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(71) Applicant(s)
AB Plast S.r.l.

(72) Inventor(s)
Poli, Massimiliano;Paderno, Alberto

(74) Agent / Attorney
Cullen & Co, Level 26 239 George Street, Brisbane, QLD, 4000

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(71) Déposant (pour tous les États désignés sauf US) : AB
PLAST S.R.L. [IT/IT]; Via Grazia Deledda, 23, I-25018
Montichiari (IT).

(72) Inventeurs; et

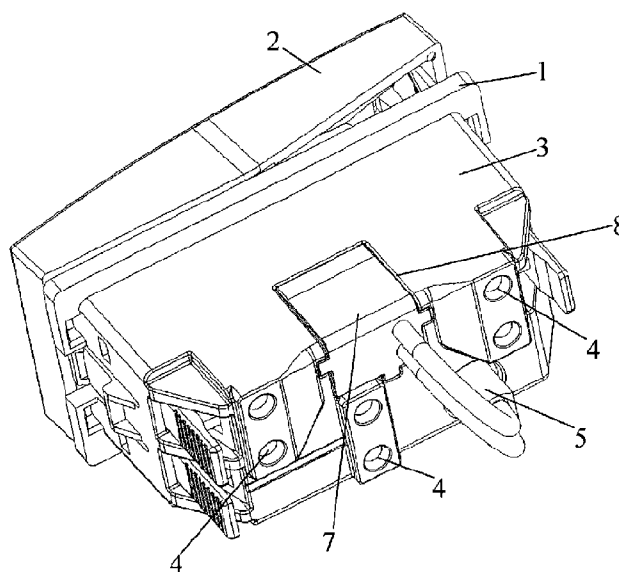
(75) Inventeurs/Déposants (pour US seulement): POLI, Mas-
similiano [IT/IT]; Loc. Terzago n°3, Calvagese della riv-
iera, I-25080 Brescia (IT). PADERNO, Alberto [IT/IT];
Via G.B. Rodella 29, I-25136 Brescia (IT).

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(54) Title: SWITCH

(54) Titre : INTERRUPTEUR



(57) Abstract: The invention concerns a switch consisting of a trim plate (1) with an overlying actuator (2) and mounted by its underside on a mechanism (3) provided with connection terminals (4), said switch comprising an indicator or signalling light (5) housed in the mechanism (3) and opening through the trim plate (1) beneath a translucent portion of the actuator (2). The invention is characterized in that said indicator or signalling light (5) is provided with terminal strip (7) for electrical connection to the switch terminals by being plugged in a corresponding connector (8) of the mechanism (3), said terminal strip (7) being initially wired on the light (5). The invention is more particularly applicable in the field of electrical appliances, in particular switches, and more particularly modular switches equipped with an indicator of signalling light.

[Suite sur la page suivante]

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En ce qui concerne les codes à deux lettres et autres abréviations, se référer aux "Notes explicatives relatives aux codes et abréviations" figurant au début de chaque numéro ordinaire de la Gazette du PCT.

(57) Abrégé : La présente invention concerne un interrupteur, constitué par une plaque d'habillage (1) surmontée d'un actionneur (2) et montée par sa face inférieure sur un mécanisme (3) muni de bornes de connexion (4), cet interrupteur comportant une lampe témoin ou de signalisation (5) logée dans le mécanisme (3) et débouchant à travers la plaque d'habillage (1) sous une partie translucide de l'actionneur (2), caractérisé en ce que ladite lampe témoin ou de signalisation (5) est pourvue d'un bornier (7) de connexion électrique aux bornes de l'interrupteur par enfichage dans une prise correspondante (8) du mécanisme (3), ledit bornier (7) étant câblé d'origine sur la lampe (5). L'invention est plus particulièrement applicable dans le domaine des appareillages électriques, en particulier des interrupteurs et notamment des interrupteurs modulaires munis d'une lampe témoin ou de signalisation.

The present invention relates to the field of electrical apparatus, in particular switches and especially modular switches equipped with a signalling or indicator light, and concerns a switch of this type.

5 Currently, various modular or non-modular switches have signalling or indicator devices in the form of lights, the beam of which generally passes through a translucent part of the actuator of said switches.

10 The term "light" as used hereinafter refers to any lighting device, incandescent lights, fluorescent lights, electroluminescent devices, for example light-emitting diodes.

