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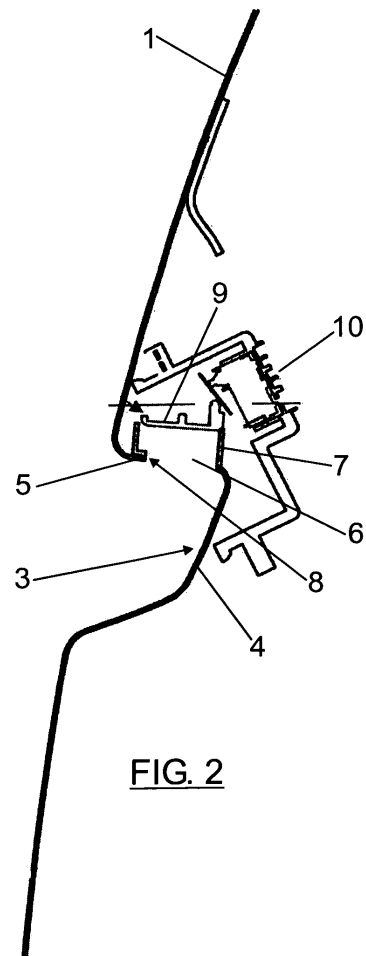
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(54) **Handle for vehicle doors**

(57) The invention relates to a handle for vehicle doors, formed by a push-button (9) which is assembled inside a recess (3) made in the outer surface of a door (2), by means of actuating the push-button (9) a micro-switch (10) responsible for activating an electric lock is activated.



**FIG. 2**

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## Description

### FIELD OF THE INVENTION

[0001] The present utility model relates to a handle for vehicle doors and more specifically for vehicle doors with an electric lock, which can be activated through a micro-switch that can be actuated through a lever switch or a push-button forming part of the handle.

### BACKGROUND OF THE INVENTION

[0002] The handle of vehicle doors is traditionally located in an area seen from the door. This handle, both if the lock is of the mechanical type and of the electric type, is formed by a lever switch or knob occupying relatively considerable dimensions and that in most cases projecting from the surface of the door. All this generally creates aerodynamic problems and above all affects the line of the vehicle, limiting the creativity of the designers.

### DESCRIPTION OF THE INVENTION

[0003] The object of the present invention is to eliminate the drawbacks set forth by means of a handle in which the door knob or lever switch is eliminated, such that it has a clean outer surface without additional elements, which allows improving the aerodynamics as well as achieving more attractive designs with sportier lines.

[0004] To that end according to the present invention, the handle consists of a recess, which is made in the door from its outer surface, with a horizontal elongated outline and with an upwardly increasing depth. In the deepest area, this recess is limited at the upper part with an approximately horizontal wall or ceiling having a longitudinal opening moved towards the inside in relation to the outer surface of the door.

[0005] The mentioned longitudinal opening is further surrounded at the upper part by a frame which is located above the recess, a frame in which a push-button is assembled by means of which a microswitch responsible for activating an electric lock can be activated.

[0006] In the handle of the invention, the handgrip or hand hold of the door is formed by the opening formed in the ceiling or upper wall of the recess, together with the frame surrounding this opening at the upper part and that will allow partially introducing the fingers of the hand, both to act on the push-button actuating the microswitch and to act on the door in the opening and closing operations.

[0007] With the mentioned constitution, the only visible element of the handle is the recess formed on the outer surface of the door, since the other elements or components thereof are concealed.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The constitution of the handle of the invention will be better understood with the following description, made with reference to the attached drawings, in which a nonlimiting embodiment is shown.

[0009] In the drawings:

Figure 1 is an outer perspective of a vehicle door provided with the handle of the invention.

Figure 2 is a partial vertical section of the door taken according to section line 2-II of Figure 1.

## DETAILED DESCRIPTION OF AN EMBODIMENT

[0010] Figure 1 generally shows a vehicle door 1, including the handle 2 of the invention. This handle is formed by a recess 3 formed from the outer surface of the door 1. The recess 3 has an elongated configuration, with a horizontal outline, being able to have an approximately rectangular contour. The inner wall 4 of this recess has an upwardly increasing depth. The recess 3 is limited at the upper part by a ceiling or horizontal wall 5 in which a longitudinal opening 6 has been made, which opening is limited by a frame 7 above the horizontal wall 5.

[0011] As shown in Figure 2, the opening 6 is moved towards the back 4 of the recess, such that it is slightly separated from the outer surface of the wall 1.

[0012] The recess 3 as well as the longitudinal upper opening 6 are sized so as to allow the partial entrance of the hand of a user, such that the fingers can be supported against the outer longitudinal edge 8 of the opening 6, during the opening operation of the door, acting as a grab handle.

[0013] A push-button 9 is assembled in the frame 7 to actuate a microswitch 10 responsible for activating an electric lock, responsible for opening and closing the door 1.

