

Title (en)
METHOD FOR A COMPLEX PART OF A COMPOSITE MATERIAL WITH LONG FIBERS AND HEAT-CURABLE MATRIX

Title (de)
VERFAHREN FÜR EINEN KOMPLEXEN TEIL EINES VERBUNDMATERIALS MIT LANGEN FASERN UND WÄRMEAUSHÄRTBARER MATRIX

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE PIÈCE COMPLEXE EN MATÉRIAU COMPOSITE À FIBRES LONGUES ET À MATRICE THERMODURCISSABLE

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Application
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Abstract (en)
[origin: WO2008071657A1] In order to produce a part (1) of a composite material having a heat-curable matrix, at least one member (3) of the part (1) is realised separately from ribbons of fibres pre-impregnated with a heat-curable resin, wherein said member is submitted to a partial thermal baking (32) in order to partially polymerise the resin of said first member, on the one hand, up to a stage where the first member (3) has acquired both a chemical stability sufficient for ensuring its storage at room temperature and a dimensional stability sufficient for ensuring its handling and maintaining its integrity for subsequent operations for manufacturing the part (1) and, on the other hand, not exceeding a stage in which the material of said first member has thermoplastic properties allowing for a plastic shaping of said first member by raising its temperature at least locally. During a further step, the first member (3) is assembled with a second member (2) that has undergone no heat curing baking or has undergone a partial baking (32), and both assembled members are simultaneously subjected to a thermal baking (50) that induces the complete and homogenous polymerisation of the resins of the two members by ensuring the generation of molecular bonds between the members.

IPC 8 full level
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