15 These known lights, which are mounted by through-plugging in the switch mechanism, are electrically connected to the terminals of the switch mechanism by wiring carried out manually.

20 However, manual wiring of this type has the drawback of being time-consuming for an operator, thus driving up costs. In addition, it can be subject to technical defects inherent to wiring of this type, i.e. to sub-standard wiring.

Document FR-A-2 804 791 describes a switch according to the preamble of the single claim.

25 The object of the present invention is to overcome these drawbacks by proposing a switch equipped with a signalling or indicator light.

30 For this purpose, said switch, consisting of a trim plate topped by an actuator and provided on its lower face with a mechanism equipped with connection terminals and comprising a signalling or indicator light which is housed in the mechanism and opening across the trim plate below a translucent part of the actuator is characterised in that said signalling or indicator light is provided with a terminal

block for electrical connection to the terminals of the switch by being plugged in a corresponding socket of the mechanism, said block being wired on to the light.

A better understanding of the invention will be facilitated by the following description which relates to a preferred embodiment given by way of non-limiting example and explained with reference to the appended schematic drawings, in which:

Figure 1 is a perspective side view of a switch according to the invention;

Figure 2 is a perspective view from below of the switch; and

Figure 3 is a perspective view from above of the switch.

Figures 1 to 3 of the appended drawings show a switch consisting of a trim plate 1 topped by an actuator 2 and mounted with its lower face on a mechanism 3 equipped with connection terminals 4, this switch comprising a signalling or indicator light 5 which is housed in the mechanism 3 and opening across the trim plate 1 below a translucent part 6 of the actuator 2.

According to the invention and as shown more specifically in Figures 2 and 3 of the appended drawings, said signalling or indicator light 5 is provided with a terminal block 7 for electrical connection to the terminals of the switch by being plugged in a corresponding socket 8 of the mechanism 3, said block 7 being wired on to the light 5.

Thus, the signalling or indicator light 5 forms with its electrical connection terminal block 7 a single part capable of being mounted simply and rapidly in the mechanism 3 by plugging of the light through the housing thereof in the mechanism 3 and by plugging of the block 7 of the corresponding socket 8 of the mechanism 3.

The empty recess in the light 5 and the socket 8 for connection of the block 7 are quite clear in Figure 2, in which the light 5 and the block 7 are not shown. Figure 1 of the appended drawings shows the switch according to the invention, the block 7 being plugged in the socket 8 and the light 5 being housed in the mechanism 3.

5

In this position, and as shown in Figure 3, the indicator light 5 can inform the user of the state of the circuit controlled by the switch, for example by being switched on, and this can be noted, if the light is switched on, by observation of the illumination through the translucent part 6 of the actuator 2.

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The invention facilitates the production of switches, in particular modular switches equipped with a signalling or indicator light, of which said light can be mounted easily and rapidly without the need for specific wiring operations during fitting. This reduces the cost of the switches produced in this way and increases the reliability of the operation of these lights.

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CLAIM

Switch consisting of a trim plate (1) topped by an actuator (2) and mounted with its lower face on a mechanism (3) equipped with connection terminals (4), this
5 switch comprising a signalling or indicator light (5) which is housed in the mechanism (3) and opening across the trim plate (1) below a translucent part (6) of the actuator (2), characterized in that the signalling or indicating light (5) is provided with a terminal block (7) for electrical connection to the terminals of the switch by being plugged in a corresponding socket (8) of the mechanism (3), said
10 block (7) being wired on to the light (5).

