

Title (en)  
PLASMA SPRAYING METHOD, AND DEVICE THAT IS SUITABLE THEREFOR

Title (de)  
VERFAHREN ZUM PLASMASPRITZEN SOWIE DAZU GEEIGNETE VORRICHTUNG

Title (fr)  
PROCEDE DE PROJECTION AU PLASMA ET DISPOSITIF CORRESPONDANT

Publication  
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Application  
**EP 04738669 A 20040611**

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Abstract (en)  
[origin: WO2005007921A1] The invention relates to a method for coating a substrate with a powder by means of a thermal spraying process, in which the powder is introduced into a plasma jet and is applied to the substrate with the aid of the plasma. According to the invention, at least some of the powder that diverges from the plasma jet is deflected from the substrate and/or redirected into the plasma jet by a means. A device that is suitable for carrying out the inventive method and deflects and/or focuses a portion of a powder jet comprises a means for deflecting and/or focusing particles, which has the shape of a hollow cylinder and contains graphite and/or high-grade steel. Said means has a minimum inner diameter ranging between 5 and 30 mm, particularly between 10 and 20 mm, and a length of 5 to 80 mm, especially 10 to 50 mm. The inner and/or outer surface of the means is provided with a surface geometry which is curved in such a way that said means is able to deflect and/or focus powder particles diverging from an introduced powder jet.

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