

Title (en)
Process of treating shrinkable fibers.

Title (de)
Verfahren zur Behandlung von schrumpffähigen Fasern.

Title (fr)
Procédé de traitement de fibres rétrécissables.

Publication
EP 0355222 A1 19900228 (EN)

Application
EP 88307697 A 19880819

Priority
• EP 88307697 A 19880819
• CA 575127 A 19880818
• JP 21263288 A 19880829

Abstract (en)
A process for diffusing and subliming water-soluble and water-insoluble materials into never-dried, shrinkable aromatic polyamide fibres, using steam heated at certain controlled temperatures, within a specially designed treatment chamber. The treatment chamber comprises a fold-forming funnel-shaped entrance section (18), a plug section (23), and three steam treatment sections (24), (25), (30). The tow of fibres (1) entering the chamber (7) at a first speed in section (18) is moved throughout the sections (23), (24), (25) and (30) at a second speed lower than the first one by means of a pin-bearing endless chain (28). Steam is injected into section (25) and allowed to escaped through entrance opening (17) and exit opening (26). Steam losses are minimised owing to the reduced cross-section of section (24) in order to accommodate the reduced volume of the tow after shrinking in section (23).

IPC 1-7
D02J 13/00; **D06B 3/04**

IPC 8 full level
D06B 3/02 (2006.01); **D02J 13/00** (2006.01); **D06B 3/04** (2006.01)

CPC (source: EP)
D02J 13/00 (2013.01); **D06B 3/045** (2013.01)

Citation (search report)
• [YD] EP 0228224 A2 19870708 - DU PONT [US]
• [Y] GB 1193725 A 19700603 - ILMA IND LAVORAZIONI MATALLI A [IT], et al

Cited by
US5306312A

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 0355222 A1 19900228; **EP 0355222 B1 19931027**; CA 1340008 C 19980825; DE 3885277 D1 19931202; DE 3885277 T2 19940505; ES 2045133 T3 19940116; JP 2645485 B2 19970825; JP H0268351 A 19900307

DOCDB simple family (application)
EP 88307697 A 19880819; CA 575127 A 19880818; DE 3885277 T 19880819; ES 88307697 T 19880819; JP 21263288 A 19880829