

Title (en)

Method and device for making an effect yarn from continuous filaments

Title (de)

Verfahren und Vorrichtung zur Erzeugung eines Effektgarnes aus Endlosfilament

Title (fr)

Procédé et dispositif pour la production de fil d'effet de fil continu

Publication

EP 1028183 A2 20000816 (DE)

Application

EP 00810072 A 20000126

Priority

CH 24199 A 19990209

Abstract (en)

To produce a continuous filament effect yarn, the filament bundle is treated before the texturizing stage so that the bundle structure is modified to give a durable action on it until it is texturized. The initial process is an eddy action, fusion or adhesion. A number of filaments are texturized preferably in a stuffing chamber, and bonded together. For texturizing, the filaments are compressed into a plug in the stuffing chamber. A number of filament bundles are mixed together or combined by the texturizing action, to form a texturized yarn drawn out through a common jet. Each filament bundle is formed into a part-plug, for a yarn to be formed from all the part-plugs. The mixed yarn material is compacted after texturizing, such as by eddying. The texturized yarn is taken directly to a bonding station, where it is combined with a further component to give a multi-component yarn. The structure of the effect yarn takes the differences in the filament types used and their different dyeing performance, to combine them according to the required effect taking into account the thickness, the number of fibrils in the bundle, the type of polymer, the cross section of the fibrils and any additive in the filament bundles. The differences in the filament character can be set during the initial eddying action by adjusting the parameters for the pressure in bar, the air volume in kg/h and the temp. in degrees C. An Independent claim is included for an assembly with a station to process the filament bundles in an eddying, fusion or adhesion action, and a stuffer chamber (100) for texturizing. Preferred Features: The eddying action gives discrete braiding points in the filament bundle, which remain in place during the texturizing stage, and the braided points are passed directly into the texturizing stage, in an eddy channel (101,102) leading to the stuffer chamber where the bundles are formed into a plug. The eddying action is at the start of the feed channel, where a fluid flow (103,104) preferably of air is generated downstream of the eddy jet (105) point, to draw the bundle into the channel and move it into the stuffer chamber. The filaments in the bundle are eddied by one or more air streams, using heated air to prevent any shock effects on the hot filaments. A number of filament bundles are texturized simultaneously, where more than one or all the filament bundles have been edded in advance. The number of braided points in the filament bundles is selected by length units to give open sections between them, to give bonding points for a multi-component yarn where the texturized filaments form a fraction of the final multi-component yarn content. The braided points are restricted to form one-third of the length unit in the filament bundle.

Abstract (de)

Ein Filamentbündel wird vor dem Texturieren derart vorbehandelt, dass die Bündelstruktur dadurch verändert und eine bleibende Wirkung bis in den Texturierschritt erzielt wird. Die Vorbehandlung erfolgt z.B. durch Verwirbeln, Verschmelzen oder Verkleben. Vorzugsweise werden mehrere Filamentbündel gemeinsam in einer Stauchkammer texturiert und dadurch miteinander verbunden. <IMAGE>

IPC 1-7

D02G 1/20; D02G 1/12; D02G 1/16; D02J 1/08

IPC 8 full level

D02G 1/12 (2006.01); **D02G 1/16** (2006.01); **D02G 1/20** (2006.01); **D02J 1/08** (2006.01)

CPC (source: EP)

D02G 1/12 (2013.01); **D02G 1/122** (2013.01); **D02G 1/16** (2013.01); **D02G 1/20** (2013.01); **D02J 1/08** (2013.01)

Cited by

EP1184494A3; CN111560674A

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 1028183 A2 20000816

DOCDB simple family (application)

EP 00810072 A 20000126