# **B60Q**

# ARRANGEMENT OF SIGNALLING OR LIGHTING DEVICES, THE MOUNTING OR SUPPORTING THEREOF OR CIRCUITS THEREFOR, FOR VEHICLES IN GENERAL

## **Definition statement**

This place covers:

The arrangement of lighting or signalling devices with relationship to the vehicle or to each other.

The mounting or supporting of lighting and signalling devices on the vehicle.

The circuits therefor.

The switches therefor.

The control and signal-initiating means therefor.

The monitoring therefor.

The devices mentioned being:

- for illuminating areas inside or outside a vehicle or for giving signals to the outside of the vehicle or to the vehicle occupants; and
- mounted to the vehicle in a fixed or adjustable manner or supported by the vehicle with the provision of being portable.

## **Relationships with other classification places**

Subclass <u>B60Q</u> covers arrangements of lighting and signalling devices as a whole, i.e. as a complete unit dedicated to a given lighting or signalling function.

The relative arrangement of devices dedicated to different lighting or signalling functions within a single housing is also covered by  $\underline{B60Q}$ .

Optical components (e.g. lenses, light sources) constituting of the lighting and signalling device itself are classified in other relevant classes and subclasses.

Arrangements of these optical components in relation to each other in order to generate a specific optical beam are covered by F21S 41/00, F21S 43/00.

Subclass <u>B60Q</u> covers arrangements of lighting and signalling devices mounted on vehicles in general, but not the arrangements of lighting and signalling devices specifically adapted to particular types of vehicles other than cars, trucks and buses; these are classified in the relevant subclasses for other types of vehicles. An exception to this are the arrangements of lighting and signalling devices specifically adapted to motorcycles which are classified in both subclasses <u>B60Q</u> and <u>B62J</u>.

Circuits for lighting and signalling devices that may have an application other than in a vehicle are also classified in <u>H05B</u>.

Subclass <u>B60Q</u> covers the mechanical arrangement of switches only if they apply to vehicle lighting and signalling. However <u>B60Q</u> covers the mechanical arrangement of all steering column stalk switches. Switches that may have an application other than in a vehicle are also classified in <u>H01H</u>.

# 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:

Arrangement of lighting devices for rail vehicles	<u>B61D 29/00</u>
Arrangement of optical signalling or lighting devices on cycles; Mounting or supporting thereof; Circuits therefor	<u>B62J 6/00</u>
Arrangements or adaptations of signalling or lighting devices on ships	<u>B63B 45/00</u>
Arrangements or adaptations of signal or lighting devices on aircrafts	<u>B64D 47/02</u>

## Informative references

Safety devices, e.g. sleeping driver	<u>B60K 28/00</u>
Cruise control	<u>B60K 31/0008</u>
Arrangements of cameras in vehicles	<u>B60R 1/00</u>
Vehicle electric circuits in general	<u>B60R 16/00</u>
Anti-theft	<u>B60R 25/00</u>
Driving assistance	<u>B62D</u>
Steering aids	<u>B62D 15/02</u>
Mounting means	<u>F16B</u>
Lighting in general, lighting devices per se	<u>F21, H05B</u>
Lighting or signalling devices per se	<u>F21S</u> , <u>F21V</u>
Infrared night vision	<u>G01S</u>
Anti-collision	<u>G01S 13/931</u>
Automatic pilot	<u>G05D 1/00</u>
Image transformation	<u>G06T 3/00</u>
Image enhancement	<u>G06T 5/00</u>
Image analysis	<u>G06T 7/00</u>
Character recognition, image acquisition	<u>G06V 30/14</u>
Signalling in general	<u>G08</u>
Alarms in general	<u>G08B 21/00</u>
Traffic control	<u>G08G</u>
Inter-vehicle communication for warning purposes	<u>G08G 1/00</u>
Anti-collision systems	<u>G08G 1/16</u>
Illumination of logos, symbols, advertisement	G09F
Electric switches per se	<u>H01H</u>
Television systems	H04N
Electric lighting not otherwise provided for	<u>H05B</u>

# **Glossary of terms**

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

LED Light Emitting Diode	
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## **Synonyms and Keywords**

In patent documents, the following abbreviations are often used:

DRL	Daytime Running Light

# B60Q 1/00

# Arrangement of optical signalling or lighting devices, the mounting or supporting thereof or circuits therefor (for lighting vehicle interior <u>B60Q 3/00</u>)

# **Definition statement**

#### This place covers:

The arrangement or adaptation of non-portable devices on vehicles dedicated to:

- illuminate areas outside of a vehicle in visible and non-visible wavelength range;
- give optical signals to the outside of the vehicle.

The mounting thereof, also for adjustable devices.

The circuits thereof.

The switches thereof.

The manual or automatic control and signal-initiating means thereof.

# References

## Limiting references

This place does not cover:

Arrangement of lighting devices for vehicle interior, the mounting or	<u>B60Q 3/00</u>
supporting thereof or circuits therefor	

## Informative references

Horn switches integrated in steering wheel covers with tear lines	B60R 21/21658
Assembling headlights on an assembly line	<u>B62D 65/16</u>
Gear selector levers	<u>F16H 59/02</u>
Calibration of headlight	<u>G01M 11/06</u>
Control circuits of light sources for camera capture	<u>H05B 41/30</u>
Circuit arrangements for electric light sources in general	<u>H05B 47/00</u>

{Devices preventing the lights from becoming dirty or damaged, e.g. protection grids or cleaning by air flow (windshield wipers for cleaning optical devices of vehicles **B60S 1/04**)}

## References

#### **Limiting references**

This place does not cover:

Windshield wipers for cleaning optical devices of vehicles	<u>B60S 1/04</u>	
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#### Informative references

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

Protecting lighting devices from damage in general	F21V 15/00
Fastening of grids or protective cages in general	F21V 17/00

# B60Q 1/0011

# {with light guides for distributing the light between several lighting or signalling devices}

## References

#### Informative references

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

Using light guides inside a single device	F21S 41/24, F21S 43/235
Light guides per se	<u>G02B 6/0001</u>

# B60Q 1/0064

{with provision for maintenance, e.g. changing the light bulb (swivel arrangements **B60Q 1/0425**)}

## References

#### **Limiting references**

This place does not cover:

Swivel arrangements	<u>B60Q 1/0425</u>
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#### Informative references

Fastening of light sources or lamp holders	<u>F21S 41/19, F21S 43/19</u>
Fastening of covers	<u>F21S 41/50</u>
Changing light sources in general	<u>F21V 19/04</u>

# {via a removable cap}

# **Definition statement**

This place covers:

Devices in which the cap has no mechanical link (no holding function) with the bulb

# References

## Informative references

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

Fastening of the light source by a cap holding the light source	F21S 41/19, F21S 43/19
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# B60Q 1/0076

# {Switches therefor (B60Q 1/1446, B60Q 1/343, B60Q 1/40 take precedence)}

# References

# **Limiting references**

This place does not cover:

Mechanically actuated switches for dimming of head lights	<u>B60Q 1/1446</u>
Optical signalling or lighting devices with manually actuated switching arrangements for indicating change of drive direction	<u>B60Q 1/343</u>
Optical signalling or lighting devices arrangements for indicating change of drive direction with mechanical automatic return	<u>B60Q 1/40</u>

## Informative references

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

Input arrangements for vehicle instruments	<u>B60K 35/10</u>
input analigements for vehicle instruments	<u>Doort 33/10</u>

# B60Q 1/0088

{Details of electrical connections (B60Q 1/305 takes precedence; electrical connection of the light source itself F21S 41/192, F21S 43/195)}

# **Definition statement**

This place covers:

Connections to the vehicle power supply or connections of several lamp units with each other.

