

## Title (en)

Method and device for galvanising substrates and solar cells

## Title (de)

Verfahren und Vorrichtung zur galvanischen Beschichtung von Substraten und Solarzellen

## Title (fr)

Procédé et dispositif destinés au revêtement galvanisé de substrats et cellules solaires

## Publication

**EP 2444528 A2 20120425 (DE)**

## Application

**EP 11184987 A 20111013**

## Priority

DE 102010042642 A 20101019

## Abstract (en)

The device comprises a reservoir (12) having an electrolytic coating liquid (13), a lower transport device (40), and an upper transport device (30) for substrates, where a transport device comprises a unit for contacting and connecting the substrates to a voltage source (21). The upper transport device comprises a tampon (41) of an absorbent material. The unit is provided so that the tampon receives the electrolytic coating liquid and contacts the surface of the substrate to be plated. The transport devices lead the substrates at a distance over a coating pan. The device comprises a reservoir (12) having an electrolytic coating liquid (13), a lower transport device (40), and an upper transport device (30) for substrates, where a transport device comprises a unit for contacting and connecting the substrates to a voltage source (21). The upper transport device comprises a tampon (41) of an absorbent material. The unit is provided so that the tampon receives the electrolytic coating liquid and contacts the surface of the substrate to be plated. The transport devices lead the substrates at a distance over a coating pan. The lower transport device comprises the tampon. The transport devices: comprise a transport roller or transport drum, which is provided with the tampon of the absorbent material or the tampon forms and consists of the absorbent material; and a conveyor belt, which is provided with the absorbent material or the tampon forms and consists of the absorbent material. The conveyor belt is guided in a guide element. A light source for irradiating the surface of the substrates to be coated is arranged in the coating liquid. An independent claim is included for a method for galvanic coating solar cells.

## Abstract (de)

Es wird eine Vorrichtung zur galvanischen Beschichtung von Substraten, insbesondere von Solarzellen beschrieben. Die Vorrichtung weist ein Reservoir (12) mit einer elektrolytischen Beschichtungsflüssigkeit (13) sowie eine untere Transporteinrichtung (40) und eine obere Transporteinrichtung (30) für das Substrat (1) auf. Eine Transporteinrichtung weist Mittel (20, 21, 24, 32) zum Kontaktieren und Anschließen des Substrats (1) an eine Spannungsquelle (21) auf. Mindestens eine Transporteinrichtung (30) weist mindestens einen Tampon (41) aus einem saugfähigen Material (44) auf. Ferner sind Mittel vorgesehen, so dass der Tampon (41) elektrolytische Beschichtungsflüssigkeit (13) aufnimmt und die zu galvanisierende Oberfläche des Substrats (1) kontaktiert. Es wird auch ein Verfahren zur galvanischen Beschichtung von Solarzellen beschrieben.

## IPC 8 full level

**C25D 5/02** (2006.01); **C25D 5/06** (2006.01); **C25D 7/12** (2006.01); **C25D 17/00** (2006.01); **H01L 21/288** (2006.01)

## CPC (source: EP US)

**C25D 5/011** (2020.08 - EP US); **C25D 5/024** (2013.01 - EP US); **C25D 5/028** (2013.01 - EP); **C25D 17/001** (2013.01 - EP); **C25D 17/005** (2013.01 - EP)

## Citation (applicant)

- DE 102005038449 A1 20070208 - SCHMID GMBH & CO GEB [DE]
- DE 102007005161 A1 20080807 - NB TECHNOLOGIES GMBH [DE]
- WO 2008065069 A1 20080605 - BASF SE [DE], et al
- EP 0003680 A1 19790822 - WELDEX AG [CH]

## Citation (examination)

- WO 2009152896 A1 20091223 - RENA GMBH [DE], et al
- US 2540602 A 19510206 - THOMAS FRANK W, et al

## Cited by

CN105369307A; CN114959848A; CN103382566A; CN110117805A

## Designated contracting state (EPC)

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## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

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## DOCDB simple family (application)

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