamps, direction indicator lights or reversing lights****WARNING**

Group [F21S 43/00](#) is impacted by reclassification into group [F21S 43/601](#).

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

43/10

. characterised by the light source

43/13

. . characterised by the type of light source

43/14

. . . Light emitting diodes [LED]

43/145

. . . . Surface emitters, e.g. organic light emitting diodes [OLED]

43/15

. . . Strips of light sources

43/16

. . . Light sources where the light is generated by photoluminescent material spaced from a primary light generating element

43/19

. . Attachment of light sources or lamp holders

WARNING

Group [F21S 43/19](#) is impacted by reclassification into group [F21S 43/601](#).

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

43/195

. . . {Details of lamp holders, terminals or connectors}

WARNING

Group [F21S 43/195](#) is impacted by reclassification into group [F21S 43/601](#).

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

43/20

. characterised by refractors, transparent cover plates, light guides or filters

WARNING

Group [F21S 43/20](#) is impacted by reclassification into groups [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#), [F21S 43/2817](#) and [F21S 43/601](#).

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

43/235

. . Light guides

WARNING

Group [F21S 43/235](#) is impacted by reclassification into groups [F21S 43/246](#), [F21S 43/2492](#), [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/236 . . . characterised by the shape of the light guide

WARNING

Group [F21S 43/236](#) is impacted by reclassification into groups [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/237 rod-shaped

WARNING

Group [F21S 43/237](#) is impacted by reclassification into groups [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/239 plate-shaped

WARNING

Group [F21S 43/239](#) is impacted by reclassification into groups [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/241 of complex shape

WARNING

Group [F21S 43/241](#) is impacted by reclassification into groups [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/242 . . . characterised by the emission area

WARNING

Group [F21S 43/242](#) is impacted by reclassification into groups [F21S 43/246](#), [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/243 emitting light from one or more of its extremities

WARNING

Group [F21S 43/243](#) is impacted by reclassification into groups [F21S 43/246](#), [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/245 emitting light from one or more of its major surfaces

WARNING

Group [F21S 43/245](#) is impacted by reclassification into groups [F21S 43/246](#), [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/246 {having two or more output branches}

WARNING

Group [F21S 43/246](#) is incomplete pending reclassification of documents from groups [F21S 43/235](#), [F21S 43/242](#), [F21S 43/243](#) and [F21S 43/245](#).

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

43/247 . . . with a single light source being coupled into the light guide

WARNING

Group [F21S 43/247](#) is impacted by reclassification into groups [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/249 . . . with two or more light sources being coupled into the light guide

WARNING

Group [F21S 43/249](#) is impacted by reclassification into groups [F21S 43/2492](#), [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/2492 {having two or more input branches}

WARNING

Group [F21S 43/2492](#) is incomplete pending reclassification of documents from groups [F21S 43/235](#) and [F21S 43/249](#).

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

43/251 the light guides being used to transmit light from remote light sources

WARNING

Group [F21S 43/251](#) is impacted by reclassification into groups [F21S 43/252](#), [F21S 43/253](#), [F21S 43/281](#), [F21S 43/2811](#), [F21S 43/28131](#), [F21S 43/28133](#), [F21S 43/28135](#), [F21S 43/2815](#) and [F21S 43/2817](#).

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

43/252 {Two or more successive light guides}

WARNING

Group [F21S 43/252](#) is incomplete pending reclassification of documents from groups [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#) and [F21S 43/251](#).

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

43/253 {Two or more juxtaposed light guides}

WARNING

Group [F21S 43/253](#) is incomplete pending reclassification of documents from groups [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#) and [F21S 43/251](#).

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

43/255 . . . {Filters}

WARNING

Group [F21S 43/255](#) is impacted by reclassification into groups [F21S 43/601](#), [F21S 43/281](#), [F21S 43/28133](#), [F21S 43/2811](#), [F21S 43/28135](#), [F21S 43/2815](#), [F21S 43/28131](#) and [F21S 43/2817](#).

