

Title (en)

INDIUM ELECTROPLATING BATHS FOR THIN LAYER DEPOSITION

Title (de)

INDIUM-ELEKTROPLATTIERUNGSBÄDER ZUR DÜNNSCHICHTABSCHIEDUNG

Title (fr)

BAINS D'ÉLECTRODÉPOSITION À L'INDIUM POUR DÉPÔT DE COUCHE MINCE

Publication

**EP 2245216 A1 20101103 (EN)**

Application

**EP 09706296 A 20090128**

Priority

- US 2009032291 W 20090128
- US 2211308 A 20080129

Abstract (en)

[origin: US2009188808A1] Indium (In) electroplating solutions which are used to deposit compositionally pure, uniform, substantially defect free and smooth In films with near 100% plating efficiency and repeatability. In one embodiment the plating solution includes an In source, citric acid and its conjugate pair salt and a solvent. At a pH value of below 4.0, sub-micron thick In layers with close to 100% purity at close to 100% plating efficiency are produced. Such In layers are used in fabrication of electronic devices such as thin film solar cells.

IPC 8 full level

**C25D 21/18** (2006.01); **C25D 3/38** (2006.01); **C25D 5/34** (2006.01)

CPC (source: EP US)

**C25D 3/54** (2013.01 - EP US); **H01L 31/0322** (2013.01 - EP US); **H01L 31/0749** (2013.01 - EP US); **Y02E 10/541** (2013.01 - EP US);  
**Y02P 70/50** (2015.11 - EP US)

Cited by

WO2017060216A1

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**US 2009188808 A1 20090730**; EP 2245216 A1 20101103; EP 2245216 A4 20110921; TW 200938662 A 20090916;  
WO 2009097360 A1 20090806

DOCDB simple family (application)

**US 2211308 A 20080129**; EP 09706296 A 20090128; TW 98103278 A 20090202; US 2009032291 W 20090128