

Title (en)

Polyester multi-filament yarns, process for their production and winding and winding device

Title (de)

Multifilament-Polyesterfäden, Verfahren zu ihrer Herstellung und Aufwicklung, sowie Vorrichtung zu ihrer Aufwicklung

Title (fr)

Fils multifilaments en polyester, procédé pour les produire et les enruler, et dispositif de bobinage

Publication

EP 1482077 A1 20041201 (EN)

Application

EP 03011514 A 20030521

Priority

EP 03011514 A 20030521

Abstract (en)

Production and winding of at least one polyester multi-filament yarn involves providing an infrared absorbing pigment and/or a catalyst having infrared absorbing properties to enhance the infrared absorption properties of the yarn, and heat-treating by infrared radiation during winding to yarn package. The yarn comprises (wt.%): at least polybutylene terephthalate (PBT) (90) and/or polytrimethylene terephthalate (PTMT) (preferably PTMT). An independent claim is included for a device for winding of at least one multi-filament yarn comprising a commercial winder (W) and at least one infrared radiant heater arranged in a defined distance from the winder shaft to irradiate a yarn package placed on the shaft.

IPC 1-7

D01F 1/10; D01F 6/62; D01D 10/02; B65H 54/14

IPC 8 full level

B65H 55/00 (2006.01); **B65H 71/00** (2006.01); **D01D 7/00** (2006.01); **D01D 10/02** (2006.01); **D01F 1/10** (2006.01); **D01F 6/62** (2006.01)

CPC (source: EP)

B65H 55/00 (2013.01); **B65H 71/00** (2013.01); **D01D 7/00** (2013.01); **D01D 10/02** (2013.01); **D01F 1/106** (2013.01); **D01F 6/62** (2013.01);
B65H 2301/51432 (2013.01); **B65H 2701/3132** (2013.01)

Citation (search report)

- [AD] EP 1033422 A1 20000906 - ASAHI CHEMICAL IND [JP]
- [A] NL 7108728 A 19721121
- [A] WO 9743479 A1 19971120 - TMT MANENTI & C SAS [IT], et al
- [AD] DE 10121542 A1 20030206 - ZIMMER AG [DE]
- [A] DATABASE WPI Section Ch Week 199703, Derwent World Patents Index; Class A17, AN 1997-029730, XP002258911

Cited by

CN1306083C; EP1631432A4; WO2007076433A1; WO2016113176A1; US11981065B1; US9903988B2; US10895673B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1482077 A1 20041201

DOCDB simple family (application)

EP 03011514 A 20030521