

Title (en)
PROCESS FOR PRODUCING SHEATH-CORE STAPLE FIBRE WITH A THREE-DIMENSIONAL CRIMP, AND CORRESPONDING SHEATH-CORE STAPLE FIBRE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON KERN-MANTEL-STAPELFASERN MIT EINER DREIDIMENSIONALEN KRÄUSELUNG SOWIE EINE DERARTIGE KERN-MANTEL-STAPELFASER

Title (fr)
PROCEDE DE FABRICATION DE FIBRES COURTES AYANT UNE STRUCTURE NOYAU-GAINE AVEC UNE FRISURE TRIDIMENSIONNELLE ET FIBRE COURTE AYANT UNE STRUCTURE NOYAU-GAINE AINSI OBTENUE

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Application
EP 06806673 A 20061103

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Abstract (en)
[origin: WO2007051633A1] The invention relates to a process for producing sheath-core staple fibre with a three-dimensional crimp, and to corresponding sheath-core staple fibre. In this process the fibre, with a symmetrical sheath-core arrangement, is extruded from two different polymer melts, with one polymer component, A, for the core and one polymer component, B, for the sheath. In order to maximize the intensity of the three-dimensional crimping in the fibre, the fibre is cooled with a sharp stream of cooling air, with a quench air velocity of at least 3 m/sec, and, after the fibres have been bundled to a tow, the multi-stage treatment takes place in a fibre line at a maximum temperature load which is below the glass transition temperature of the polymer component B in the sheath of the fibre. In this way it is possible, after the multi-stage treatment and before the cutting of the fibre, to achieve a high degree of three-dimensional crimp.

IPC 8 full level
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CPC (source: EP US)
D01F 8/06 (2013.01 - EP US); **D01F 8/14** (2013.01 - EP US); **Y10T 428/2909** (2015.01 - EP US); **Y10T 442/612** (2015.04 - EP US); **Y10T 442/636** (2015.04 - EP US)

Citation (search report)
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