

Title (en)

Nickel cobalt phosphorus electroplating compositions and its use in surface treatment of a workspace

Title (de)

Nickel-Kobalt-Phosphor-Galvanisierungszusammensetzungen und ihre Verwendung bei der Oberflächenbehandlung in einem Arbeitsbereich

Title (fr)

Compositions d'électroplacage au nickel cobalt phosphore et leur utilisation dans le traitement de surfaces d'un espace de travail

Publication

EP 1857572 A3 20090325 (EN)

Application

EP 07252037 A 20070518

Priority

CN 200610081018 A 20060519

Abstract (en)

[origin: EP1857572A2] A nickel cobalt phosphorus electroplating composition includes a nickel salt, a cobalt salt, a phosphite-containing compound, and a multidentate chelating agent selected from triethylene tetraamine, diethylene triamine, hydrazobenzene, and combinations thereof. An electroplating solution including the nickel cobalt phosphorus electroplating composition and a method for treating a surface of a workpiece using the electroplating solution are also disclosed.

IPC 8 full level

C25D 3/56 (2006.01); **C25D 5/50** (2006.01)

CPC (source: EP)

C25D 3/562 (2013.01); **C25D 5/50** (2013.01)

Citation (search report)

- [X] US 2006083850 A1 20060420 - VALVERDE CHARLES [US], et al
- [DY] US 6406611 B1 20020618 - ENGELHAUPT DARELL E [US], et al
- [Y] GB 1006173 A 19650929 - BAYER AG
- [A] DATABASE WPI Week 198209, Derwent World Patents Index; AN 1982-17644E, XP002514947

Cited by

CN103009681A; US11807929B2

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 1857572 A2 20071121; **EP 1857572 A3 20090325**; CN 101074483 A 20071121

DOCDB simple family (application)

EP 07252037 A 20070518; CN 200610081018 A 20060519