

Title (en)

METHOD FOR STABILIZING AND FUNCTIONALIZING POROUS METALLIC LAYERS

Title (de)

VERFAHREN ZUR STABILISIERUNG UND FUNKTIONALISIERUNG VON PORÖSEN METALLISCHEN SCHICHTEN

Title (fr)

PROCÉDÉ DE STABILISATION ET DE FONCTIONNALISATION DE COUCHES MÉTALLIQUES POREUSES

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Abstract (en)

[origin: WO2008046785A2] The invention relates to a method for stabilizing and functionalizing a porous metallic layer (1), wherein the porous metallic layer (1) comprises a metallic matrix (3) with pores (5) therein. In a first step, ceramic material (7) or precursors of ceramic material (7) is introduced into the pores (5) of the metallic matrix (3). In a second step, the precursors of the ceramic material are converted into the ceramic material (7), if applicable. Subsequently, a thermal or chemical post-treatment of the porous metallic layer takes place. The invention further relates to a porous metallic structure, particularly for gate electrodes of semiconductor transistors, comprising pores (5) in a metallic matrix (3). The pores (5) of the metallic matrix (3) comprise ceramic material.

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