

Title (en)

METHOD FOR COATING A SURFACE OF A SOLID SUBSTRATE WITH A LAYER COMPRISING A CERAMIC COMPOUND, AND COATED SUBSTRATE THUS OBTAINED

Title (de)

VERFAHREN ZUR BESCHICHTUNG DER OBERFLÄCHE EINES FESTKÖRPERSUBSTRATS MIT EINER SCHICHT MIT EINEM KERAMISCHEN VERBINDUNG UND SO ERHALTENES BESCHICHTETES SUBSTRAT

Title (fr)

PROCEDE DE REVETEMENT D'UNE SURFACE D'UN SUBSTRAT SOLIDE PAR UNE COUCHE COMPRENANT UN COMPOSE CERAMIQUE, ET SUBSTRAT REVETU AINSI OBTENU

Publication

**EP 3529395 A1 20190828 (FR)**

Application

**EP 17797677 A 20171018**

Priority

- FR 1660103 A 20161018
- FR 2017052868 W 20171018

Abstract (en)

[origin: CA3040347A1] The invention relates to a method for coating at least one surface of a solid substrate with at least one layer comprising at least one ceramic compound by a suspension plasma spraying (SPS) technique, in which at least one suspension of solid particles of at least one ceramic compound is injected into a plasma jet, and then the thermal jet that contains the solid particle suspension is sprayed onto the surface of the substrate, by means of which the layer comprising at least one ceramic compound is formed on the surface of the substrate; method characterised in that, in the suspension, at least 90 vol% of the solid particles have a larger dimension (referred to as d90), such as a diameter, smaller than 15 µm, preferably smaller than 10 µm, and at least 50 vol% of the solid particles have a larger dimension, such as a diameter (referred to as d50), no smaller than 1 µm. The invention also relates to a substrate coated with at least one layer that can be obtained by said method. The invention also relates to a part comprising said coated substrate. The invention further relates to the use of said layer in order to protect a solid substrate against degradations caused by contaminants such as CMAS.

IPC 8 full level

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See references of WO 2018073538A1

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