Title (en)

Method of manufacturing an elastic polyester fabric completely made of fibres

Title (de)

Verfahren zur Herstellung eines ganz aus Fasern bestehenden elastischen Polyestergewebes

Title (fr)

Procédé de fabrication d'un tissu polyester toutes fibres élastique

Publication

EP 0987358 B1 20011107 (FR)

Application

EP 99490026 A 19990824

Priority

FR 9811450 A 19980910

Abstract (en)

[origin: EP0987358A1] In the production of a polyester fabric, where all the fibers have an elastic stretch, a proportion of the fibers are a bi-component type which can be shaped into spiral coils. The fiber preparation and spinning stages are for non-stretch filaments, and the fabric is strongly structured to take in its potential elasticity. For the production of a polyester fabric, where all the fibers have an elastic stretch, a proportion of the fibers are a bi-component type which can be shaped into spiral coils. The fiber preparation and spinning stages are for non-stretch filaments, and the fabric is strongly structured to take in its potential elasticity. The loomstate fabric is given an initial heat treatment in hot air at a temperature of 180-190 degrees C under a low fabric tension before conventional processing and finishing such as washing and dyeing. During all subsequent heating processes, the fabric tension is limited. For the initial heat treatment, the fabric is carrier by a stenter through a temperature of 185 degrees C for 1.0-1.5 minutes. The fabric is composed of polyester and wool fibers, in a 50:50 mixture, where all the polyester fibers have a bi-component structure. The stenter gives a stenter advance of 15% and a fabric width control at the stenter exit of 9% less than the width of the loomstate material. After dyeing, the fabric is dried at a stenter at a temperature of 130 degrees C after a heating stage at 185 degrees C. The fibers are mixed at the carding and spinning stages, without recombing. The polyester and wool fibers are taken from their bales, to be mixed by carding and combing to form tops followed by drawing at a drafting frame and spinning. During weaving, the warps are reduced by 15-20%. The bi-component polyester fibers have an elastic stretch of 15-20% in the warps and wefts. The cloth is composed of yarns number 2/70, in the warps and wefts. The bi-component polyester fibers are in two different cuts of 80 and 105.

IPC 1-7

D03D 15/08; D06C 7/02

IPC 8 full level

D03D 15/56 (2021.01); **D06C 7/02** (2006.01)

CPC (source: EP US)

D03D 15/56 (2021.01 - EP US); **D06C 7/02** (2013.01 - EP US)

Cited by

CN102205677A; EP1316634A4; US6648926B1; US7572744B1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0987358 A1 20000322; **EP 0987358 B1 20011107**; AT E208443 T1 20011115; CN 1247244 A 20000315; DE 69900429 D1 20011213; DE 69900429 T2 20020627; ES 2167995 T3 20020516; FR 2783257 A1 20000317; FR 2783257 B1 20001201; PT 987358 E 20020429; SI 0987358 T1 20020228; US 6418598 B1 20020716

DOCDB simple family (application)

EP 99490026 A 19990824; AT 99490026 T 19990824; CN 99118469 A 19990902; DE 69900429 T 19990824; ES 99490026 T 19990824; FR 9811450 A 19980910; PT 99490026 T 19990824; SI 9930014 T 19990824; US 38781299 A 19990901