

Title (en)
PROCESS FOR MANUFACTURING A CERAMIC MATRIX COMPOSITE PART

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES KERAMIKMATRIXVERBUNDETEILS

Title (fr)
PROCEDE DE FABRICATION D'UNE PIECE EN MATERIAU COMPOSITE A MATRICE CERAMIQUE

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Application
EP 17742814 A 20170628

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Abstract (en)
[origin: WO2018002525A1] The invention relates to a process for manufacturing a composite part comprising a fibrous reinforcement and a ceramic matrix present in the porosity of the fibrous reinforcement, the process comprising at least the following steps: a) the formation of the fibrous reinforcement by three-dimensional weaving of ceramic yarns (step E1), the fibrous reinforcement thus formed having an interlock weave; b) the formation of a first ceramic matrix phase in the porosity of the fibrous reinforcement (step E4); c) the introduction into the porosity of the fibrous reinforcement, after carrying out step b), of a powder comprising a mixture of SiC particles and carbon particles (step E5); and d) the infiltration of the fibrous reinforcement obtained after carrying out step c) by an infiltration composition in the melt state comprising at least silicon so as to form a second ceramic matrix phase in the porosity of the fibrous reinforcement and thus obtain the composite part (step E6).

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Citation (search report)
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