



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 434 029 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **90124769.2**

(51) Int. Cl.⁵: **D01F 8/12, D01F 8/14**

(22) Date of filing: **19.12.90**

(30) Priority: **19.12.89 JP 329987/89**
16.01.90 JP 7505/90
28.05.90 JP 138964/90
21.09.90 JP 253708/90

(43) Date of publication of application:
26.06.91 Bulletin 91/26

(84) Designated Contracting States:
DE FR GB IT

(88) Date of deferred publication of the search report:
21.11.91 Bulletin 91/47

(71) Applicant: **Kuraray Co., Ltd.**
2045-1 Sakazu
Kurashiki-city Okayama Prefecture, 710(JP)

(72) Inventor: **Akagi, Takao**

2632-1, Sakazu
Kurashiki-City, Okayama-Pref.(JP)
Inventor: **Tokunaga, Isao**
829, Yae, Kondo-Town
Asakuchi-District, Okayama-Pref.(JP)
Inventor: **Fukuda, Keiji**
1652-1, Sakazu
Kurashiki-City, Okayama-Pref.(JP)
Inventor: **Nagata, Hidefumi**
1652-1, Sakazu
Kurashiki-City, Okayama-Pref.(JP)
Inventor: **Nanjo, Masahiko**
1092-3, Higashiminari, Yakage-Town
Oda-District, Okayama-Pref.(JP)

(74) Representative: **Strehl, Peter, Dipl.-Ing. et al**
Patentanwälte Strehl Schübel-Hopf Groening
Maximilianstrasse 54 Postfach 22 14 55
W-8000 München 22(DE)

(54) **Moisture-absorbent composite fiber.**

(57) Provided are composite fibers comprising a hydrophobic polyester (B) having a moisture absorbency at 20° C, 65% RH of not more than 2% and having a total concentration of at least one metal selected from the group consisting of alkali metals and alkali earth metals of at least 500 ppm and a nylon-4 polymer (A) in an amount of 40 to 80% by weight based on the weight of the fiber. They are excellent for clothing use, since they have excellent moisture absorbency, give no clammy feeling upon absorption of moisture, and do not suffer delamination between the nylon-4 polymer and the hydrophobic polyester. Particularly excellent among them are sheath-core composite fibers comprising a core of the nylon-4 polymer (A) and a sheath of the hydrophobic polyester (B) and side-by-side composite fibers having a flat cross-section in which the nylon-4 polymer and the hydrophobic polyester are bimetal-wise laminated with each other.

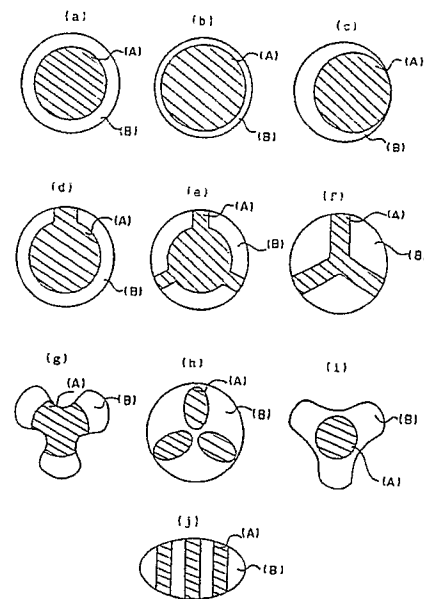


Fig. 1

EP 0 434 029 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 12 4769

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	DATABASE WPIL, accession no. 85-034488 (06), Derwent Publications Ltd., London, GB; &JP-A-59228070 (KURARAY KK) 21 December 1984 * the whole document* ---	1-7	D01F8/12 D01F8/14
A	DATABASE WPIL, accession no. 86-147864 (23), Derwent Publications Ltd., London, GB; &JP-A-61083316 (NIPPON ESTER KK) 26 April 1986 * the whole document * -----	1-7	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			D01F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 SEPTEMBER 1991	Examiner TARRIDA TORRELL J. B.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			