# References

## **Limiting references**

This place does not cover:

Details of electrical connections of indicating devices for towed vehicles	<u>B60Q 1/305</u>
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Electrical connection of the light source itself	<u>F21S 41/192,</u> F21S 43/195
	<u>FZ15 43/195</u>

## Informative references

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

Electrical connectors in general	<u>H01R</u>

# B60Q 1/0094

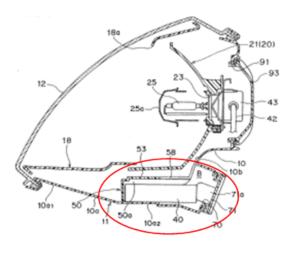
{Arrangement of electronic circuits separated from the light source, e.g. mounting of housings for starter circuits for discharge lamps (arrangements being part of the light source holder F21V 17/06, F21S 43/195)}

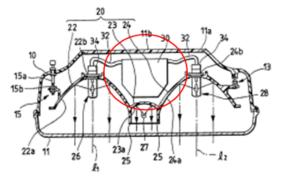
## **Definition statement**

This place covers:

- position, mounting of the circuit unit in or outside the lamp unit
- connections between the circuit unit and the light source or the external power supply

Illustrative example of subject matter classified in this group.





# References

## Limiting references

This place does not cover:

Arrangements of electronic circuits being part of the light source holder	F21V 17/06, F21S 43/195
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## Informative references

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

Architecture or diagrams of electronic circuits for vehicle lamps	<u>B60Q 1/1415,</u> <u>B60Q 1/1423,</u> <u>B60Q 1/143</u>
Details of lamp holders, terminals or connectors	F21S 41/192
Arrangement of electric circuit elements in or on lighting devices	F21V 23/00
Electronic circuits per se	<u>H05B</u>

# B60Q 1/0408

{built into the vehicle body, e.g. details concerning the mounting of the headlamps on the vehicle body (B60Q 1/0491, B60Q 1/05 take precedence, integrated front ends B62D 25/00)}

# **Relationships with other classification places**

Arrangements on headlights for positioning or indexing other vehicle parts (e.g. bumper cover or wing) are classified here and in the field relating to the other parts, e.g. <u>B62D 25/00</u>, <u>B60R 19/00</u>.

# References

## Limiting references

This place does not cover:

Shock absorbing devices therefor	<u>B60Q 1/0491</u>
Retractable headlights	<u>B60Q 1/05</u>
Integrated front ends	<u>B62D 25/00</u>

# B60Q 1/0425

## {the housing being swivel mounted on the vehicle body}

# **Relationships with other classification places**

Arrangements in which the headlight can be entirely swivelled around an axis for instance to change the bulb are classified in this group. Small swivelling for adjustment purposes is covered by <u>B60Q 1/045</u>, <u>B60Q 1/068</u>.

# B60Q 1/045

# {with provision for adjusting the alignment of the headlamp housing with respect to the vehicle body}

# References

## Informative references

Adjusting the light beam	<u>B60Q 1/06</u>
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# {the front cover being directly mounted onto the vehicle body}

# References

## Informative references

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

Mounting the cover on the housing	F21S 41/50

# B60Q 1/0491

# {Shock absorbing devices therefor}

# **Definition statement**

#### This place covers:

Shock absorbing devices located within or on the housing in order to minimize pedestrian injuries or minimize damages to the headlamp or the signal lamp.

# **Relationships with other classification places**

Arrangements for preventing vibrations of the light source are classified in <u>F21S 41/19</u> for headlamps and in <u>F21S 43/19</u> for signal lamps and also in <u>F21S 45/10</u>.

# References

## Informative references

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

Arrangements or fittings on vehicles for protecting or preventing injuries to pedestrians in case of accidents or other traffic risks	B60R 21/34
Shock absorbing devices in general	<u>F16F 15/04</u>
Resilient mounting of lighting devices in general	F21V 15/04
Safety devices structurally associated with lighting devices	F21V 25/00

# B60Q 1/0495

## {Frangible brackets}

## References

## Informative references

Safety devices coming into action when lighting device is disturbed,	F21V 25/02
dismounted or broken	

# adjustable, e.g. remotely-controlled from inside vehicle (<u>B60Q 1/05</u> takes precedence)

## References

#### Limiting references

This place does not cover:

Retractable headlights	<u>B60Q 1/05</u>

#### Informative references

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

	Controlling the distribution of the light emitted by acting on refractors	F21S 41/63
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# B60Q 1/076

by electrical means {including means to transmit the movements, e.g. shafts or joints}

# **Special rules of classification**

Details of automatic headlight adjustment systems which would otherwise be classified in  $\frac{B60Q \ 1/115}{B60Q \ 1/122}$  are instead classified in  $\frac{B60Q \ 1/076}{B60Q \ 1/076}$  if the general features of the actuating means, e.g. motors, shafts, ball-joints are included.

# B60Q 1/08

## automatically

# **Special rules of classification**

Documents in this group and its subgroups are also classified in <u>B60Q 2300/00</u> according to the parameters used for the automatic adjustment or switching. However, classification in <u>B60Q 2300/00</u> is only done for parameters whose contribution in the automatic process is clearly shown. Statements such as that "parameter x could be used for the adjustment" or "parameter x is measured by a sensor and fed into the control unit" without further details are not sufficient for classification in <u>B60Q 2300/00</u>. <u>B60Q 2300/00</u> is only used for <u>B60Q 1/08</u> and its subgroups, <u>B60Q 1/1423</u> and <u>B60Q 1/143</u>.

# B60Q 1/12

## due to steering position

## **Special rules of classification**

Devices in which automatic cornering is done by an additional, separate headlamp are classified in <u>B60Q 1/12</u> and <u>B60Q 1/18</u>.

# having dimming means

# References

## Informative references

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

Lighting power supply circuits in general	<u>H05B</u>
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# B60Q 1/1407

# {General lighting circuits comprising dimming circuits}

# References

## Informative references

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

Dimming circuits per se B60Q 1/1415
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# B60Q 1/1423

{Automatic dimming circuits, i.e. switching between high beam and low beam due to change of ambient light or light level in road traffic}

# References

## Informative references

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

Lighting device activated by means of a sensor, e.g. motion or	F21V 23/0442
photodetectors	

# **Special rules of classification**

Documents in this group and its subgroup B60Q 1/143 are also classified in B60Q 2300/00 according to the parameters used for the automatic adjustment or switching. However, classification in B60Q 2300/00 is only done for parameters whose contribution in the automatic process is clearly shown. Statements such as that "parameter x could be used for the adjustment" or "parameter x is measured by a sensor and fed into the control unit" without further details are not sufficient for classification in B60Q 2300/00. B60Q 2300/00 is only used for B60Q 1/08 and its subgroups, B60Q 1/1423 and B60Q 1/143.

