

Title (en)  
An improved structure of stepped plug terminals and its production method

Title (de)  
Verbesserte Struktur von dimmbaren Steckern und Herstellungsverfahren

Title (fr)  
Structure améliorée de terminaux de prise à gradins et son procédé de production

Publication  
**EP 2178174 A1 20100421 (EN)**

Application  
**EP 09250606 A 20090303**

Priority  
CN 200810167590 A 20081014

Abstract (en)  
An improved structure of stepped plug terminal and its production method; the terminal body, linkage part, and connector of the improved stepped plug terminal are formed integrally using an extrusion method. The production method of the present invention adopts the following technology: firstly, a stepped terminal body is made out using a forming machine; then, the neck of the terminal body is fixed by a mould with stepped cavity; and then, extrude the part of the neck extending to the rear of the cavity, making it distorted to form into the linkage part at the rear end of the cavity, while the part out of the cavity constitutes the connector. As the terminal body, linkage part, and connector are formed integrally through extrusion, the production process is simplified, processing speed is enhanced and no waste will be generated. Hence, the production cost of the plug terminals is considerably reduced. In addition, when processing the terminals using the production method of the present invention, no heavy metal of lead needs to be purposely added into the raw material, and the content of heavy metal of lead in the raw material can be as low as 0.5%. Hence, the environmental friendliness of the terminals is greatly improved.

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• [XY] EP 1331696 A2 20030730 - FRIWO GERAETEBAU GMBH [DE]  
• [Y] GB 734796 A 19550810 - ALFRED KREIDLER  
• [Y] US 2002185027 A1 20021212 - DRAGER UDO [DE], et al

Cited by  
CN103715585A; EP2398113A1; ITPD20100192A1; US8410894B2

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