

## ECLA EUROPEAN CLASSIFICATION

### F21K LIGHT SOURCES NOT OTHERWISE PROVIDED FOR

[N: **WARNING**  
[C2010.03]

- The following IPC groups are not used in the internal ECLA classification system. Subject matter covered by these groups is classified in the following ECLA groups:

<a href="#">F21K5/04</a>	covered by	<a href="#">G03B15/04F2</a>
<a href="#">F21K5/06</a>	" "	<a href="#">G03B15/04D</a>
<a href="#">F21K5/08</a>	" "	<a href="#">F21K5/02</a> , <a href="#">G03B15/04D</a>
<a href="#">F21K5/10</a>	" "	<a href="#">G03B15/04D</a>
<a href="#">F21K5/12</a>	" "	<a href="#">F21K5/02B</a>
<a href="#">F21K5/14</a>	" "	<a href="#">F21K5/02B2</a> , <a href="#">G03B15/04P3</a>
<a href="#">F21K5/16</a>	" "	<a href="#">G03B15/04F</a>
<a href="#">F21K5/18</a>	" "	<a href="#">G03B15/04F</a>
<a href="#">F21K5/20</a>	" "	<a href="#">G03B15/04D2</a>
<a href="#">F21K5/22</a>	" "	<a href="#">G03B15/04D</a>

- Groups [F21K9/00](#) to [F21K9/90](#) do not correspond to former or current IPC groups. Concordance ECLA : IPC for these groups is as follows:  
- [F21K9/00](#) to [F21K9/90](#): [F21K99/00](#)

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#### F21K2/00

**Light sources using luminescence** (using excitation by another light source [F21V9/16](#); lamps, other than those in which all the electrodes are within the vessel, in which a screen or coating is excited to luminesce by radioactive material located inside the vessel [H01J65/08](#); using electroluminescence [H05B33/00](#))

#### F21K2/00C

- [N: excited by infra-red radiation using up-conversion (frequency changing of light [G02F2/02](#))]

#### F21K2/04

- using triboluminescence; using thermoluminescence

#### F21K2/06

- using chemiluminescence

#### F21K2/08

- activated by an electric field i.e. electrochemiluminescence

#### F21K5/00

**Light sources using a charge of combustible material, e.g. illuminating flash devices** (explosive or thermic compositions [C06B](#); fireworks [F42B4/00](#); photographic flash units [G03B15/03](#))

#### F21K5/02

- [N: IPC4] ignited in a non-disrupting container, e.g. photo-flash bulb

#### F21K5/02B

- [N: Ignition devices in photo flash bulbs (ignition devices being part of a shutter mechanism included in a camera [G03B9/70](#); ignition devices not being part of a shutter mechanism included in a camera [G03B15/04](#); ignition circuits for combustion lamps [H05B43/02](#))] [C1207]

#### F21K5/02B2

- [N: using mechanical firing e.g. percussion of a fulminating charge (if included in a camera [G03B15/04P3](#))]

#### F21K9/00

[N: Electric lamps using semiconductor devices as light generating elements, e.g. using light emitting diodes [LED] or lasers (light emitting diodes per se [H01L33/00](#), [H01L51/50](#);

semiconductor lasers per se [H01S5/00](#); electric lamps using a combination of different types of light generation [H05B35/00](#) )] [\[N1204\]](#)

[N: **WARNING**

[\[N1207\]](#) This group is not complete pending a reclassification; see also [F21K99/00](#), [H01L33/00](#), [H01S5/00](#), [H05B35/00](#) ]

- F21K9/10 . [N: specially adapted for retrofitting or substituting conventional lamps, e.g. for substitution of incandescent lamps or fluorescent tubes] [\[N1204\]](#)
- F21K9/13 . . [N: with only one fitting, e.g. a bayonet or screw based fitting] [\[N1204\]](#)
- F21K9/135 . . . [N: specially adapted for generating an omni-directional light distribution, e.g. with a glass bulb] [\[N1204\]](#)
- F21K9/1355 . . . . [N: Details of the base; Arrangements of components inside the base] [\[N1204\]](#)
- F21K9/137 . . . [N: specially adapted for generating a spot light distribution, e.g. to substitute reflector lamps] [\[N1204\]](#)
- F21K9/1375 . . . . [N: Details of the base; Arrangements of components in the base] [\[N1204\]](#)
- F21K9/17 . . [N: with two fittings, e.g. for substituting a fluorescent tube] [\[N1204\]](#)
- F21K9/175 . . . [N: Details of the base; Arrangements of components in the base] [\[N1204\]](#)
  
- F21K9/30 . [N: LED lamps or modules comprising attachment means not covered by groups F21K9/10 to F21K9/175] [\[N1204\]](#)
  
- F21K9/50 . [N: Optical arrangements, i.e. for improving the color rendering index or the light extraction] [\[N1204\]](#)
- F21K9/52 . . [N: using a light guide] [\[N1204\]](#)
- F21K9/54 . . [N: using a mixing chamber, e.g. a housing with reflective walls] [\[N1204\]](#)
- F21K9/56 . . [N: using wavelength conversion means distinct or spaced from the light generating element, e.g. a remote phosphor layer] [\[N1204\]](#)
- F21K9/58 . . [N: specially adapted for changing the characteristics or the distribution of the light, e.g. by movement of parts] [\[N1204\]](#)
  
- F21K9/90 . [N: Manufacturing methods] [\[N1204\]](#)
  
- F21K99/00** **Subject matter not provided for in other groups of this subclass** [\[N1003\]](#)