

Description**BACKGROUND OF THE INVENTION**

5 The present invention relates to an electrical connector comprising a male plug and a female socket, and more particularly to a connector, for mating with a male plug, having the features of the preamble of claim 1, as disclosed, for example, by patent US-A-3,731,259.

DESCRIPTION OF THE PRIOR ART

10 It is well known that two printed circuit boards can be electrically connected by an electrical connector assembly in which a male plug is mounted to one printed circuit board and a female socket is mounted to the other printed circuit board. The female socket has a plurality of female terminals, each being comprised of a contact section, a solder tail section and an intermediate section. The contact section is designed to permit
15 the insertion of a male pin. The solder tail section is designed to be inserted into a hole in a printed circuit board and soldered to the printed circuit board. These contact and solder tail sections are integrally connected by an intermediate section in the form of "L".

The prior art electrical connector has long been used and is satisfactory for many uses. Under some circumstances, however, its performance is not satisfactory. For example, if the male terminals of a male plug which is attached to a printed board are inserted into the female terminals of a female socket which is attached to another printed board, the socket housing will be permitted to move back and forth. Because of this movement and because of the shape of the intermediate section, the force that is applied to the contact section while inserting the pin terminal into the female terminal will be applied directly to the solder tail section of the female terminal. The consequence of this force may be that the solder tail section of the female terminal is partly de-
20 formed, the part of circuit pattern to which the solder tail section is soldered is peeled off, or cracks may appear in the solder of the female terminal. The greater the density on the printed circuit board, the more likely these problems will occur because a high density package requires the use of terminals of the minimum possible size, which are inevitably fragile.

25 The present invention is a connector according to the preamble of claim 1 characterized by the features of the characterizing portion of claim 1.

SUMMARY OF THE INVENTION:

35 One object of the present invention is to provide an electrical connector that is capable of absorbing an external force applied to the contact section of each female terminal in the direction in which a male pin terminal is inserted into the contact section of the female terminal. This will isolate the solder tail section from this force and thus prevent deformation of the solder section, peeling-off or cracking of the solder of the female terminal, which may lead to an incomplete electrical connection.

40 Another object of the present invention is to provide an electrical connector which has means to prevent perpetual deformation of the intermediate joint section of each female terminal beyond recoverable deformation limits, thus assuring that each female terminal retains its force-absorbing capability for an extended time even upon the occurrence of repeated vigorous coupling and decoupling of the male and female terminals.

To attain these objects, an electrical connector is provided comprising a male plug and a female socket, said male plug having a plurality of male terminals mounted in its housing, and said female socket having a
45 plurality of female terminals each comprised of a contact section, a solder tail section and an intermediate joint section integrally connected at its opposite ends to said contact section and said solder tail section. The contact section is mounted to a first housing, and the solder tail section is mounted to a second housing. The intermediate joint of said female terminal is of such a curved shape that it provides enough resiliency to absorb external forces applied to said female terminal in the direction in which a pin terminal is inserted in said contact
50 section of said female terminal. The first and second housings have projections from their opposed walls that create a gap whereby said intermediate joint of each female terminal is prevented from being deformed beyond its recoverable deformation limit due to said projections abutting against each other.

The intermediate joint may be in the shape of "U" and may be flexible in directions perpendicular to the direction in which a pin terminal is inserted in the contact section, and the first housing may have a longitudinal
55 opening elongated in the direction perpendicular to the direction in which the pin terminal is inserted in the contact section.

If the female socket is attached to a printed circuit board with the first housing somewhat loosely fixed to the printed circuit board to permit the first housing to move back and forth slightly, when a male pin terminal

is inserted into the contact section of a female terminal in the first housing, an external force will be directed to the contact section in the direction in which the male pin terminal is inserted. The curved intermediate joint will be yieldingly bent to substantially absorb the external force, thereby minimizing the external force applied to the solder tail section. As a result, peeling-off or cracking of the solder will be minimized. Once the pin terminal is inserted, the external force will no longer be present and the curved joint will restore to its normal, stress free position.

The distance between the opposed projections of the first and second housings is determined so as to prevent the bending of the curved intermediate joint beyond its recoverable deformation limit even if a strong pin-insertion force is applied to the contact section. Thus, no perpetual deformation will result to the curved intermediate joint.