[0014] The solution proposed allows eliminating the traditional grip or handle of the door of vehicles and has a clean outer surface, as shown in Figure 1, in which only the recess 3 will be visible, since both the element acting as the grab handle, formed by the outer longitudinal edge 8 of the opening 6 and the push-button 9 of the microswitch 10, are concealed from view.

[0015] As there is no element projecting from the outer surface of the door 1, the aerodynamics and the outer appearance thereof are improved, giving design freedom while at the same time minimizing the number of parts necessary for the elements serving as a handle of the door and for actuating the lock thereof.

## Claims

1. A handle for vehicle doors, **characterized in that** it is formed by a recess (3) which the door (1) has on its outer surface, with a horizontal elongated outline

and an upwardly increasing depth, the recess of which is limited at the upper part by a ceiling or approximately horizontal wall (5) having a longitudinal opening (6) moved towards the inside in relation to the outer surface of the door; the opening of which is surrounded at the upper part by a frame (7) in which a push-button (9) is assembled to actuate a microswitch (10) responsible for activating an electric lock.

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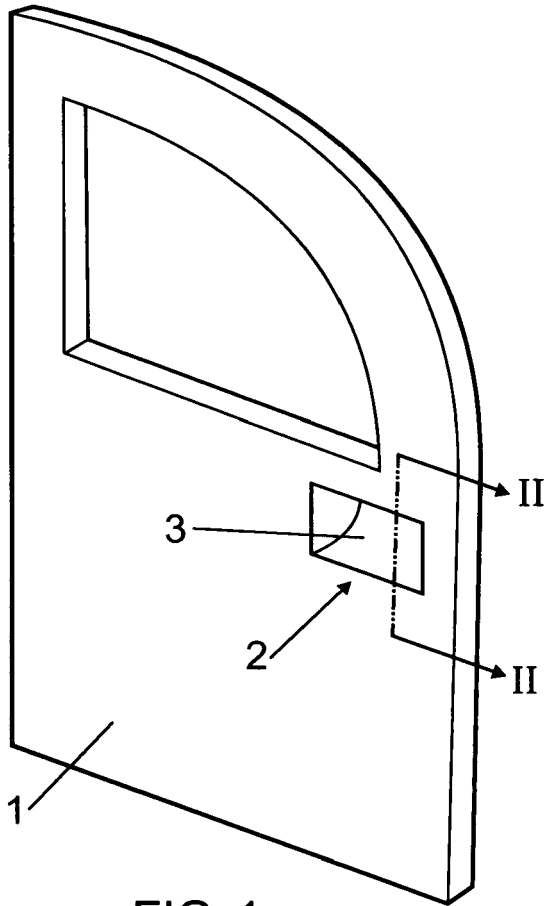


FIG. 1

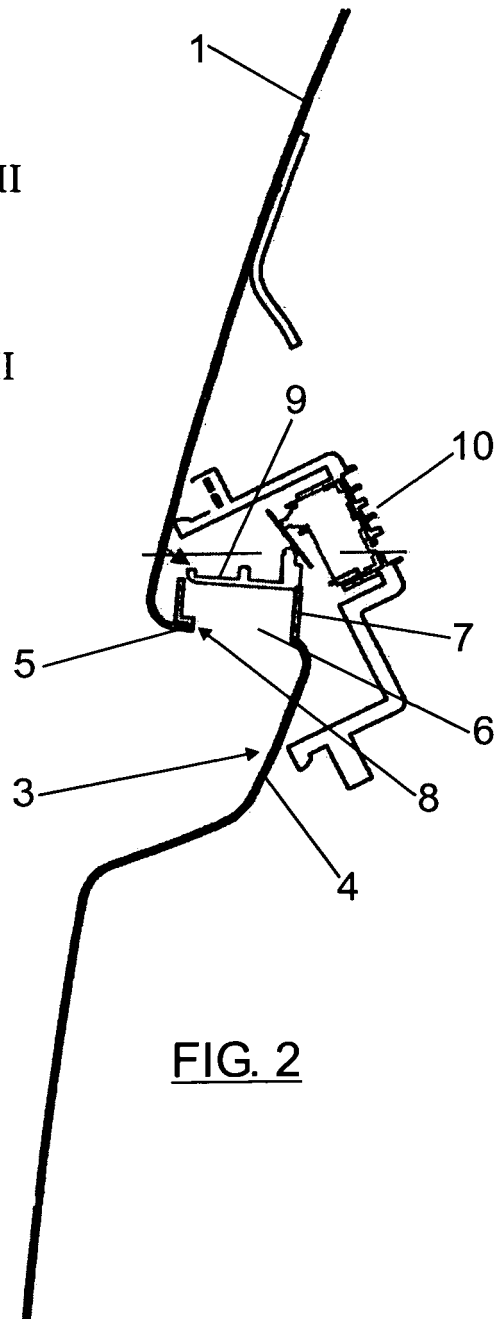


FIG. 2