



EUROPEAN PATENT APPLICATION

 Application number: **86830257.1**


 Int. Cl.: **H 01 R 25/14**

 Date of filing: **18.09.86**


 Priority: **19.09.85 IT 1180185**

 Date of publication of application:
25.03.87 Bulletin 87/13

 Designated Contracting States:
AT BE CH DE FR GB LI NL SE

 Applicant: **TARGETTI SANKEY S.p.A.**
Via Pratese 164
I-50145 Firenze (IT)

 Inventor: **Targetti, Giampaolo**
Via Barbacane 29
I-50133 Firenze (IT)

 Representative: **Mannucci, Gianfranco, Dott.-Ing.**
Ufficio Tecnico Ing. A. Mannucci Via della Scala 4
I-50123 Firenze (IT)

 **Electric track for lighting devices (adaptors), with cylindrical development.**


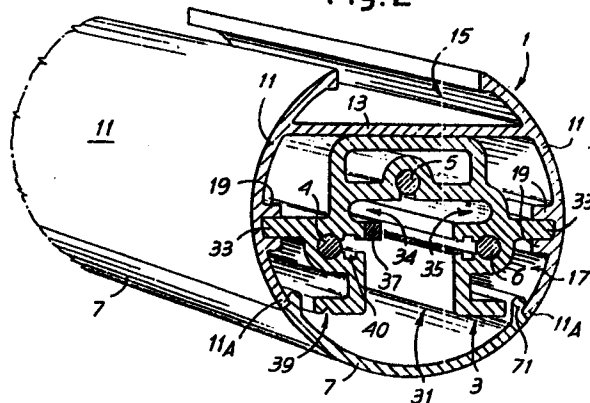
 The electric track, for lighting devices (adaptors), includes an external shell (11) having an outside contour substantially cylindrical, in two symmetrical parts connected by a straight diaphragm (13) spaced from the axis to form a smaller channel (15), and an application means and a larger channel (17), and an extruded structural shape (3) received in said larger channel (17) and forming the channel seat (31) for the fitting means of the electric devices (adaptors) and the housings for the conductors.

Fig.2



Description

"ELECTRIC TRACK FOR LIGHTING DEVICES (ADAPTORS) WITH CYLINDRICAL DEVELOPMENT"

Object of the invention is an electric track for lighting devices (adaptors) being applicable along the track itself. It substantially includes: an external shell having an outside contour substantially cylindrical, in two symmetrical parts connected by a straight diaphragm spaced from the axis to form a smaller channel for the application means and a larger channel; and an extruded structural shape received in said larger channel and forming the channel seat for the fitting means of the electric devices (adaptors) and the housings for the conductors.

Said structural shape can be engaged in its channel by the aid of two opposite wings and of respective longitudinal guides, especially formed by the external mantle or shell.

The channel for the structural shape can be covered by segments of shell, which are snap applied and suitable to complete the cylindrical development of the external mantle or shell.

The drawing shows a possible embodiment of the invention and in particular:

Figs. 1 and 2 show an external perspective section view and an enlarged transverse section view;

Figs. 3, 4 and 5 separately show the sections of the track main components.

According to what is illustrated in the enclosed drawing, numeral 1 generically indicates the external component, developed as a mantle or a shell with a whole substantially cylindrical outside contour; it is defined by two symmetrical sections 11, joined by a diaphragm 13. This diaphragm 13 - that is spaced from the axis of the cylindrical contour - defines a first smaller channel 15 for the engagement means for the fitting, and a larger channel 17, wherein two pairs of wings 19, forming two opposite longitudinal guides, rise. The two sections 11 end with edges 11A, which define the opening of the channel 17.

Numeral 3 indicates a structural shape, generally extruded in synthetic insulating resin, which is received in the channel 17. In particular this structural shape 3 forms a channel seat 31 for the electric devices to be applied to the track through parts provided in said devices for this purpose, generally named adaptors. The structural shape 3 is asymmetrical and has two opposite wings 33 for the engagement in the guides formed by the pairs of wings 19. The structural shape 3 has in addition three housings for the respective conductors 4, 5, 6 which remain embedded that is enclosed, but partially uncovered, to be able to be reached by the contacts of electric tap, provided in the adaptors and which can be displaced to obtain the mechanical engagement and the electric contact by a single clamping operation of the device. The channel seat 31 is realized asymmetrical because of the presence of grooves 34 and 35 and also because of the possible presence of a side projection 37; this is of use for ensuring a correct and exact positioning of the adaptor in the channel seat 31 (the projection 37 can be in some cases omitted); for a better visualization of the position to be imposed to the

adaptor for the insertion into the seat 31, a mark 39 - which can be made with a continuous groove - can be also provided. By this way the so called "polarization" of the track can be obtained.