# B60Q 1/1438

## {Actuating means for dimming masks or screens}

# References

#### Informative references

Variable light distribution by acting on screens as such	F21S 41/68	
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# being additional front lights {(bracket mounted headlights **B60Q 1/0483**)}

## References

#### **Limiting references**

This place does not cover:

Bracket mounted headlights B60Q 1/0483
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# **Special rules of classification**

Devices in which automatic cornering is done by an additional, separate headlamp are classified in <u>B60Q 1/12</u> and <u>B60Q 1/18</u>.

# B60Q 1/24

## for lighting other areas than only the way ahead

## **Special rules of classification**

Cornering lights are classified in B60Q 1/12.

# B60Q 1/245

# {Searchlights, e.g. adjustable from within the vehicle (adjustable headlights **B60Q 1/06**)}

## **Definition statement**

This place covers:

Arrangements for illuminating in which an entire spotlight or searchlight is moved as a unit.

## References

#### **Limiting references**

This place does not cover:

Adjustable headlights	<u>B60Q 1/06</u>
Adjustable headlights	<u>B60Q 1/06</u>

# B60Q 1/247

{for illuminating the close surroundings of the vehicle, e.g. to facilitate entry or exit (for reverse drive <u>B60Q 1/22</u>; by opening a side door <u>B60Q 1/323</u>)}

## References

#### **Limiting references**

This place does not cover:

Lighting devices for reverse drive	<u>B60Q 1/22</u>
Lighting devices operated by opening a side door	<u>B60Q 1/323</u>

#### Informative references

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

The light being emitted to facilitate access to the vehicle	F21W 2102/40
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# B60Q 1/249

## {for illuminating the field of view of a sensor or camera}

# **Definition statement**

This place covers:

Arrangements specifically adapted for illuminating, in visible or non-visible light, the field of view of sensors or cameras.

## References

#### Informative references

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

Lighting or signalling devices with sensors integrated in their housing	<u>B60Q 1/0023</u>
Constructional features of LIDAR systems, e.g. arrangements of optical elements	<u>G01S 7/481</u>

# B60Q 1/26

the devices being primarily intended to indicate the vehicle, or parts thereof, or to give signals, to other traffic

## References

## Informative references

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

Means for the lighting or illuminating of antennas, e.g. for purpose of	<u>H01Q 1/06</u>
warning	

# B60Q 1/2611

{Indicating devices mounted on the roof of the vehicle}

## References

#### Informative references

Flashing light sources in general	<u>F21S 10/06</u>
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# {mounted on a shaft, e.g. telescopic}

## References

## Informative references

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

	1 (I)
Lamps on antennas or powerlines	F21S 8/085

# B60Q 1/2665

{on rear-view mirrors (lighting devices for vehicle interior on or for rear-view mirrors **B60Q 3/258**)}

## References

## **Limiting references**

This place does not cover:

Lighting devices for vehicle interior on or for rear-view mirrors	<u>B60Q 3/258</u>
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## Informative references

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

Rear-view mirror arrangements	<u>B60R 1/02</u>
Mirror assemblies combined with lamps	<u>B60R 1/1207</u>
Adaptations or arrangements of mirrors for use on cycles	<u>B62J 29/00</u>

# B60Q 1/2669

## {on door or boot handles (lighting devices for vehicle interior on door handles B60Q 3/267)}

## References

#### **Limiting references**

This place does not cover:

Lighting devices for vehicle interior on door handles	<u>B60Q 3/267</u>
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## Informative references

Vehicle doors	<u>B60J 5/00</u>
Keyhole finders	E05B 15/08
Illuminating devices on or for locks or keys	<u>E05B 17/10</u>

{on parts worn by the driver, e.g. clothes, gloves or bags, specially adapted to provide auxiliary vehicle signalling}

## **Definition statement**

This place covers:

Portable lighting and signalling devices worn by a (motorcycle) driver or passenger and not mounted on the vehicle, whereby the device repeats or replaces a lighting or signalling function of the vehicle.

## References

#### Informative references

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

Professional or sporting clothes with reflecting or luminous means	<u>A41D 13/01</u>
Protective gloves with reflecting or luminous means	<u>A41D 19/0157</u>

# B60Q 1/2676

## {Helmets}

## References

#### Informative references

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

Helmets in general	<u>A42B 3/00</u>
Helmets with signalling or lighting devices	A42B 3/0433

# B60Q 1/268

{on windscreens or windows (B60Q 1/302 takes precedence; lighting devices for vehicle interior on or for windows B60Q 3/208)}

## References

#### **Limiting references**

This place does not cover:

For indicating rear of vehicle, e.g. by means of reflecting surfaces, and mounted in the vicinity, e.g. in the middle, of a rear window	<u>B60Q 1/302</u>
Lighting devices for vehicle interior on or for windows	B60Q 3/208

## Informative references

Windows or windscreens in general	<u>B60J 1/00</u>
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# {on wipers or windscreen washers}

# References

## Informative references

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

Vehicle wipers	<u>B60S 1/04</u>
Windscreen washers	<u>B60S 1/46</u>

# B60Q 1/2688

## {on exhaust pipes}

# References

## Informative references

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

Exhaust or silencing apparatuses in general	<u>F01N</u>

# B60Q 1/2696

# {Mounting of devices using LEDs}

# References

## Informative references

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

Fastening of LEDs on printed circuits	F21V 19/001

# B60Q 1/301

{by means of surfaces, e.g. metal plate, reflecting the light of an external light source}

# **Definition statement**

This place covers:

Illustrative example (see two striped reflective surfaces) of subject matter classified in this group.



# References

## Informative references

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

Vehicle signalling devices characterised by refractors	F21S 43/2605
Vehicle signal lamp reflectors using total internal reflection	F21S 43/315
Reflex reflectors per se	<u>G02B 5/12</u>

# B60Q 1/3015

# {combined with a lamp}

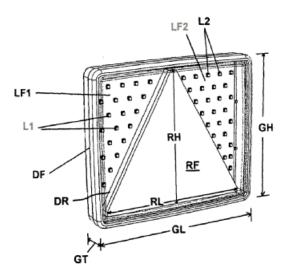
# **Definition statement**

This place covers:

Illustrative example of subject matter classified in this group.

RF: Reflector Surface;

L1, L2: Light Sources



# References

## Informative references

Vehicle signalling devices characterised by refractors	F21S 43/2605
Vehicle signal lamp reflectors using total internal reflection	F21S 43/315
Reflex reflectors per se	<u>G02B 5/12</u>

# {mounted in the vicinity, e.g. in the middle, of a rear window}

# References

## Informative references

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

Signalling devices specially adapted for vehicle exteriors, e.g. brake lamps, direction indicator lights or reversing lights	<u>F21S 43/00</u>
The light being emitted to facilitate access to the vehicle	F21W 2102/40

# B60Q 1/303

## {Rear fog lamps}

## References

## Informative references

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

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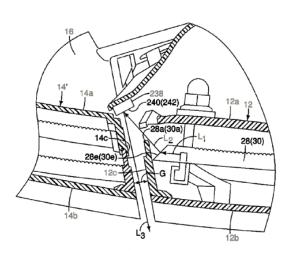
# B60Q 1/304

{Adaptations of signalling devices having a part on the vehicle body and another on the boot door}

# **Definition statement**

This place covers:

Arrangements and controls of signalling devices having a part on the vehicle body and a part on the boot door, e.g. increasing light intensity of the lamp part located on the vehicle body when the boot door is open.



