

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 302 587 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
06.10.2004 Bulletin 2004/41

(51) Int Cl.7: **D06N 3/00**, D01F 8/14,
D04H 1/42, D04H 1/46

(43) Date of publication A2:
16.04.2003 Bulletin 2003/16

(21) Application number: **02021713.9**

(22) Date of filing: **25.09.2002**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
IE IT LI LU MC NL PT SE SK TR**
Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
• **Latini, David**
05100 Terni (IT)
• **Teofrasti, Omar**
05020 Sismano (Terni) (IT)

(30) Priority: **12.10.2001 IT MI20012108**

(74) Representative: **Cioni, Carlo**
STUDIO CIONI & PIPPARELLI,
Via Quadronno, 6
20122 Milano (IT)

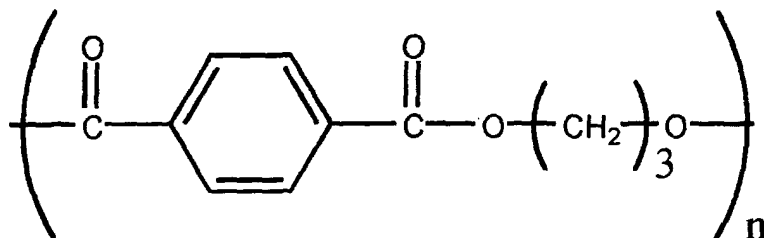
(71) Applicant: **ALCANTARA S.p.A.**
20138 Milano (IT)

(54) **Production of suede-finish woven and non-woven fabric with high-elasticity microfiber**

(57) Process for the preparation of microfibrinous non-woven fabric with good mechanical and dyeing properties comprising the following stages:

- preparation of a microfiber constituted in general from polyesters used singularly or in mixtures between them or with nylons 6, nylons 6.6 or other materials normally used in the textile field;
- preparation, by means of needle-punching, of a felt comprising the microfiber indicated above;
- impregnation of the felt with polymer binder;
- mechanical treatment in order to generate the suede effect;
- dyeing of the non-woven fabric,

in which a polyester constituted partially or totally from repeating monomer units of trimethylene terephthalate (PTT) of formula:



(where n it is a number between 30 and 300) is employed as the polymer for the preparation of the microfibers that constitute the non-woven fabric

