

Title (en)

METHODS FOR PRODUCING A STRUCTURAL COMPONENT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES STRUKTURBAUTEILS

Title (fr)

PROCÉDÉS DE FABRICATION D'UN COMPOSANT STRUCTURAL

Publication

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Application

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Abstract (en)

[origin: WO2020070204A2] The invention relates to methods for producing a structural component (B). The methods comprises in each case the provision of a preformed layer structure (100) having a plurality of layers (110), which each have reinforcing fibers (21) embedded in a thermoplastic matrix material (20), the heating of the layer structure (100) in a cavity (205) formed between a contour surface (150a) and a contact part (220) to a first temperature which is greater than a melting point of the thermoplastic matrix material (20), and, by applying a compression pressure, the cooling of the layer structure (100) in the cavity (205) to a solidification temperature which is, for example, smaller than the melting point of the thermoplastic matrix material (20). According to a method, the compression pressure is generated in that a magnetic field directed transversely to the contour surface (150a) is generated by means of a magnet device (240), which magnetic field contracts or compresses the contact part (220) and the contour surface (150a) relative to one another. According to a further method, inductive heating of the cavity (205) occurs.

IPC 8 full level

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