Title (en)

Method for electrically connecting non-corrodible anodes to the corrodible core of a power supply cable insulated with a standard insulating material.

Title (de)

Verfahren zum elektrischen Verbinden nichtkorrodierbarer Anoden mit dem korrodierbaren Kern eines kraftliefernden, mit Standardisoliermaterial isolierten Leistungsversorgungskabels.

Title (fr)

Procédé pour connecter électriquement des anodes non corrodables avec le noyau corrodable d'un câble d'amenée de courant isolé avec un materiau standard.

Publication

EP 0401483 B1 19941221 (EN)

Application

EP 90105585 A 19900323

Priority

US 35871789 A 19890526

Abstract (en)

[origin: EP0401483A1] An improved method of connecting one or more non-corrodible valve metal anodes, the surfaces of which have been activated by a deposit of a non-passivatable material, to the corrodible core of an insulated power supply in order to produce a flexible anode assembly to be used for the cathodic protection of metallic structures. In the inventive method, a plurality of ductile metal bushings (7, 8, 9) are disposed over a tubular valve metal anode (6) provided with a corrosion resistant outer surface. The power supply cable (2) is passed through at least one piece of an elastomeric tubing (5a, 5b) having an inner diameter slightly larger than the cable insulation and an outer diameter slightly smaller than the inner diameter of the anode. The cable and tubing is passed through the anode until a segment of the cable, previously stripped of its insulating sheath, and supplied with a highly conductive split collar (4a, 4b) having a thickness substantially similar to the combined thickness of the cable insulation and elastomeric tubing, is underneath one of the bushings, and at least one piece of the tubing is located on at least one side of the stripped cable segment and underneath at least one of the bushings. After the anode is in place, the circumference thereof is reduced at positions corresponding to the bushings by cold-heading. The inventive method can be used to form a seal between the anode and cables insulated with low cost and chemically resistant non-elastomeric insulating materials.

IPC 1-7

C23F 13/02

IPC 8 full level

C23F 13/02 (2006.01)

CPC (source: EP)

C23F 13/10 (2013.01); **C23F 13/20** (2013.01); C23F 2213/31 (2013.01)

Cited by

DE19732172B4; US5527440A; ES2042415A2; CN112195473A; WO9409184A1; WO2020249646A1

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