

Title (en)

Arrangement and process to obtain a cathodic protection.

Title (de)

Anordnung und Verfahren zur Erzielung eines kathodischen Korrosionsschutzes.

Title (fr)

Arrangement et procés pour obtenir une protection cathodique.

Publication

EP 0472057 B1 19950719 (DE)

Application

EP 91113329 A 19910808

Priority

DE 4025088 A 19900808

Abstract (en)

[origin: EP0472057A2] The invention relates to the cathodic corrosion protection for a metallic, aluminium-containing substrate surface which may have an electrolyte flowing round it by carrying out electrolysis, switching off the electrolysis, observing the control voltage and switching on the electrolysis when the control voltage is equal to a specified limit voltage. A counterelectrode (4), which can be corroded by the electrolyte only to an insignificant extent, is wired as anode, while the surface of a substrate (3) acts as cathode. A reference electrode (7) has a constant electrochemical potential with respect to the electrolyte. An electrolysis can be brought about in the electrolyte by a potentiostat (5) which is electrically connected to the substrate (3) and the counterelectrode (4), an electrical electrolysing voltage being switched on between the substrate (3) and the counterelectrode (4). A control unit (6, 8, 9), which is electrically connected to the substrate (3), the reference electrode (7) and the potentiostat (5) and which is capable of measuring an electrical control voltage between the reference electrode (7) and the substrate (3) switches the electrolysing voltage on and off. <IMAGE>

IPC 1-7

C23F 13/04

IPC 8 full level

C23F 13/00 (2006.01); **C23F 13/02** (2006.01)

CPC (source: EP US)

C23F 13/02 (2013.01 - EP US)

Cited by

CN103014721A; CN107723713A; GB2286196A; EP2442101A1

Designated contracting state (EPC)

BE FR IT LU NL

DOCDB simple family (publication)

EP 0472057 A2 19920226; **EP 0472057 A3 19920902**; **EP 0472057 B1 19950719**; DE 4025088 A1 19920213; JP H05331669 A 19931214; US 5338417 A 19940816

DOCDB simple family (application)

EP 91113329 A 19910808; DE 4025088 A 19900808; JP 19627891 A 19910806; US 74193491 A 19910808