Other objects and advantages of the present invention will be understood from the following description of an electrical connector according to one preferred embodiment of the present invention, which is shown in accompanying drawings:

- Fig. 1 is a perspective view of a female terminal of the present invention;
- Fig. 2 shows a development pattern of the female terminal;
- Fig. 3 is a side view of the female terminal;
- Fig. 4 is a top view of the female terminal;
- Fig. 5 is a front view of the female terminal;
- Fig. 6 is a top view of an electric connector;
- Fig. 7 is a front view of the female socket of an electric connector of the present invention;
- Fig. 8 is a side view of the female socket of the electric connector;
- Fig. 9 is a sectional view of the female socket of the electric connector taken along the line 9-9 in Fig. 7; and
- Fig. 10 is a sectional view of the female socket with a male terminal inserted therein.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Figs. 1 to 5 show a female terminal indicated generally at 1 which is used in an electrical connector according to the present invention. Female terminal 1 is made from a thin metal sheet of good conductivity. In known manner, a terminal pattern is stamped out from a metal sheet (Fig. 2) and is folded into a female terminal structure 1. Such structure comprises contact section 2 having parallel-spaced, opposite contact pieces 2a and 2b; solder tail section 3; and curved intermediate joint section 4 whose opposite ends are integrally connected to contact section 2 and solder tail section 3.

In one embodiment of the present invention, intermediate joint 4 is shaped as the letter "U", having gap 5 between its opposite legs. "U"-shaped joint 4 is dimensioned so that upon inserting male terminal 18 into female terminal 1 (Fig. 10), "U"-shaped joint 4 yieldingly deforms to absorb a portion of the external force in the direction Z. Thus, "U"-shaped joint 4 functions as a resilient deformation area to absorb a portion of an external force and prevent the force from being transferred to solder tail section 3, effectively isolating solder tail 3 from the insertion force. Alternatively, intermediate joint 4 can take a different shape such as the shape of the letters "V", "W" or "M", so long as the shape will absorb a portion of the insertion force in order to isolate the solder tail section 3.

Fig. 2 shows a terminal pattern which is stamped out of a thin metal sheet. A plurality of terminal patterns are integrally connected to carrier band 6. Each pattern is folded into a female terminal in known manner. Because the terminals are made of thin metal sheet, the curved joint 4 of the female terminal 1 is easily bendable in a direction S (Figs. 1 and 4) perpendicular to the direction Z in which a pin terminal is inserted into female terminal 1.

Figs. 6-10 show female terminals inserted into a female socket housing. Contact section 2 of each female terminal 1 is fitted in first housing 8 of the socket, and is oriented with respect to pin-insertion aperture 13 of first housing 8 to allow a pin terminal to be inserted into contact section 2 of female terminal 1. Solder tail section 3 of female terminal 1 is fitted in second housing 9, allowing part of the tail section to appear from the bottom surface of second housing 9. Intermediate joint 4 of female terminal 1 is exposed between first and second housings 8 and 9 of the socket. Thus, the resilient, force-absorbing "U"-shaped section 4 of each female terminal is between first and second housing 8 and 9.

With such a structure, "U"-shaped section 4 can be yieldingly deformed when an external force is applied to female terminal 1 upon insertion of pin terminal 18 therein, and will return to its initial, stress-free position when the external force is removed. To assure such performance it is necessary to prevent the intermediate joint 4 from being deformed beyond its recoverable deformation limit. For this purpose, two projections 10a and 10b (Fig. 6) are integrally connected to rear surface 15 of first housing 8. The rear surface 15 faces the

front surface 16 of second housing 9. Two projections 11a and 11b are integrally connected to front surface 16 of second housing 9.

As best shown in Fig. 6, projection 10a faces projection 11a, leaving gap 12 therebetween and projection 10b faces projection 11b, leaving gap 12 therebetween. The gap 12 is dimensioned so that 10a and 11a, and 10b and 11b, will contact each other prior to over-stressing curved joint 4. In this particular embodiment, each projection has an angled surface.

First housing 8 has elongate pin receiving slot 13 positioned in the direction J perpendicular to the direction Z in which a pin terminal 18 is inserted into the female terminal 1. Both slot 13 and contact section 2 may be dimensioned in direction J substantially greater than pin terminal 18. Thus, even if a male plug is attached to a printed board somewhat inexact in the direction J, the dimensions of elongated slot 13 and contact section 2 will permit insertion of male terminal 18 into contact section 2 of female terminal 1. Due to its shape and size, female terminal 1 is capable of yieldingly deforming at its joint section 4 in the direction Z, and of bending in directions S and J.

