

Title (en)

MELT-SPINNING PROCESS AND MELT-SPINNING APPARATUS FOR PRODUCING A CRIMPED YARN

Title (de)

SCHMELZSPINNVERFAHREN UND SCHMELZSPINNVORRICHTUNG ZUR HERSTELLUNG EINES GEKRÄUSELTEN FADENS

Title (fr)

PROCÉDÉ DE FILAGE PAR FUSION ET DISPOSITIF DE FILAGE PAR FUSION, DESTINÉS À PRODUIRE UN FIL FRISÉ

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Application

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Abstract (en)

[origin: WO2014026902A1] The invention relates to a melt-spinning process and apparatus for producing a crimped yarn. A spinneret means is used to spin a thermoplastic polymer into a filament bundle which is cooled down, drawn and, in a stuffer box, compressed into a yarn plug. The yarn plug is resolved into a crimped yarn, which is wound up to form a package. To maximize the crimp stability of the yarn, amorphous portions in the molecular structure of the post-drawing yarn material are avoided. This is achieved according to the invention by a relaxation treatment after the drawing step and before the compressing step by maintaining a minimum yarn pull force of > 0.05 cN/dtex at a relaxation temperature in the range from 120°C to 245°C.

IPC 8 full level

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