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

43/26 . . . {Refractors, transparent cover plates, light guides or filters not provided in groups [F21S 43/235](#) - [F21S 43/255](#)}

WARNING

Group [F21S 43/26](#) is no longer used for the classification of documents as of May 1, 2024. The content of this group is being reclassified into groups [F21S 43/26221](#), [F21S 43/2605](#), [F21S 43/28133](#), [F21S 43/26211](#), [F21S 43/26261](#), [F21S 43/2641](#), [F21S 43/2651](#), [F21S 43/281](#), [F21S 43/26231](#), [F21S 43/2643](#), [F21S 43/601](#), [F21S 43/26411](#), [F21S 43/2815](#), [F21S 43/2621](#), [F21S 43/26241](#), [F21S 43/265](#), [F21S 43/26251](#), [F21S 43/26271](#), [F21S 43/28135](#), [F21S 43/2817](#), [F21S 43/2811](#), [F21S 43/26421](#) and [F21S 43/28131](#).

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

43/2605 . . . {Refractors}

WARNING

Group [F21S 43/2605](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/2621 {characterised by the properties of the light beam shaping surface}

WARNING

Group [F21S 43/2621](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26211 {redirecting, i.e. substantially only changing light propagation direction}

WARNING

Group [F21S 43/26211](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26221 {dividing, unifying or reunifying}

WARNING

Group [F21S 43/26221](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26231 {collimating, focusing, condensing or projecting beams, e.g. projection lenses or Fresnel lenses}

WARNING

Group [F21S 43/26231](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26241 {diffusing, scattering or spreading}

WARNING

Group [F21S 43/26241](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26251 {Holograms}

WARNING

Group [F21S 43/26251](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26261 {Single refractor combining two or more properties of the groups [F21S 43/26211](#) - [F21S 43/26251](#) on opposite sides}

WARNING

Group [F21S 43/26261](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26271 {using micro-optics, e.g. micro-lenses or micro-structures}

WARNING

Group [F21S 43/26271](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/2641 {Refractors or refracting portions characterised by their relative arrangement, e.g. parallel refractors}

WARNING

Group [F21S 43/2641](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26411 {Two or more successive refractors}

WARNING

Group [F21S 43/26411](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/26421 {Refractors comprising a plurality of non-successive refracting portions}

WARNING

Group [F21S 43/26421](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/2643 {with several light entry surfaces for two or more light sources having distinct functions, at least one of them being signalling}

WARNING

Group [F21S 43/2643](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

43/265 . . . {Transparent cover plates, e.g. for protecting the interior of the signalling devices against environmental influences}

WARNING

Group [F21S 43/265](#) is incomplete pending reclassification of documents from group [F21S 43/26](#).

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

- 43/2651 . . . {with several light entry surfaces for two or more light sources having distinct functions, at least one of them being signalling}

WARNING

Group [F21S 43/2651](#) is incomplete pending reclassification of documents from groups [F21S 41/28](#) and [F21S 43/26](#).

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

- 43/27 . . Attachment thereof

WARNING

Group [F21S 43/27](#) is impacted by reclassification into groups [F21S 43/2815](#), [F21S 43/28131](#), [F21S 43/2811](#), [F21S 43/601](#), [F21S 43/2817](#), [F21S 43/281](#), [F21S 43/28133](#) and [F21S 43/28135](#).

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

- 43/281 . . {Materials thereof; Structures thereof; Properties thereof; Coatings thereof}

WARNING

Group [F21S 43/281](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

- 43/2811 . . . {Heterogeneous materials}

WARNING

Group [F21S 43/2811](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

- 43/28131 . . . {Structures comprising multiple layers}

WARNING

Group [F21S 43/28131](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

- 43/28133 . . . {Structures comprising gas or liquid media}

WARNING

Group [F21S 43/28133](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

- 43/28135 . . . {Structures encapsulating the light source}

WARNING

Group [F21S 43/28135](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

- 43/2815 . . . {Mechanical properties, e.g. flexibility}

WARNING

Group [F21S 43/2815](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

43/2817 . . . {Coatings, e.g. anti-reflection coatings}

WARNING

Group [F21S 43/2817](#) is incomplete pending reclassification of documents from groups [F21S 43/20](#), [F21S 43/235](#), [F21S 43/236](#), [F21S 43/237](#), [F21S 43/239](#), [F21S 43/241](#), [F21S 43/242](#), [F21S 43/243](#), [F21S 43/245](#), [F21S 43/247](#), [F21S 43/249](#), [F21S 43/251](#), [F21S 43/255](#), [F21S 43/26](#) and [F21S 43/27](#).

