

## LIGHT EMITTING HANDLE FOR VEHICLE

The present invention relates to a light emitting handle for a vehicle, such as a car, a motorcycle or the like.

A conventional car has warning lights, such as headlights, taillights or turn signals, so as to provide an indication effect to other people located adjacent to the vehicle. However, the conventional car is not provided with any warning light at the two sides thereof, so that other people cannot clearly inspect passage of the vehicle, especially at the night or at a dark zone, thereby causing danger to other people passing by the vehicle.

The primary objective of the present invention is to provide a light emitting handle that is mounted on the door of a car or mounted on two sides of the tail portion of a motorcycle to emit light outward.

In the drawings:

Fig. 1 is a perspective view of the present invention.

Fig. 2 is an exploded perspective view of Fig. 1.

Fig. 3 is a cross-sectional view of Fig. 1.

Fig. 4 is a locally enlarged view of Fig. 3.

Fig. 5 is a top view of the present invention.

Fig. 6 is an exploded perspective view of the present invention.

Fig. 7 is a cross-sectional view of Fig. 6.

Referring to Figs. 1-5, a light emitting handle of the present invention comprises a handle body 1, a light emitting device 2 mounted on the handle body 1 to emit light outward, and a light guide device 3 mounted on the handle body 1 to guide and reflect the light of the light emitting device 2 outward from the handle body 1.

The handle body 1 has two ends provided with a first connecting portion 18 and a second connecting portion 19 to attach the handle body 1 to a vehicle, such as a car or a motorcycle. The handle body 1 has a side formed with a receiving chamber 16 to receive the light emitting device 2 and a mediate portion formed with a recessed portion 12 to facilitate a user holding the handle body 1. The receiving chamber 16 has a side formed with two screw

bores 161. The recessed portion 12 has a slot 13 for mounting the light guide device 3. The slot 13 has a first end formed with a passage 15 connected to the receiving chamber 16 and a second end formed with a screw hole 17. The slot 13 has a periphery formed with a locking portion 14.

5           The light emitting device 2 includes a first fixing seat 21 mounted in the receiving chamber 16, a circuit board 25 mounted in the first fixing seat 21, a light emitting member 23 connected to the circuit board 25 and extended into the passage 15 to emit light toward the light guide device 3, a light gathering member 231 mounted on the light emitting member 23 so that the light  
10 emitting member 23 produces a light gathering effect, and a second fixing seat 27 combined with the first fixing seat 21 to cover the circuit board 25. The circuit board 25 has a periphery formed with two positioning bores 251. The first fixing seat 21 has a first side formed with a mounting hole 22 connected to the passage 15, and the light emitting member 23 is mounted in the mounting  
15 hole 22. The first fixing seat 21 has a second side formed with two first positioning holes 26 and has a periphery formed with two positioning posts 24 secured in the positioning bores 251. The second fixing seat 27 has a side formed with two second positioning holes 28. The light emitting handle further comprises two locking screws 162 extended through the second positioning  
20 holes 28 and the first positioning holes 26 and screwed into the screw bores 161.

          The light guide device 3 includes a transparent plate 31 mounted on the handle body 1 and having a first end formed with a protruding guide portion 34 extended into the passage 15 and enclosed around the light emitting  
25 member 23 to guide the light emitted from the light emitting member 23 into the transparent plate 31, a transparent refractive plate 35 mounted on a first side of the transparent plate 31, and a reflective plate 36 mounted on a second side of the transparent plate 31 to enhance the projecting effect of the light emitting member 23 onto the transparent plate 31. The transparent plate 31 is  
30 locked on the locking portion 14 and has a second end formed with a through hole 311. The transparent plate 31 is provided with a plurality of characters 32.

The guide portion 34 has a substantially arc-shaped recess 33 encompassing a periphery of the light emitting member 23. The refractive plate 35 is received in the slot 13. The reflective plate 36 has an end formed with a through hole 361. The light emitting handle further comprises a locking screw 171 extended through the through hole 361 and the through hole 311 and screwed into the screw hole 17.

In operation, when an electric power is supplied to the circuit board 25, the light emitting member 23 emits light beams toward the light guide device 3. Then, the light beams are extended through the recess 33 into the transparent plate 31 to light the characters 32. Then, the light beams are refracted by the refractive plate 35 and projected outward from the refractive plate 35. Thus, the light emitting handle emits light outward to provide a lightening effect.

In practice, the handle body 1 is mounted on the door of a car to emit light outward. At this time, the circuit board 25 is connected to a lamp switch, so that the electric power from the car is supplied into the circuit board 25. Alternatively, as shown in Fig. 5, the handle body 1 is mounted on two sides of the tail portion of a motorcycle to emit light outward. Thus, the light emitting handle emits light outward constantly so that the light emitting handle has a lightening effect when the car or motorcycle is turned around so as to provide a warning effect to other person.

Referring to Figs. 6 and 7, the light emitting device 2 further includes a wireless sensor 232 connected to the circuit board 25. Thus, when the wireless sensor 232 detects that the lamp of the car is turned on, the circuit board 25 is operated to light the light emitting member 23.

## CLAIMS

1. A light emitting handle, comprising:

a handle body;

5 a light emitting device mounted on the handle body to emit light outward; and

a light guide device mounted on the handle body to guide and reflect the light of the light emitting device outward from the handle body.

2. The light emitting handle of claim 1, wherein the handle body has a side formed with a receiving chamber to receive the light emitting device and  
10 a mediate portion formed with a recessed portion, and the recessed portion has a slot for mounting the light guide device.

3. The light emitting handle of claim 2, wherein the slot has a first end formed with a passage connected to the receiving chamber.

4. The light emitting handle of claim 2, wherein the light emitting  
15 device includes a first fixing seat mounted in the receiving chamber, a circuit board mounted in the first fixing seat, and a light emitting member connected to the circuit board and extended into the passage to emit light toward the light guide device.

5. The light emitting handle of claim 4, wherein the light emitting  
20 device further includes a light gathering member mounted on the light emitting member so that the light emitting member produces a light gathering effect.

6. The light emitting handle of claim 4, wherein the light emitting device further includes a second fixing seat combined with the first fixing seat to cover the circuit board.

25 7. The light emitting handle of claim 4, wherein the light emitting device further includes a wireless sensor connected to the circuit board.

8. The light emitting handle of claim 3, wherein the light guide device includes a transparent plate mounted on the handle body and having a first end formed with a protruding guide portion extended into the passage and  
30 enclosed around the light emitting member to guide the light emitted from the light emitting member into the transparent plate.

9. The light emitting handle of claim 8, wherein the light guide device further includes a transparent refractive plate mounted on a first side of the transparent plate.

10. The light emitting handle in accordance with claim 9, wherein the  
5 light guide device further includes a reflective plate mounted on a second side of the transparent plate.