

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 0 918 380 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
26.05.1999 Bulletin 1999/21

(51) Int Cl.⁶: **H01R 23/70, H01R 13/50**

(21) Application number: **98500235.1**

(22) Date of filing: **28.10.1998**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
• **Secall Manresa, Xavier**
43800 Valls (Tarragona) (ES)
• **Cardenas Diaz, Carmen**
43800 Valls (Tarragona) (ES)

(30) Priority: **21.11.1997 ES 9703032**

(74) Representative:
Morgades Manonelles, Juan Antonio
Calle Valencia, 300 - entresuelo 1a
08009 Barcelona (ES)

(71) Applicant: **MECANISMOS AUXILIARES
INDUSTRIALES S.A. M.A.I.S.A.**
E-43800 Valls, Tarragona (ES)

(54) Perfected connector for printed circuit

(57) The invention refers to a connector of the kind designed for application in printed circuits fitted with conducting tracks with a heat dissipation surface, wherein the female terminals are fixed to the cavities of

the body of the connector, whose design provides for a cover which is held in place by a conventional hinge whose function is to guide the tongues when fitting the female and male terminals.

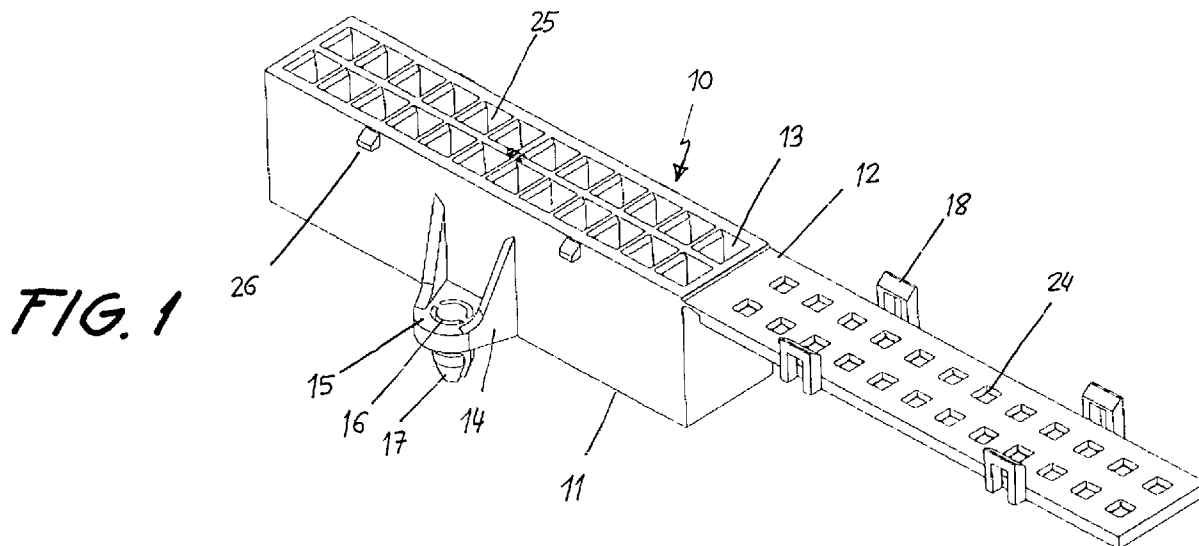


FIG. 1

EP 0 918 380 A2

Description

[0001] This Patent of Invention application, as its name indicates, consists of a "PERFECTED CONNECTOR FOR PRINTED CIRCUIT", whose new characteristics of construction, conformation and design comply with the mission for which they have been specifically designed with maximum safety and efficacy.

[0002] More specifically, the invention refers to a connector of the kind designed for application in printed circuits fitted with conducting tracks with a heat dissipation surface, wherein the female terminals are fixed to the cavities of the body of the connector, whose design provides for a cover which is held in place by a conventional hinge whose function is to guide the tongues when fitting the female and male terminals.

[0003] The suggested connector is formed by an eminently prismatic body with no bases, inside which there are a number of likewise prismatic cavities, through whose openings the male and female terminals are inserted.

[0004] The top part of one of the shorter side bases of the connector is fitted with a hinge which allows play between the body of the connector and a cover with holes in it, which folds over, and which, bearing the relevant gripping elements, moves and clips onto the body of the connector.

[0005] The longer side bases of the connector body are fitted with extensions with lugs whose heads slot into the printed circuit onto which the connector is fitted.

