

Title (en)  
Reverse pulse plating composition and method

Title (de)  
Zusammensetzung und Methode zum Elektroplattieren mit Umkehrpulsstrom

Title (fr)  
Composition et méthode pour placage électrolytique utilisant de courant pulsé inversé

Publication  
**EP 1475463 A3 20060412 (EN)**

Application  
**EP 03258024 A 20031218**

Priority  
US 43597602 P 20021220

Abstract (en)  
[origin: EP1475463A2] A composition and method for electroplating a metal on a substrate. The composition has a chloride to brightener concentration ratio of from 20:1 to 125:1. The method of electroplating, which employs the composition, employs pulse patterns that improve physical properties of metal surfaces.

IPC 8 full level  
**C25D 3/02** (2006.01); **C25D 3/38** (2006.01); **C25D 5/18** (2006.01); **C25D 7/00** (2006.01)

CPC (source: EP KR US)  
**C25D 3/02** (2013.01 - EP KR US); **C25D 3/38** (2013.01 - EP US); **C25D 5/18** (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 IT LI LU MC NL PT RO SE SI SK TR

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**EP 1475463 A2 20041110; EP 1475463 A3 20060412; EP 1475463 B1 20110330; EP 1475463 B2 20170301**; CN 1540040 A 20041027; CN 1540040 B 20120404; DE 60336539 D1 20110512; JP 2004204351 A 20040722; JP 4342294 B2 20091014; KR 101085005 B1 20111121; KR 20040055684 A 20040626; TW 200424330 A 20041116; TW I296014 B 20080421; US 2005016858 A1 20050127; US 2006081475 A1 20060420

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**EP 03258024 A 20031218**; CN 200310124974 A 20031219; DE 60336539 T 20031218; JP 2003423400 A 20031219; KR 20030093625 A 20031219; TW 92136071 A 20031219; US 29004005 A 20051130; US 74190803 A 20031219