

Title (en)
SILVER-CONTAINING AQUEOUS INK FORMULATION FOR PRODUCING ELECTRICALLY CONDUCTIVE STRUCTURES, AND INK JET PRINTING METHOD FOR PRODUCING SUCH ELECTRICALLY CONDUCTIVE STRUCTURES

Title (de)
SILBERHALTIGE WÄSSRIGE TINTEN-FORMULIERUNG ZUR HERSTELLUNG VON ELEKTRISCH LEITFÄHIGEN STRUKTUREN UND TINTENSTRAHLDRUCKVERFAHREN ZUR HERSTELLUNG SOLCHER ELEKTRISCH LEITFÄHIGEN STRUKTUREN

Title (fr)
FORMULATION D'ENCRE AQUEUSE CONTENANT DE L'ARGENT POUR LA PRODUCTION DE STRUCTURES ÉLECTRO-CONDUCTRICES ET PROCÉDÉ D'IMPRESSION À JET D'ENCRE POUR LA PRODUCTION DE TELLES STRUCTURES ÉLECTRO-CONDUCTRICES

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Abstract (en)
[origin: WO2012171936A1] The invention relates to a silver-containing aqueous ink formulation for producing electrically conductive structures, wherein the formulation is provided as a two-component system made of a carrier component A, at least containing an organic solvent, additives and water, and a silver nanoparticle as component B, at least containing a liquid dispersion agent, stabilized silver nanoparticle and an electrostatic dispersion stabilizer. The formulation comprises of components A and B containing at least a) 1 - 50 wt% organic solvent, b) 0.005 - 12 wt% additives, c) 40-70 wt% water, and d) 15-50 wt% electrostatically stabilized silver nanoparticles, wherein the sum of all portions of the ink formulation make up 100%. The invention furthermore relates to a method for producing such ink formulations, to a method for producing electrically conductive structures and/or coatings on a substrate, and to the use of an ink formulation according to the invention as ink for ink jet printers and/or for creating electrically conductive structures and coatings.

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