

Title (en)

THERMOLABILE PRECURSOR COMPOUNDS FOR IMPROVING THE INTERPARTICULATE CONTACT POINTS AND FOR FILLING THE INTERSPACES IN SEMICONDUCTIVE METAL OXIDE PARTICLE LAYERS

Title (de)

THERMOLABILE VORLÄUFER-VERBINDUNGEN ZUR VERBESSERUNG DER INTERPARTIKULÄREN KONTAKTSTELLEN UND ZUM AUFFÜLLEN DER ZWISCHENRÄUME IN HALBLEITENDEN METALLOXIDPARTIKELSCHICHTEN

Title (fr)

COMPOSÉS PRÉCURSEURS THERMOLABILES PERMETTANT D'AMÉLIORER LES POINTS DE CONTACT INTERPARTICULAIRES ET DE REMPLIR LES ESPACES INTERMÉDIAIRES DANS DES COUCHES DE PARTICULES D'OXYDE MÉTALLIQUE SEMI-CONDUCTRICES

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Application

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Abstract (en)

[origin: WO2010146053A1] The present invention relates to a method for producing a layer containing at least one semiconductive metal oxide on a substrate, comprising at least the following steps: (A) a porous layer comprising at least one semiconductive metal oxide is applied to a substrate, (B) the porous layer from step (A) is treated with a solution containing at least one precursor compound of the semiconductive metal oxide, so that the pores of the porous layer are at least partially filled with this solution, and (C) the layer obtained in step (B) is heat-treated in order to convert at least one precursor compound of the semiconductive metal oxide into the semiconductive metal oxide, wherein the at least one precursor compound of the at least one semiconductive metal oxide is selected in step (B) from the group comprising carboxylates of monocarboxylic acids, dicarboxylic acids or polycarboxylic acids with at least three carbon atoms or derivatives of monocarboxylic acids, dicarboxylic acids or polycarboxylic acids, alcoholates, hydroxides, semicarbazides, carbamates, hydroxamates, isocyanates, amidines, amidrazones, urea derivatives, hydroxylamines, oximes, oximates, urethanes, ammonia, amines, phosphines, ammonium compounds, nitrates, nitrides or azides of the relevant metal and mixtures thereof.

IPC 8 full level

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