

Title (en)

Method for preparation of antibacterial, deodorant polyurethane yarns.

Title (de)

Verfahren zur Herstellung von antibakteriellen und desodorierenden Polyurethanfasern.

Title (fr)

Procédé de préparation de fibres de polyuréthane antibactériens et déodorants.

Publication

**EP 0522447 A1 19930113 (EN)**

Application

**EP 92111236 A 19920702**

Priority

KR 910011338 A 19910704

Abstract (en)

A method for preparation of an antibacterial, deodorant polyurethane yarn. The improvement comprises adding a solution resulting from dissolving a mordenite, a class of antibacterial zeolites, in dimethylformamide to a polyurethane polymer before spinning in a conventional process for preparing the polyurethane yarn. The mordenite is previously prepared, before being dissolved in the dimethylformamide, by being boiled in a strong acid to have a silica/alumina molar ratio in the range of about 12 to 33, then ion-exchanged with an antibacterial metal, such as silver, copper, zinc or the like, thereafter, controlled to have an average particle size in the range of about 0.5  $\mu$ m to 2.0  $\mu$ m.

IPC 1-7

**D01F 1/10**; **D01F 6/70**

IPC 8 full level

**D01F 1/10** (2006.01); **D01F 6/70** (2006.01)

CPC (source: EP KR)

**D01F 1/10** (2013.01 - KR); **D01F 1/103** (2013.01 - EP); **D01F 6/70** (2013.01 - EP)

Citation (search report)

- [X] US 4775585 A 19881004 - HAGIWARA ZENJI [JP], et al
- [XP] PATENT ABSTRACTS OF JAPAN vol. 15, no. 474 (C-890)3 December 1991 & JP-A-32 05 436 ( TORAY IND INC ) 6 September 1991
- [A] DATABASE WPIL Section Ch, Week 8910, Derwent Publications Ltd., London, GB; Class A, AN 89-072714 & JP-A-1 024 861 (SHINAGAWA NENRYO KK ET AL.) 26 January 1989

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CN114540975A; EP1353794A4; DE19722411A1; CN108138368A; JP2018535331A; WO2010036214A1; WO2017060709A1

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