

# CPC COOPERATIVE PATENT CLASSIFICATION

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

### LIGHTING; HEATING

#### F21 LIGHTING (NOTE omitted)

#### F21V FUNCTIONAL FEATURES OR DETAILS OF LIGHTING DEVICES OR SYSTEMS THEREOF; STRUCTURAL COMBINATIONS OF LIGHTING DEVICES WITH OTHER ARTICLES, NOT OTHERWISE PROVIDED FOR

##### NOTES

1. Groups [F21V 1/00-F21V 14/00](#) cover aspects related to light emission or distribution. Groups [F21V 15/00-F21V 31/00](#) cover aspects not related to light emission or distribution.
2. Details of non-electric lighting devices or systems are classified in groups [F21V 35/00-F21V 37/00](#) only if a special adaptation related to the use of a non-electric light source is of interest.
3. In this subclass, it is desirable to add the indexing codes of subclasses [F21W](#) and [F21Y](#)

##### WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:  
[F21V 8/00](#) covered by [G02B 6/00](#)
2. 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.

##### {Aspects related to light emission or distribution}

		3/04	. characterised by materials, surface treatments or coatings
<b>1/00</b>	<b>Shades for light sources {, i.e. lampshades for table, floor, wall or ceiling lamps}</b>	3/049	. . {Patterns or structured surfaces for diffusing light, e.g. frosted surfaces}
1/02	. Frames	3/06	. . characterised by the material
1/04	. . rigid ( <a href="#">F21V 1/08</a> takes precedence)	3/061	. . . {the material being glass}
1/06	. . foldable or collapsible	3/0615	. . . . {the material diffusing light, e.g. translucent glass}
1/08	. . adjustable	3/062	. . . {the material being plastics}
1/10	. Rotating shades	3/0625	. . . . {the material diffusing light, e.g. translucent plastics}
1/12	. Composite shades {, i.e. shades being made of distinct parts}	3/063	. . . {comprising air or water bubbles, e.g. foamed materials}
1/14	. Covers for frames; Frameless shades	3/08	. . . the material comprising photoluminescent substances
1/143	. . {The cover being attached to a supporting lampshade frame}	3/10	. . characterised by coatings
1/146	. . {Frameless shades}	3/12	. . . the coatings comprising photoluminescent substances
1/16	. . characterised by the material		
1/17	. . . the material comprising photoluminescent substances		
1/18	. . . the material being paper		
1/20	. . . the material being glass	<b>5/00</b>	<b>Refractors for light sources (characterised by cooling arrangements <a href="#">F21V 29/504</a>)</b>
1/22	. . . the material being plastics	5/002	. {using microoptical elements for redirecting or diffusing light}
1/24	. . . the material being metal	5/003	. . {using holograms}
1/26	. Manufacturing shades	5/004	. . {using microlenses}
<b>3/00</b>	<b>Globes; Bowls; Cover glasses (with refracting properties <a href="#">F21V 5/00</a>; with reflecting properties <a href="#">F21V 7/00</a>; characterised by cooling arrangements <a href="#">F21V 29/506</a>)</b>	5/005	. . {using microprisms}
3/02	. characterised by the shape	5/006	. {applied to portable lighting devices}
3/023	. . {Chinese lanterns; Balloons}	5/007	. {Array of lenses or refractors for a cluster of light sources, e.g. for arrangement of multiple light sources in one plane (combination of two or more refractors <a href="#">F21V 5/008</a> )}
3/026	. . . {being inflatable}		

