

Title (en)
Electroless nickel plating.

Title (de)
Chemische Vernickelung.

Title (fr)
Dépôt chimique de nickel.

Publication
EP 0071436 A1 19830209 (EN)

Application
EP 82303913 A 19820723

Priority
US 28697181 A 19810727

Abstract (en)
Nickel-phosphorus deposits are electrolessly coated onto substrates at a commercially acceptable rate of deposition in a manner that enhances corrosion resistance and reduces the internal tensile stress of the electroless deposit on the substrate. This is done by plating from a bath that is sulfur-free (or free of sulfur except at its highest oxidation state) and that includes an unsaturated carboxylic acid of the formula $R(COOH)_n$ wherein R is an unsaturated alkyl group of at least 2 carbon atoms and n is at least 1, or a derivative thereof. Such compounds include aconitic, citraconic, fumaric, itaconic and maleic acids. The reducing agent of the bath may also be its phosphorus source e.g. an alkali metal hypophosphite.

IPC 1-7
C23C 3/02

IPC 8 full level
C23C 18/32 (2006.01); **C23C 18/36** (2006.01)

CPC (source: EP)
C23C 18/36 (2013.01)

Citation (search report)
• [X] FR 2144782 A1 19730216 - SHIPLEY CO
• [A] US 2935425 A 19600503 - GREGOIRE GUTZEIT, et al

Cited by
US6230930B1; US2015159277A1; EP0084937A1; US4503131A; GB2192197A; GB2192197B; EP0237663A1; US8492899B2; WO2015187402A1; US11685999B2

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