

Title (en)  
COATING METHOD

Title (de)  
BESCHICHTUNGSVERFAHREN

Title (fr)  
PROCEDE DE REVÊTEMENT

Publication  
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Application  
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Abstract (en)  
[origin: US2008090071A1] The present invention relates to a method of coating a surface with nanoparticles, to a nanostructured coating that can be obtained by this method, and also to a device for implementing the method of the invention. The method is characterized in that it comprises an injection of a colloidal sol of said nanoparticles into a plasma jet that sprays them onto said surface. The device ( 1 ) comprises: a plasma torch ( 3 ); at least one container ( 5 ) containing the colloidal sol ( 7 ) of nanoparticles; a device ( 9 ) for fixing and for moving the substrate(S); and a device ( 11 ) for injecting the colloidal sol into the plasma jet ( 13 ) of the plasma torch. The present invention has applications in optical, electronic and energy devices (cells, thermal barriers) comprising a nanostructured coating that can be obtained by the method of the invention.

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