# References

# Informative references

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

Hazard lights	F21W 2103/30
Brake lights	F21W 2103/35
Reversing lights	F21W 2103/45

# B60Q 1/307

# {mounted on loading platforms}

# References

## Informative references

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

Warning signals on loading platforms of vehicles predominantly for	B60P 1/4464
transporting loads and modified to facilitate loading or unloading	

Illustrative example of subject matter classified in this group.

# for indicating vehicle sides {, e.g. clearance lights}

# References

## Informative references

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

Side marker lights	F21W 2103/15
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# B60Q 1/425

# {using a latching element for resetting a switching element}

# References

## Informative references

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

Hand-actuated multifunction switches	B60Q 1/1461
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# B60Q 1/441

# {Electric switches operable by the driver's pedals}

# References

## Informative references

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

Electric switches in general	<u>H01H</u>
	·

# B60Q 1/46

for giving flashing caution signals during drive, other than signalling change of direction, e.g. flashing the headlights {or hazard lights}

# References

## Informative references

Flashing lights in general	F21S 10/06
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# for parking purposes

# References

## Informative references

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

Warning arrangements in garages	E04H 6/42

# B60Q 1/50

# for indicating other intentions or conditions, e.g. request for waiting or overtaking

# **Definition statement**

#### This place covers:

Arrangements and controls for providing signals to other traffic participants, whereby the purpose of the signal is not covered by other subgroups of  $\frac{B60Q}{1/26}$ .

# References

## Informative references

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

Projection of signs from lighting devices, e.g. symbols or information being projected onto the road	<u>B60Q 2400/50,</u> F21W 2103/60
Illuminated devices on vehicles for advertisement or general information purposes	<u>G09F 13/00,</u> <u>G09F 13/044,</u> <u>G09F 2013/227,</u> <u>G09F 21/04</u>

# B60Q 1/509

# {specific to unauthorised use, e.g. for indicating stolen vehicles or infringements of traffic rules}

# **Relationships with other classification places**

Optical devices indicating unauthorised use of vehicle to the vehicle exterior are classified in <u>B60Q 1/509</u> and in <u>B60R 25/10</u> and subgroups.

# References

## Informative references

Safety devices coming into action when lighting device is disturbed,	F21V 25/02
dismounted, or broken	

## for indicating emergencies

## **Definition statement**

#### This place covers:

Arrangements whereby an optical signal is given to other traffic when the vehicle is in a critical situation, such as involved in an accident, (partly) disabled, or airbags have been deployed.

#### References

#### References out of a residual place

Examples of places in relation to which this place is residual:

Signalling emergency braking	<u>B60Q 1/444, B60Q 1/447</u>
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#### Informative references

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

5	<u>B60Q 1/46,</u> F21W 2103/30
Portable emergency signal devices	<u>B60Q 7/00</u>
	<u>B60Q 2400/50,</u> F21W 2103/60

## **Special rules of classification**

Arrangements of signalling devices for emergency vehicles, such as light bars for ambulances or police vehicles are classified in <u>B60Q 1/2611</u> only.

# B60Q 1/525

# {automatically indicating risk of collision between vehicles in traffic or with pedestrians, e.g. after risk assessment using the vehicle sensor data}

## **Definition statement**

#### This place covers:

Arrangements for indicating to other traffic a potentially dangerous situation whereby the situation is not an emergency yet, i.e. an accident has not yet happened.

This place relates to driving situations other than parking.

The arrangements in this group assess the vehicle environment, e.g. distances to other traffic, lane departure, and automatically emit an external optical signal based on the evaluation of potentially dangerous situation such as a probable collision.

## References

#### References out of a residual place

Examples of places in relation to which this place is residual:

External optical signalling while reversing	<u>B60Q 1/22</u>
Signalling emergency braking	B60Q 1/444, B60Q 1/447

References ou	it of a resid	lual place
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	External optical signalling while parking	<u>B60Q 1/48</u>
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## Informative references

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

Drive control systems for vehicles predicting or avoiding probable or impending collision	<u>B60W 30/08</u>
Systems using the reflection or reradiation of radio waves, e.g. radar systems	<u>G01S 13/00</u>
Systems using the reflection or reradiation of acoustic waves, e.g. sonar systems	<u>G01S 15/00</u>
Systems using the reflection or reradiation of electromagnetic waves other than radio waves, e.g. lidar systems	<u>G01S 17/00</u>
Control of position or course in two dimensions	<u>G05D 1/43</u>
Traffic control systems relating to anti-collision	<u>G08G 1/16</u>

# B60Q 1/54

# for indicating speed {outside of the vehicle}

## References

#### Informative references

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

Automatic vehicle speed controlling fittings including unintended speed signalling devices to the vehicle driver	<u>B60K 31/18</u>
Illuminated devices on vehicles for advertisement or general information purposes	<u>G09F 13/00,</u> <u>G09F 13/044,</u> <u>G09F 2013/227,</u> <u>G09F 21/04</u>

# B60Q 1/543

{for indicating other states or conditions of the vehicle (indicating taxis' state of hire or fare G07B 13/045)}

## References

#### **Limiting references**

This place does not cover:

Indicating taxis' state of hire or fare	<u>G07B 13/045</u>
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## References out of a residual place

Examples of places in relation to which this place is residual:

Indicating silent vehicle	<u>B60Q 1/506</u>
Indicating autonomous driving	<u>B60Q 1/507</u>

Indicating driving in fleets or convoys	<u>B60Q 1/508</u>
Indicating unauthorised use, e.g. for indicating stolen vehicles or infringements of traffic rules	<u>B60Q 1/509, B60R 25/10</u>
External optical signalling for indicating an emergency, e.g. a disabled vehicle	<u>B60Q 1/52</u>

## Informative references

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

Illuminated devices on vehicles for advertisement or general information	<u>G09F 13/00,</u>
purposes	<u>G09F 13/044,</u>
	<u>G09F 2013/227,</u>
	<u>G09F 21/04</u>

# B60Q 1/544

{for indicating other states or conditions of the vehicle occupants, e.g. for indicating disabled occupants}

# References

## References out of a residual place

Examples of places in relation to which this place is residual:

External optical signalling for indicating an emergency	<u>B60Q 1/52</u>
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## Informative references

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

Illuminated devices on vehicles for advertisement or general information	<u>G09F 13/00</u> ,
purposes	<u>G09F 13/044,</u>
	<u>G09F 2013/227,</u>
	<u>G09F 21/04</u>

# B60Q 1/547

{for issuing requests to other traffic participants; for confirming to other traffic participants they can proceed, e.g. they can overtake}

# References

## Informative references

Illuminated devices on vehicles for advertisement or general information	<u>G09F 13/00,</u>
purposes	<u>G09F 13/044,</u>
	<u>G09F 2013/227,</u>
	<u>G09F 21/04</u>

# {for expressing greetings, gratitude or emotions}

# References

## References out of a residual place

Examples of places in relation to which this place is residual:

External optical signalling for indicating an emergency	<u>B60Q 1/52</u>
External optical signalling for indicating a probable collision	<u>B60Q 1/525</u>

## Informative references

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

Traffic control systems for road vehicles	<u>G08G 1/00</u>
purposes	<u>G09F 13/00,</u> <u>G09F 13/044,</u> <u>G09F 2013/227,</u> <u>G09F 21/04</u>

# B60Q 1/56

## for illuminating registrations or the like {, e.g. for licence plates}

# References

## Informative references

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

Licence plates	<u>B60R 13/10</u>
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# B60Q 3/00

# Arrangement of lighting devices for vehicle interiors; Lighting devices specially adapted for vehicle interiors

# **Definition statement**

#### This place covers:

Lighting devices in vehicles dedicated to illuminate in visible and non-visible wavelength range areas or parts located inside a vehicle, e.g. in the passenger or engine compartment.

