

Title (en)

METHOD AND SYSTEM FOR SELECTIVE ELECTRO-COATING OF THE SURFACES OF METALS

Title (de)

VERFAHREN UND SYSTEM ZUR SELEKTIVEN GALVANISCHEN BESCHICHTUNG VON METALLOBERFLÄCHEN

Title (fr)

PROCEDE ET SYSTEME POUR RECOUVRIR DE MANIERE SELECTIVE DES SURFACES METALLIQUES PAR GALVANISATION

Publication

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Application

**EP 02779151 A 20021011**

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Abstract (en)

[origin: WO03033771A2] Disclosed is a method for selective electro-coating of the surfaces of metals, wherein the surface areas which not are to be coated are initially masked by contactless application of a liquid dielectric and, subsequently, the non-masked surface areas are electroplated. The dielectric is applied in a very precise manner in very fine droplets (14) having a substantially identical droplet size of between 3 and 70 micrometers and a contour acuity of less or equal to 80 micrometers. The droplets (14) are initially electrically charged and are then controlled according to requirements upon application by an electric field. The dielectric can be applied in at least one continuous interruption-free strip (16) or in a controlled discontinuous manner, enabling masking layers (16) of almost all conceivable forms to be produced, especially for flat, flat-stamped or embossed metal strips (10). After electroplating has occurred, the applied dielectric (16) is removed in a residue-free state in an aqueous solution with microdisperse additives. The invention also relates to an electroplating system for carrying out the above-mentioned method.

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