

Title (en)

Method for making PTT fibres with improved curling

Title (de)

Verfahren zur Herstellung von PTT-Fasern mit verbesserter Einkräuselung

Title (fr)

Procédé pour la manufacture de fibres PTT dotée d'un frilage amélioré

Publication

EP 2177651 B1 20111214 (DE)

Application

EP 09012733 A 20091008

Priority

DE 102008051738 A 20081015

Abstract (en)

[origin: EP2177651A1] The PTT fiber is spun conventionally. In the new process it is stretched at up to 70[deg] C. Following stretching and before entry into the crimping chamber it receives no heat treatment. It is preferably held to a temperature no greater than 85[deg] C. When in the crimping chamber it is heated, reaching a temperature up to 100[deg] C. During crimping it is fixed whilst still in the crimping chamber. The temperature during stretching is up to 60[deg] C and after stretching up to 70[deg] C. The temperature before entry into the crimping chamber is up to 70[deg] C, preferably up to 60[deg] C and most especially between room temperature and 40[deg] C. In the crimping chamber the temperature is up to 95[deg] C, preferably being held in the range 85-90°C. It is then fixed by introducing superheated steam. Before entering the crimping chamber the fibers are preheated to a temperature at least 20[deg] C greater than that after stretching, but to no more than 85[deg] C; further alternative temperature conditions are cited. Steam is used for heating in the crimping chamber. The individual filament titer of the PTT fiber filaments is preferably about 2.4 dtex. 3.9-8.9 crimps/cm are produced, preferably 5.5 crimps/cm. The crimping ratio ($\Delta L/L$) is preferably at least 17%. Following fixing, the PTT fibers are cut and used as staple fibers. An independent claim IS INCLUDED FOR the PTT fibers so produced.

IPC 8 full level

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CPC (source: EP)

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