

## Title (en)

Method for passivation of coated metal sheets and apparatus thereof

## Title (de)

Verfahren zur Passivierung der Oberflächen von beschichteten Metallbändern und Vorrichtung für das Aufbringen der Passivschicht auf ein metallisch beschichtetes Stahlband

## Title (fr)

Méthode de passivation de bandes métalliques revêtus et l'appareil utilisé par cette méthode

## Publication

**EP 1767665 A3 20080716 (DE)**

## Application

**EP 06016796 A 20060811**

## Priority

DE 102005045034 A 20050921

## Abstract (en)

[origin: EP1767665A2] Surface of metal bands covered with a coating is passivated by moving tin-coated steel bands at a band speed through a coating installation, and spraying an aqueous solution of a surface active substance on the coated metal band moving at the band speed. The coated metal band is dried after squeezing the surface active substance. A thin film of the surface active substance is present with an overlay of 2-10 mg/m<sup>2</sup>. Independent claims are included for: (1) a device for the application of a metallic coating on a steel band, particularly a band tin-coating installation, comprising an application device for electrolytic application of a thin tin layer on the steel band, and a passivation device (2) for the passivation of the metal layer; and (2) a method of using a substance during the manufacture of tin-coated steel bands, comprising providing the substance containing a polymer having a chemical composition of polymethyl siloxane with polyether lateral chains, a refractive index of 1.456-1.466, and a density at 20[deg]C. of 1.09-1.13 g/cm<sup>3</sup>; a polymer having a chemical composition of an acidic polyether with a density of 1.20-1.30 g/cm<sup>3</sup> and an acid index of 270-310 mg potassium hydroxide/g; or a polymer containing 0-80 (5-80) mol.% monomer(s) of formula (1), 0-70 mol.% monomer(s) of formula C(R<sup>5</sup>)(R<sup>6</sup>)=C(R<sup>7</sup>)(C(OR<sup>8</sup>)=O), 5-50 mol.% monomer(s) containing a heterocyclic group with at least one basic ring nitrogen atom or to which such a heterocyclic group is attached after polymerization, 0-10 mol.% monomer(s) containing group(s) reactive for crosslinking or coupling, or 0-20 mol.% monomer(s) that do not fall into the above groups where the quantity of the monomers in the first group together with monomers containing acrylate group is at least 20 mol.% as well as their organic salts; and spraying the substance as an aqueous solution on the tin-coated steel bands. R<sup>1</sup>-R<sup>4</sup>H or alkyl; R<sup>5</sup>-R<sup>7</sup>H or alkyl; and R<sup>8</sup> optionally substituted alkyl, where the alkyl can be interrupted by -O groups. [Image].

## IPC 8 full level

**B05D 7/16** (2006.01); **B05D 7/14** (2006.01); **C23C 22/00** (2006.01); **C23C 22/76** (2006.01)

## CPC (source: EP KR US)

**C23C 22/00** (2013.01 - EP US); **C23C 22/76** (2013.01 - EP US); **C23F 11/00** (2013.01 - KR); **C25D 5/48** (2013.01 - EP US)

## Citation (search report)

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## 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 1767665 A2 20070328**; **EP 1767665 A3 20080716**; AU 2006206063 A1 20070405; BR PI0603941 A 20070814; BR PI0603941 B1 20170411; CA 2558562 A1 20070321; CA 2558562 C 20141104; CN 1935392 A 20070328; CN 1935392 B 20120704; DE 102005045034 A1 20070329; JP 2007084934 A 20070405; JP 5362951 B2 20131211; KR 101216697 B1 20130109; KR 20070033256 A 20070326; US 2007065589 A1 20070322

## DOCDB simple family (application)

**EP 06016796 A 20060811**; AU 2006206063 A 20060904; BR PI0603941 A 20060921; CA 2558562 A 20060901; CN 200610154283 A 20060919; DE 102005045034 A 20050921; JP 2006254545 A 20060920; KR 20060088709 A 20060913; US 53213806 A 20060915