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 frisage amélioré

Publication

EP 2177651 A1 20100421 (DE)

Application

EP 09012733 A 20091008

Priority

DE 102008051738 A 20081015

Abstract (en)

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.

Abstract (de)

Die Erfindung betrifft ein spezielles Verfahren zur Herstellung von gekräuselten Fasern aus Polytrimethylenterephthalat ("PTT") mit verbesserter Einkräuselung und die durch dieses erfindungsgemäße Verfahren hergestellten PTT-Fasern, insbesondere Stapelfasern, die sich für Garne und andere Textilanwendungen eignen, sowie Textilprodukte aus diesen Garnen, aber auch durch dieses erfindungsgemäße Verfahren hergestellte PTT-Fasern, die sich für Füllfasern eignen, sowie aus diesen Füllfasern hergestellte Produkte.

IPC 8 full level

D01F 6/62 (2006.01); **D01D 5/084** (2006.01); **D01F 6/84** (2006.01)

CPC (source: EP)

D01D 5/084 (2013.01); **D01D 10/00** (2013.01); **D01F 6/62** (2013.01); **D01F 6/84** (2013.01); **D02G 1/12** (2013.01)

Citation (applicant)

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