The arrangement thereof.

The mounting thereof.

The circuits therefor.

The switches specifically adapted therefor.

The manual or automatic control means therefor.

# **Relationships with other classification places**

Arrangements or adaptations of lighting devices for the interior of aircrafts (B64D 47/02) and rail vehicles (B61D 29/00) are classified also in B60Q 3/00 and subgroups, because they are similar to arrangements for buses.

## References

#### Informative references

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

Lighting devices for door or window locks	<u>E05B 17/10</u>
Non-portable lighting devices in general	<u>F21S</u>
Details of lighting devices, of general application	<u>F21V</u>
Lighting devices for individual instruments, e.g. speedometers	<u>G01D 11/28,</u> <u>G01D 13/265,</u> <u>G01D 13/28</u>

## **Glossary of terms**

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

	LED	Light Emitting Diode
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# B60Q 3/10

#### for dashboards

## **Definition statement**

#### This place covers:

Lighting devices for illuminating the dashboard or parts thereof, from inside or outside the dashboard.

Circuits and control means therefor.

# **Relationships with other classification places**

Lighting devices internal to instruments are classified in <u>G01D 11/28</u>, <u>G01D 13/28</u>, but lighting devices for illuminating onto or around the instruments from outside the instruments are classified in <u>B60Q 3/10</u> and subgroups.

## References

#### Informative references

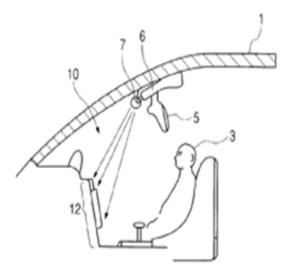
Instruments specially adapted for vehicles; Arrangement of instruments in or on vehicles	<u>B60K 35/00</u>
Dashboards	<u>B60K 37/00</u>
Lighting devices for individual instruments	<u>G01D 11/28</u> , <u>G01D 13/28</u>
Internal illumination of Liquid Crystal Displays	<u>G02F 1/00</u>
Illuminated signs	<u>G09F 13/00</u>

# lighting onto the surface to be illuminated

# **Definition statement**

#### This place covers:

Lighting devices or arrangements where the light impinges on the dashboard or parts thereof.



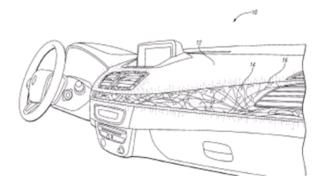
# **B60Q 3/14**

# lighting through the surface to be illuminated

# **Definition statement**

This place covers:

Backlight arrangements of the dashboard or parts thereof.



## **Circuits; Control arrangements**

## **Definition statement**

This place covers:

Circuits or control arrangements for the illumination of the dashboard as a whole or parts thereof, e.g. illuminating the dashboard when starting the vehicle, changing illumination colors for decoration purposes.

Circuits or control arrangements for the illumination of the instruments and buttons when it is not related to the function of the instruments or buttons themselves, e.g. adjusting the color of the illumination of instruments or buttons depending on the time of the day.

# References

#### Informative references

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

Circuits for electric light sources in general	H05B 47/00, H05B 39/00
------------------------------------------------	------------------------

# B60Q 3/18

## for varying the light intensity

## **Definition statement**

#### This place covers:

Circuits or control arrangements for varying the intensity of illumination onto or from the dashboard, e.g. to compensate for variations in ambient light intensity.

# References

#### Informative references

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

	Controlling light sources in displays	<u>G09G 3/06, G09G 3/22</u>
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# B60Q 3/20

for lighting specific fittings of passenger or driving compartments; mounted on specific fittings of passenger or driving compartments (lighting for dashboards <u>B60Q 3/10</u>)

# **Definition statement**

#### This place covers:

Lighting devices associated with a particular vehicle fitting, either by being mounted on or in the fitting, or by illuminating from or onto the fitting.

# References

## **Limiting references**

This place does not cover:

Lighting devices on or for dashboards	<u>B60Q 3/10</u>

## Informative references

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

	11
Receptacle for food or beverages, e.g. cup holders	<u>B60N 3/10</u>
	A

# B60Q 3/208

# Sun roofs; Windows

## References

## Informative references

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

Vehicle windows	<u>B60J 1/00</u>
Vehicle sun roofs	<u>B60J 7/00</u>

# B60Q 3/217

## Doors, e.g. door sills; Steps

## References

#### Informative references

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

Lighting devices for indicating vehicle sides to the exterior, e.g. mounted on doors or steps	<u>B60Q 1/32</u>
Vehicle doors	<u>B60J 5/00</u>

# **Special rules of classification**

Lighting devices mounted on doors or steps may be classified in both B60Q 3/217 and B60Q 1/32 if light can be cast inside and outside the vehicle, e.g. depending on whether the door is open or closed.

# B60Q 3/225

## Small compartments, e.g. glove compartments

## References

#### Informative references

Stowing small appliances in vehicles	<u>B60R 7/00</u>
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## Seats; Arm rests; Head rests

## References

## Informative references

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

Vehicle seats	<u>B60N 2/00</u>
Arm-rests for vehicle seats	<u>B60N 2/75</u>
Head-rests for vehicle seats	<u>B60N 2/80</u>

# B60Q 3/242

## Safety belts; Body harnesses

#### References

#### Informative references

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

Buckles	<u>A44B 11/00</u>
Vehicle safety belts or harnesses	B60R 22/00

# B60Q 3/252

Sun visors

## References

#### Informative references

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

	Sun visors	<u>B60J 3/02</u>
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# B60Q 3/258

## **Rear-view mirrors**

#### References

#### Informative references

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

Signalling devices mounted on exterior side mirrors	<u>B60Q 1/26</u>
Rear-view mirrors	<u>B60R 1/02</u>
Vehicle mirrors assemblies combined with other articles	<u>B60R 1/12</u>

# **Special rules of classification**

Lighting devices in vehicle interior combined with rear-view mirrors are also classified in <u>B60R 1/12</u>.