[0006] Other details and characteristics will be revealed in the course of the description provided hereunder, where reference is made to the drawings attached to this abstract, in which, somewhat schematically, the preferred details are represented. These details are given by way of example, referring to a possible case of a practical embodiment, but are not limited to the details expounded herein; this description may therefore be regarded as an illustrative point of view, with no type of limitation whatsoever.

[0007] The following is a list of the different numbered elements which appear in the drawings attached to this abstract: (10) connector, (11) connector body, (12) cover, (13) cavities, (14) extensions, (15) base, (16) lug, (17) head, (18) tongues, (19) hinge, (20) female terminals, (21) male terminals, (22) conducting track, (23) printed circuit, (24) holes, (25) opening, (26) protuberances.

[0008] Figure no. 1 is a view of the connector (10) where the cover (12) is fully open, revealing the openings (25) of the connector body (11).

[0009] Figure no. 2 is a side elevation, with a partial section of the connector (10), with the cover (12) also open.

[0010] Figure no. 3 is a view of the suggested connector (10) with the cover (12) folded over onto the body (11) of the connector (10), with the body immobilised by the tongues (18) and the protuberances (26).

[0011] In one of the preferred embodiments of the object of this application, and as can be seen from figure no. 1, the terminal (10) has a body (11) which is eminently prismatic in shape, having no top or bottom base, and being specially designed for incorporation into a printed circuit (23) having conductive tracks (22), which are not represented in this figure.

[0012] The long side bases have extensions (14) emerging from them, with a base (15) perpendicular to the aforementioned longer side bases, in which there is a trunco-conical head (17) which, by virtue of having small notches in it, enables it to be secured to the aforementioned printed circuit (23) simply by slotting it into a hole made in (23), which is not represented in the figures.

[0013] A cover (12) is attached to the body (11) of the connector (10), and which for this purpose bears a hinge (19). The surface of the cover (12) has a number of holes (24) which allow for the insertion of female terminals (20) and male terminals (21), represented in figure no. 2.

[0014] The cover (12) folds over onto the top base of the body (11) of the connector (10) and is secured to the top base by the tongues which slot into the protuberances (26), see figure no. 3.

[0015] The holes (24) on the cover (12) also make it possible to dissipate the heat which emerges from the conducting tracks of the printed circuit (23).

[0016] Now that the Patent of Invention has been properly described, as shown in the attached plans, it may be understood that any detailed modifications deemed necessary may be introduced, provided that any variations introduced do not alter the essence of the Patent which is summarised in the following Claims.

Claims

1. "PERFECTED CONNECTOR FOR PRINTED CIRCUIT", of the kind formed by a prismatic body (11) with no top or bottom base, and whose inside is formed by a set of cavities (13), also prismatic with no bases, through whose openings (25) the male (21) and female (20) terminals are inserted, and characterised by having certain base (15) extensions (14) emerging from one of the longer side bases of the body (11) of the connector (10), the said base being perpendicular to the body (11) of the connector, with trunco-conical head (17) lugs (16) for slotting into a printed circuit (23) and for connecting the terminals (21) with the tracks (22) of the printed circuit (23), and the aforementioned body (11) being joined to the cover (12) by a hinge (19).
2. "PERFECTED CONNECTOR FOR PRINTED CIRCUIT" characterised according to the previous claim in that a series of holes (24) have been made on the cover (12) which line up with the openings (25) of the cavities (13) of the body (11) of the con-

nector (10).

3. "PERFECTED CONNECTOR FOR PRINTED CIRCUIT" characterised according to the previous claims in that tongues (18) have been made on the cover (12), and which fit into the protuberances (26) made on the longer side of the longer side bases of the body (11) of the connector (10).