As shown in Fig. 10, first housing 8 has stopper 14 extending down from its bottom. Aperture 19 in printed circuit board 17 is made somewhat larger than the diameter of stopper 14, thereby permitting positional adjustment of first housing 8.

In use, the female socket is attached to printed board 17. Specifically, stopper 19 of first housing 8 is pushed into aperture 19, and solder tail section 3 of each female terminal is soldered to the circuit pattern of printed board 17 (Fig. 10). The male plug may be attached to another printed circuit board or another device or cable. Each male terminal 18 is inserted into contact section 2 of female terminal 1, thus completing the electrical connection therebetween.

Insertion of each male terminal 18 into female terminal 1 will cause the application of an external force D to portion 20 (Fig. 10) of "U"-shaped joint 4. As a result, "U"-shaped joint 4 will be yieldingly bent to absorb the external force as indicated by arrow H, thereby minimizing the application of the external force to solder tail 3. By minimizing this force, deformation of solder tail section 3 can be prevented which in turn prevents peeling-off or cracking of the solder.

After insertion of every male terminal 18 in its respective female terminal 1, the extra force will be removed and "U"-shaped joint 4 of each female terminal 1 will be restored to its initial, stress-free position. Application of excessive force will cause opposed projections 10a, 10b, and 11a, 11b of first and second housings 8 and 9 to abut against each other, thereby preventing deformation of "U"-shaped joint 4 beyond its recoverable deformation limit.

It is also possible that a male plug and/or a female socket may be attached to associated printed circuit boards somewhat aside from the exact position, for example, along the direction S. The "U"-shaped joint 4 is also flexible enough in lateral direction S to permit positional adjustment of female terminal 1 with respect to male terminal 18. Elongated slot 13 of first housing 8 is dimensioned so that female terminal 2 can move slightly within slot 13. This feature combined with the movable mounting of first housing 8 with respect to printed circuit board 17 permit positional adjustment of female terminals 1 with respect to male terminals 18, thereby permitting the male and female terminals to mate with each other irrespective of deviation of the male plug and/or female socket from their exact positions. Accordingly, the connector of the present invention not only isolates solder tail 3 from insertion forces, but also permits contact 2 to "float" sufficiently to permit proper mating of pin 18 and contact 2 even if the female terminal 1 or male pin 18 are imprecisely positioned.

Claims

1. An electrical connector for mating with a male plug having at least one electrically conductive pin (18), said connector having at least one electrically conductive female terminal (1), said female terminal having a contact section (2) and a solder tail (3) electrically connected to said contact section (2) CHARACTERISED BY

a female receptacle having first and second dielectric housings (8,9) having a first passageway (13) and a second passageway, respectively therein; and

said female terminal (1) having the contact section (2) disposed within said first passageway (13) of said first housing (8) for receiving an electrically conductive pin (18) inserted into the passageway (13) of said first housing (8) in a given direction; the solder tail section (3) being electrically connected to said contact section (2) and disposed within said second passageway of said second housing (9); and a resilient planar spring section (4) intermediate said contact section (2) and said solder tail section (3); said spring section having at least two leg members oriented generally transverse to said given direction and a base member intermediate said leg members, said spring section (4) permitting said first housing (8)



front surface 16 of second housing 9. Two projections 11a and 11b are integrally connected to front surface 16 of second housing 9.

As best shown in Fig. 6, projection 10a faces projection 11a, leaving gap 12 therebetween and projection 10b faces projection 11b, leaving gap 12 therebetween. The gap 12 is dimensioned so that 10a and 11a, and 10b and 11b, will contact each other prior to over-stressing curved joint 4. In this particular embodiment, each projection has an angled surface.

First housing 8 has elongate pin receiving slot 13 positioned in the direction J perpendicular to the direction Z in which a pin terminal 18 is inserted into the female terminal 1. Both slot 13 and contact section 2 may be dimensioned in direction J substantially greater than pin terminal 18. Thus, even if a male plug is attached to a printed board somewhat inexact in the direction J, the dimensions of elongated slot 13 and contact section 2 will permit insertion of male terminal 18 into contact section 2 of female terminal 1. Due to its shape and size, female terminal 1 is capable of yieldingly deforming at its joint section 4 in the direction Z, and of bending in directions S and J.

