Title (en)

PRODUCTION METHOD FOR AN ABSORBENT FIBRE PRODUCT AND CORRESPONDING ABSORBENT FIBRE PRODUCT

Title (de)

HERSTELLUNGSVERFAHREN FÜR ABSORBIERENDES FASERPRODUKT UND ABSORBIERENDES FASERPRODUKT

Title (fr)

PROCEDE DE PRODUCTION D'UN PRODUIT FIBREUX ABSORBANT ET PRODUIT FIBREUX ABSORBANT

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Application

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Abstract (en)

[origin: US2007160835A1] The invention relates to a method for producing an absorbent fiber product, starting with a parent fiber product that comprises fibers that, on the one hand, lie at a statistical distance from one another and, on the other hand, make contact with one another at contact points. The method comprises treating the parent fiber product with a fluid medium in such a way that the fibers are at least partially wetted and the fluid medium is then rapidly evaporated by irradiation, so that the evaporation pressure generated by the evaporating fluid medium has a kinematic effect on the fibers, which increases the distance between them. In this way the risk of inadvertent, in particular, thermal damage to the fibers is eliminated. Furthermore, the intrinsic fiber structure is left unaffected, or is only affected in a controlled manner. This prevents the uncontrolled destruction of the fiber structure and a detrimental effect on the fiber product, for example, to its tear resistance when wet. Instead, the proposed method achieves an expansion of the fiber product on a microscopic scale by increasing the distance between the fibers. In a further embodiment, the intrinsic fiber structure can be controlled and affected in a targeted manner if necessary, by controlling the time period between the wetting of the fibers and the evaporation of the fluid medium.

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