

Title (en)

Process for chromium plating the inner surface of tubes, anode used in this process.

Title (de)

Verfahren zur Innenverchromung von Rohren, Anode zur Durchführung des Verfahrens.

Title (fr)

Procédé de chromage intérieur d'un élément tubulaire, anode pour sa mise en oeuvre.

Publication

EP 0084752 A1 19830803 (FR)

Application

EP 82402398 A 19821230

Priority

FR 8200868 A 19820121

Abstract (en)

1. Electrolytic process for depositing different thicknesses of chromium on the inside wall of successive length of a tube element, inside which is placed one anode (5) centered on the tube elements axis (1) and an electrolytic liquid which, when an electric current is passed through it, deposits chromium on the wall of the tube, which is the cathode of the tube element, characterized by the fact that anode (5) is made up of several parts (5a, 5b) having different electric conductivities, with one part (5a, 5b) per length (2, 3) of tube element to be coated, with the conductivity and diameter of corresponding anode part (5a, 5b) being chosen as a function of the thickness of the deposition to be made on the corresponding length of tube element wall (1).

Abstract (fr)

Le procédé de chromage utilise, à l'intérieur de l'élément tubulaire (1), une anode (5) coaxiale. Celle-ci présente des parties (5a, 5b) de conductibilités différentes, à savoir une partie par tronçon (2, 3) d'élément tubulaire à revêtir, la valeur de la conductibilité et le diamètre de la partie d'anode étant choisis en fonction de l'épaisseur du dépôt à réaliser. Anode pour la mise en oeuvre de ce procédé et éléments tubulaires obtenus.

IPC 1-7

C25D 7/04

IPC 8 full level

C25D 7/04 (2006.01)

CPC (source: EP)

C25D 7/04 (2013.01)

Citation (search report)

- [A] US 3706651 A 19721219 - LELAND JAMES M
- [A] GB 712314 A 19540721 - ELECTRO METAL HARDENING CO S A
- [A] FR 712505 A 19311003 - ORFEVRERIE CHRISTOFLE

Cited by

US8192606B2; US4931150A; DE4419864C2; CN115976617A; EP0335277A1; EP0653503A1; US5476581A; EP1070772A3; US6923898B2; WO2007073339A1

Designated contracting state (EPC)

CH DE LI

DOCDB simple family (publication)

EP 0084752 A1 19830803; EP 0084752 B1 19860305; DE 3269763 D1 19860410; FR 2520009 A1 19830722; FR 2520009 B1 19840323

DOCDB simple family (application)

EP 82402398 A 19821230; DE 3269763 T 19821230; FR 8200868 A 19820121