# Door handles; Hand grips

## References

## Informative references

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

Signalling devices mounted on exterior door handles	<u>B60Q 1/26</u>
Vehicle hand grips	<u>B60N 3/02</u>
Illuminating devices on, or for, locks or keys	<u>E05B 17/10</u>
Vehicle inner door handles	E05B 85/12

# B60Q 3/275

## Smoking-related fittings, e.g. cigarette lighters or ashtrays

## References

## Informative references

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

Ashtrays in vehicles	<u>B60N 3/08</u>
Cigarette lighters	<u>B60N 3/14</u>

# B60Q 3/283

## Steering wheels; Gear levers

## References

## Informative references

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

Steering wheels	<u>B62D 1/04</u>
Gear levers	<u>F16H 59/02</u>
Indicating ratio on gear levers	<u>F16H 63/42</u>

# B60Q 3/292

## **Ignition locks**

## References

#### Informative references

Illuminating devices on, or for, locks or keys	<u>E05B 17/10</u>

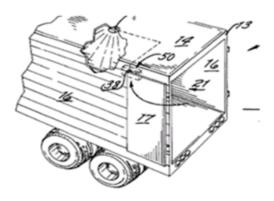
# for compartments other than passenger or driving compartments, e.g. luggage or engine compartments

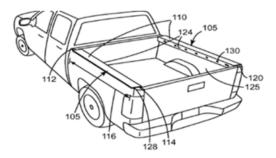
## **Definition statement**

This place covers:

Lighting devices for illuminating the inside of the engine compartment, the vehicle trunk, pick-up truck beds or vehicle cargo areas. The device may be dedicated to this single illuminating function or combined with a signalling or illuminating function towards the vehicle exterior.

Systems switching on the device according to the movement of the hood or trunk door.





# B60Q 3/35

## Portable lighting devices

## **Definition statement**

This place covers:

Lighting devices intended to be attached to the vehicle in their normal lighting use and that can be detached to illuminate other areas, e.g. outside the vehicle.

## References

#### Informative references

Portable lighting devices in general	<u>F21L</u>
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# specially adapted for specific vehicle types

## **Definition statement**

#### This place covers:

Lighting devices specially adapted in their size, structure, function, arrangement or control to be used or fulfil special needs of specific vehicle types, e.g. emergency lighting in buses.

# B60Q 3/41

#### for mass transit vehicles, e.g. buses

## **Definition statement**

#### This place covers:

Lighting devices specially adapted for buses, trains, or aircrafts.

# **Relationships with other classification places**

Lighting devices for the interior of aircrafts are classified also in <u>B64D 47/02</u>. Lighting devices for the interior of rail vehicles are classified also in <u>B61D 29/00</u>.

# References

## Informative references

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

Lighting devices for rail vehicles	<u>B61D 29/00</u>
Aircraft passenger or crew accommodation	<u>B64D 11/00</u>
Aircraft signal or lighting devices	<u>B64D 47/02</u>

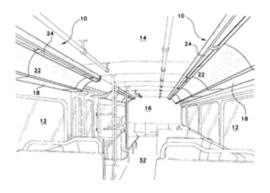
# B60Q 3/43

## **General lighting**

# **Definition statement**

#### This place covers:

Lighting devices of a large size for lighting the whole or large parts of the passenger compartment, for illumination purposes or for generating a particular ambience.



# References

## Informative references

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

General lighting in personal vehicles	<u>B60Q 3/74</u>

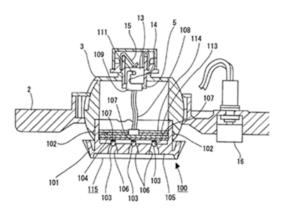
# B60Q 3/44

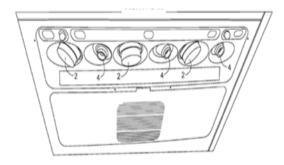
# Spotlighting, e.g. reading lamps

# **Definition statement**

#### This place covers:

Lighting devices for illuminating individual areas, of restricted surface, and specially adapted to mass transit vehicles, e.g. spherical type of reading lamps that can be oriented at 360 degrees; cluster of reading lamps associated with air conditioning units.





# B60Q 3/46

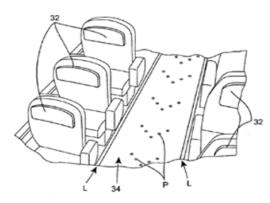
# Emergency lighting, e.g. for escape routes

# **Definition statement**

This place covers:

Active or passive illuminated marking to guide passengers towards exits.

Lighting devices with stand-alone electrical supply to be activated by failure of the main vehicle power supply.



# References

## Informative references

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

Signalling systems in general	<u>G08B 7/00</u>
Illuminated signs in general	<u>G09F 13/00</u>

# B60Q 3/47

## **Circuits; Control arrangements**

## **Definition statement**

#### This place covers:

Circuits and control arrangements specifically adapted to mass transit vehicles, e.g. for creating different ambiences in different parts of a vehicle, for changing light characteristics for waking up passengers in an aircraft.

#### References

#### Informative references

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

Circuits for electric light sources in general	H05B 47/00, H05B 39/00
------------------------------------------------	------------------------

# B60Q 3/49

## for vehicles with non-fixed roofs, e.g. convertibles

## **Definition statement**

#### This place covers:

Lighting devices specially adapted for the moving part of the non-fixed roof, e.g. adapted to the soft material of a convertible, with an electric supply adapted to the moving roof.

# References

## Informative references

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

Vehicle non-fixed roofs	<u>B60J 7/00</u>

# B60Q 3/50

Mounting arrangements (for compartments other than passenger or driving compartments <u>B60Q 3/30</u>; specially adapted for specific vehicle types <u>B60Q 3/40</u>)

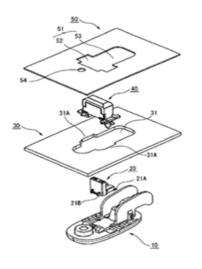
# **Definition statement**

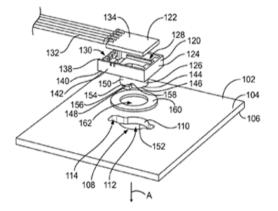
#### This place covers:

Mounting arrangements of lighting devices in the passenger compartment, e.g. on an arm, embedded in interior trim panel.

Details of fastening means for mounting the lighting device as a whole to the vehicle interior.

Arrangements for connecting the lighting device as a whole to the vehicle electrical wiring.





# References

## **Limiting references**

This place does not cover:

Mounting arrangements of lighting device in vehicle compartments other than the passenger compartment	<u>B60Q 3/30</u>
Mounting arrangements of lighting device in specific vehicle types	<u>B60Q 3/40</u>

## Informative references

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

Fastening of component parts of lighting devices in general	F21V 17/00, F21V 19/00
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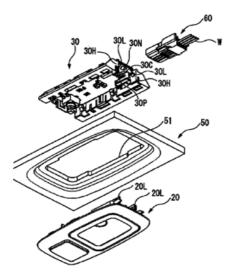
# B60Q 3/51

for mounting lighting devices onto vehicle interior, e.g. onto ceiling or floor

# **Definition statement**

This place covers:

Arrangements for mounting lighting devices onto vehicle interior panels or liners, e.g. for mounting a dome lamp in a hole of a panel or liner.



