

LIGHTING; HEATING

F21 LIGHTING (electric aspects or elements, see section H, e.g. electric light sources H01J, H01K, H05B)

Note

Attention is drawn to Note III of Section H, and in particular that subclass H05B covers electrical aspects of the same technical subjects that are covered by class F21.

F21H INCANDESCENT MANTLES; OTHER INCANDESCENT BODIES HEATED BY COMBUSTION (arrangements thereof F21V 36/00; burners F23D)

- | | |
|---|--|
| <p>1/00 Incandescent mantles; Selection of imbibition liquids therefor</p> <p>1/02 . characterised by the material thereof</p> | <p>3/00 Manufacturing incandescent mantles; Treatment prior to use, e.g. burning-off; Machines for manufacturing</p> <p>5/00 Solid incandescent bodies (incandescent mantles F21H 1/00)</p> <p>7/00 Other incandescent bodies [2009.01]</p> |
|---|--|

F21K LIGHT SOURCES NOT OTHERWISE PROVIDED FOR

- | | |
|---|---|
| <p>2/00 Light sources using luminescence (luminescent materials C09K 11/00; selection of luminescent materials for light screens F21V 9/16; using excitation by radioactivity G21H 3/02, H01J 65/06, H01J 65/08; transforming the wavelength of the light of gas- or vapour-discharge lamps by luminescence H01J 61/42; electroluminescent light sources H05B 33/00) [2,7]</p> <p>2/04 . using triboluminescence; using thermoluminescence</p> <p>2/06 . using chemiluminescence [3]</p> <p>2/08 . . activated by an electric field, i.e. electrochemiluminescence [3]</p> <p>5/00 Light sources using charges of combustible material, e.g. illuminating flash devices (explosive or thermic compositions C06B; fireworks F42B 4/00; photographic flash units G03B 15/03) [3,5]</p> <p>5/04 . Plural charges, e.g. associated for sequential ignition (F21K 5/06, F21K 5/12 take precedence) [5]</p> | <p>5/06 . Charge containment [5]</p> <p>5/08 . . Charge held in non-disrupting container, e.g. photo-flash bulb [5]</p> <p>5/10 . . . bearing a coating [5]</p> <p>5/12 . Charge ignition [5]</p> <p>5/14 . . percussive [5]</p> <p>5/16 . . electrical (circuit arrangements H05B 43/02) [5]</p> <p>5/18 . . . Electrically-ignited primers [5]</p> <p>5/20 . Charge feeding means [5]</p> <p>5/22 . Protective light shields [5]</p> <p>99/00 Subject matter not provided for in other groups of this subclass [2010.01]</p> |
|---|---|

F21L LIGHTING DEVICES OR SYSTEMS THEREOF, BEING PORTABLE OR SPECIALLY ADAPTED FOR TRANSPORTATION (burners F23D) [1,7]

- (1) This subclass covers devices or systems designed or specially adapted to be carried, e.g. by hand, or otherwise transported from place to place, e.g. on wheeled supports, in order to provide illumination as and where required. [7]
- (2) This subclass does not cover devices or systems intended for fixed installation, e.g. vehicle lighting, or for use essentially at a permanent location, which are covered by subclass F21S. [7]
- (3) Non-electric lighting devices are classified in groups F21L 17/00 to F21L 26/00 only if a special adaptation related to the use of a non-electric light source is of interest. [2009.01]

Note

In this subclass, it is desirable to add the indexing codes of subclasses F21W and F21Y. [7]

Subclass index

ELECTRIC DEVICES

Systems	2/00
with self-contained batteries or cells	4/00
with built-in generators	13/00
without self-contained power source	14/00

NON-ELECTRIC DEVICES

Torches, flares; lanterns	17/00; 19/00
Pocket-lamps; miners' hand-lamps	21/00; 23/00
Other portable lighting devices or systems thereof	26/00