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

43/30 . characterised by reflectors

WARNING

Group [F21S 43/30](#) is impacted by reclassification into group [F21S 43/601](#).

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

43/31 . . Optical layout thereof

WARNING

Group [F21S 43/31](#) is impacted by reclassification into groups [F21S 43/331](#), [F21S 43/601](#) and [F21S 43/332](#).

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

43/315 . . . {using total internal reflection}

WARNING

Group [F21S 43/315](#) is impacted by reclassification into group [F21S 43/402](#).

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

43/33 . . characterised by their material, surface treatment or coatings

WARNING

Group [F21S 43/33](#) is impacted by reclassification into groups [F21S 43/332](#) and [F21S 43/331](#).

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

43/331 . . . {Semi-transparent reflectors}

WARNING

Group [F21S 43/331](#) is incomplete pending reclassification of documents from groups [F21S 43/31](#) and [F21S 43/33](#).

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

43/332 . . . {Diffusing reflectors}

WARNING

Group [F21S 43/332](#) is incomplete pending reclassification of documents from groups [F21S 43/31](#) and [F21S 43/33](#).

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

43/37 . . Attachment thereof

WARNING

Group [F21S 43/37](#) is impacted by reclassification into group [F21S 43/601](#).

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

43/40 . characterised by the combination of reflectors and refractors

WARNING

Group [F21S 43/40](#) is impacted by reclassification into groups [F21S 43/402](#) and [F21S 43/401](#).

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

43/401 . . {the refractors and the reflectors being distinct parts}

WARNING

Group [F21S 43/401](#) is incomplete pending reclassification of documents from group [F21S 43/40](#).

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

43/402 . . {Total internal reflection [TIR] collimators}

WARNING

Group [F21S 43/402](#) is incomplete pending reclassification of documents from groups [F21S 43/315](#) and [F21S 43/40](#).

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

43/50 . characterised by aesthetic components not otherwise provided for, e.g. decorative trim, partition walls or covers

43/51 . . {Attachment thereof}

WARNING

Group [F21S 43/51](#) is impacted by reclassification into group [F21S 43/601](#).

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

- 43/601 . {characterised by variable optical properties, e.g. involving the use of LCD or movable parts}

WARNING

Group [F21S 43/601](#) is incomplete pending reclassification of documents from groups [F21S 43/00](#), [F21S 43/19](#), [F21S 43/195](#), [F21S 43/20](#), [F21S 43/255](#), [F21S 43/26](#), [F21S 43/27](#), [F21S 43/30](#), [F21S 43/31](#), [F21S 43/37](#) and [F21S 43/51](#).

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

45/00 Arrangements within vehicle lighting devices specially adapted for vehicle exteriors, for purposes other than emission or distribution of light

- 45/10 . Protection of lighting devices (cooling of lighting devices [F21S 45/40](#); waterproofing of lighting devices [F21S 45/50](#))
- 45/20 . Promoting gas flow in lighting devices, e.g. directing flow toward the cover glass for demisting (ventilation [F21S 45/30](#); forced cooling [F21S 45/42](#))
- 45/30 . Ventilation or drainage of lighting devices
- 45/33 . . specially adapted for headlamps
- 45/37 . . specially adapted for signal lamps
- 45/40 . Cooling of lighting devices
- 45/42 . . Forced cooling
- 45/43 . . . using gas
- 45/435 circulating the gas within a closed system
- 45/46 . . . using liquid
- 45/465 from other vehicle cooling systems, e.g. from air-conditioning or engine cooling systems
- 45/47 . . Passive cooling, e.g. using fins, thermal conductive elements or openings
- 45/48 . . . with means for conducting heat from the inside to the outside of the lighting devices, e.g. with fins on the outer surface of the lighting device
- 45/49 . . Attachment of the cooling means
- 45/50 . Waterproofing
- 45/60 . Heating of lighting devices, e.g. for demisting
- 45/70 . Prevention of harmful light leakage

Indexing code associated with [F21S 43/00](#) relating to manufacturing details of signalling devices specially adapted for vehicle exteriors

2243/00 Manufacturing details of signalling devices specially adapted for vehicle exteriors