#### F21L

# LIGHTING DEVICES OR SYSTEMS THEREOF, BEING PORTABLE OR SPECIALLY ADAPTED FOR TRANSPORTATION

#### **Definition statement**

This place covers:

- Lighting devices or systems of lighting devices which are 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 where required. The light sources of the lighting devices may be either electrically powered (e.g. by electric batteries, electric cells, electric generators or cables for electric mains connection) or non-electrically powered (e.g. by combustion or daylight).
- Details and components specially adapted to be used for carrying or transporting lighting devices or systems of lighting devices.

#### Relationships with other classification places

The borderline between subclasses F21L and F21S is defined by the words "portable" and "fixed", not by "movable" and "non-movable". For example, lighting devices or systems used in the operation of vehicles, e.g. headlights, which are fixed on the vehicle and move together with the vehicle when it is travelling are considered to be non-portable, since they are components of the vehicle and fixed relative to the remainder of the vehicle at a permanent location. Such lighting devices are classified in subclass F21S. Lighting devices transported by a vehicle between locations and used for lighting purposes not related to the operation of the vehicle are classified in F21L.

Functional features or details of lighting devices or systems are classified in subclass F21V.

Structural combinations of lighting devices with other articles are classified in <u>F21V 33/00</u>, unless specifically provided for in this subclass or elsewhere in the CPC.

Light sources per se are covered in places indicated in the section "Informative references".

In this subclass, it is desirable to add the indexing codes of subclass  $\underline{F21W}$  in order to indicate the uses or applications of lighting devices, and of  $\underline{F21Y}$  in order to indicate the form of the light sources of lighting devices.

#### References

#### Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Light pointers	G02B 27/20
Flash units for photography	G03B 15/03
Transportable traffic lights	G08G 1/0955

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangement or adaptation of portable emergency signal devices on vehicles to be placed on roadways or vehicles	B60Q 7/00
Candles	C11C 5/00
Incandescent bodies heated by combustion. e.g. mantles	<u>F21H</u>

Non-electric light sources using luminescence	F21K 2/00
Light sources using electrochemiluminescence	F21K 2/08
Light sources using charges of combustible material, e.g. illuminating flash devices	F21K 5/00
Light sources using semiconductor devices as light generating elements, e.g. using light-emitting diodes [LED] or lasers	F21K 9/00
Light sources not otherwise provided for	F21K 99/00
Devices or systems intended for fixed installation, e.g. vehicle lighting, or for use essentially at a permanent location	<u>F21S</u>
Lighting devices intended to be free standing, e.g. table lamp or floor lamp	F21S 6/00
Non-electric lighting devices intended to be free-standing, e.g. table lamp, floor lamp	F21S 13/12
Details of portable lighting devices	<u>F21V</u>
Structural combinations of lighting devices with other articles, not otherwise provided for	F21V 33/00
Candle holders	F21V 35/00
Burners	<u>F23D</u>
Fireworks	F42B 4/00
Electric discharge tubes or discharge lamps	<u>H01J</u>
Electric incandescent lamps	<u>H01K</u>
Semiconductor devices specially adapted for light emission	H01L 33/00
Fastening electric light sources solely by the coupling device	H01R 33/00
Masers, lasers	<u>H01S</u>
Electric arc lamps	H05B 31/00
Electroluminescent light sources	H05B 33/00
Electric light sources using a combination of different types of light generation	H05B 35/00
Organic semiconductor devices specially adapted for light emission	H10K 50/00

# Special rules of classification

Non-electric lighting devices are classified in groups  $\underline{F21L\ 17/00}$  -  $\underline{F21L\ 26/00}$  only if a special adaptation related to the use of a non-electric light source is of interest. If there is no such special adaptation, classification is made in a relevant general place. In this subclass, it is desirable to add the Indexing Codes of subclasses  $\underline{F21W}$  and  $\underline{F21Y}$ .

## **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Light source	The entity (e.g. light bulb, fluorescent tube, gas mantle or
	combustible charge) that generates light for a lighting device.

