

Title (en)  
A POLYURETHANE TYPE ELASTIC FIBER, AND A PROCESS OF PREPARING FOR THE SAME

Title (de)  
ELASTISCHE FASER DES TYPES POLYURETHAN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)  
FIBRE ELASTIQUE DE TYPE POLYURETHANE, ET PROCEDE DE PREPARATION DE LA FIBRE

Publication  
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Application  
**EP 02718687 A 20020419**

Priority  

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Abstract (en)  
[origin: WO02086208A1] Disclosed a polyurethane elastic fiber and a method of producing the polyurethane elastic fiber. The method of producing the polyurethane elastic fiber is characterized in that polyol with high molecular weight and diisocyanate with excessive amount are mixed in a condition of a designated shear rate and prepolymerized to produce a prepolymer, the prepolymer is reacted with the chain extender and the chain terminator to produce a polymer, and an additive is added to the polymer and the final polymer is spun. The method of producing the polyurethane elastic fiber according to the present invention improves the stability of the polymer, has an excellent spinnability even in high-speed spinning, and remarkably reduces the generation of wave yarns. The polyurethane elastic fiber of the present invention is excellent in heat resistance, thermosetting efficiency and coherence strength between the monofilaments.

IPC 8 full level  
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Citation (search report)  

- [XAY] EP 0544009 A1 19930602 - ASAHI CHEMICAL IND [JP]
- [DX] US 5000899 A 19910319 - DREIBELBIS RICHARD L [US], et al
- [DX] US 5362432 A 19941108 - HOUSER NATHAN E [US], et al
- [YA] EP 1055691 A2 20001129 - BAYER AG [DE]
- [A] US 3639652 A 19720201 - MOMMAERTS HENRI ALBERT, et al
- [A] WO 0114441 A1 20010301 - HENKEL CORP [US]
- [A] EP 1055692 A2 20001129 - BAYER AG [DE]
- See references of WO 02086208A1

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DE IT

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