

Title (en)

Working device for galvanic precipitation

Title (de)

Arbeitsvorrichtung für galvanische Abscheidungen

Title (fr)

Dispositif de travail pour séparations galvaniques

Publication

**EP 2006421 A1 20081224 (DE)**

Application

**EP 07405173 A 20070618**

Priority

EP 07405173 A 20070618

Abstract (en)

The processing device (1) for an electro-chemical deposition of metallic coating on a workpiece (4) to be coated and electrically conductive, comprises an electrolyte bath (3), an anode (6), and a device for injecting the workpiece with an electrolytic solution during the electro-chemical deposition. The workpiece is fixed in a holding device (5.1, 5.2) of the processing device. The holding device has a rotary mechanism, so that the workpiece to be coated is rotatably stored around an axis of rotation, which is horizontally aligned. The injecting device is immersed in the electrolyte bath. The processing device (1) for an electro-chemical deposition of metallic coating on a workpiece (4) to be coated and electrically conductive, comprises an electrolyte bath (3), an anode (6), and a device for injecting the workpiece with an electrolytic solution during the electro-chemical deposition. The workpiece is fixed in a holding device (5.1, 5.2) of the processing device. The holding device has a rotary mechanism, so that the workpiece to be coated is rotatably stored around an axis of rotation, which is horizontally aligned. The injecting device is immersed in the electrolyte bath, and is connected with a pump for producing high pressure and conveying electrolyte. The holding device is positioned, so that the workpiece is partially immersed with 50-80% of its volume into the electrolyte bath. A common inlet in multiple injecting devices is intended with only one high pressure producing and electrolyte conveying pump for all injecting devices. The injecting device is arranged, so that it produces a directed and flat fluid jet from the electrolytic solution, which reaches at an impact point beneath a liquid surface of the electrolyte bath on the workpiece. The fluid jet at the impact point has an angle of 95-170[deg] or 190-265[deg] to a normal vector. The multiple injecting devices are arranged in such a way that the flat fluid jets overlap at its edge area, so that the workpiece is sprayed on an entire length with electrolytic solution. An independent claim is included for a procedure for the execution of an electro-chemical deposition of metallic coats from an electrolyte bath on a workpiece with a processing device.

Abstract (de)

Eine Arbeitsvorrichtung umfasst wenigstens ein Elektrolytbad und eine Anode für eine elektrochemische Abscheidung von metallischen Überzügen auf einem zu beschichtenden und elektrisch leitenden Werkstück, welches in einer Haltevorrichtung der Arbeitsvorrichtung fixiert ist. Zudem weist die Arbeitsvorrichtung wenigstens eine Anspritzvorrichtung zum Bespritzen des Werkstücks mit einer Elektrolytlösung während der elektrochemischen Abscheidung auf. Bevorzugt verfügt die Haltevorrichtung über einen Drehmechanismus, welcher es erlaubt, das zu beschichtende Werkstück während der Abscheidung um eine Drehachse zu rotieren.

IPC 8 full level

**C25D 5/08** (2006.01); **C25D 17/02** (2006.01)

CPC (source: EP US)

**C25D 5/08** (2013.01 - EP US); **C25D 17/00** (2013.01 - EP); **C25D 17/06** (2013.01 - EP)

Citation (search report)

- [X] DE 2415705 A1 19751016 - ESSER HERBERT
- [X] DE 2449735 A1 19760429 - NOCKEMANN OTTO

Cited by

CN112899740A

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**EP 2006421 A1 20081224**

DOCDB simple family (application)

**EP 07405173 A 20070618**