COMBINATIONS OF ELECTRIC AND

NON-ELECTRIC DEVICES	27/00
----------------------------	-------

2/00	Systems of electric lighting devices (systems employing both electric and non-electric light sources or exchangeable light sources F21L 27/00) [7]
4/00	Electric lighting devices with self-contained electric batteries or cells [7]
4/02	. characterised by provision of two or more light sources [7]
4/04	. characterised by provision of a light source housing portion adjustably fixed to the remainder of the device [7]
4/06	. with light source coupled to the remainder of the device solely by cable [7]
4/08	. characterised by means for <u>in situ</u> recharging of the batteries or cells [7]
13/00	Electric lighting devices with built-in electric generators (with solar cells F21L 4/00) [1,7]
13/02	. with fluid drive
13/04	. . actuated by hand
13/06	. with mechanical drive, e.g. spring
13/08	. . by reciprocating pusher actuated by hand

14/00	Electric lighting devices without a self-contained power source, e.g. for mains connection [7]
14/02	. capable of hand-held use, e.g. inspection lamps [7]
14/04	. carried on wheeled supports [7]
17/00	Non-electric torches; Non-electric flares
19/00	Lanterns, e.g. hurricane lamps or candle lamps (candle holders F21V 35/00)
21/00	Non-electric pocket-lamps, e.g. lamps producing sparks
23/00	Non-electric hand-lamps for miners
26/00	Non-electric portable lighting devices, or systems thereof, not provided for in groups F21L 17/00 to F21L 23/00 [8]
27/00	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 <u>vice versa</u> in lighting devices or systems

F21S NON-PORTABLE LIGHTING DEVICES OR SYSTEMS THEREOF (burners F23D) [1,7]

- (1) This subclass covers devices or systems intended for fixed installation, e.g. vehicle lighting, or for use at a permanent location, e.g. free-standing floor- or table-lamps. [7]
- (2) This subclass does not cover devices or systems specially adapted for transportation, which are covered by subclass F21L. [7]
- (3) Non-electric lighting devices or systems are classified in groups F21S 11/00 to F21S 15/00 only if a special adaptation related to the use of a non-electric light source is of interest. [2009.01]

Note

In this subclass, it is desirable to add the indexing codes of subclasses F21W and F21Y. [7]

Subclass index

ELECTRIC DEVICES

Systems	2/00
String or strip of light sources	4/00
Free-standing	6/00
Fixed installation	8/00
Built-in power supply	9/00
Producing varying lighting effects	10/00

NON-ELECTRIC DEVICES

Using daylight	11/00
Light source: Point-like or of unspecified shape	13/00
Other devices	15/00

COMBINATIONS OF ELECTRIC AND

NON-ELECTRIC DEVICES	19/00
----------------------------	-------

2/00	Systems of lighting devices, not provided for in main groups F21S 4/00 to F21S 10/00 or F21S 19/00, e.g. of modular construction [7]
4/00	Lighting devices or systems using a string or strip of light sources [7]

6/00	Lighting devices intended to be free-standing (F21S 9/00, F21S 10/00 take precedence) [7]
-------------	--

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) [7]	11/00	Non-electric lighting devices or systems using daylight
8/02	. of recess-mounted type, e.g. downlighters (F21S 8/10 takes precedence) [7]	13/00	Non-electric lighting devices or systems employing a point-like light source (candle holders F21V 35/00); Non-electric lighting devices or systems employing a light source of unspecified shape
8/04	. intended only for mounting on a ceiling or like overhead structure (F21S 8/02 takes precedence) [7]	13/02	. Devices intended to be fixed, e.g. ceiling lamp, wall lamp
8/06	. . by suspension [7]	13/04	. . with a pendant
8/08	. with a standard [7]	13/06	. . . multi-branched, e.g. chandelier
8/10	. specially adapted for vehicles [7]	13/08	. . with suspension from a stretched wire
8/12	. . providing a single shaped beam, e.g. asymmetric beam, e.g. for penetrating fog or for preventing glare [7]	13/10	. . with a standard, e.g. street lamp
9/00	Lighting devices with a built-in power supply; Systems employing lighting devices with a built-in power supply	13/12	. Devices intended to be free-standing, e.g. table lamp, floor lamp
9/02	. the power supply being a battery or accumulator	13/14	. Lighting systems
9/03	. . rechargeable by exposure to light [7]	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
9/04	. the power supply being a generator	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 <u>vice versa</u>
10/00	Lighting devices or systems producing a varying lighting effect [7]		
10/02	. changing colours (F21S 10/04 takes precedence) [7]		
10/04	. simulating flames [7]		
10/06	. flashing, e.g. with rotating reflector or light source [7]		

