

Title (en)
PULTRUSION PROCESS AND ARRANGEMENT FOR THE CONTINUOUS PRODUCTION OF BLANKS FROM A FIBRE-PLASTIC COMPOSITE MATERIAL

Title (de)
PULTRUSIONSVERFAHREN UND ANORDNUNG ZUR KONTINUIERLICHEN HERSTELLUNG VON ROHLINGEN AUS EINEM FASER-KUNSTSTOFF-VERBUNDWERKSTOFF

Title (fr)
PROCÉDÉ DE PULTRUSION ET AGENCEMENT POUR LA FABRICATION CONTINUE D'ÉBAUCHES EN UN MATÉRIAU COMPOSITE DE FIBRES-MATIÈRE PLASTIQUE

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Application
EP 17777579 A 20170929

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• EP 2017074869 W 20170929

Abstract (en)
[origin: WO2018065326A1] The invention relates to a pultrusion process for the continuous production of blanks from a fibre-plastic composite material (23), an arrangement for carrying out a pultrusion process and use of the pultrusion process according to the invention and the arrangement according to the invention. The pultrusion process comprises at least the following process steps: i. providing a strand of unimpregnated fibres (21); ii. feeding the strand of unimpregnated fibres (21) to a vacuum device (5, 5', 5''), which has at least one vacuum chamber (52, 52', 52''); iii. generating a negative relative pressure in the at least one vacuum chamber (52, 52', 52'') of the vacuum device (5, 5', 5''), whereby air (200) escapes from the strand of unimpregnated fibres (21); iv. removing the almost airless strand of unimpregnated fibres (22) from the vacuum device (5, 5', 5'') and feeding the almost airless strand of unimpregnated fibres (22) to an injection device (6, 6'), which has at least one injection chamber (61, 61'), wherein the vacuum device (5, 5', 5'') and the injection device (6, 6') are connected to one another in an airtight manner, at least with respect to the surroundings; v. injecting matrix material (230) in a flowable state into the at least one injection chamber (61, 61') of the injection device (6, 6') and impregnating the strand (2) with the matrix material (230); vi. removing of the blank (23) from the injection device (6, 6'). With the process according to the invention, a homogeneous and complete wetting of the fibres of the strand is advantageously achieved at a high drawing rate. Furthermore, the fibre-plastic composite is not pressed in the process.

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Citation (search report)
See references of WO 2018065326A1

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