A third component consists of a shell 7 suitable to be engaged, by its proper profiled ends 71, forming prominences, at the end edges 11A of the sections 11 of the component 1. The shell 7 is therefore elastic and can complete - between the two edges 11A - the sections 11 of the external mantle or shell 1 having cylindrical outside contour. Advantageously the shell 7 is formed by segments with proper length - which are able to be composed with each other - to assure the possibility of covering the outlet of the channel seat 17 formed by the component 1.

The described track, being the object of this invention, results to be particularly compact, strong, stable, safe upon the electric point of view, flexible as far as the possibilities of distribution of the devices, and aesthetically agreeable. Moreover the described track results in compliance with the safety rules issued by the main international Authorities or Societies put in charge for the purpose; IEC (Institution for the standardization of the European Rules); IMQ (Italian Institution for the Quality Mark); VDE (the same Institution for USA); and others.

In particular, the grooves 40 which interrupt the surface of the grooves, that make the conductors 6 and 4 communicate with the channel 31, has the basic purpose of realizing - between accessible parts of the track 31, and the parts under tension 4 and 6 - a length of superficial path, which is greater than the minimum length permitted by the safety rules.

Claims

1. An electric track for lighting devices (adaptors) applicable along the track itself, characterized in that it includes: an external mantle or shell (11) having on the whole a substantially cylindrical outside contour, in two symmetrical parts connected by a straight diaphragm (13), spaced from the axis to form a smaller channel (15) for the application means and a larger channel (17); and extruded structural shape (3) received in said larger channel (17) and forming the channel seat (31) for the fitting means of the electric devices (adaptors) and the housings for the conductors (4, 5, 6).

2. An electric track as per claim 1, characterized in that the structural shape (33) is engaged in its channel (17) by the aid of two opposite wings (33) and respective longitudinal guides (19), especially formed by the external mantle or shell.

3. An electric track as per claims 1 and 2, characterized in that the channel (17) for the structural shape (3) can be covered by seg-

ments of shell (7), which are snap applied and suitable to complete the cylindrical development of the external mantle or shell.