As shown in Fig. 10, first housing 8 has stopper 14 extending down from its bottom. Aperture 19 in printed circuit board 17 is made somewhat larger than the diameter of stopper 14, thereby permitting positional adjustment of first housing 8.

In use, the female socket is attached to printed board 17. Specifically, stopper 19 of first housing 8 is pushed into aperture 19, and solder tail section 3 of each female terminal is soldered to the circuit pattern of printed board 17 (Fig. 10). The male plug may be attached to another printed circuit board or another device or cable. Each male terminal 18 is inserted into contact section 2 of female terminal 1, thus completing the electrical connection therebetween.

Insertion of each male terminal 18 into female terminal 1 will cause the application of an external force D to portion 20 (Fig. 10) of "U"-shaped joint 4. As a result, "U"-shaped joint 4 will be yieldingly bent to absorb the external force as indicated by arrow H, thereby minimizing the application of the external force to solder tail 3. By minimizing this force, deformation of solder tail section 3 can be prevented which in turn prevents peeling-off or cracking of the solder.

After insertion of every male terminal 18 in its respective female terminal 1, the extra force will be removed and "U"-shaped joint 4 of each female terminal 1 will be restored to its initial, stress-free position. Application of excessive force will cause opposed projections 10a, 10b, and 11a, 11b of first and second housings 8 and 9 to abut against each other, thereby preventing deformation of "U"-shaped joint 4 beyond its recoverable deformation limit.

It is also possible that a male plug and/or a female socket may be attached to associated printed circuit boards somewhat aside from the exact position, for example, along the direction S. The "U"-shaped joint 4 is also flexible enough in lateral direction S to permit positional adjustment of female terminal 1 with respect to male terminal 18. Elongated slot 13 of first housing 8 is dimensioned so that female terminal 2 can move slightly within slot 13. This feature combined with the movable mounting of first housing 8 with respect to printed circuit board 17 permit positional adjustment of female terminals 1 with respect to male terminals 18, thereby permitting the male and female terminals to mate with each other irrespective of deviation of the male plug and/or female socket from their exact positions. Accordingly, the connector of the present invention not only isolates solder tail 3 from insertion forces, but also permits contact 2 to "float" sufficiently to permit proper mating of pin 18 and contact 2 even if the female terminal 1 or male pin 18 are imprecisely positioned.

Claims

1. An electrical connector for mating with a male plug having at least one electrically conductive pin (18), said connector having at least one electrically conductive female terminal (1), said female terminal having a contact section (2) and a solder tail (3) electrically connected to said contact section (2) CHARACTERIZED BY

a female receptacle having first and second dielectric housings (8,9) having a first passageway (13) and a second passageway, respectively therein; and

said female terminal (1) having the contact section (2) disposed within said first passageway (13) of said first housing (8) for receiving an electrically conductive pin (18) inserted into the passageway (13) of said first housing (8) in a given direction; the solder tail section (3) being electrically connected to said contact section (2) and disposed within said second passageway of said second housing (9); and a resilient planar spring section (4) intermediate said contact section (2) and said solder tail section (3); said spring section having at least two leg members oriented generally transverse to said given direction and a base member intermediate said leg members, said spring section (4) permitting said first housing (8)



and said contact section (2) disposed therewithin to move relative to said second housing (9) and said solder tail section (3) disposed therewithin.

- 5 2. An electrical connector as claimed in claim 1 wherein said first passageway (13) is sufficiently larger than said contact member (2) so that said contact member (2) can move transversely relative to said passageway (13) in order to compensate for misalignment of said contact member (2) relative to a pin (18) to be inserted therein.
- 10 3. An electrical connector as claimed in any preceding claim which further comprises means (10a,10b,11a,11b) for preventing over-stressing of the resilient spring section.
4. An electrical connector as claimed in any preceding claim wherein said contact section (2), said solder tail section (3), and said resilient spring section (4) are formed from a single piece of conductive sheet metal.
- 15 5. An electrical connector as claimed in claim 4 wherein said resilient spring section (4) is "U"-shaped.
6. An electrical connector as claimed in claim 4 wherein said resilient spring section is "V"-shaped.
7. An electrical connector as claimed in claim 4 wherein said resilient spring section is "W" or "M"-shaped.
- 20 8. An electrical connector as claimed in claim 3 wherein said means (10a,10b,11a,11b) for preventing over-stressing comprises a mechanical stop located on at least one of said first and second housings (8,9).
9. An electrical connector as claimed in claim 8 wherein said mechanical stops (10a,10b,11a,11b) are opposed projections from said housings dimensioned to abut against each other in order to prevent additional relative movement of the housings (8,9) prior to said resilient spring section (4) being over-stressed.
- 25 10. An electrical connector as claimed in claim 5 wherein said first passageway (13) in said first housing (8) and said contact section (2) are substantially larger in the vertical direction to permit proper mating of an electrically conductive pin (18) with said contact section (2) in the event that said pin (18) and said contact member (2) are not in the same horizontal plane.
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Patentansprüche