F21V FUNCTIONAL FEATURES OR DETAILS OF LIGHTING DEVICES OR SYSTEMS THEREOF; STRUCTURAL COMBINATIONS OF LIGHTING DEVICES WITH OTHER ARTICLES, NOT OTHERWISE PROVIDED FOR [1,7]

- Groups F21V 1/00 to F21V 14/00 cover details of those parts involved in light emission or distribution. Groups F21V 15/00 to F21V 31/00 cover details of those parts not so involved. [2009.01]
- Details of non-electric lighting devices or systems are classified in groups F21V 35/00 to F21V 37/00 only if a special adaptation related to the use of a non-electric light source is of interest. [2009.01]
- In this subclass, it is desirable to add the indexing codes of subclasses F21W and F21Y. [7]

Subclass index

DETAILS OF PARTS INVOLVED IN LIGHT EMISSION OR DISTRIBUTION

Shades; globes; refractors; reflectors	1/00; 3/00; 5/00; 7/00
Light guides	8/00
Light filters	9/00
Other screens.....	11/00
Combinations of elements	13/00
Changing characteristics or distribution of the light	14/00

DETAILS OF PARTS NOT INVOLVED IN LIGHT EMISSION OR DISTRIBUTION

Fastening	17/00; 19/00
-----------------	--------------

Arrangements for supporting or suspending.....	21/00
Arrangements of electric circuit elements.....	23/00
Cable stowing.....	27/00
Protection; safety; cooling; tightness.....	15/00; 25/00; 29/00; 31/00
Combinations with other articles	33/00
Candle holders.....	35/00
Arrangements of mantles or burners.....	36/00
Details of combustion lighting.....	37/00

SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS

99/00

1/00	Shades for light sources	1/14	. Covers for frames; Frameless shades
1/02	. Frames	1/16	. . characterised by the material
1/04	. . rigid (F21V 1/08 takes precedence)	1/18	. . . the material being paper
1/06	. . foldable or collapsible	1/20	. . . the material being glass
1/08	. . adjustable	1/22	. . . the material being plastics
1/10	. Rotating shades	1/24	. . . the material being metal
1/12	. Composite shades	1/26	. Manufacturing shades