## F21L 2/00

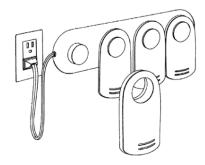
Systems of electric lighting devices (systems employing both electric and nonelectric light sources or exchangeable light sources <u>F21L 27/00</u>)

#### **Definition statement**

This place covers:

Set of plurality of identical portable lighting devices.

The following image shows an example of an identical portable lighting system.



#### References

#### Limiting references

This place does not cover:

Systems	employing both electric and non-electric light sources or	F21L 27/00
exchange	able light sources	

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Systems employing lighting devices with a built-in power supply, the	F21S 9/00
lighting devices not being "portable"	

## F21L 4/00

# Electric lighting devices with self-contained electric batteries or cells

#### **Definition statement**

This place covers:

Electrical portable lighting devices being self-powered

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Systems employing lighting devices with a built-in power supply, the	F21S 9/00
lighting devices not being "portable"	

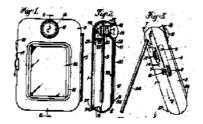
## F21L 4/005

# {the device being a pocket lamp (F21L 4/022, F21L 4/045, F21L 4/085 take precedence)}

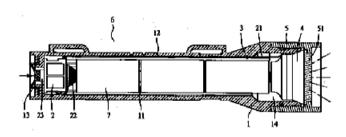
## **Definition statement**

This place covers:

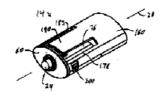
Flat type self-contained or battery-operated portable electric light



Torch



squeeze-activated flashlight



# References

## Limiting references

Pocket lamps characterised by the provision of two or more light sources	F21L 4/022
Pocket lamps characterised by the provision of a light source housing portion adjustably fixed to the remainder of the device	F21L 4/045

Pocket lamps characterised by means for in situ recharging of the	F21L 4/085
batteries or cells	

# Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

• "flashlight", "pocket lamp" and "torch"

## F21L 4/025

# {the light sources being of different shape or type}

# **Special rules of classification**

In this subclass, it is desirable to add the Indexing Codes of subclasses F21Y 2113/20

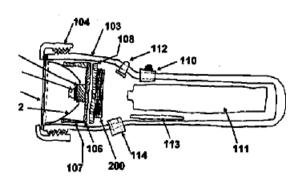
## F21L 4/027

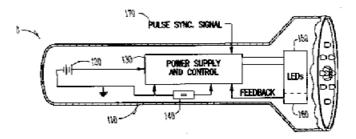
# {the light sources being a LED}

#### **Definition statement**

This place covers:

Pocket lamp, the light emitter of which being one or more LED





# Special rules of classification

In this subclass, it is desirable to add the Indexing Codes F21Y 2101/00

## F21L 4/04

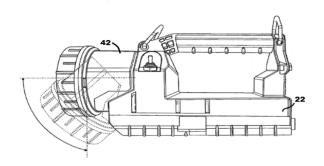
# characterised by the provision of a light source housing portion adjustably fixed to the remainder of the device

#### **Definition statement**

This place covers:

Portable lighting device having a head portion mechanically attached to the body part and adjustably attached to it.

The following illustration shows light source housing (42) adjustably fixed to lantern body (22).



#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Head portion attached to body part by means of flexible connecting sheath comprising electrical wires	<u>F21L 4/06</u>
Head portion of a lighting device being adjustable	F21V 21/30

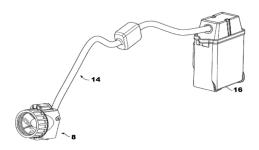
## F21L 4/06

# with the light source coupled to the remainder of the device solely by cable

#### **Definition statement**

This place covers:

For example, note the following figure showing head portion (8) attached to body part (16) by means of flexible connecting sheath comprising electrical wires (14).



