

Title (en)  
Device and method for manufacturing moulded parts from fibrous material

Title (de)  
Vorrichtung und Verfahren zum Herstellen von Formteilen aus Fasermaterial

Title (fr)  
Dispositif et procédé de fabrication de pièces de formage à partir de matériaux en fibres

Publication  
**EP 2305869 B1 20130612 (DE)**

Application  
**EP 10010798 A 20100927**

Priority  
DE 102009048001 A 20091002

Abstract (en)  
[origin: EP2305869A1] The method for the production of three-dimensional mat- or cushion-like form part from fibers under use of a multi-layered form that has an interior area, where the interior side of the multi-sectional form partially determines the contour of the form part, comprises blowing the fibers (F1, F2) in the interior area of the form, applying the fibers on the interior side of the form, and connecting the fiber for the production of the form part, where the fibers are partially exposed to electric fields in the interior area during blowing in the form. The method for the production of three-dimensional mat- or cushion-like form part from fibers under use of a multi-layered form that has an interior area, where the interior side of the multi-sectional form partially determines the contour of the form part, comprises blowing the fibers (F1, F2) in the interior area of the form, applying the fibers on the interior side of the form, and connecting the fiber for the production of the form part, where the fibers are partially exposed to electric fields in the interior area during blowing in the form and are directed along the respective direction (4) of the electric field that corresponds to the desired preferential direction of the fiber in the form part. The unloaded fiber is provided before and/or during blowing with a static electric charge and/or the charge of the loaded fibers is reinforced. The electric field is produced by conductive section of the form. The electric field is produced by electrodes, which are arranged in the form. Electric field strength of 6-8 kV/cm is used for the electric field. The fiber has a length of 40 mm. The blowing of fiber material is carried out by a nozzle (D), which is formed as electrodes (2a, 2b) for electric field. The fiber ensures an orientation parallel to its flow direction before blowing in the mold. An independent claim is included for a device for the production of three-dimensional form part from fibers.

IPC 8 full level  
**D04H 1/00** (2006.01); **D04H 1/732** (2012.01); **D04H 1/736** (2012.01); **D04H 1/74** (2006.01)

CPC (source: EP US)  
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