- 3/00** **Globes; Bowls; Cover glasses** (with refracting properties F21V 5/00; with reflecting properties F21V 7/00)
- 3/02 . characterised by the shape
 - 3/04 . characterised by the material; characterised by surface treatments or coatings
- 5/00** **Refractors for light sources**
- 5/02 . of prismatic shape (F21V 5/04 takes precedence)
 - 5/04 . of lens shape
 - 5/06 . Hanging lustres for chandeliers
 - 5/08 . producing an asymmetric light distribution [1,7]
- 7/00** **Reflectors for light sources**
- 7/04 . Optical design (F21V 7/22 takes precedence) [1,7]
 - 7/05 . . plane [1,7]
 - 7/06 . . with parabolic curvature [1,7]
 - 7/07 . . with hyperbolic curvature [1,7]
 - 7/08 . . with elliptical curvature [1,7]
 - 7/09 . . with a combination of different curvatures [1,7]
 - 7/10 . Construction (F21V 7/22 takes precedence) [1,7]
 - 7/16 . . with provision for adjusting the curvature [1,7]
 - 7/18 . . with provision for folding or collapsing [1,7]
 - 7/20 . . specially adapted for facilitating cooling, e.g. with fins [1,7]
 - 7/22 . characterised by the material; characterised by surface treatments or coatings
- 8/00** **Use of light guides, e.g. fibre optic devices, in lighting devices or systems** (light guides *per se* C09K 11/00; structural details of arrangements with other optical elements G02B 6/00) [4]
- 9/00** **Light filters** (coloured shades F21V 1/00); **Selection of luminescent materials for light screens** (luminescent materials *per se* C09K 11/00; electroluminescent light sources *per se* H05B 33/00)
- 9/02 . for simulating daylight (F21V 9/04, F21V 9/06, F21V 9/16 take precedence)
 - 9/04 . for filtering out infra-red radiation (using liquid-filled chambers F21V 9/12)
 - 9/06 . for filtering out ultra-violet radiation (F21V 9/16 takes precedence)
 - 9/08 . for producing coloured light, e.g. monochromatic; for reducing intensity of light (F21V 9/16 takes precedence)
 - 9/10 . . with provision for variation of the colour or intensity (F21V 9/12 takes precedence)
 - 9/12 . . with liquid-filled chambers
 - 9/14 . for producing polarised light
 - 9/16 . Selection of luminescent materials for light screens
- 11/00** **Screens not covered by groups F21V 1/00, F21V 3/00, F21V 7/00 or F21V 9/00**
- 11/02 . using parallel laminae or strips, e.g. of Venetian-blind type (F21V 11/06 takes precedence)
 - 11/04 . . adjustable
 - 11/06 . using crossed laminae or strips; using lattices or honeycombs
 - 11/08 . using diaphragms containing one or more apertures
 - 11/10 . . of iris type
 - 11/12 . . of slot type
 - 11/14 . . with many small apertures
 - 11/16 . using sheets without apertures, e.g. fixed (F21V 11/02, F21V 11/06 take precedence)
 - 11/18 . . movable, e.g. flaps, slides
- 13/00** **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 to F21V 11/00** (changing the characteristics or distribution of the light emitted by adjustment of parts F21V 14/00) [1,7]
- 13/02 . Combinations of only two kinds of elements
 - 13/04 . . the elements being reflectors and refractors
 - 13/06 . . . a reflector being rotatable
 - 13/08 . . the elements being reflectors and filters
 - 13/10 . . the elements being reflectors and screens
 - 13/12 . Combinations of only three kinds of elements
 - 13/14 . . the elements being reflectors, refractors, and filters
- 14/00** **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]
- 14/02 . by movement of light sources [7]
 - 14/04 . by movement of reflectors [7]
 - 14/06 . by movement of refractors [7]
 - 14/08 . by movement of screens [7]
- 15/00** **Protecting lighting devices from damage** (cooling or heating arrangements F21V 29/00; gas-tight or water-tight arrangements F21V 31/00)
- 15/01 . Housings, e.g. material or assembling of housing parts (F21V 15/02 takes precedence) [7]
 - 15/015 . . Devices for covering joints between adjacent lighting devices; End coverings [7]
 - 15/02 . Cages
 - 15/04 . Resilient mountings, e.g. shock-absorbers
 - 15/06 . Thermal insulation [7]
- 17/00** **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)
- 17/02 . with provision for adjustment (F21V 17/04 to F21V 17/08 take precedence; changing the characteristics or distribution of the light emitted by adjustment of parts F21V 14/00) [1,7]
 - 17/04 . onto or by the light source
 - 17/06 . onto or by the lamp holder
 - 17/08 . onto the supporting or suspending arrangements of the lighting device, e.g. power cords, standards [7]
 - 17/10 . characterised by specific fastening means or way of fastening (F21V 17/02 to F21V 17/08 take precedence) [7]
 - 17/12 . . by screwing [7]
 - 17/14 . . Bayonet-type fastening [7]
 - 17/16 . . by deformation of parts of the lighting device; Snap action mounting [7]
 - 17/18 . . Latch-type fastening, e.g. with rotary action [7]
 - 17/20 . . by toggle-action levers [7]
- 19/00** **Fastening of light sources or lamp holders** (fastening electric light source solely by the coupling device H01R 33/00)
- 19/02 . 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]

