

Title (en)  
Electrical heating cable connection device.

Title (de)  
Elektrische HeizkabelanschlußVorrichtung.

Title (fr)  
Dispositif de connexion pour un câble chauffant.

Publication  
**EP 0187636 A1 19860716 (DE)**

Application  
**EP 86100003 A 19860102**

Priority  
DE 3500232 A 19850105

Abstract (en)  
1. Electrical heating cable connecting device, in particular self-regulating heating cable (32, 132), at least one end part (33, 133) of the cable being introduced in an explosion-proof manner into a housing (1, 101) and at least one electrical lead being connected to one contact of an insulating member (19, 119), characterized in that the insulating member (19, 119) is releasably mounted closely surrounded in an unfilled inner chamber (20, 120) of an insulating casing (18, 118) resistant to the heating temperature, that the end part (33, 133) of the heating cable (32, 132) is clamped in a flame-proof manner in a passage of an elastomeric gasket (15, 115) resistant to the heating temperature, that the heating cable (32, 132) with the associated elastomeric gasket (15, 115) closes off the inner chamber (20, 120) of the insulating casing (18, 118) and is detachably fastened with a fire-proof gap (34, 134) on the periphery of the elastomeric gasket in an opening (35, 135) of the housing (1, 101) and that the housing (1, 101) is constructed as a pressure-resistant enclosure withstanding the pressure of an explosion of an explosive mixture in the inner chamber (20, 120) of the insulating casing (18, 118) at the heating temperature of the heating cable (32, 132) and preventing a transmission of the explosion to the atmosphere surrounding the housing (1, 101).

Abstract (de)  
Bei der Einrichtung für einen explosionsgeschützten Heizkabelanschluß werden die elektrischen Leiter des Heizbandendes (33) im Gehäuse (1) an Kontakten eines Isolierkörpers (19) angeschlossen. Der Isolierkörper (19) befindet sich in einem nicht vergossenen Innenraum (20) und ist von einer temperaturbeständigen Isolierumhüllung (18) eng umschlossen. Das Heizkabelende (33) ist innerhalb einer Kabeleinführung (13) in einer hochtemperaturbeständigen Elastomerdichtung zünddurchschlagsicher gelagert. Die Elastomerdichtung (15) ist ebenfalls im Einführungsbereich des Gehäuses (1) zünddurchschlagsicher lösbar befestigt. Das Gehäuse (1) selbst ist als explosionsgeschützte druckfeste Kapselung ausgebildet.

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**H05B 3/56; H05B 3/06**

IPC 8 full level  
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**H05B 3/06** (2013.01); **H05B 3/56** (2013.01)

Citation (search report)  
• [A] DE 1440855 A1 19681114 - OSKAR BIEGEL GMBH  
• [A] DE 2549158 A1 19760520 - ELCALOR AG  
• [A] US 4388523 A 19830614 - KEEP JR HENRY, et al  
• [A] FR 1244373 A 19601028 - NEC  
• [A] DE 2011392 A1 19710923 - KARL HENNING & CO  
• [A] US 2046102 A 19360630 - ABBOTT CHARLES C  
• [A] US 2269194 A 19420106 - FINLAYSON FRANK E  
• [A] FR 2221061 A7 19741004 - THERMO CONTROLE [FR]

Cited by  
CN108593698A; EP1313351A1; US6126483A; EP0893857A3; DE19726418A1; US5998772A; EP0893844A3; CN110416936A; CN115021196A; US6423952B1; WO2014040772A1; WO9006604A1; US6520800B1; WO9927615A1

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