- 35 1. Elektrischer Verbinder zur Verbindung mit einem Stecker mit zumindest einem elektrisch leitenden Stift (18), wobei der Verbinder zumindest einen elektrisch leitenden Aufnahmeanschluß (1) aufweist und der Aufnahmeanschluß einen Kontaktbereich (2) und eine elektrisch mit dem Kontaktbereich (2) verbundene Lötfläche (3) besitzt, gekennzeichnet durch
 - 40 eine Steckbuchse mit einem ersten und einem zweiten dielektrischen Gehäuse (8,9) mit einem ersten Kanal (13) bzw. einem zweiten Kanal in diesen,
 - wobei der Aufnahmeanschluß (1) mit dem Kontaktbereich (2) im ersten Kanal (13) des ersten Gehäuses (8) angeordnet ist zur Aufnahme eines in den Kanal (13) des ersten Gehäuses (8) in einer gegebenen Richtung eingesetzten elektrisch leitenden Stiftes (18) und der Lötflächenbereich (3) mit dem Kontaktbereich (2) elektrisch verbunden und in dem zweiten Kanal des zweiten Gehäuses (9) angeordnet ist,
 45 und einen elastischen ebenen Federbereich (4) zwischen dem Kontaktbereich (2) und dem Lötflächenbereich (3), wobei der Federbereich zumindest zwei im wesentlichen quer zu der gegebenen Richtung ausgerichtete Schenkelglieder und ein Basisglied zwischen den Schenkelgliedern besitzt und der Feder-
 teil (4) dem ersten Gehäuse (8) und dem in diesem angeordneten Kontaktbereich (2) die Möglichkeit einer
 50 Bewegung relativ zu dem zweiten Gehäuse (9) und dem in diesem angeordneten Lötflächenbereich (3) beläßt.
- 55 2. Elektrischer Verbinder nach Anspruch 1, bei dem der erste Kanal (13) ausreichend größer ist als der Kontaktteil (2), so daß der Kontaktteil (2) sich quer relativ zum Kanal (13) bewegen kann, um eine Fehlausrichtung des Kontaktteils (2) in bezug auf einen in diesen einzusetzenden Stift (18) zu kompensieren.
3. Elektrischer Verbinder nach einem beliebigen vorhergehenden Anspruch, der ferner eine Einrichtung (10a,10b,11a,11b) zum Verhindern einer Überbeanspruchung des elastischen Federbereichs umfaßt.



4. Elektrischer Verbinder nach einem beliebigen vorhergehenden Anspruch, bei dem der Kontaktbereich (2), der Lötflächenbereich (3) und der elastische Federbereich (4) von einem einzigen Stück eines leitfähigen Metallbleches gebildet sind.
5. Elektrischer Verbinder nach Anspruch 4, bei dem der elastische Federbereich (4) U-förmig ist.
6. Elektrischer Verbinder nach Anspruch 4, bei dem der elastische Federbereich V-förmig ist.
7. Elektrischer Verbinder nach Anspruch 4, bei dem der elastische Federbereich W- oder M-förmig ist.
8. Elektrischer Verbinder nach Anspruch 3, bei dem die Einrichtung (10a, 10b, 11a, 11b) zum Verhindern einer Überbeanspruchung einen mechanischen Anschlag umfaßt, der an zumindest einem von dem ersten und dem zweiten Gehäuse (8,9) angeordnet ist.
9. Elektrischer Verbinder nach Anspruch 8, bei dem die mechanischen Anschläge (10a, 10b, 11a, 11b) gegenüberliegende Vorsprünge von den Gehäusen in einer solchen Bemessung sind, daß sie aneinander anstoßen, um eine zusätzliche Relativbewegung der Gehäuse (8,9) vor einer Überbeanspruchung des elastischen Federbereichs (4) zu verhindern.
10. Elektrischer Verbinder nach Anspruch 5, bei dem der erste Kanal (13) im ersten Gehäuse (8) und der Kontaktbereich (2) wesentlich größer in vertikaler Richtung sind, um eine ordnungsgemäße Verbindung eines elektrisch leitenden Stiftes (18) mit dem Kontaktbereich (2) in dem Fall zu ermöglichen, daß sich der Stift (18) und der Kontaktteil (2) nicht in der gleichen horizontalen Ebene befinden.

