

Title (en)
COATING SUBSTRATES.

Title (de)
BESCHICHTUNGSSUBTRATE.

Title (fr)
RECOUVREMENT DE SUBSTRATS.

Publication
EP 0595879 A1 19940511 (EN)

Application
EP 92915400 A 19920717

Priority
• GB 9115655 A 19910719
• GB 9201316 W 19920717

Abstract (en)
[origin: GB2257715A] A method of depositing a coating comprises inserting a substrate into a plating solution in a chamber and subjecting the plating solution to heating by a microwave power source 12 during the plating process. This produces coatings which have superior coating rates, grain structure and hardness as well as providing cleaner treatment conditions. A pressure probe in the form of a glass rod 14 extends into the microwave chamber 10. The coating process may be electroless plating or electrolytic plating. The substrate may be copper or steel and the material deposited may be a nickel-phosphorous coating. The power to the microwave source may be pulsed and the power output of the microwave source may be adjusted to control the temperature of the plating solution. The plating solution may be heated by the microwave source prior to insertion of the substrate and the coated substrate may be subjected to a further heat-treatment. <IMAGE>

Abstract (fr)
On décrit un procédé permettant d'appliquer un revêtement, selon lequel un substrat et une solution de placage sont placés dans un récipient et chauffés par une source de micro-ondes. Ceci produit des revêtements présentant des taux de recouvrement, une structure granulaire et une dureté supérieurs tout en créant des conditions de traitement plus salubres. Le procédé peut être effectué sous forme de dépôt chimique ou de placage électrolytique.

IPC 1-7
C23C 18/16; **C25D 21/02**

IPC 8 full level
C23C 18/16 (2006.01); **C25D 21/02** (2006.01)

CPC (source: EP)
C23C 18/1667 (2013.01); **C23C 18/1676** (2013.01); **C23C 18/168** (2013.01); **C23C 18/1692** (2013.01); **C25D 21/02** (2013.01)

Citation (search report)
See references of WO 9302224A1

Cited by
US10925603B2

Designated contracting state (EPC)
DE FR IT NL

DOCDB simple family (publication)
GB 2257715 A 19930120; **GB 2257715 B 19940629**; **GB 9115655 D0 19910904**; DE 69205983 D1 19951214; DE 69205983 T2 19960523; EP 0595879 A1 19940511; EP 0595879 B1 19951108; WO 9302224 A1 19930204

DOCDB simple family (application)
GB 9115655 A 19910719; DE 69205983 T 19920717; EP 92915400 A 19920717; GB 9201316 W 19920717