

Title (en)

Method of jointing shielded cables of small diameter insulated by a compressed mineral.

Title (de)

Verfahren zum Verbinden abgeschirmter Kabel mit geringem Durchmesser und zusammengepresster mineralischer Isolierstoffe.

Title (fr)

Procédé de jonctionnement de câbles blindés de faible diamètre à isolant minéral comprimé.

Publication

**EP 0043524 A1 19820113 (FR)**

Application

**EP 81104973 A 19810626**

Priority

FR 8014919 A 19800704

Abstract (en)

[origin: US4375720A] Cable ends (1 and 2) are to be joined. The cables are armored by stainless steel sheaths, and have two conductors (9 & 11, and 8 & 10 respectively) insulated by means of compressed mineral insulation (14). The cables are typically for thermocouples and have an outside diameter of a few millimeters. Joining proceeds as follows: The cable ends are reduced in diameter by swaging, e.g. with initial conical portions (5,4) followed by smaller diameter portions (7,6). The ends of the swaged portions are stripped to reveal the conductors which are joined end-to-end by welding. A longitudinally slotted length of tubing (3) is placed around the join, and the tubing is filled, via its slot, with powdered mineral insulation. The length of tubing 3 is then closed by welding, and the entire join is drawn down around the join to ensure that the entire joined cable is of uniform outside diameter.

Abstract (fr)

Procédé de jonctionnement de câbles blindés (1, 2) à isolant minéral comprimé, de faible diamètre. On utilise un élément de tube (3) d'un diamètre externe un peu supérieur au diamètre externe de la gaine des tubes, et muni d'une fente longitudinale. On rétreint les extrémités (6, 7) des câbles, puis en dénude une partie, on soude les conducteurs internes, met en place l'élément de tube autour de ceux-ci, reconstitue l'isolant minéral en poudre, puis comprime cet élément de tube, soude les bords de sa fente longitudinale, puis le soude sur les extrémités des gaines des câbles et étire le câble formé. Application au jonctionnement de câbles de thermocouples.

IPC 1-7

**H01R 4/58; G01K 7/02**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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DOCDB simple family (publication)

**EP 0043524 A1 19820113; EP 0043524 B1 19840919**; AU 544853 B2 19850613; AU 7259481 A 19820422; CA 1163791 A 19840320;  
DE 3166168 D1 19841025; FR 2486318 A1 19820108; FR 2486318 B1 19820903; JP S5757472 A 19820406; SU 1095890 A3 19840530;  
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JP 10435781 A 19810703; SU 3309300 A 19810703; US 28058381 A 19810706