EP 1 302 587 A3

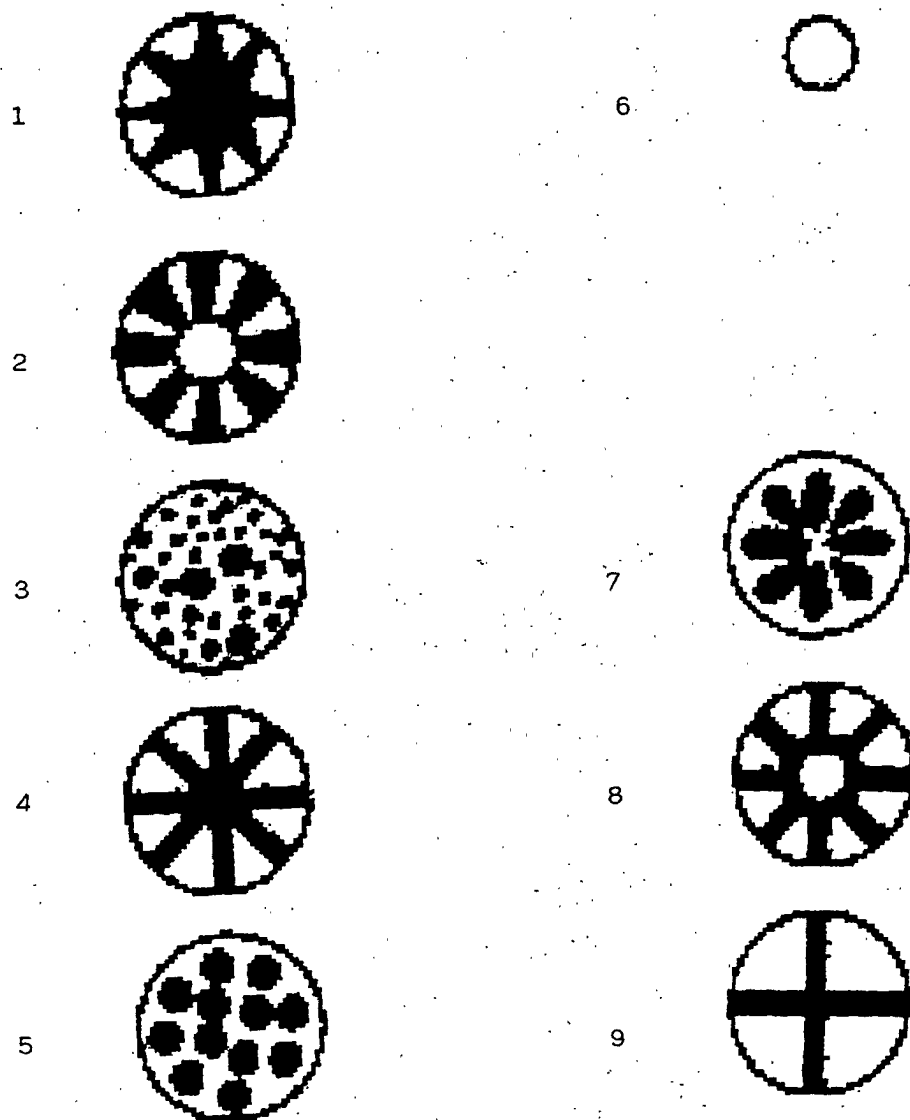


Fig. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 02 1713

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.7)
X	DATABASE WPI Section Ch, Week 200062 Derwent Publications Ltd., London, GB; Class A23, AN 2000-642516 XP002291668 & JP 2000 256971 A (TEIJIN LTD) 19 September 2000 (2000-09-19) * abstract *	10,11	D06N3/00 D01F8/14 D04H1/42 D04H1/46
X	DATABASE WPI Section Ch, Week 199909 Derwent Publications Ltd., London, GB; Class A23, AN 1999-101621 XP002291669 & JP 10 331075 A (TORAY IND INC) 15 December 1998 (1998-12-15) * abstract *	10,11	
X	DATABASE WPI Section Ch, Week 199925 Derwent Publications Ltd., London, GB; Class A23, AN 1999-296789 XP002291670 & JP 11 100721 A (ASAHI KASEI KOGYO KK) 13 April 1999 (1999-04-13) * abstract *	10,11	TECHNICAL FIELDS SEARCHED (Int.Cl.7) D06N D01F D04H
X	DATABASE WPI Section Ch, Week 199928 Derwent Publications Ltd., London, GB; Class A84, AN 1999-330038 XP002291671 & JP 11 107154 A (ASAHI KASEI KOGYO KK) 20 April 1999 (1999-04-20) * abstract *	10,11	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 August 2004	Examiner Pamies Olle, S
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			

EPO FORM 1503 03.82 (P04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 02 1713

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.7)
X	DATABASE WPI Section Ch, Week 199943 Derwent Publications Ltd., London, GB; Class A23, AN 1999-512634 XP002291683 & JP 11 222780 A (ASAHI KASEI KOGYO KK) 17 August 1999 (1999-08-17) * abstract * -----	10,11	
X	DATABASE WPI Section Ch, Week 199953 Derwent Publications Ltd., London, GB; Class A23, AN 1999-615973 XP002291672 & JP 11 269751 A (ASAHI KASEI KOGYO KK) 5 October 1999 (1999-10-05) * abstract * -----	10,11	
A	----- US 3 899 292 A (OKAZAKI KAORU ET AL) 12 August 1975 (1975-08-12) * column 1, line 24 - line 33; examples 1,9 * -----	1-9,12	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
Place of search Munich		Date of completion of the search 10 August 2004	Examiner Pamies Olle, S
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			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 02 1713

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

10-08-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2000256971	A	19-09-2000	NONE	
JP 10331075	A	15-12-1998	JP 3428425 B2	22-07-2003
JP 11100721	A	13-04-1999	JP 3199669 B2	20-08-2001
JP 11107154	A	20-04-1999	NONE	
JP 11222780	A	17-08-1999	JP 3226024 B2	05-11-2001
JP 11269751	A	05-10-1999	JP 3280302 B2	13-05-2002
US 3899292	A	12-08-1975	JP 1021538 C	25-11-1980
			JP 48096702 A	10-12-1973
			JP 50037241 B	01-12-1975
			JP 858632 C	16-05-1977
			JP 49085203 A	15-08-1974
			JP 51033601 B	21-09-1976
			FR 2177061 A1	02-11-1973
			GB 1389804 A	09-04-1975
			IT 980679 B	10-10-1974