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(71) Applicant(s):

SGL CARBON SE [DE/DE]; Söhnleinstr. 8 65201 Wiesbaden (DE) *(for all designated states)*

(72) Inventor(s):

OETTINGER, Oswin; Werner-von-Siemens-Str. 18 86405 Meitingen (DE)

RIVOLA, Dominik; Werner-von-Siemens-Str. 18 86405 Meitingen (DE)

MODLMEIR, Philipp; Werner-von-Siemens-Str. 18 86405 Meitingen (DE)

(54) Title (EN): METHOD FOR PRODUCING COMPLEX GEOMETRIC COMPONENTS CONTAINING CARBON OR SILICON CARBIDE

(54) Title (FR): PROCÉDÉ DE FABRICATION D'ÉLÉMENTS GÉOMÉTRIQUES COMPLEXES CONTENANT DU CARBONE OU DU CARBURE DE SILICIUM

(54) Title (DE): VERFAHREN ZUR HERSTELLUNG VON KOMPLEXEN GEOMETRISCHEN BAUTEILEN ENTHALTEND KOHLENSTOFF ODER SILIZIUMKARBID

(57) Abstract:

(EN): The present invention relates to a method for producing a complex geometric component containing carbon or silicon carbide, to the component produced by said method and to the use thereof. The method for producing a complex geometric component containing carbon or silicon carbide comprises the following steps: a) providing a green body on the basis of carbon or silicon carbide, which has been produced by means of a 3D printing method, b) redensifying the green body by means of chemical vapor infiltration.

(FR): La présente invention concerne un procédé de fabrication d'un élément géométrique complexe contenant du carbone ou du carbure de silicium, l'élément fabriqué selon de procédé et son utilisation.

(DE): Die vorliegende Erfindung betrifft ein Verfahren zur Herstellung eines komplexen geometrischen Bauteils enthaltend Kohlenstoff oder Siliziumkarbid, das mit diesem Verfahren hergestellte Bauteil und dessen Verwendung. Das Verfahren zum Herstellen eines komplexen geometrischen Bauteils enthaltend Kohlenstoff oder Siliziumkarbid umfasst die folgenden Schritte: a) Bereitstellen eines Grünkörpers auf Basis von Kohlenstoff oder Siliziumkarbid, welcher mittels eines 3D-Druckverfahrens hergestellt worden ist, b) Nachverdichten des Grünkörpers mittels der chemischen Gasphaseninfiltration.

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Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

Declaration made as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))