

Title (en)
A METHOD FOR ACTIVATING A SURFACE OF A NON-CONDUCTIVE OR CARBON-FIBRES CONTAINING SUBSTRATE FOR METALLIZATION

Title (de)
VERFAHREN ZUR AKTIVIERUNG EINER OBERFLÄCHE EINES NICHTLEITENDEN ODER KOHLENSTOFFFASERHALTIGEN SUBSTRATS
ZUR METALLISIERUNG

Title (fr)
PROCÉDÉ D'ACTIVATION D'UNE SURFACE D'UN SUBSTRAT CONTENANT DES FIBRES NON CONDUCTRICES OU DE CARBONE DESTINÉ
À LA MÉTALLISATION

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Abstract (en)
[origin: WO2020201387A1] The present invention relates to a method for activating a surface of a non-conductive or carbon-fibres containing substrate for metallization, the method comprising the steps (a) providing said substrate, (b) providing an aqueous, palladium-free activation composition comprising (i) a first species of dissolved transition metal ions and additionally metal particles thereof, (ii) one or more than one complexing agent, (iii) permanently or temporarily one or more than one reducing agent, (iv) optionally one or more than one second species of dissolved metal ions being different from the first species, wherein - at least of the first species, the dissolved transition metal ions and the metal particles thereof are present in a reversible equilibrium, with the proviso that - the metal particles are formed from the dissolved transition metal ions through a continuous or semi-continuous reduction through the one or more than one reducing agent, - the dissolved transition metal ions are formed from the metal particles through continuous or semi-continuous oxidation of said particles, and - the dissolved transition metal ions and the metal particles thereof, respectively, are repeatedly involved in said reduction and said oxidation such that no precipitating agglomerates of said metal particles are formed, (c) contacting the substrate with said activation composition such that a transition metal or a transition metal alloy is deposited on the surface of said substrate and an activated surface for metallization is obtained.

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