5

10

15

20

25

30

35

40

45

50

55

60

65

3

Fig.1

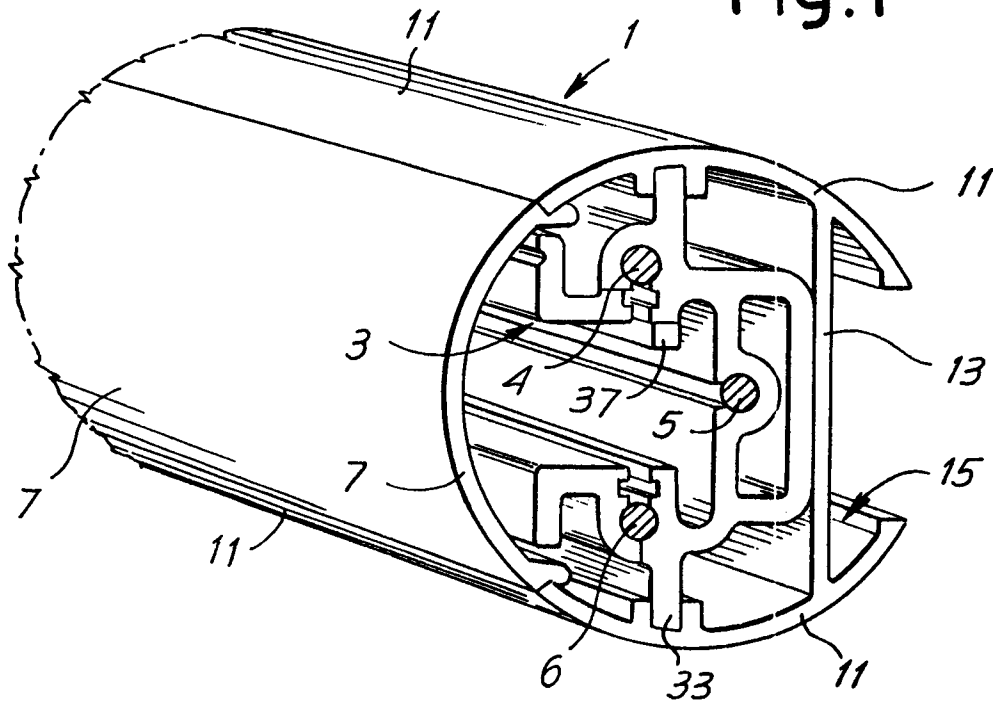


Fig.2

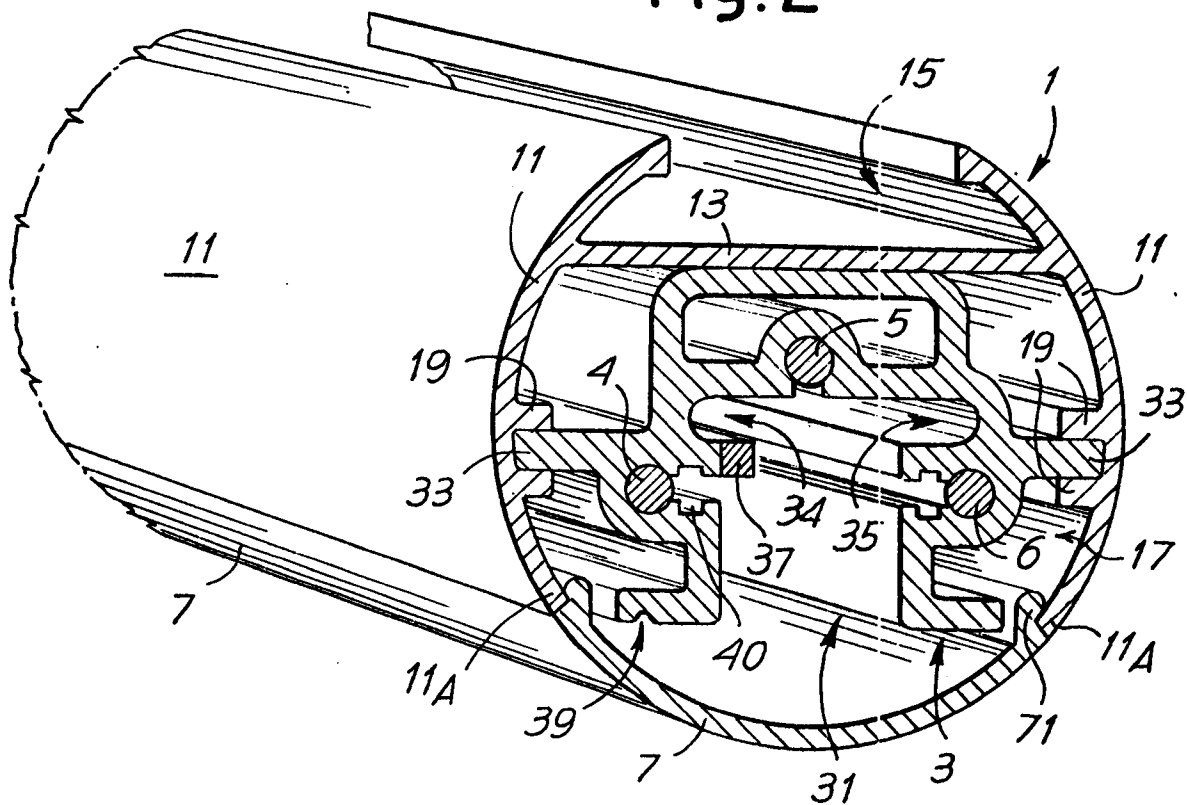


Fig. 3

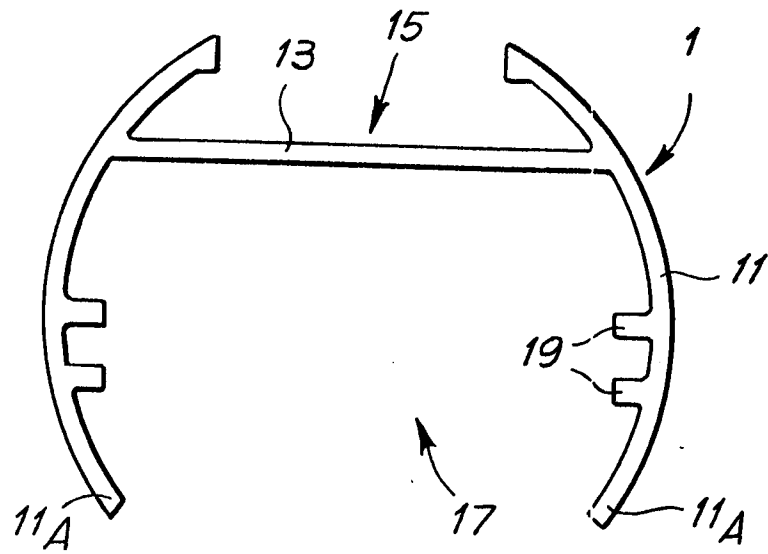


Fig. 4

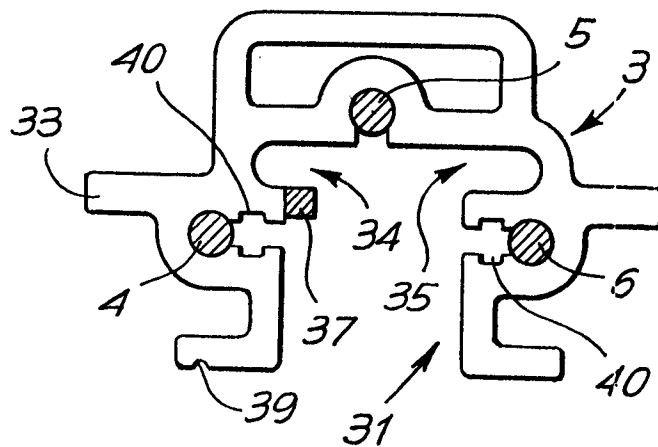


Fig. 5