5/008	. {Combination of two or more successive refractors along an optical axis}	7/10	. Construction
5/02	. of prismatic shape ( <a href="#">F21V 5/04</a> takes precedence)	7/16	. . with provision for adjusting the curvature
5/04	. of lens shape	7/18	. . with provision for folding or collapsing
5/041	. . {Ball lenses}	7/22	. characterised by materials, surface treatments or coatings, e.g. dichroic reflectors
5/043	. . {the lens having cylindrical faces, e.g. rod lenses, toric lenses}	7/24	. . characterised by the material
5/045	. . {the lens having discontinuous faces, e.g. Fresnel lenses}	7/26	. . . the material comprising photoluminescent substances
5/046	. . {the lens having a rotationally symmetrical shape about an axis for transmitting light in a direction mainly perpendicular to this axis, e.g. ring or annular lens with light source disposed inside the ring}	7/28	. . characterised by coatings
5/048	. . {the lens being a simple lens adapted to cooperate with a point-like source for emitting mainly in one direction and having an axis coincident with the main light transmission direction, e.g. convergent or divergent lenses, plano-concave or plano-convex lenses}	7/30	. . . the coatings comprising photoluminescent substances
5/06	. Hanging lustres for chandeliers	<b>9/00</b>	<b>Elements for modifying spectral properties, polarisation or intensity of the light emitted, e.g. filters</b> (coloured shades <a href="#">F21V 1/00</a> ; elements characterised by cooling arrangements <a href="#">F21V 29/502</a> )
5/08	. producing an asymmetric light distribution	9/02	. for simulating daylight ( <a href="#">F21V 9/04</a> , <a href="#">F21V 9/06</a> take precedence)
5/10	. comprising photoluminescent material	9/04	. for filtering out infrared radiation (dichroic reflectors <a href="#">F21V 7/22</a> ; using liquid-filled chambers <a href="#">F21V 9/12</a> )
<b>7/00</b>	<b>Reflectors for light sources</b> (characterised by cooling arrangements <a href="#">F21V 29/505</a> )	9/06	. for filtering out ultraviolet radiation
7/0008	. {providing for indirect lighting}	9/08	. for producing coloured light, e.g. monochromatic; for reducing intensity of light (with provision for controlling the colour <a href="#">F21V 9/40</a> )
7/0016	. . {on lighting devices that also provide for direct lighting, e.g. by means of independent light sources, by splitting of the light beam, by switching between both lighting modes}	9/083	. . {for portable lighting devices}
7/0025	. {Combination of two or more reflectors for a single light source (array of reflectors for a cluster of light sources <a href="#">F21V 7/0083</a> )}	9/12	. . with liquid-filled chambers
7/0033	. . {with successive reflections from one reflector to the next or following}	9/14	. for producing polarised light
7/0041	. . . {for avoiding direct view of the light source or to prevent dazzling}	9/20	. Dichroic filters, i.e. devices operating on the principle of wave interference to pass specific ranges of wavelengths while cancelling others
7/005	. {with an elongated shape to cooperate with linear light sources}	9/30	. Elements containing photoluminescent material distinct from or spaced from the light source (shades <a href="#">F21V 1/17</a> ; globes, bowls or cover glasses <a href="#">F21V 3/08</a> , <a href="#">F21V 3/12</a> ; refractors <a href="#">F21V 5/10</a> ; reflectors <a href="#">F21V 7/26</a> , <a href="#">F21V 7/30</a> ; elements with provision for controlling the spectral properties or intensity <a href="#">F21V 9/40</a> )
7/0058	. {adapted to cooperate with light sources of shapes different from point-like or linear, e.g. circular light sources}	9/32	. . characterised by the arrangement of the photoluminescent material
7/0066	. {specially adapted to cooperate with point like light sources; specially adapted to cooperate with light sources the shape of which is unspecified ( <a href="#">F21V 7/16</a> - <a href="#">F21V 7/30</a> take precedence)}	9/35	. . . at focal points, e.g. of refractors, lenses, reflectors or arrays of light sources
7/0075	. {for portable lighting devices}	9/38	. . Combination of two or more photoluminescent elements of different materials
7/0083	. {Array of reflectors for a cluster of light sources, e.g. arrangement of multiple light sources in one plane (combination of two or more reflectors <a href="#">F21V 7/0025</a> )}	9/40	. with provision for controlling spectral properties, e.g. colour, or intensity
7/0091	. {using total internal reflection}	9/45	. . by adjustment of photoluminescent elements
7/04	. Optical design	<b>11/00</b>	<b>Screens not covered by groups <a href="#">F21V 1/00</a>, <a href="#">F21V 3/00</a>, <a href="#">F21V 7/00</a> or <a href="#">F21V 9/00</a></b> (characterised by cooling arrangements <a href="#">F21V 29/502</a> )
7/041	. . {with conical or pyramidal surface}	11/02	. using parallel laminae or strips, e.g. of Venetian-blind type ( <a href="#">F21V 11/06</a> takes precedence)
7/043	. . {with cylindrical surface}	11/04	. . adjustable
7/045	. . {with spherical surface}	11/06	. using crossed laminae or strips {, e.g. grid-shaped louvers}; using lattices or honeycombs
7/046	. . {with involute curvature}	11/065	. . {adjustable}
7/048	. . {with facets structure}	11/08	. using diaphragms containing one or more apertures
7/05	. . plane	11/10	. . of iris type
7/06	. . with parabolic curvature	11/12	. . of slot type
7/07	. . with hyperbolic curvature	11/14	. . with many small apertures
7/08	. . with elliptical curvature	11/16	. using sheets without apertures, e.g. fixed
7/09	. . with a combination of different curvatures	11/18	. . movable, e.g. flaps, slides
		11/183	. . . {pivotable}



