

CPC**COOPERATIVE PATENT CLASSIFICATION****F21K****LIGHT SOURCES NOT OTHERWISE PROVIDED FOR****WARNING**

1. The following IPC groups are not used in the CPC system. Subject matter covered by these groups is classified in the following CPC groups:

F21K 5/04		covered by	G03B 15/0457
F21K 5/06	"	"	G03B 15/0442
F21K 5/08	"	"	F21K 5/02
,	G03B 15/0442		F21K 5/10 "
"	G03B 15/0442		F21K 5/12 "
"	F21K 5/023		F21K 5/14 "
"	F21K 5/026	,	G03B 15/0489
F21K 5/16	"	"	G03B 15/0452
F21K 5/18	"	"	G03B 15/0452
F21K 5/20	"	"	G03B 15/0447
F21K 5/22	"	"	G03B 15/0442

2. Groups [F21K 9/00](#) to [F21K 9/90](#) do not correspond to former or current IPC groups.

Concordance CPC : IPC for these groups is as follows:

- [F21K 9/00](#) to [F21K 9/90](#) : [F21K 99/00](#)

F21K 2/00

Light sources using luminescence (using excitation by another light source [F21V 9/16](#) ; 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 [H01J 65/08](#) ; using electroluminescence [H05B 33/00](#))

F21K 2/005

- {excited by infra-red radiation using up-conversion (frequency changing of light [G02F 2/02](#))}

F21K 2/04

- using triboluminescence; using thermoluminescence

F21K 2/06

- using chemiluminescence

F21K 2/08

- activated by an electric field i.e. electrochemiluminescence

F21K 5/00

Light sources using a charge of combustible material, e.g. illuminating flash devices (explosive or thermic compositions [C06B](#); fireworks [F42B 4/00](#) ; photographic flash units [G03B 15/03](#))

F21K 5/02

- ignited in a non-disrupting container, e.g. photo-flash bulb

F21K 5/023

- {Ignition devices in photo flash bulbs (ignition devices being part of a shutter mechanism included in a camera [G03B 9/70](#) ; ignition devices not being part of a shutter mechanism included in a camera [G03B 15/04](#) ; ignition circuits for combustion lamps [H05B 43/02](#))}

F21K 5/026

- {using mechanical firing e.g. percussion of a fulminating charge (if included in a camera [G03B 15/0489](#))}

F21K 9/00	{Electric lamps using semiconductor devices as light generating elements, e.g. using light emitting diodes [LED] or lasers (light emitting diodes per se H01L 33/00 , H01L 51/50 ; semiconductor lasers per se H01S 5/00 ; electric lamps using a combination of different types of light generation H05B 35/00)}
	<u>WARNING</u>
	This group is not complete pending a reclassification; see also F21K 99/00 , H01L 33/00 , H01S 5/00 , H05B 35/00
F21K 9/10	. {specially adapted for retrofitting or substituting conventional lamps, e.g. for substitution of incandescent lamps or fluorescent tubes}
F21K 9/13	.. {with only one fitting, e.g. a bayonet or screw based fitting}
F21K 9/135	... {specially adapted for generating an omni-directional light distribution, e.g. with a glass bulb}
F21K 9/1355 {Details of the base; Arrangements of components inside the base}
F21K 9/137	... {specially adapted for generating a spot light distribution, e.g. to substitute reflector lamps}
F21K 9/1375 {Details of the base; Arrangements of components in the base}
F21K 9/17	.. {with two fittings, e.g. for substituting a fluorescent tube}
F21K 9/175	... {Details of the base; Arrangements of components in the base}
F21K 9/30	. {LED lamps or modules comprising attachment means not covered by groups F21K 9/10 to F21K 9/175 }
F21K 9/50	. {Optical arrangements, i.e. for improving the color rendering index or the light extraction}
F21K 9/52	.. {using a light guide}
F21K 9/54	.. {using a mixing chamber, e.g. a housing with reflective walls}
F21K 9/56	.. {using wavelength conversion means distinct or spaced from the light generating element, e.g. a remote phosphor layer}
F21K 9/58	.. {specially adapted for changing the characteristics or the distribution of the light, e.g. by movement of parts}
F21K 9/90	. {Manufacturing methods}
F21K 99/00	Subject matter not provided for in other groups of this subclass
F21K 2099/005	. {Other light sources comprising light emitting diodes associated with conversion means}