# B60Q 3/53

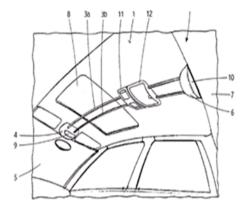
# Modular mounting systems, e.g. using tracks, rails or multiple plugs

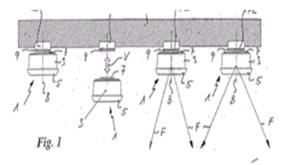
# **Definition statement**

This place covers:

Arrangements for mounting lighting devices at different places.

Arrangements for mounting different types of lighting devices at a given place.





# References

#### Informative references

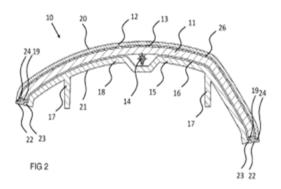
Supporting lighting devices displaceable along a guiding element	F21V 21/34
------------------------------------------------------------------	------------

# Lighting devices embedded in interior trim, e.g. in roof liners

# **Definition statement**

#### This place covers:

Arrangements where at least some components of the lighting device are part of a vehicle interior trim element, e.g. trim layer is light diffusing, light guide is integrated into the trim element layers.



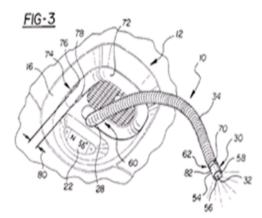
# B60Q 3/56

#### Lighting devices mounted on elongate supports, e.g. on flexible arms

## **Definition statement**

#### This place covers:

Arrangements of elongate supports for bringing the lighting device closer to its place of use, e.g. telescopic, articulated arms.



#### References

#### Informative references

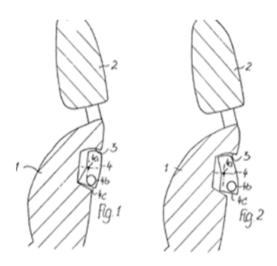
Lighting devices mounted on arms or standards in general	<u>F21V 21/10</u>
Adjustable mounting for lighting devices in general	F21V 21/14

# Retractable or concealable lighting devices

# **Definition statement**

#### This place covers:

Arrangements where the lighting device is retractable or concealable as a whole with respect to the vehicle part on which it is mounted.



# References

#### Informative references

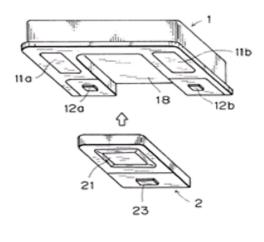
Movable parts in lighting devices for vehicle interiors for manually	B60Q 3/85
controlling the light emission	

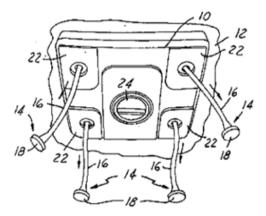
## Lighting devices mounted in the vehicle interior and adapted for portability

#### **Definition statement**

#### This place covers:

Arrangements whereby in its normal use, the lighting device is attached to the vehicle interior and provides light therefrom, and having possibly to be taken out of the mounting location as a portable lighting device, with or without a remaining link to the vehicle.





Arrangements of vehicle interior specially adapted for holding self-powered portable lighting devices that can be recharged from vehicle, or for holding portable lighting devices permanently powered from the vehicle, e.g. by way of extensible cables.

# **Relationships with other classification places**

Portable lighting devices characterised by means for in situ recharging of the batteries or cells are classified in  $\frac{F21L 4}{08}$ .

# References

#### Informative references

Portable lighting devices in general	<u>F21L</u>
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# **Special rules of classification**

Arrangements of self-powered lighting devices that can be recharged from the vehicle are also classified in <u>B60Q 3/88</u>.

# B60Q 3/62

# using light guides

## References

#### Informative references

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

Use of light guides in lighting devices in general	F21V 2200/00
Light guides in general	<u>G02B 6/00</u>

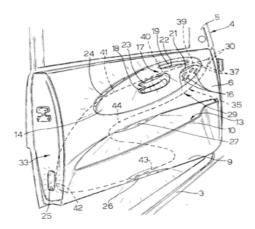
# B60Q 3/66

# for distributing light among several lighting devices

# **Definition statement**

This place covers:

Arrangements with one or several light guides for distributing the light of a single light source to several separated surfaces that illuminate different areas in the vehicle or provide different illumination functions.

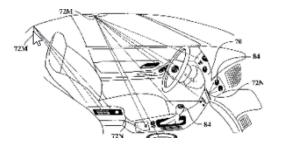


# using ultraviolet light

# **Definition statement**

#### This place covers:

Arrangements in which ultraviolet light impinges on luminescent areas in the vehicle interior.



## References

#### Informative references

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

Luminescent materials	<u>C09K 11/00</u>
Electroluminescent light sources per se	H05B 33/00

# B60Q 3/72

#### for preventing the driver from being dazzled

#### **Definition statement**

This place covers:

Arrangements in which visible or non-visible light is emitted in the vehicle interior in order to prevent the driver from being dazzled or to reduce eyestrain, e.g. by adjusting the light intensity falling on the driver's eyes according to the light level in front of the vehicle.

# B60Q 3/74

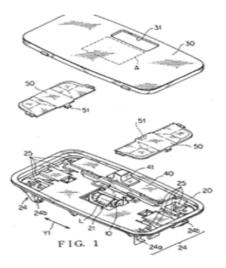
for overall compartment lighting; for overall compartment lighting in combination with specific lighting, e.g. room lamps with reading lamps (general lighting mounted on specific fittings <u>B60Q 3/20</u>; general lighting for mass transit vehicles <u>B60Q 3/43</u>)

# **Definition statement**

#### This place covers:

Details and arrangements of lighting devices for illuminating or creating a light ambience in large areas of the vehicle interior, e.g. starry sky lighting effect.

Devices combining room lamps and reading lamps, e.g. dome cluster.



## References

#### Limiting references

This place does not cover:

General lighting mounted on specific fittings	<u>B60Q 3/20</u>
General lighting for mass transit vehicles	<u>B60Q 3/43</u>

# B60Q 3/76

for spotlighting, e.g. reading lamps (spotlighting on or for specific fittings <u>B60Q 3/20</u>; spotlighting in mass transit vehicles <u>B60Q 3/44</u>)

#### **Definition statement**

This place covers:

Lighting devices towards small surfaces, providing directional or focused light, e.g. using lenses or blends.

#### References

#### **Limiting references**

This place does not cover:

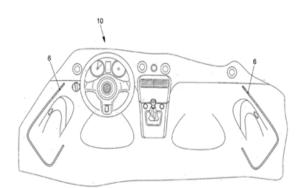
Spotlighting on or for specific fittings	<u>B60Q 3/20</u>
Spotlighting in mass transit vehicles, e.g. reading lamps orientable at 360 degrees	<u>B60Q 3/44</u>

## for generating luminous strips, e.g. for marking trim component edges

## **Definition statement**

#### This place covers:

Arrangements using elongated light sources, light guides or series of lights sources to create illuminated lines, e.g. along or around parts.



# References

#### Informative references

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

Lighting devices using a strip or string of light sourcesF21S 4/00
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# B60Q 3/80

# Circuits; Control arrangements (for dashboards <u>B60Q 3/16</u>; for mass transit vehicles <u>B60Q 3/47</u>)

#### **Definition statement**

This place covers:

Vehicle circuit architecture specifically designed for interior lighting devices.