- 19/0035 . . . {the fastening means being capable of simultaneously attaching of an other part, e.g. a housing portion or an optical component}
- 19/004 . . . {by deformation of parts or snap action mountings, e.g. using clips}
- 19/0045 . . . {by tongue and groove connections, e.g. dovetail interlocking means fixed by sliding}
- 19/005 . . . {by permanent fixing means, e.g. gluing, riveting or embedding in a potting compound}
- 19/0055 . . . {by screwing}
- 19/006 . . . {of point-like light sources, e.g. incandescent or halogen lamps, with screw-threaded or bayonet base (of sources having contact pins, wires or blades [F21V 19/0005](#); of LEDs or sources mounted on printed-circuit board [F21V 19/001](#))}
- 19/0065 . . . {at least one conductive element acting as a support means, e.g. spring-mounted contact plate in a bayonet base}
- 19/007 . . . {the support means engaging the vessel of the source}
- 19/0075 . . . {of tubular light sources, e.g. ring-shaped fluorescent light sources}
- 19/008 . . . {of straight tubular light sources, e.g. straight fluorescent tubes, soffit lamps}
- 19/0085 . . . {at least one conductive element acting as a support means, e.g. resilient contact blades, piston-like contact}
- 19/009 . . . {the support means engaging the vessel of the source}
- 19/0095 . . . {of U-shaped tubular light sources, e.g. compact fluorescent tubes}
- 19/02 . . . with provision for adjustment, e.g. for focusing
- 19/04 . . . with provision for changing light source, e.g. turret {(auxiliary devices for cleaning, placing, or removing incandescent lamps [H01K 3/32](#), fluorescent lamps [H01J 9/006](#))}
- 19/047 . . . {by using spare light sources comprised in or attached to the lighting device and being intended to replace a defect light source by manual mounting}
- 19/06 . . . Fastening incandescent mantles or other incandescent bodies to lamp parts; Suspension devices for incandescent mantles or other incandescent bodies (arrangements of mantles or other incandescent bodies on burners [F21V 36/00](#))
- 21/00** **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**
- 21/002 . . . making direct electrical contact, e.g. by piercing ([F21V 21/35](#) takes precedence)
- 21/005 . . . for several lighting devices in an end-to-end arrangement, i.e. light tracks
- 21/008 . . . Suspending from a cable or suspension line
- 21/02 . . . 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](#))
- 21/025 . . . {Elongated bases having a U-shaped cross section}
- 21/03 . . . Ceiling bases, e.g. ceiling roses ([F21V 21/04](#) takes precedence)
- 21/04 . . . Recessed bases
- 21/041 . . . {Mounting arrangements specially adapted for false ceiling panels or partition walls made of plates ([F21V 21/047](#) takes precedence)}
- 21/042 . . . . . {using clamping means, e.g. for clamping with panel or wall}
- 21/043 . . . . . {actuated by screwing}
- 21/044 . . . . . {with elastically deformable elements, e.g. spring tongues}
- 21/045 . . . . . {being tensioned by translation of parts, e.g. by pushing or pulling}
- 21/046 . . . . . {being tensioned by rotation of parts}
- 21/047 . . . {Mounting arrangements with fastening means engaging the inner surface of a hole in a ceiling or wall, e.g. for solid walls or for blind holes}
- 21/048 . . . {Mounting arrangements for fastening lighting devices to false ceiling frameworks}
- 21/049 . . . {Mounting arrangements for attaching lighting devices to the ceiling, the lighting devices being recessed in a false or stretched ceiling}
- 21/06 . . . Bases for movable standing lamps; Fixing standards to the bases ([F21V 21/08](#) takes precedence)
- 21/08 . . . Devices for easy attachment to any desired place, e.g. clip, clamp, magnet
- 21/0808 . . . {Adhesive means}
- 21/0816 . . . {Strap fasteners, e.g. fasteners with a buckle}
- 21/0824 . . . {Ground spikes}
- 21/0832 . . . {Hook and loop-type fasteners}
- 21/084 . . . Head fittings
- 21/088 . . . Clips; Clamps
- 21/0885 . . . . . {for portable lighting devices}
- 21/092 . . . Suction devices
- 21/0925 . . . . . {for portable lighting devices}
- 21/096 . . . Magnetic devices
- 21/0965 . . . . . {for portable lighting devices}
- 21/10 . . . 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](#))
- 21/104 . . . Pendants
- 21/108 . . . Arms
- 21/112 . . . Fixing lighting devices to pendants ([F21V 21/002](#) takes precedence)
- 21/116 . . . Fixing lighting devices to arms or standards ([F21V 21/002](#) takes precedence)
- 21/12 . . . capable of being elongated or shortened by the insertion or removal of intermediate pieces
- 21/13 . . . Spring-loaded poles fixed at both ends
- 21/14 . . . Adjustable mountings
- 21/145 . . . . . {for portable lighting devices}
- 21/15 . . . specially adapted for power operation, e.g. by remote control
- 21/16 . . . using wires or cords
- 21/18 . . . . . operated by springs
- 21/20 . . . . . operated by weights
- 21/22 . . . telescopic
- 21/24 . . . Lazy-tongs
- 21/26 . . . Pivoted arms
- 21/28 . . . . . adjustable in more than one plane
- 21/29 . . . . . employing universal joints
- 21/30 . . . Pivoted housings or frames
- 21/32 . . . Flexible tubes

