

Title (en)

OXIDATION DEVICE FOR PLANAR METAL SURFACES, SUCH AS SHEET, FABRIC OR WIRE MESH OF METAL AND TREATMENT APPLICATION METHOD

Title (de)

OXIDATIONSVORRICHTUNG FÜR EBENE METALLOBERFLÄCHEN WIE BLECHE, GEWEBE ODER DRAHTGEFLECHTE AUS METALL UND BEHANDLUNGSANWENDUNGSVERFAHREN

Title (fr)

DISPOSITIF D'OXYDATION POUR SURFACES MÉTALLIQUES PLANES, TELLES QU'UNE TÔLE, UN TISSU OU UN TREILLIS MÉTALLIQUE ET PROCÉDÉ D'APPLICATION DU TRAITEMENT

Publication

EP 4019670 A1 20220629 (EN)

Application

EP 21020636 A 20211213

Priority

IT 202000030569 A 20201211

Abstract (en)

An oxidation apparatus (1) of planar metal surfaces (2), comprises: a tank (5) within which the planar metal surface (2) being treated is laid; an electrical power supply circuit with the two heads (8, 14) of the electrical power supply of the circuit placed in contact with electrodes with high electrical conductivity; a first planar electrode (6, 7) is placed below the metal surface being treated on a bottom (4) of the aforementioned tank; an electrolyte is placed in the tank to close the electrolytic oxidation circuit; a second electrode is placed sliding and spaced on the planar metal surface (2) under treatment in an immersed position at the level (11) of the electrolyte in the tank (5); and it has the second electrode constituted by a conductive roller (13) placed so as to roll on the planar metal surface (2) being treated, avoiding contact between the cylindrical surface (17) of the roller electrode and the planar metal surface (2) being treated by means of the interposition of a permeable spacer element (18, 30, 37); the permeable spacer element is made of material resistant to the electrolytic action of oxidation and at least placed on one of the two surfaces, the cylindrical one of the roller electrode (13, 17) or the planar metallic one (2) being treated, neither of which must come into contact.

IPC 8 full level

C25D 11/00 (2006.01); **C25D 11/02** (2006.01); **C25D 17/14** (2006.01)

CPC (source: EP US)

C25D 11/005 (2013.01 - EP US); **C25D 11/02** (2013.01 - EP); **C25D 11/022** (2013.01 - EP); **C25D 17/005** (2013.01 - US);
C25D 17/12 (2013.01 - US); **C25D 17/14** (2013.01 - EP)

Citation (applicant)

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- JP 2003211324 A 20030729 - KOYO SEIKO CO
- US 2014360881 A1 20141211 - MURATORI STEFANO [IT], et al

Citation (search report)

- [A] US 2540602 A 19510206 - THOMAS FRANK W, et al
- [A] JP S53124134 A 19781030 - SASAKI ICHIROU, et al
- [A] DE 10344424 A1 20050512 - DAIMLER CHRYSLER AG [DE]
- [A] US 4569730 A 19860211 - KILLER ERIC [CH]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 4019670 A1 20220629; US 2022186396 A1 20220616

DOCDB simple family (application)

EP 21020636 A 20211213; US 202117643844 A 20211213