

Title (en)
METHOD FOR DEPOSITING METAL NANOPARTICLES ON A TEXTILE WEB BY PHOTOCATALYSIS, AND CORRESPONDING TEXTILE WEB

Title (de)
VERFAHREN ZUM AUFBRINGEN VON METALLNANOPARTIKELN AUF EINER TEXTILBAHN DURCH FOTOKATALYSE UND
ENTSPRECHENDE TEXTILBAHN

Title (fr)
PROCÉDÉ DE DEPOT DE NANOPARTICULES MÉTALLIQUES SUR UNE NAPPE TEXTILE PAR PHOTOCATALYSE ET NAPPE TEXTILE
CORRESPONDANTE

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Application
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Abstract (en)
[origin: WO2020234523A1] The invention relates to a method for depositing metal particles on a textile support, which comprises: - placing at least one textile web (1) made of side-emitting optical fibres (2) in contact with a solution containing at least one ionic precursor of a metal to be deposited, the textile web (1) being formed from optical fibres (2) woven in warp and/or weft with binding threads in warp and/or weft, each of the optical fibres (2) having invasive alterations (5) along the fibre and allowing the emission of light propagating in the fibre at these alterations (5), the textile web (1) being coated on all or part of the surfaces thereof with a layer of semiconductor particles (4) having photocatalytic properties, the textile web (1) and the solution being contained in a space of a reactor (9), the space being free of oxygen; - illuminating the textile web (1) by at least one light source (7) connected to all or part of the free ends (6) of the optical fibres (2), the light source generating light radiation suitable for activating the photocatalysis of the semiconductor inducing the deposition of metal particles on the photocatalytic layer (4).

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CPC (source: CN EP US)
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