- 21/34 . Supporting elements displaceable along a guiding element [{\(telescopic mounting of lighting devices F21V 21/22\)}](#)
- 21/35 . . with direct electrical contact between the supporting element and electric conductors running along the guiding element
- 21/36 . Hoisting or lowering devices, e.g. for maintenance
- 21/38 . . with a cable
- 21/40 . Hand grips
- 21/403 . . [{\(for operation or dentist lamps\)}](#)
- 21/406 . . [{\(for portable lighting devices\)}](#)
- 23/00 Arrangement of electric circuit elements in or on lighting devices [{\(characterised by cooling arrangements F21V 29/508\)}](#)**
- 23/001 . [{\(the elements being electrical wires or cables\)}](#)
- 23/002 . . [{\(Arrangements of cables or conductors inside a lighting device, e.g. means for guiding along parts of the housing or in a pivoting arm\)}](#)
- 23/003 . [{\(the elements being electronics drivers or controllers for operating the light source, e.g. for a LED array\)}](#)
- 23/004 . . [{\(arranged on a substrate, e.g. a printed circuit board\)}](#)
- 23/005 . . . [{\(the substrate is supporting also the light source\)}](#)
- 23/006 . . . [{\(the substrate being distinct from the light source holder\)}](#)
- 23/007 . . [{\(enclosed in a casing\)}](#)
- 23/008 . . . [{\(the casing being outside the housing of the lighting device\)}](#)
- 23/009 . . . [{\(the casing being inside the housing of the lighting device\)}](#)
- 23/02 . the elements being transformers, impedances [{\(or power supply units, e.g. a transformer with a rectifier\)}](#)
- 23/023 . . [{\(Power supplies in a casing \[\\(F21V 23/003 takes precedence\\)\]\(#\)\)}](#)
- 23/026 . . [{\(Fastening of transformers or ballasts\)}](#)
- 23/04 . the elements being switches [\(safety devices \[F21V 25/00\]\(#\)\)](#)
- 23/0407 . . [{\(for flashing\)}](#)
- 23/0414 . . [{\(specially adapted to be used with portable lighting devices\)}](#)
- 23/0421 . . . [{\(the switch being part of, or disposed on the tail cap portion thereof\)}](#)
- 23/0428 . . . [{\(the switch being part of, or disposed on the lamp head portion thereof\)}](#)
- 23/0435 . . [{\(activated by remote control means\)}](#)
- 23/0442 . . [{\(activated by means of a sensor, e.g. motion or photodetectors\)}](#)
- 23/045 . . . [{\(the sensor receiving a signal from a remote controller\)}](#)
- 23/0457 . . . [{\(the sensor sensing the operating status of the lighting device, e.g. to detect failure of a light source or to provide feedback to the device\)}](#)
- 23/0464 . . . [{\(the sensor sensing the level of ambient illumination, e.g. dawn or dusk sensors\)}](#)
- 23/0471 . . . [{\(the sensor detecting the proximity, the presence or the movement of an object or a person\)}](#)
- 23/0478 . . . . [{\(by means of an image recording device, e.g. a camera\)}](#)