#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Portable lighting device with a light source housing portion adjustably	F21L 4/04
fixed to the remainder of the device	

## F21L 4/08

## characterised by means for in situ recharging of the batteries or cells

#### **Definition statement**

This place covers:

Portable lighting device provided with connectors to connect the device to external power supply in order to recharge the batteries, e.g. with built-in accumulators

Portable lighting device provided with accumulators (not shaped like conventional batteries) that can be dismounted in order to be recharged on an external recharging base

Portable lighting devices with solar cells integrated to the body of the lamp

#### References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Circuit arrangements for charging or depolarising batteries or for	H02J 7/00
supplying loads from batteries	

## F21L 13/00

# Electric lighting devices with built-in electric generators (with solar cells F21L 4/00)

#### References

#### Limiting references

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Electric lighting devices with solar cells	F21L 4/00

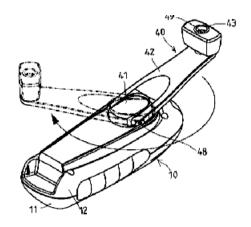
# F21L 13/06

# with mechanical drive, e.g. spring

## **Definition statement**

This place covers:

Flashlight having manual charging device



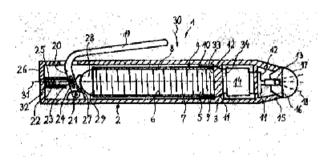
# F21L 13/08

# by reciprocating pusher actuated by hand

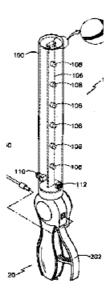
## **Definition statement**

This place covers:

Electric power device for portable device with a piezo-converter



Portable signal light with a self-generator

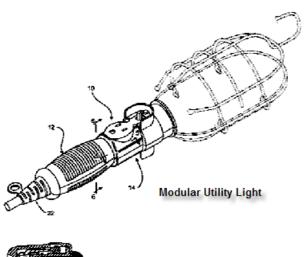


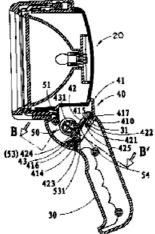
F21L 14/02

# capable of hand-held use, e.g. inspection lamps

# **Definition statement**

This place covers:





# F21L 14/023

# {having two or more, or different light sources}

# **Special rules of classification**

In this subclass, it is desirable to add the appropriate Indexing Codes of subclasses F21Y 2113/00

## F21L 14/026

# {having a linear light source}

## **Special rules of classification**

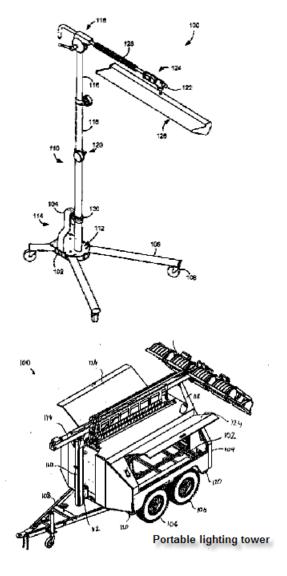
In this subclass, it is desirable to add the appropriate Indexing Codes of subclasses F21Y 2103/00

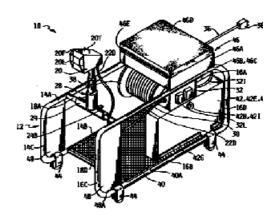
## F21L 14/04

## carried on wheeled supports

# **Definition statement**

This place covers:





## References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Projector or searchlight on land vehicles	B60P 3/18
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# F21L 19/00

# Lanterns, e.g. hurricane lamps or candle lamps

## References

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Candle holders	F21V 35/00
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# F21L 19/003

{Fastening or lifting of the lamp glass (fastening of component parts of lighting devices F21V 17/00)}

#### References

## Limiting references

Fastening of component parts of the lighting devices	F21V 17/00
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# F21L 19/006

{Special adaptation for protection against draughts (in lighting devices employing combustion other than lanterns F21V 37/02)}

## References

# Limiting references

In lighting devices employing combustion other than lanterns	F21V 37/02
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