

Title (en)

METHOD FOR PRODUCING A POWDER INCLUDING CARBON, SILICON AND BORON

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KOHLENSTOFF, SILICIUM UND BOR ENTHALTENDEN PULVERS

Title (fr)

PROCEDE D'ELABORATION D'UNE POUDRE COMPRENANT DU CARBONE, DU SILICIUM ET DU BORE

Publication

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Application

EP 10719750 A 20100429

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Abstract (en)

[origin: WO2010125149A1] The invention relates to a method for producing a powder including carbon, silicon and boron, the silicon being in the form of silicon carbide and the boron being in the form of boron carbide and/or free boron, including the following steps: a step of placing in contact a carbon-based precursor, a silicon-based precursor and a boron-based precursor BX₃, where X is a halogen atom, such as to obtain a mix of said three precursors; a step of subjecting the resulting mixture to laser pyrolysis, the boron-based precursor BX₃ being heated, prior to the step of placing in contact and/or simultaneously with the step of placing in contact, to a temperature higher than the condensation temperature of said precursor.

IPC 8 full level

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Citation (search report)

See references of WO 2010125149A1

Citation (examination)

- FÖRSTER JÜRGEN: "Laserchemische Erzeugung, Characterisierung und Verdichtung ultrafeiner SiC- und SiC/B-Pulver", May 1995, THE INSTITUTION OF ELECTRICAL ENGINEERS, Stevenage GB, pages: 1 - 164
- "Laserchemische Erzeugung, Characterisierung und Verdichtung ultrafeiner SiC- und SiC/B-Pulver", 1 May 1995, INSTITUT FÜR WERKSTOFFE DER ENERGIE TECHNIK, Jülich GmbH Forschungszentrum, article JÜRGEN FÖRSTER: "Laserchemische Erzeugung, Characterisierung und Verdichtung ultrafeiner SiC- und SiC/B-Pulver", pages: 1 - 164, XP055264527

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