25 Revendications

1. Connecteur électrique pour accoupler une fiche mâle comportant au moins une broche électriquement conductrice (18), ledit connecteur comprenant au moins une borne femelle électriquement conductrice (1), ladite borne femelle ayant une section de contact (12) et un embout de soudure (3) connecté électriquement à ladite section de contact (2), caractérisé par
un réceptacle femelle comprenant un premier et un deuxième logements diélectriques (8, 9) comprenant un premier chemin de passage (13) et un deuxième chemin de passage, respectivement ; et ladite borne femelle (1) comprenant une section de contact (2) disposée à l'intérieur dudit premier chemin de passage (13) dudit premier logement (8), pour recevoir une broche électriquement conductrice (18) insérée dans le chemin de passage (13) dudit premier logement (8) dans une direction donnée ; la section d'embout de soudure (3) étant électriquement connectée à ladite section de contact (2) et disposée à l'intérieur dudit deuxième chemin de passage dudit deuxième logement (9) ; et une section formant ressort plan élastique (4) intermédiaire entre ladite section de contact (2) et ladite section d'embout de soudure (3) ; ladite section formant ressort comportant au moins deux éléments formant branches orientés généralement dans une direction transversale par rapport à ladite direction donnée et un élément formant base intermédiaire entre lesdits éléments formant branches, ladite section formant ressort (4) permettant audit premier logement (8) et à ladite section de contact (2) qui y sont disposés de se déplacer par rapport audit deuxième logement (9) et par rapport à ladite section d'embout de soudure (3) qui est disposée entre ces éléments.
2. Connecteur électrique selon la revendication 1, dans lequel ledit premier chemin de passage (13) est de dimensions suffisamment plus grandes que ledit élément de contact (2) de telle sorte que ledit élément de contact (2) peut se déplacer transversalement par rapport audit chemin de passage (13) afin de compenser tout défaut d'alignement ledit élément de contact (2) par rapport à ladite broche (18) qui doit y être insérée.
3. Connecteur électrique selon l'une quelconque des revendications précédentes, comportant en outre des moyens (10a, 10b, 11a, 11b) pour empêcher qu'une surcontrainte ne s'exerce sur la section élastique formant ressort.
4. Connecteur électrique selon l'une quelconque des revendications précédentes, dans lequel ladite section de contact (2), ladite section d'embout de soudure (3) et ladite section élastique formant ressort (4) sont formées à partir d'une pièce unique d'une tôle métallique conductrice.



5. Connecteur électrique selon la revendication 4, dans lequel ladite section élastique formant ressort (4) est en forme de "U".
- 5 6. Connecteur électrique selon la revendication 4, dans lequel ladite section élastique formant ressort est en forme de "V".
7. Connecteur électrique selon la revendication 4, dans lequel ladite section élastique formant ressort est en forme de "W" ou de "M".
- 10 8. Connecteur électrique selon la revendication 3, dans lequel lesdits moyens (10a, 10b, 11a, 11b) destinés à empêcher une surcontrainte comportent une butée mécanique située sur au moins un des premier et deuxième logements (8, 9).
- 15 9. Connecteur électrique selon la revendication 8, dans lequel lesdites butées mécaniques (10a, 10b, 11a, 11b) sont constituées par des protubérances opposées prévues sur lesdits logements et dimensionnées pour venir en butée l'une contre l'autre, afin d'éviter un déplacement relatif supplémentaires des logements (8, 9) avant que la section élastique formant ressort (4) ne soit soumise à une surcontrainte.
- 20 10. Connecteur électrique selon la revendication 5, dans lequel ledit premier chemin de passage (13) dans ledit premier logement (8) et ladite section de contact (2) sont de dimensions sensiblement plus grandes dans une direction verticale pour permettre un accouplement correct de la broche électriquement conductrice (18) avec ladite section de contact (2) dans le cas où ladite broche (18) et ledit élément de contact (2) ne sont pas situés dans le même plan horizontal.
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