(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 005 350**
A1

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **79300716.2**

(22) Date of filing: **26.04.79**

(51) Int. Cl.²: **H 01 R 9/00**, H 01 R 9/08

(30) Priority: **05.05.78 US 903367**

(43) Date of publication of application: **14.11.79**
Bulletin 79/23

(84) Designated Contracting States: **BE DE FR GB IT NL SE**

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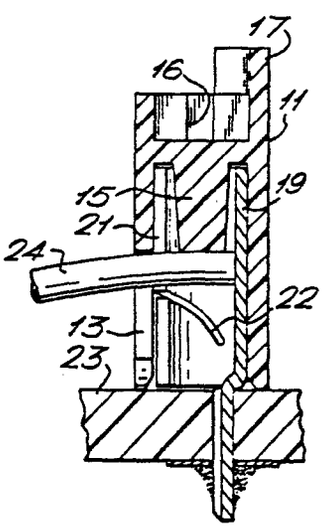
(54) Terminal cover.

(57) A cover (11) for a tubular terminal (19) having an axially extending wire receiving slot (21), which cover (11) comprises a tube moulded in one piece from plastics material with a closed end (12) and an open, terminal receiving end, a wire receiving slot (13) terminating remote from the closed end (12) in a transversely extending slot (19). A centrally located, axially extending stuffer (15) projecting internally from the closed end (12) for engagement with a wire (24) received in the slot (21) when the cover (11) is applied to the terminal (19). A pair of tool receiving intersecting recesses (16) extend transversely of the axis on the exterior of the closed end (12). A lug (17) is integrally joined to the closed end.



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Terminal cover.

The invention relates to a cover for a tubular terminal having an axially extending wire receiving slot.

An object of the invention is to provide a cover which provides a reliable wire stuffing function.

According to the invention a cover for a tubular terminal having an axially extending wire receiving slot, comprises a tube moulded in one piece from plastics material with a closed end and an open, terminal receiving end, a wire receiving slot extending axially along the plastics tube from the open end and terminating remote from the closed end in a transversely extending slot, a centrally located, axially extending stuffer projecting internally from the closed end for engagement with a wire received in the slot when the cover is applied to the terminal, a pair of tool receiving intersecting recesses extending transversely of the axis being formed on the exterior of the closed end.

A specific example of the invention will now be described with reference to the accompanying drawings, in which:-

Figure 1 is a perspective view of a cover according to the invention aligned with a single wire for application to a terminal;

Figure 2 is a cross-sectional view of the terminal and cover after application of the cover to the terminal;

Figure 3 is a cross-sectional view of the

terminal and cover after insertion of two wires into the terminal; and

Figure 4 is a side view of a series of covers during application to a series of terminals.

The cover 11 comprises a tube moulded in one piece from plastics material and closed at one end 12. A wire receiving slot 13 extends axially of the tube from an open terminal receiving end and terminates remote from the closed end 12 in a transversely extending slot 14. A centrally located, axially extending, stuffer 16 projects internally from the closed end to a location adjacent the slot 14. A pair of tool receiving intersecting recesses 16 extending transversely of the tube axis are formed on the exterior of the closed end and an axially extending arcuate lug 17 having the same profile as the tube is integrally formed with the closed end.

A terminal 19 for use with the cover is a stamped and formed metal tube adapted at one end to be mounted in a printed circuit board 23 and having a wire receiving slot 21 extending axially between the ends and intersected by a transverse slot 22 which divides the terminal into two wire receiving sections, one on each side of the slot 22, which have substantially independent wire clamping characteristics as described in our Great Britain Patent No. 1,463,830 (8299).

In use of the cover, an insulated wire 24 is aligned with the slot 21 (Figure 1) and the cover is pushed onto the terminal by a tool, such as a screwdriver having a cruciform head inserted in slots 16, so that the wire is received in slot 13, engaged by the stuffer, and forced into the section of slot 21 remote from the printed circuit board. During insertion into the slot 21, the slot walls penetrate the insulation and

establish electrical connection with the wire core. The wire is retained above the transverse slot 22 by abutment with the corners defined between slots 21 and 22, the section of slot 21 adjacent the printed circuit board being in unexpanded condition. Insertion of a second wire 25 into slot 21 pushes the first wire 24 past the slot 22 into the section of slot 21 adjacent the printed circuit board. The walls of the slot 13 provide strain relief for the connection.