10

15

20

25

30

35

40

45

50

55

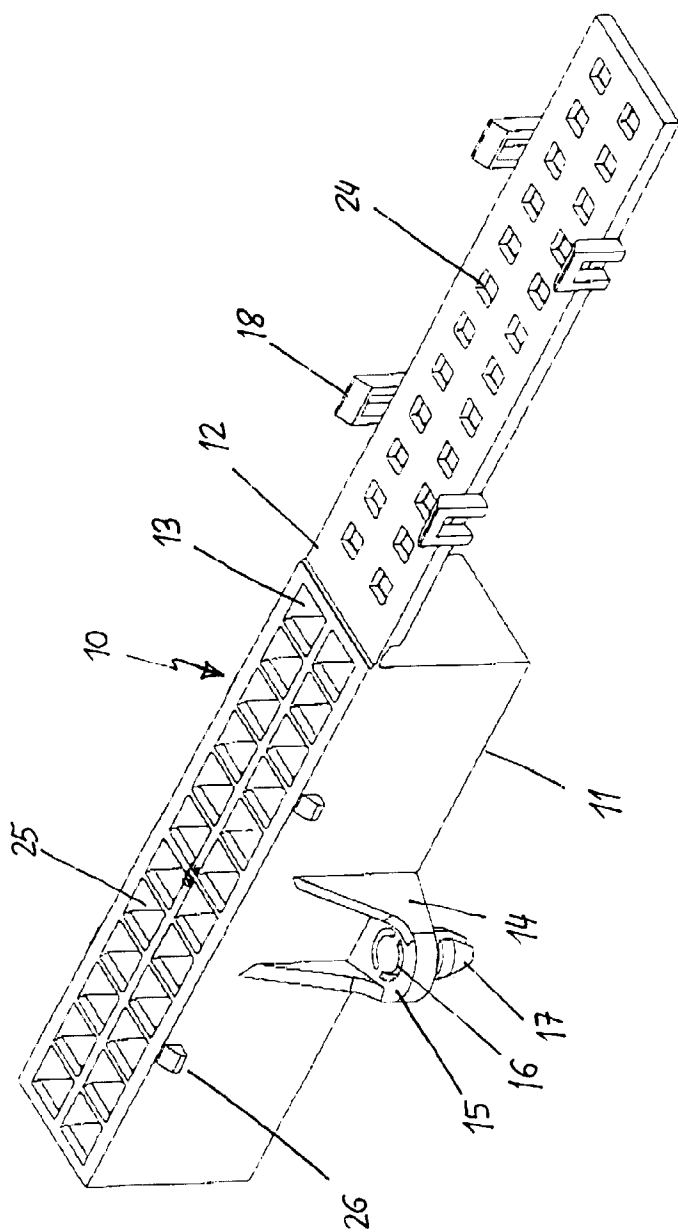


FIG. 1

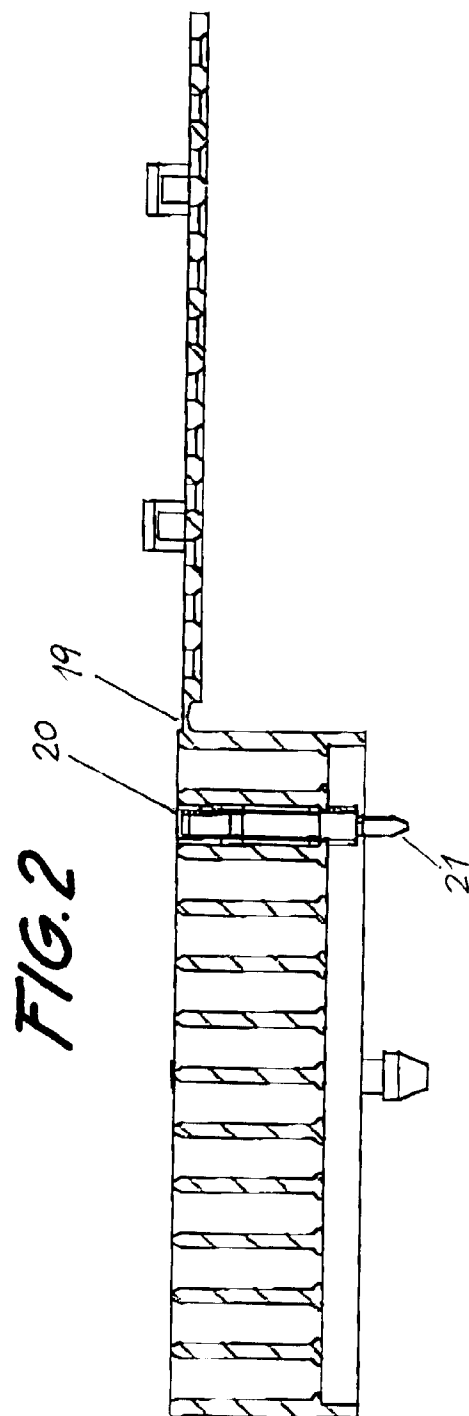


FIG. 2