- 19/04 . with provision for changing light source, e.g. turret
- 19/06 . Fastening incandescent mantles or other incandescent bodies to lamp parts; Suspension devices for incandescent mantles or other incandescent bodies [1,7]
- 21/00 Supporting, suspending, or attaching arrangements for lighting devices** (F21V 17/00, F21V 19/00 take precedence); **Hand grips** [1,7]
- 21/002 . making direct electrical contact, e.g. by piercing (F21V 21/35 takes precedence) [7]
- 21/005 . for several lighting devices in an end-to-end arrangement, i.e. light tracks [7]
- 21/008 . Suspending from a cable or suspension line [7]
- 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)
- 21/03 . . Ceiling bases, e.g. ceiling roses (F21V 21/04 takes precedence) [7]
- 21/04 . . Recessed bases
- 21/06 . Bases for movable standing lamps; Fixing standards to the bases (F21V 21/08 takes precedence)
- 21/08 . Devices for easy attachment to a desired place
- 21/084 . . Head fittings (for medical purposes A61B 1/06) [7]
- 21/088 . . Clips; Clamps [7]
- 21/092 . . Suction devices [7]
- 21/096 . . Magnetic devices [7]
- 21/10 . Pendants, arms or standards; Fixing lighting devices to pendants, arms or standards (adjustable mounting F21V 21/14)
- 21/104 . . Pendants [7]
- 21/108 . . Arms [7]
- 21/112 . . Fixing lighting devices to pendants (F21V 21/002 takes precedence) [7]
- 21/116 . . Fixing lighting devices to arms or standards (F21V 21/002 takes precedence) [7]
- 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 [7]
- 21/14 . Adjustable mountings
- 21/15 . . specially adapted for power operation, e.g. by remote control [7]
- 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
- 21/35 . . with direct electrical contact between the supporting element and electric conductors running along the guiding element [7]
- 21/36 . Hoisting or lowering devices, e.g. for maintenance (F21V 21/14 takes precedence)
- 21/38 . . with a cable
- 21/40 . Hand grips [7]
- 23/00 Arrangement of electric circuit elements in or on lighting devices**
- 23/02 . the elements being transformers or impedances
- 23/04 . the elements being switches (safety devices F21V 25/00)
- 23/06 . the elements being coupling devices
- 25/00 Safety devices structurally associated with lighting devices** (gas-tight or water-tight arrangements F21V 31/00)
- 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
- 27/00 Cable-stowing arrangements structurally associated with lighting devices, e.g. reels**
- 27/02 . Cable inlets [7]
- 29/00 Cooling or heating arrangements** (reflectors specially adapted for cooling F21V 7/20; cooling of air-treatment systems with air-flow over lighting fixtures F24F 3/056; lighting fixtures combined with outlets for air-treatment systems F24F 13/078; cooling of projectors G03B 21/16) [1,7]
- 29/02 . Cooling by forcing air over or around the light source (cooling arrangements structurally associated with electric lamps H01J 61/52, H01K 1/58) [7]
- 31/00 Gas-tight or water-tight arrangements**
- 31/03 . with provision for venting [7]
- 31/04 . Provision of filling media (safety devices F21V 25/00; cooling arrangements F21V 29/00)
- 33/00 Structural combinations of lighting devices with other articles, not otherwise provided for** [1,7]
- 35/00 Candle holders**
- 36/00 Arrangements of mantles or other incandescent bodies on burners** (attaching to lamp parts F21V 19/06)
- 36/02 . in ceiling lamps
- 37/00 Details of lighting devices employing combustion as light source, not otherwise provided for** [1,7]
- 37/02 . Special adaptation for protection against draughts [7]
- 99/00 Subject matter not provided for in other groups of this subclass** [8]

