

Title (en)  
PROCESS FOR THE SELECTIVE OR PARTIAL ELECTROLYTIC METALLIZATION OF SURFACES OF SUBSTRATES MADE FROM NON-CONDUCTING MATERIALS

Title (de)  
VERFAHREN ZUM SELEKTIVEN ODER PARTIELLEN ELEKTROLYTISCHEN METALLISIEREN VON OBERFLÄCHEN VON SUBSTRATEN AUS NICHTLEITENDEN MATERIALIEN

Title (fr)  
PROCEDE DE METALLISATION ELECTROLYTIQUE SELECTIVE OU PARTIELLE DE SURFACES DE SUBSTRATS COMPOSES DE MATERIAUX NON CONDUCTEURS

Publication  
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Application  
**EP 96907505 A 19960315**

Priority

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- EP 9601190 W 19960315

Abstract (en)  
[origin: WO9629452A1] The invention concerns a process for the selective or partial electrolytic metallization of surfaces of substrates made from electrically non-conducting materials which for the purpose of the coating process are secured to plastic-coated holding elements. The proposed process involves the following steps: a) preliminary treatment of the surfaces with an etching solution containing chromium (VI) oxide; followed immediately by b) treatment of the surfaces with a colloidal acidic solution of palladium-/zinc compounds, care being taken to prevent prior contact with adsorption-promoting solutions; c) treatment of the surfaces with a solution containing a soluble metal compound capable of being reduced by zinc (II) compounds, an alkali or alkaline earth metal hydroxide, and a complex forming agent for the metal in a quantity sufficient at least to prevent precipitation of metal hydroxides; d) treatment of the surfaces with an electrolytic metallization solution. By applying this process, it is possible to ensure that only the surfaces of the work piece are coated with metal, not the holding elements or, where applicable, non-conductive plastic layers applied to parts of the work pieces. In addition, the process facilitates direct electrolytic metallization even of large plastic surfaces without prior currentless metallization.

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