- 23/0485 . . . [{\(the sensor sensing the physical interaction between a user and certain areas located on the lighting device, e.g. a touch sensor\)}](#)
- 23/0492 . . . [{\(the sensor detecting a change in orientation, a movement or an acceleration of the lighting device, e.g. a tilt switch\)}](#)
- 23/06 . the elements being coupling devices [{\(, e.g. connectors\)}](#)
- 25/00 Safety devices structurally associated with lighting devices [\(gas-tight or water-tight arrangements \[F21V 31/00\]\(#\); in general \[F16P\]\(#\); protective circuit arrangements \[per se \\[H02H 7/00\\]\\(#\\)\]\(#\)\)](#)**
- 25/02 . coming into action when lighting device is disturbed, dismantled, or broken
- 25/04 . . breaking the electric circuit
- 25/06 . . feeding a quenching fluid to the light source
- 25/08 . . cutting the incandescent filament
- 25/10 . coming into action when lighting device is overloaded, e.g. thermal switch
- 25/12 . Flameproof or explosion-proof arrangements
- 25/125 . . [{\(using intumescent material, i.e. using materials which swells up as a result of heat exposure\)}](#)
- 27/00 Cable-stowing arrangements structurally associated with lighting devices, e.g. reels [{\(storing lengths of cable in general \[B65H\]\(#\); the lighting devices being vehicle headlamps \[F21S 41/192\]\(#\); the lighting devices being vehicle lights \[F21S 43/195\]\(#\)\)}](#)**
- 27/005 . [{\(for portable lighting devices\)}](#)
- 27/02 . Cable inlets
- 29/00 Protecting lighting devices from thermal damage; Cooling or heating arrangements specially adapted for lighting devices or systems [\(lighting fixtures combined with outlets for air-treatment systems \[F24F 13/078\]\(#\)\)](#)**
- 29/10 . Arrangement of heat-generating components to reduce thermal damage, e.g. by distancing heat-generating components from other components to be protected
- 29/15 . Thermal insulation
- 29/50 . Cooling arrangements [\(air-treatment systems dissipating or using the heat of lighting fixtures \[F24F 3/056\]\(#\)\)](#)
- 29/502 . . characterised by the adaptation for cooling of specific components
- 29/503 . . . of light sources [\(cooling arrangements structurally associated with gas-discharge or vapour-discharge lamps \[H01J 61/52\]\(#\); cooling arrangements structurally associated with electric incandescent lamps \[H01K 1/58\]\(#\); cooling arrangements structurally associated with light-emitting diodes \[H10H 20/858\]\(#\)\)](#)
- 29/504 . . . of refractors
- 29/505 . . . of reflectors
- 29/506 . . . of globes, bowls or cover glasses
- 29/507 . . . of means for protecting lighting devices from damage, e.g. housings
- 29/508 . . . of electrical circuits
- 29/51 . . using condensation or evaporation of a fluid, e.g. heat pipes
- 29/52 . . . electrically powered, e.g. refrigeration systems
- 29/54 . . using thermoelectric means, e.g. Peltier elements