The engagement of the tool in the cruciform slots ensures correctly directed force is applied to the cover, particularly during initial application to the terminal reducing risk of damage to the terminal by faulty application. The cover may readily be removed from the terminal by gripping the lug 17 with a suitable tool such as a pair of pliers.

As shown in Figure 4, a series of covers 11 may conveniently be integrally moulded with a flexible carrier strip 27 and applied to terminals 19 unequally spaced apart on a printed circuit board reducing handling difficulties.

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Claims:

1. A cover for a tubular terminal having an axially extending wire receiving slot, which cover comprises a tube moulded in one piece from plastics material with a closed end and a open, terminal receiving end, a wire receiving slot extending axially along the plastics tube from the open end and terminating remote from the closed end in a transversely extending slot, a centrally located, axially extending stuffer projecting internally from the closed end for engagement with a wire received in the slot when the cover is applied to the terminal, characterised in that a pair of tool receiving intersecting recesses (16) extending transversely of the axis are formed on the exterior of the closed end (12).

2. A cover according to Claim 1, characterised in that a lug (17) is integrally joined to the closed end.

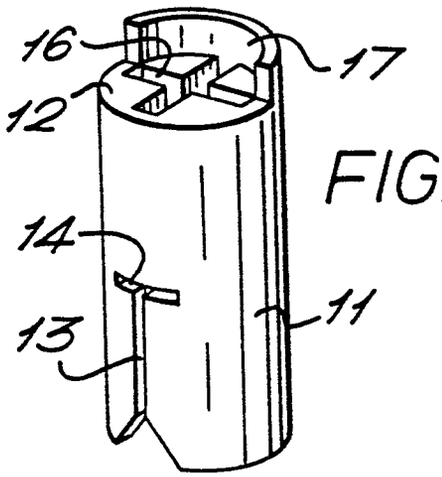
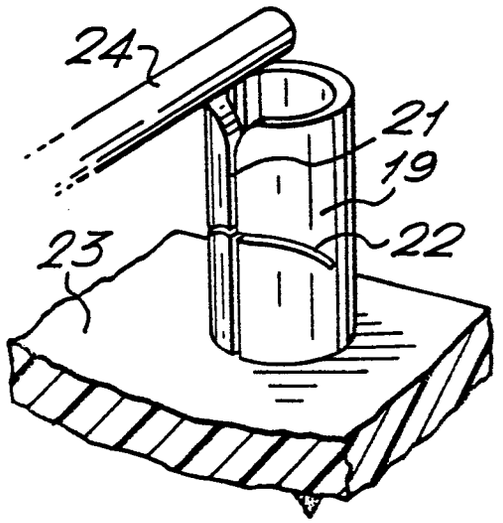


FIG.1.



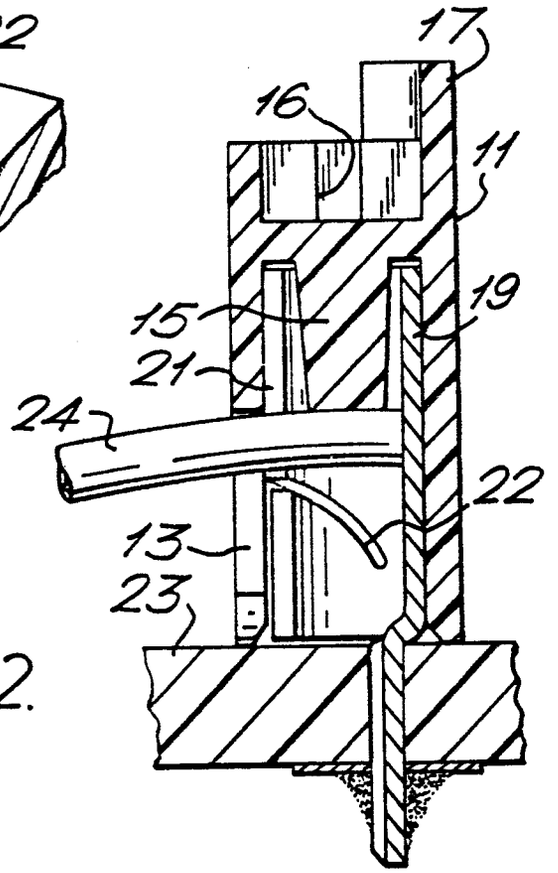
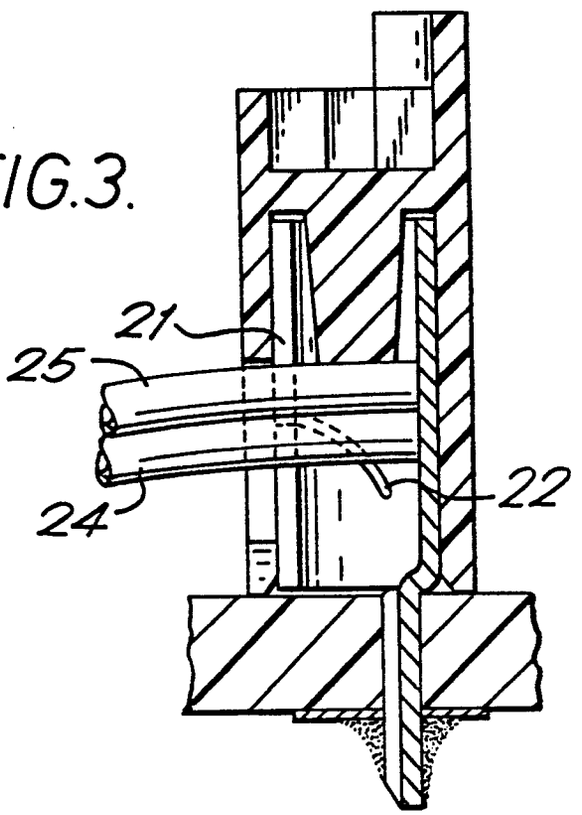