Electrical arrangements within lighting devices.

Means for plugging the lighting device directly to a vehicle socket.

Switch arrangements specially designed for vehicle interior lighting devices.

Control arrangements for automatically switching on or off the lighting device, for automatically changing the illumination characteristics.

Control arrangements for manually changing the illumination characteristics.

#### References

#### Limiting references

This place does not cover:

Circuits and control arrangements for dashboards	<u>B60Q 3/16</u>	
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Circuits and control arrangements for mass transit vehicles	<u>B60Q 3/47</u>
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#### Informative references

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

	1
Circuits for electric light sources in general	H05B 47/00, H05B 39/00

# **Special rules of classification**

Arrangements for connecting the lighting device as a whole to the vehicle electrical wiring are classified in B60Q 3/50 and subgroups.

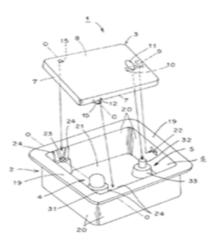
# B60Q 3/82

# Switches specially adapted for vehicle interior lighting, e.g. switching by tilting the lens

# **Definition statement**

#### This place covers:

Switching arrangements with special application for vehicle interior lamps, e.g. three-position switches, switching by rotating the lamp housing.



# References

#### Informative references

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

Switches in general	<u>H01H</u>

# **Special rules of classification**

Switching arrangements by closing or opening small compartments are also classified in <u>B60Q 3/225</u>.

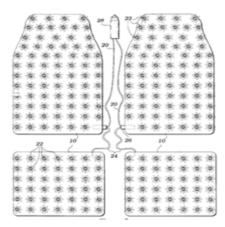
Switching arrangements by tilting sun shades or courtesy mirrors are also classified in <u>B60Q 3/252</u>.

Means for plugging to the electrical power supply of the vehicle, e.g. by using cigarette lighter sockets

## **Definition statement**

This place covers:

Arrangements for plugging vehicle interior lighting devices into vehicle sockets for use or recharge.



## References

#### Informative references

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

Portable lighting devices in general with means for in situ recharging	<u>F21L 4/08</u>
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# B60Q 5/00

#### Arrangement or adaptation of acoustic signal devices

# **Definition statement**

This place covers:

The arrangement or adaptation of acoustic devices for providing signals to the outside of the vehicle.

Vehicle horns to repel animals

The mounting thereof.

The circuits therefor.

The switches therefor.

#### **Relationships with other classification places**

Arrangements or adaptations of acoustic devices for providing signals to the inside of the vehicle, e.g. to the driver, are classified in B60Q 9/00.

# References

## Informative references

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

Acoustic devices to repel animals in general	A01M 29/00
Horn switches integrated in steering wheel covers with tear lines	B60R 21/21658
Sound producing devices per se, producing sound not determined by the supply frequency	<u>G10K</u>
Sound producing devices per se, e.g. loudspeakers or like acoustic electromechanical transducers	<u>H04R</u>

# B60Q 5/006

# {indicating risk of collision between vehicles or with pedestrians}

# References

#### Informative references

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

Radars designed for anti-collision purposes between land vehicles or between land vehicle and fixed obstacles	<u>G01S 13/931</u>
Control of position or course in two dimensions	<u>G05D 1/43</u>
Anti-collision systems for road vehicles	<u>G08G 1/16</u>

# B60Q 7/00

# Arrangement or adaptation of portable emergency signal devices on vehicles

# **Definition statement**

This place covers:

The arrangement or adaptation of portable emergency signal devices on vehicles, whereby the device is:

- · stored in the vehicle when not in use, and
- placed remote from the vehicle, or on extending parts or overhanging loads of the vehicle when in use.

# **Relationships with other classification places**

The arrangement or adaptation of portable or non-portable emergency signal devices placed on vehicles when in use is classified in B60Q 1/52.

# References

#### Informative references

Arrangements for enforcing caution on roads, e.g. marker posts or traffic signals	<u>E01F 9/00</u>
Signs in general	<u>G09F</u>
Reflecting warning triangles	<u>G09F 13/16</u>

# B60Q 9/00

# Arrangement or adaptation of signal devices not provided for in one of main groups <u>B60Q 1/00</u> - <u>B60Q 7/00</u> {, e.g. haptic signalling}

#### **Definition statement**

This place covers:

The arrangement or adaptation of devices for providing signals, e.g. acoustic, optical or haptic signals, to the driver or the passengers of the vehicle, whereby the signal is not related to a particular vehicle function or parameter.

Specific signalling devices for anti-collision purposes.

Specific signalling devices for parking purposes.

Specific signalling devices to prevent vehicle battery discharge.

#### **Relationships with other classification places**

The subject-matter to be classified in this main group are devices that produce specific, elaborated signals.

For instance, a device for analysing a traffic environment to assess potential collision situations that merely generates an optical or acoustic signal to the driver when a potential collision situation is assessed is not classified in <u>B60Q 9/00</u>, but only in the group corresponding to traffic control for anticollision purposes: <u>G08G 1/16</u>. If the device generates a signal that varies according to the situation, it is classified in <u>B60Q</u>.

Signalling devices to the driver related to a particular vehicle function, e.g. start of automatic braking, or to a vehicle parameter, e.g. reaching a particular speed, are not classified in  $\frac{B60Q}{9/00}$ , but only in the corresponding vehicle function group of class  $\frac{B60}{2}$ .

#### References

#### Informative references

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

Means for informing the driver, warning the driver or prompting driver intervention in vehicle conjoint control systems	<u>B60W 50/14</u>
Instruction means for parking or steering aid	B62D 15/027, B62D 15/029
Anti-collision systems	<u>G08G 1/16</u>

# B60Q 11/00

Arrangement of monitoring devices for devices provided for in groups <u>B60Q 1/00</u> - <u>B60Q 9/00</u>

#### References

#### Informative references

Testing of alignment of vehicle headlights at manufacture	<u>G01M 11/06</u>
Testing of electric installations on road vehicle	<u>G01R 31/006</u>

Detecting lamp failure in a circuit in general	<u>H05B 47/20</u>

# B60Q 11/007

# {the lighting devices indicating change of drive direction}

## References

#### Informative references

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

Arrangements or adaptations of optical signalling or lighting devices for	<u>B60Q 1/34</u>
indicating change of drive direction as such	

# B60Q 2400/10

Electro- or photo- luminescent surfaces, e.g. signalling by way of electroluminescent strips or panels

#### References

#### Informative references

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

Vehicular signalling strips of light sources	<u>F21S 43/15</u>
Vehicular signalling light sources where the light is generated by photoluminescent material spaced from a primary light generating element	<u>F21S 43/16</u>
Elements containing photoluminescent material distinct from or spaced from the light source	<u>F21V 9/30</u>

# B60Q 2400/50

#### Projected symbol or information, e.g. onto the road or car body

#### References

Informative references

Projection of signs from lighting devices, e.g. symbols or information	F21W 2103/60
being projected onto the road	

# B60Q 2500/00

# Special features or arrangements of vehicle interior lamps

# References

## Informative references

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

Interior vehicle lighting devices F21W 2106/00