F21W INDEXING SCHEME ASSOCIATED WITH SUBCLASSES F21L, F21S AND F21V, RELATING TO USES OR APPLICATIONS OF LIGHTING DEVICES OR SYSTEMS [7]**Note**

This subclass constitutes an indexing scheme associated with subclasses F21L, F21S and F21V, relating to uses or applications of lighting devices or systems. [7]

101/00	Use or application of lighting devices on or in vehicles [7]	131/00	Uses or applications of lighting devices or systems not provided for in groups F21W 101/00 to F21W 121/00 [7]
101/02	. for land vehicles [7]	131/10	. Outdoor lighting [7]
101/023	. . for cycles [7]	131/101	. . of tunnels or the like, e.g. under bridges [7]
101/027	. . . for motorcycles [7]	131/103	. . of streets or roads [7]
101/04	. for water vehicles [7]	131/105	. . of arenas or the like [7]
101/06	. for aircraft [7]	131/107	. . of the exterior of buildings [7]
101/08	. Interior lights [7]	131/109	. . of gardens [7]
101/10	. Head-, spot- or fog-lights [7]	131/20	. Lighting for medical use [7]
101/12	. Direction indicator lights [7]	131/202	. . for dentistry [7]
101/14	. Rear or stop lights [7]	131/205	. . for operating theatres [7]
111/00	Use or application of lighting devices or systems for signalling, marking or indicating, not provided for in group F21W 101/00 [7]	131/208	. . for hospital wards [7]
111/02	. for roads, paths or the like [7]	131/30	. Lighting for domestic or personal use [7]
111/023	. . for pedestrian walkways [7]	131/301	. . for furniture [7]
111/027	. . for indicating kerbs, steps or stairs [7]	131/302	. . for mirrors [7]
111/04	. for waterways [7]	131/304	. . for pictures [7]
111/043	. . for lighthouses or lightships [7]	131/305	. . for refrigerators [7]
111/047	. . for light-buoys [7]	131/307	. . for ovens [7]
111/06	. for aircraft runways or the like [7]	131/308	. . for aquaria [7]
111/08	. for handles or handrails [7]	131/40	. Lighting for industrial, commercial, recreational or military use [7]
111/10	. for personal use, e.g. hand-held [7]	131/401	. . for swimming pools [7]
121/00	Use or application of lighting devices or systems for decorative purposes [7]	131/402	. . for working places [7]
121/02	. for fountains [7]	131/403	. . for machines [7]
121/04	. for Christmas trees [7]	131/4035	. . . for sewing machines [7]
121/06	. for personal wear [7]	131/405	. . for shop-windows or displays [7]
		131/406	. . for theatres, stages or film studios [7]
		131/407	. . for indoor arenas [7]
		131/409	. . for furnaces or kilns [7]
		131/411	. . for inspection of the interior of hollow structures, e.g. vessels, tubes [7]

F21Y INDEXING SCHEME ASSOCIATED WITH SUBCLASSES F21L, F21S AND F21V, RELATING TO THE FORM OF THE LIGHT SOURCES [7]**Note**

This subclass constitutes an indexing scheme associated with subclasses F21L, F21S and F21V, relating to the form of the light sources. [7]

101/00	Point-like light sources [7]	105/00	Planar light sources [7]
101/02	. Miniature, e.g. light emitting diodes (LED) [7]	111/00	Light sources of form not covered by groups F21Y 101/00 to F21Y 105/00 [7]
103/00	Elongated light sources, e.g. fluorescent tubes [7]	113/00	Combination of light sources [7]
103/02	. curved, e.g. ring-shaped [7]	113/02	. of different form [7]
103/025	. . U-shaped [7]		