FIG.2.

FIG.3.



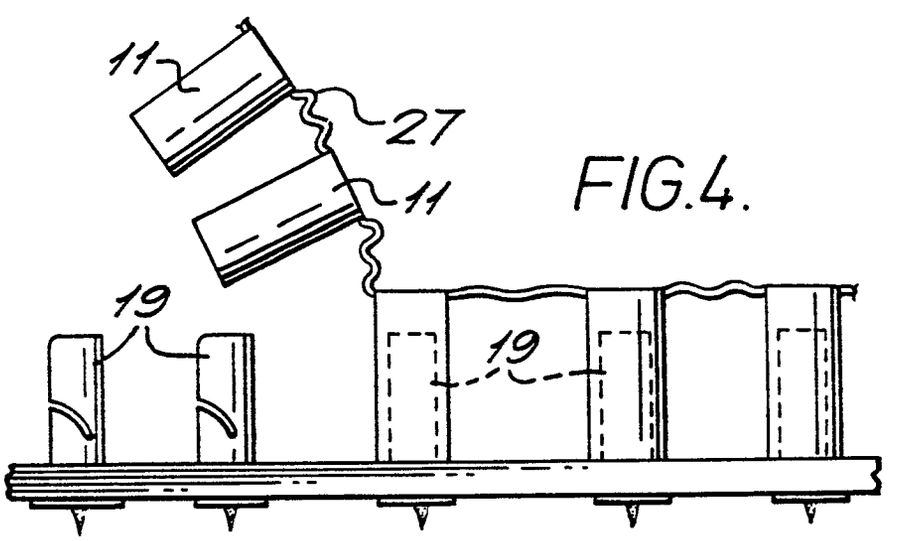


FIG.4.

European Patent Office

EUROPEAN SEARCH REPORT

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Application number
EP 79 30 0716

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	US - A - 3 877 773 (AMP) * Column 3, lines 3-24; figures 1-6 *	1
A	US - A - 2 501 187 (OORTGIJSEN) * Figures 5-7 *	1
A	US - A - 3 377 611 (PAWL) * Column 5, lines 38-48; figures 14-16 *	1
A	DE - A - 2 048 116 (NIKO) * Page 5, paragraph 5 - page 6, paragraph 2; figures 7,8 *	1,2

CLASSIFICATION OF THE APPLICATION (Int. Cl.²)

H 01 R 9/00
9/08

TECHNICAL FIELDS SEARCHED (Int.Cl.²)

H 01 R 7/00
13/38
43/00
9/00
9/08

CATEGORY OF CITED DOCUMENTS

X: particularly relevant
A: technological background
O: non-written disclosure
P: intermediate document
T: theory or principle underlying the invention
E: conflicting application
D: document cited in the application
L: citation for other reasons

&: member of the same patent family, corresponding document

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	16-07-1979	RAMBOER

EPO Form 1503.1 06.78