

Title (en)

CATALYST SOLUTIONS FOR ACTIVATING NON-CONDUCTIVE SUBSTRATES AND ELECTROLESS PLATING PROCESS

Publication

EP 0109402 B1 19880601 (EN)

Application

EP 83901290 A 19830302

Priority

US 38194382 A 19820526

Abstract (en)

[origin: WO8304268A1] Improved activation composition for preparing substrates for metallization in an electroless plating bath and improved process for activating substrates prior to metallization and an improved process for metallizing employing the improved activating process. Electroless deposition, which involves chemically reducing ions of the metal to be plated from a plating bath and onto an activated substrate surface, is improved by employing an organic acid in the activating bath which activates the substrate surface. Preferred activating baths contain palladium halide ions to provide a catalytic surface on the substrate, stannous halide ions to provide a protective sol, a source of additional halide ions, and an organic acid such as citric or tartaric acids. The composition and process enable the elimination of a typically-required acceleration step, but yet provide consistently high quality results especially with substrates having through holes requiring coating, such as printed circuit boards requiring a plating of copper.

IPC 1-7

C23C 18/00; C23C 18/04; C23C 18/08

IPC 8 full level

H05K 3/18 (2006.01); C23C 18/28 (2006.01); C23C 18/30 (2006.01); H05K 3/42 (2006.01)

CPC (source: EP)

C23C 18/28 (2013.01)

Designated contracting state (EPC)

CH DE FR GB LI NL SE

DOCDB simple family (publication)

WO 8304268 A1 19831208; CA 1199754 A 19860128; DE 3376852 D1 19880707; EP 0109402 A1 19840530; EP 0109402 A4 19841029; EP 0109402 B1 19880601; JP H0239594 B2 19900906; JP S59500870 A 19840517

DOCDB simple family (application)

US 8300302 W 19830302; CA 428815 A 19830525; DE 3376852 T 19830302; EP 83901290 A 19830302; JP 50137683 A 19830302