

Title (en)

Multivalent electrolytic process for the surface treatment of non ferrous metallic material

Title (de)

Multivalentes elektrolytisches verfahren für die oberflächenbehandlung von nichteisenhaltigen metallischen werkstoffen

Title (fr)

Procédé électrolytique multivalent pour le traitement de surface de matériaux métalliques non ferreux

Publication

EP 1793019 A3 20080806 (EN)

Application

EP 06020777 A 20061003

Priority

IT MI20052278 A 20051129

Abstract (en)

[origin: EP1793019A2] A process for the electrolytic treatment of non-ferrous metal materials, such as for example magnesium, aluminium, titanium, vanadium and alloys thereof, particularly a process for the production of a surface coating which has both an aesthetic and a protective function. Said process comprises at least one main treatment stage or anodic stage carried out in a tank or cell, using an alkaline solution which allows the simultaneous treatment of metal materials, even different metals, and/or materials made from alloys and/or combinations and/or other kind of various metals coupled together. An object of the present invention is also products made from non-ferrous metal materials, provided with surface coatings obtained according to the above process.

IPC 8 full level

C25D 11/08 (2006.01); **C25D 11/14** (2006.01); **C25D 11/24** (2006.01); **C25D 11/26** (2006.01); **C25D 11/30** (2006.01)

CPC (source: EP)

C25D 11/08 (2013.01); **C25D 11/14** (2013.01); **C25D 11/24** (2013.01); **C25D 11/243** (2013.01); **C25D 11/246** (2013.01); **C25D 11/26** (2013.01); **C25D 11/30** (2013.01)

Citation (search report)

- [X] US 2002104761 A1 20020808 - BIRSS VIOLA I [CA], et al
- [X] EP 1587348 A1 20051019 - UNIV FENG CHIA [TW]
- [X] US 2003070936 A1 20030417 - DOLAN SHAWN E [US]
- [X] US 4668347 A 19870526 - HABERMANN CLARENCE E [US], et al

Cited by

CN107227480A; CN103938252A; CN107227479A; CN107217290A; US10941502B2; US9816188B2; WO2017070780A1; WO2010112914A1; EP3245317B1; EP3245317B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1793019 A2 20070606; EP 1793019 A3 20080806; IT MI20052278 A1 20070530

DOCDB simple family (application)

EP 06020777 A 20061003; IT MI20052278 A 20051129