

Title (en)

FIXED POLYACRYLONITRILE FILAMENTS AND FIBRES, AND PROCESS FOR PREPARING THEM

Publication

**EP 0061117 A3 19830907 (DE)**

Application

**EP 82102086 A 19820315**

Priority

CH 191881 A 19810320

Abstract (en)

[origin: US4446206A] The invention relates to filaments and fibers spun from at least 98% by weight of polyacrylonitrile and relative viscosities of between 2.5 and 6.0 which have tensile strengths of more than 50 cN/tex with an elongation at break of at most 15% and a shrinkage at the boil of less than 5% and to a process for their production which comprises at least 2 stretching stages with a minimum stretching ratio of 1.9 as well as a concluding setting stage in which the filaments are treated without shrinkage in dry heat at 170 DEG to 280 DEG C. Such filaments and fibers are distinguished by an increased resistance to swelling and hydrolysis and they are particularly suitable for reinforcing organic and inorganic materials.

IPC 1-7

**D01F 6/18**

IPC 8 full level

**D01F 6/18** (2006.01)

CPC (source: EP US)

**D01F 6/18** (2013.01 - EP US); **Y10T 428/2913** (2015.01 - EP US)

Citation (search report)

- [YP] EP 0044534 A2 19820127 - HOECHST AG [DE]
- [Y] US 3846833 A 19741105 - RAM M, et al
- [YD] DE 2851273 A1 19791018 - AMERICAN CYANAMID CO

Cited by

EP0154217A3; EP0554775A3; DE102009019120A1; EP0165372A3; EP0645479A1; EP0213772A3; US6228966B1; WO9826116A1

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