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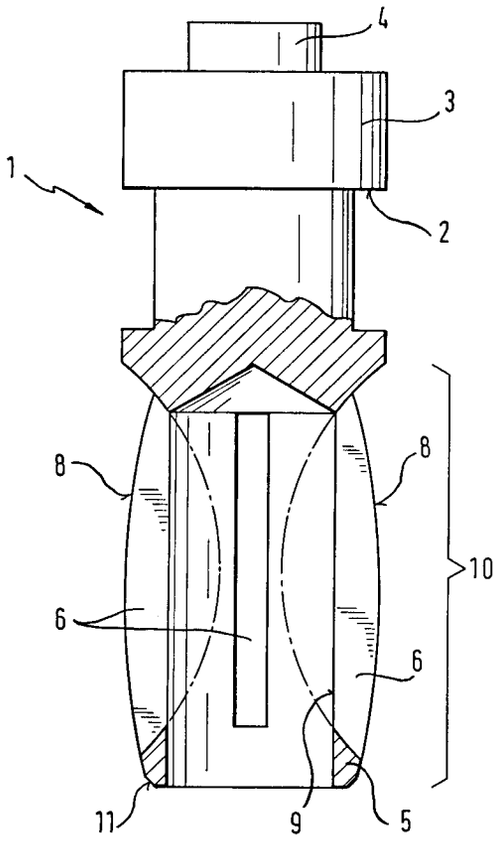
(54) Press-fit contact.

(57) The press-fit contact produced as a turned part is provided with a press-in zone (6) shaped in the form of a barrel in its outer contour (8), is designed cylindrically hollow on the inside and with a plurality of axially parallel longitudinal slits (6). The longitudinal slits (6) run only over a subregion of the press-in zone (10), such that there is an insertion edge (5) in the form of a solid ring at the free end of the press-in zone.

Fig.1



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The invention relates to a press-fit contact produced as a turned part for establishing an electrical connection, for example in a plated-through hole of a printed circuit board, for plug-in connections or else as an attachment point for a soldered connection.

In the case of conventional press-fit contacts of said type, as even a contact pressure as possible or an even contact-making over the entire region of contact between the pressed-in contact and the surrounding contact medium is desired. Owing to production inaccuracies and/or tolerances or else on account of not quite axially aligned pressing-in of the contact, differing bearing pressures occur in the contact zone and consequently partially differing current loading or wearing in the connection region between the contact pin and the contact hole.

The invention is based on the object of improving press-fit contacts of said type in such a way that an even bearing pressure and even contact-making are ensured over the entire contact zone.

In the case of a press-fit contact made as a turned part, the invention comprises that the pressing-in zone is shaped in the form of a barrel in its outer contour, is designed cylindrically hollow on the inside and is provided with a plurality of axially parallel longitudinal slits.

It is advantageous to design the lower, free edge of the press-fit contact, which edge is to be inserted into the contact hole, in the form of a solid ring with peripheral edge bevel.

An embodiment of the invention is explained below with reference to the drawing, in which,

Fig. 1 shows a press-fit contact having features according to the invention, in greatly enlarged representation, and

Fig. 2 shows on about half-scale, a cross-sectional representation of the press-fit contact according to Fig. 1.

The press-fit contact 1 may be provided in its upper region with a peripheral cross-sectional widening 3 with supporting shoulders 2 and at the upper end with an attachment stub 4, for example for producing a soldered contact, a contact pin or a contact spring. In the region of the press-in zone 10, the press-fit contact 1 is, according to the invention, shaped in the form of a barrel in its outer contour 8 and turned or drilled out hollow-cylindrically in the inner region 9. The barrel-formed contour is interrupted by a plurality of, for example four, axially parallel longitudinal slits 6.

However, the longitudinal slits 6 preferably do not run over the entire length of the press-in zone 10, but only over a subregion, in such a way that an annular insertion edge 5, which is provided on the outside with an insertion bevel 11, remains at the lower, free end, the insertion region.

Due to the barrel-formed shaping of the press-in zone 6, on the one hand pressing-in is made easier in conjunction with the insertion bevel 11. On the other hand, the contact region 10 is loaded approximately evenly over its entire length in all cross-sectional regions, the greatest diameter region lying in the region of the highest bending moment.

In accordance with the definition of the object, with the invention the pressing-in of such press-fit contacts is made easier and a substantially even contact-making over the entire press-in zone is achieved.

