

Title (en)

METHOD FOR MAKING A FORM PART BY 3D WEAVING, AND RESULTING FORM PART

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES FORMTEILS DURCH 3D-WEBEN UND SICH ERGEBENDES FORMTEIL

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE PIÈCE DE FORME PAR TISSAGE 3D ET PIÈCE DE FORME AINSI OBTENUE.

Publication

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Application

**EP 09805775 A 20091222**

Priority

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Abstract (en)

[origin: WO2010072967A1] The invention relates to a hollow form part obtained by 3D weaving and impregnation. The invention comprises making a preform (11) by three-dimensional weaving while carrying out a partial untying (19) during the weaving, which enables the subsequent formation of a cavity within the woven mass and the stabilisation of the form during the impregnation phase.

IPC 8 full level

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Citation (search report)

See references of WO 2010072967A1

Citation (examination)

- EP 0607168 B1 19971126 - FINNCLEVER OY [FI]
- US 2007175577 A1 20070802 - DAGHER HABIB J [US], et al
- US 3965942 A 19760629 - HATCH DONALD M
- US 3102559 A 19630903 - EDWARD KOPPELMAN, et al

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DOCDB simple family (publication)

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