CPC      COOPERATIVE PATENT CLASSIFICATION

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

LIGHTING; HEATING

F21     LIGHTING
      (NOTE omitted)

F21K    NON-ELECTRIC LIGHT SOURCES USING LUMINESCENCE; LIGHT SOURCES USING ELECTROCHEMILUMINESCENCE; LIGHT SOURCES USING CHARGES OF COMBUSTIBLE MATERIAL; LIGHT SOURCES USING SEMICONDUCTOR DEVICES AS LIGHT-GENERATING ELEMENTS; LIGHT SOURCES NOT OTHERWISE PROVIDED FOR

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

WARNING
The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

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2/00    Non-electric light sources using luminescence
   (using excitation by radioactivity G21H 3/02,
   H01J 65/06, H01J 65/08; using excitation by
   an external electromagnetic field or by external
   corpuscular radiation H01J 65/04); Light sources
   using electrochemiluminescence

2/005  
   [excited by infra-red radiation using up-conversion]
2/004  
   using triboluminescence; using thermoluminescence
2/06   using chemiluminescence
2/08   . . activated by an electric field, i.e.
       electrochemiluminescence

5/00    Light sources using charges of combustible
   material, e.g. illuminating flash devices
5/02   
   [ignited in a non-disrupting container, e.g. photo-
   flash bulb]
5/023   . . [Ignition devices in photo flash bulbs]
5/026   . . [using mechanical firing, e.g. percussion of a
       fulminating charge]

9/00    Light sources using semiconductor devices as
   light-generating elements, e.g. using light-emitting
   diodes [LED] or lasers

NOTES
1. In this group, the following expressions are used with the meaning indicated:

- "light source" means a light-generating component intended for installation in a fitting or holder incorporated in a lighting device;
- "retrofit light source" means a light source comprising substantially the same attachment means as those of incandescent lamps or fluorescent lamps. "Retrofit light sources" are specially adapted for replacing or substituting such lamps.

2. Semiconductor devices per se, or assemblies thereof, specially adapted for light emission, e.g. for use in light sources (in the sense of Note (1)) are covered by subclass H01L, e.g. H01L 33/00 or H01L 31/50, or by subclass H01S.

3. Lighting devices or systems in which light sources are used are covered by subclasses F21L or F21S.

4. When classifying in this group, classification is also made in subclass F21V if detail aspects covered by that subclass are of interest.
WARNING


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

9/20

Light sources comprising attachment means

WARNINGS

1. Group F21K 9/20 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21S 2/00, F21V 19/042 and F21V 19/045.

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


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

9/23

Retrofit light sources for lighting devices with a single fitting for each light source, e.g. for substitution of incandescent lamps with bayonet or threaded fittings

WARNINGS


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


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

9/232

specially adapted for generating an essentially omnidirectional light distribution, e.g. with a glass bulb

WARNING

Group F21K 9/232 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/90, F21S 2/00, F21V 19/042 and F21V 19/045.

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

9/233

specially adapted for generating a spot light distribution, e.g. for substitution of reflector lamps

WARNING

Group F21K 9/233 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/90, F21S 2/00, F21V 19/042 and F21V 19/045.

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

9/235

Details of bases or caps, i.e. the parts that connect the light source to a fitting; Arrangement of components within bases or caps (F21K 9/238 takes precedence)

WARNING


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

9/237

Details of housings or cases, i.e. the parts between the light-generating element and the bases; Arrangement of components within housings or cases (F21K 9/238 takes precedence)

WARNING


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

9/238

Arrangement or mounting of circuit elements integrated in the light source

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.
Retrofit light sources for lighting devices with two fittings for each light source, e.g. for substitution of fluorescent tubes

WARNINGS

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

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

Details of end parts, i.e. the parts that connect the light source to a fitting; Arrangement of components within end parts (F21K 9/278 takes precedence)

WARNING

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

Details of bases or housings, i.e. the parts between the light-generating element and the end caps; Arrangement of components within bases or housings (F21K 9/278 takes precedence)

WARNING

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

Arrangement or mounting of circuit elements integrated in the light source

WARNING

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

9/60 . . Optical arrangements integrated in the light source, e.g. for improving the colour rendering index or the light extraction

WARNINGS

1. Group F21K 9/60 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 200, F21V 19/042 and F21V 19/045.
   All groups listed in this Warning should be considered in order to perform a complete search.

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

Using light guides

WARNING

Group F21K 9/61 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 200, F21V 19/042 and F21V 19/045.
   All groups listed in this Warning should be considered in order to perform a complete search.

Using mixing chambers, e.g. housings with reflective walls

WARNING

Group F21K 9/62 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 200, F21V 19/042 and F21V 19/045.
   All groups listed in this Warning should be considered in order to perform a complete search.

Using wavelength conversion means distinct or spaced from the light-generating element, e.g. a remote phosphor layer

WARNING

Group F21K 9/64 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 200, F21V 19/042 and F21V 19/045.
   All groups listed in this Warning should be considered in order to perform a complete search.
specially adapted for changing the characteristics or the distribution of the light, e.g. by adjustment of parts

**WARNING**

Group **F21K 9/65** is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

**9/66**

. . Details of globes or covers forming part of the light source

**WARNING**

Group **F21K 9/66** is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/60, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

**9/68**

. . Details of reflectors forming part of the light source

**WARNING**

Group **F21K 9/68** is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/60, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

**9/69**

. . Details of refractors forming part of the light source

**WARNING**

Group **F21K 9/69** is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/60, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

**9/90**

. . Methods of manufacture

**WARNING**

Group **F21K 9/90** is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

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

**WARNINGS**

1. Group **F21K 99/00** is incomplete pending reclassification of documents from groups F21V 19/042 and F21V 19/045.

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


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

**2099/005** . {Other light sources comprising light emitting diodes associated with conversion means}