Claims

1. A press-fit contact produced as a turned part, wherein the press-in zone (6) is shaped in the form of a barrel in its outer contour (8), is designed cylindrically hollow on the inside and is provided with a plurality of axially parallel longitudinal slits (6).

2. The press-fit contact as claimed in claim 1, wherein the longitudinal slits (6) run only over a subregion of the press-in zone (10), in such a way that there is an insertion edge (5) in the form of a solid ring at the free end of the press-in zone.

3. The press-fit contact as claimed in claim 2, wherein the insertion edge (5) in the form of a solid ring has an insertion bevel (11) on the outside.

Fig. 1

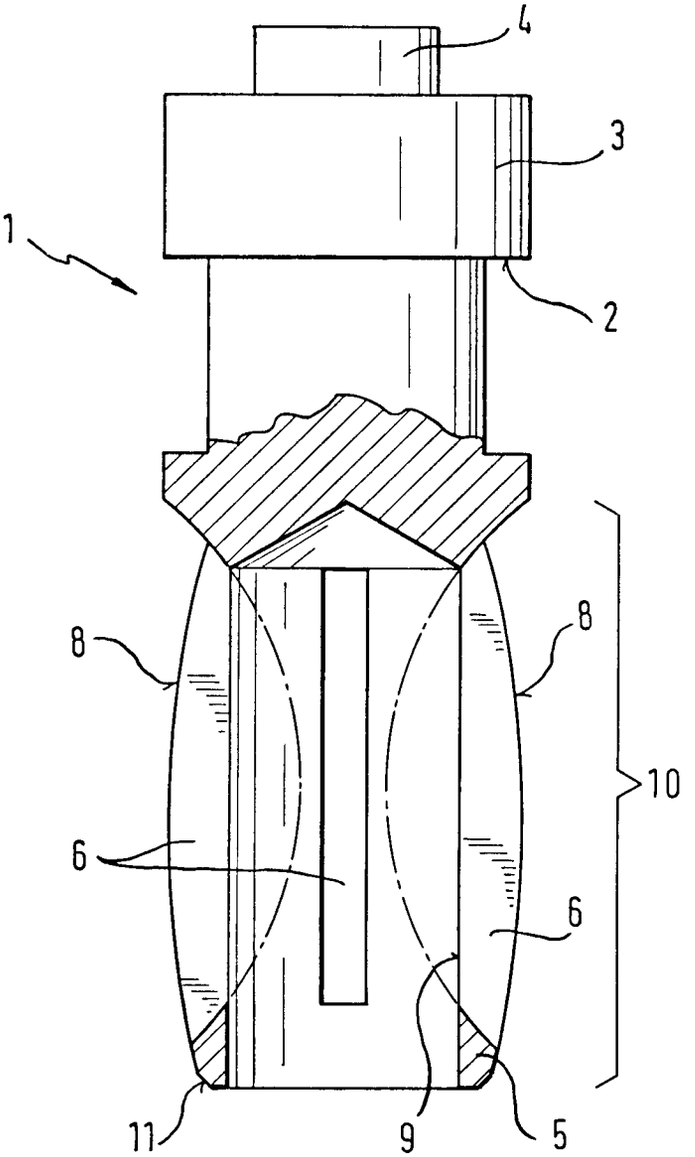
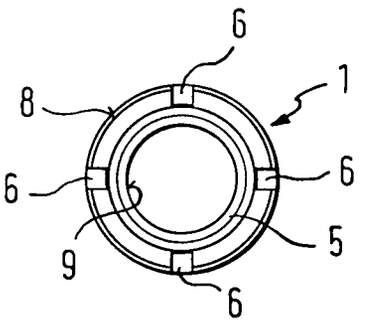


Fig. 2



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EUROPEAN SEARCH REPORT

Application Number

EP 91 11 3934

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	EP-A-0 236 186 (DIGITAL EQUIPMENT CORPORATION) * page 6, line 17 - page 7, line 9; figures 1,2 * ---	1-3	H01R9/09 H01R43/20
A	US-A-4 191 440 (SCHRAMM) * column 2, line 61 - column 3, line 5; figure 1 * ---	1-3	
A	EP-A-0 132 664 (AUGAT INC.) * page 3, line 32 - page 4, line 11; figure 3 * -----	1	

TECHNICAL FIELDS SEARCHED (Int. Cl.5)

H01R

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	04 NOVEMBER 1991	KOHLER J.W.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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