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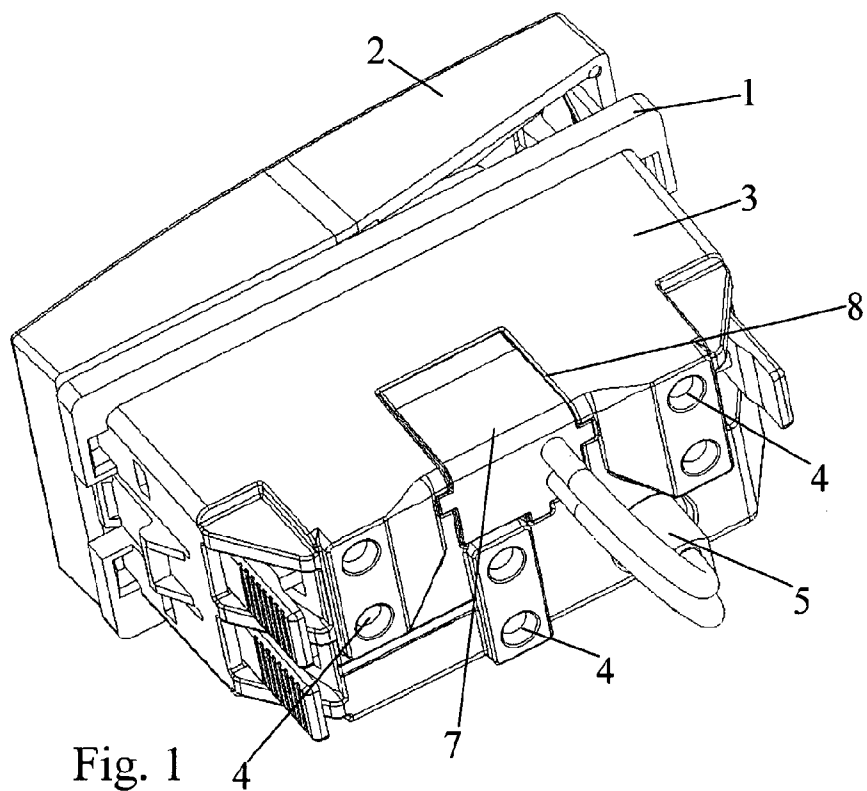


Fig. 1

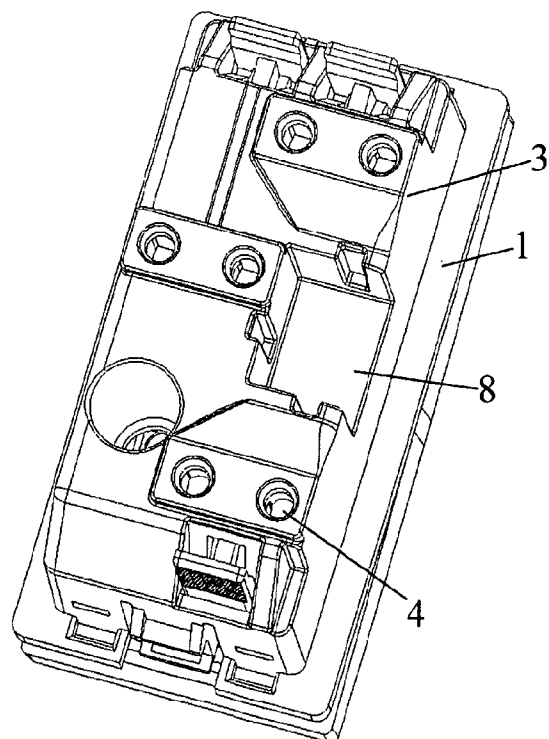


Fig. 2

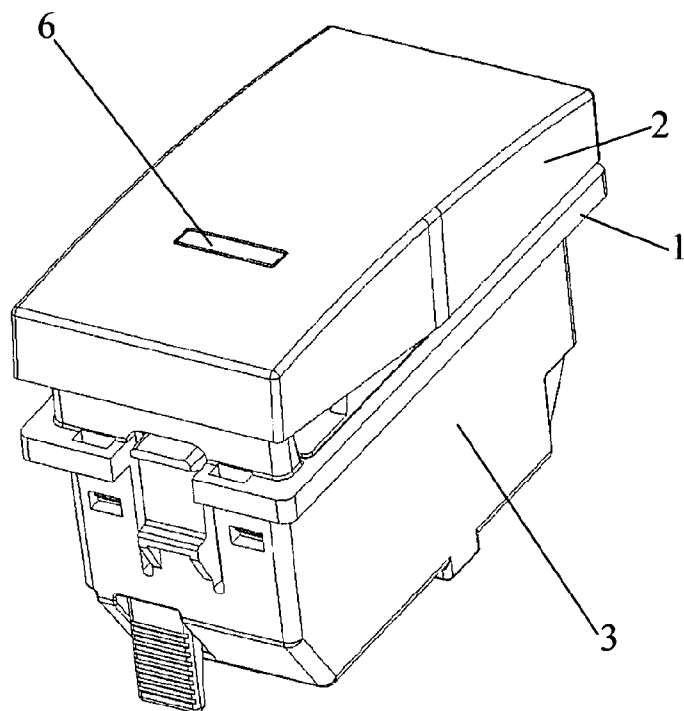


Fig. 3