

Title (en)  
METHOD FOR THE HYBRID ASSEMBLY OF PARTS MADE OF CERAMIC OR A CERAMIC MATRIX COMPOSITE WITH THE AID OF A DELIVERY MATERIAL WHICH IS DEPOSITED, THEN HEATED WITHOUT TOTAL FUSION OF SAID DELIVERY MATERIAL

Title (de)  
VERFAHREN ZUM HYBRIDEN ZUSAMMENBAU VON TEILEN AUS KERAMIK ODER EINEM KERAMIKMATRIXVERBUNDSTOFF MITHILFE EINES ABGABEMATERIALS, DAS ABGESCHIEDEN UND DANN OHNE TOTALVERSCHMELZUNG DIESES ABGABEMATERIALS ERHITZT WIRD

Title (fr)  
PROCEDE D'ASSEMBLAGE HYBRIDE DE PIECES EN CERAMIQUE OU EN COMPOSITE A MATRICE CERAMIQUE A L'AIDE D'UN MATERIAU D'APPORT DEPOSE PUIS CHAUFFE SANS FUSION TOTALE DE CE MATERIAU D'APPORT

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Abstract (en)  
[origin: WO2020016535A1] The invention relates to an assembly method, comprising the following successive steps: a) providing at least two parts (10, 20) made of ceramic materials obtained by sintering non-metallic inorganic powders or a ceramic matrix composite selected from SiC/SiC or C/C or C/SiC, b) depositing a delivery material (30), preferably an alloy, on at least one of the two parts (10, 20), c) bringing the delivery material (30) into contact with the two parts (10, 20), d) heating the assembly obtained in step c) up to an assembly temperature, e) cooling the assembly so as to form a seal between the two parts (10, 20), and assembling the two parts (10, 20), the assembly temperature being strictly lower than the liquidus temperature of the delivery material (30).

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