- 29/56 . . using liquid coolants ([F21V 29/51](#) takes precedence)
- 29/57 . . . characterised by control arrangements
- 29/58 . . . characterised by the coolants
- 29/59 . . . {with forced flow of the coolant}
- 29/60 . . characterised by the use of a forced flow of gas, e.g. air
- 29/61 . . . characterised by control arrangements
- 29/63 . . . using electrically-powered vibrating means; using ionic wind
- 29/65 . . . the gas flowing in a closed circuit
- 29/67 . . . characterised by the arrangement of fans
- 29/673 . . . . {the fans being used for intake}
- 29/677 . . . . {the fans being used for discharging}
- 29/70 . . characterised by passive heat-dissipating elements, e.g. heat-sinks
- 29/71 . . . using a combination of separate elements interconnected by heat-conducting means, e.g. with heat pipes or thermally conductive bars between separate heat-sink elements
- 29/713 . . . . {in direct thermal and mechanical contact of each other to form a single system}
- 29/717 . . . . {using split or remote units thermally interconnected, e.g. by thermally conductive bars or heat pipes}
- 29/73 . . . the elements being adjustable with respect to each other, e.g. hinged
- 29/74 . . . with fins or blades
- 29/745 . . . . {the fins or blades being planar and inclined with respect to the joining surface from which the fins or blades extend}
- 29/75 . . . . with fins or blades having different shapes, thicknesses or spacing
- 29/76 . . . . with essentially identical parallel planar fins or blades, e.g. with comb-like cross-section
- 29/763 . . . . . {the planes containing the fins or blades having the direction of the light emitting axis}
- 29/767 . . . . . {the planes containing the fins or blades having directions perpendicular to the light emitting axis}
- 29/77 . . . . with essentially identical diverging planar fins or blades, e.g. with fan-like or star-like cross-section
- 29/773 . . . . . {the planes containing the fins or blades having the direction of the light emitting axis}
- 29/777 . . . . . {the planes containing the fins or blades having directions perpendicular to the light emitting axis}
- 29/78 . . . . with helically or spirally arranged fins or blades
- 29/80 . . . with pins or wires
- 29/81 . . . . with pins or wires having different shapes, lengths or spacing
- 29/83 . . . the elements having apertures, ducts or channels, e.g. heat radiation holes
- 29/85 . characterised by the material ([liquid coolants F21V 29/56](#))
- 29/86 . . {Ceramics or glass}
- 29/87 . . Organic material, e.g. filled polymer composites; Thermo-conductive additives or coatings therefor
- 29/89 . . Metals
- 29/90 . Heating arrangements
- 31/00 Gas-tight or water-tight arrangements**
- 31/005 . {Sealing arrangements therefor}
- 31/03 . with provision for venting {(for vehicle head lights [F21S 45/33](#); for vehicle rear lights [F21S 41/192](#))}
- 31/04 . Provision of filling media
- 33/00 Structural combinations of lighting devices with other articles, not otherwise provided for**
- 33/0004 . {Personal or domestic articles}
- 33/0008 . . {Clothing or clothing accessories, e.g. scarfs, gloves or belts}
- 33/0012 . . {Furniture ([hospital beds F21V 33/0072](#))}
- 33/0016 . . . {Furnishing for windows and doors ([sunshades F21V 33/006](#))}
- 33/002 . . . . {Racks for compact discs or the like}
- 33/0024 . . {Household or table equipment}
- 33/0028 . . . {Decorative household equipment, e.g. plant holders or food dummies}
- 33/0032 . . . . {Paintings, pictures or photographs; Frames therefor}
- 33/0036 . . . {Table-ware or table equipment, e.g. dishes, cutlery or trays}
- 33/004 . . {Sanitary equipment, e.g. mirrors, showers, toilet seats or paper dispensers}
- 33/0044 . . {Household appliances, e.g. washing machines or vacuum cleaners}
- 33/0048 . . {Office articles, e.g. bookmarks, desk lamps with drawers, stands for books or music scores}
- 33/0052 . . {Audio or video equipment, e.g. televisions, telephones, cameras or computers; Remote control devices therefor}
- 33/0056 . . . {Audio equipment, e.g. music instruments, radios or speakers}
- 33/006 . {General building constructions or finishing work for buildings, e.g. roofs, gutters, stairs or floors; Garden equipment; Sunshades or parasols}
- 33/0064 . {Health, life-saving or fire-fighting equipment}
- 33/0068 . . {Medical equipment}
- 33/0072 . . . {Hospital beds}
- 33/0076 . . {Safety or security signalisation, e.g. smoke or burglar alarms, earthquake detectors; Self-defence devices}
- 33/008 . {Leisure, hobby or sport articles, e.g. toys, games or first-aid kits; Hand tools; Toolboxes}
- 33/0084 . . {Hand tools; Toolboxes}
- 33/0088 . {Ventilating systems ([lighting fixtures combined with outlets for air treatment systems F24F 13/078](#))}
- 33/0092 . . {with heating or cooling devices}
- 33/0096 . . {Fans, e.g. ceiling fans ([forced cooling of lighting devices characterised by the arrangement of fans F21V 29/67](#))}
- 35/00 Candle holders**
- 35/003 . {Special means for attaching the candle to the candle holder}
- 35/006 . {Drop catchers; Shade holders}
- 36/00 Arrangements of mantles or other incandescent bodies on burners**
- 36/02 . in ceiling lamps
- 37/00 Details of lighting devices employing combustion as light source, not otherwise provided for**
- 37/0004 . {using liquid fuel}

