

Title (en)

Pyrophosphate-based bath for depositing tin alloy layers

Title (de)

Pyrophosphat-basiertes Bad zur Abscheidung von Zinn-Legierungsschichten

Title (fr)

Bain à base de pyrophosphate destiné à la déposition de couches d'alliage d'étain

Publication

**EP 2103717 A1 20090923 (DE)**

Application

**EP 08003786 A 20080229**

Priority

EP 08003786 A 20080229

Abstract (en)

An aqueous cyanide-free electrolyte bath comprises tin ion source and source for another alloy element; and N-methyl pyrrolidone. An independent claim is included for a process for electroplating of glossy and uniform tin alloy coatings comprising introducing substrate to be coated into aqueous cyanide-free electrolyte bath, and plating the tin alloy coating on the substrate.

Abstract (de)

Beschrieben wird ein wässriges cyanid-freies Elektrolytbad zur Abscheidung von Zinn-Legierungsschichten auf Substratoberflächen, umfassend (i) eine Zinn-Ionenquelle und eine Quelle für ein weiteres Legierungselement, dadurch gekennzeichnet, dass sie weiterhin (ii) N-Methylpyrrolidon enthält.

IPC 8 full level

**C25D 3/60** (2006.01)

CPC (source: EP KR US)

**C25D 3/60** (2013.01 - EP KR US)

Citation (applicant)

- JP H10102278 A 19980421 - NIPPON NEW CHROME KK
- US 6416571 B1 20020709 - KANEKO MITSURU [JP], et al
- WO 2004005528 A2 20040115 - NIHON NEW CHROME CO LTD [JP], et al

Citation (search report)

- [DA] JP H10102278 A 19980421 - NIPPON NEW CHROME KK
- [DA] US 6416571 B1 20020709 - KANEKO MITSURU [JP], et al
- [A] US 2005166790 A1 20050804 - URATA KAZUYA [JP], et al
- [A] DATABASE WPI Derwent World Patents Index; AN 1989-128377, XP002485326, BARCHAN G P; SMIRNOV V A; SUKHOLENTS E A; "Electrolyte for nickel based coatings - contains nickel sulphate, boric acid and derivs. of pyrrolidone and improves coating properties"
- [A] DATABASE WPI Derwent World Patents Index; AN 1982-74146E, XP002485327, SMIRNOV V A; SUKHOLENTS E A; SUKHOLENTS T V; "Chromium plating electrolyte compsn. - contg. chromium sulphate, sodium sulphate, methyl pyrrolidone and di:alkyl-methyl benzyl ammonium chloride"

Designated contracting state (EPC)

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2103717 A1 20090923; EP 2103717 B1 20100421; AT E465283 T1 20100515; BR PI0907497 A2 20150714; CA 2716115 A1 20090911; CN 101918618 A 20101215; CN 101918618 B 20120222; DE 502008000573 D1 20100602; ES 2340973 T3 20100611; JP 2011513585 A 20110428; JP 5688841 B2 20150325; KR 101540615 B1 20150730; KR 20100120160 A 20101112; PL 2103717 T3 20100730; PT 2103717 E 20100614; TW 200949021 A 20091201; TW I439580 B 20140601; US 2010300890 A1 20101202; US 8647491 B2 20140211; WO 2009109271 A2 20090911; WO 2009109271 A3 20100225**

DOCDB simple family (application)

**EP 08003786 A 20080229; AT 08003786 T 20080229; BR PI0907497 A 20090205; CA 2716115 A 20090205; CN 200980101501 A 20090205; DE 502008000573 T 20080229; EP 2009000802 W 20090205; ES 08003786 T 20080229; JP 2010547984 A 20090205; KR 20107018440 A 20090205; PL 08003786 T 20080229; PT 08003786 T 20080229; TW 98104123 A 20090210; US 86418009 A 20090205**