- 37/0008 . . {Fuel containers}
- 37/0012 . . . {Filling or level checking}
- 37/0016 . . . {Fastening of the container to other parts of the lamp}
- 37/002 . . {Wicks}
- 37/0025 . . . {vegetal ([F21V 37/0033](#) takes precedence)}
- 37/0029 . . . {mineral ([F21V 37/0033](#) takes precedence)}
- 37/0033 . . . {combination of vegetal and mineral}
- 37/0037 . . . {Cleaning devices}
- 37/0041 . . {Fuel supply}
- 37/0045 . . . {using hydrostatic pressure or weights}
- 37/005 . . . {using air or gas pressure}
- 37/0054 . . . {Controlling means, e.g. floaters}
- 37/0058 . . {Reflectors, cover glasses, chimneys; Smoke-removing devices; Preheaters}
- 37/0062 . . . {Reflectors}
- 37/0066 . . . {Chimneys}
- 37/007 . . . {Globs}
- 37/0075 . . {Fastening or safety devices for reflectors, cover glasses or chimneys}
- 37/0079 . . . {Fastening of chimneys ([F21V 37/0087](#) takes precedence)}
- 37/0083 . . . {Fastening of cover glasses ([F21V 37/0087](#) takes precedence)}
- 37/0087 . . . {Devices for lifting chimneys or cover glasses}
- 37/0091 . . . {Protections against shocks}
- 37/0095 . {Night lamps; Votive lamps}
- 37/02 . . Special adaptation for protection against draughts  
{(for lanterns [F21L 19/006](#)); Draft controllers}

**99/00 Subject matter not provided for in other groups of this subclass**

**2200/00 Use of light guides, e.g. fibre optic devices, in lighting devices or systems**

- 2200/10 . . of light guides of the optical fibres type
- 2200/13 . . . the light being emitted at the end of the guide
- 2200/15 . . . the light being emitted along at least a portion of the outer surface of the guide
- 2200/17 . . characterised by the admission of light into the guide
- 2200/20 . . of light guides of a generally planar shape
- 2200/30 . . of light guides doped with fluorescent agents
- 2200/40 . . of hollow light guides