

(11) EP 2 857 564 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **08.07.2015 Bulletin 2015/28**

(51) Int Cl.: **D02G 3/36** (2006.01)

D02G 3/40 (2006.01)

(43) Date of publication A2: **08.04.2015 Bulletin 2015/15**

(21) Application number: 14002483.7

(22) Date of filing: 17.07.2014

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

(30) Priority: 17.07.2013 GB 201312822

(71) Applicant: J & P Coats Limited Glasgow, Strathclyde G2 5PA (GB)

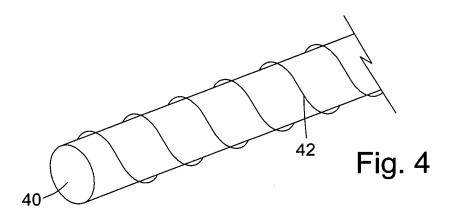
(72) Inventor: Smith, Philip Kenneth
Oakham, Rutland LE15 7BT (GB)

 (74) Representative: Jones, Bruce Graeme Roland Hill Dickinson LLP
 50 Fountain Street Manchester M2 2AS (GB)

(54) Thread

(57) A stiffening thread (20) for use in increasing the durability of a crease (12) in a panel of fabric (10) comprises at least one ply of thermofusible material having a melting point between 75°C and 125°C and at least

one carrier ply of material which is not thermofusible, having a melting point above 125°C, wherein the at least one thermofusible ply is a monofilament thermofusible ply.





EUROPEAN SEARCH REPORT

Application Number EP 14 00 2483

	DOCUMENTS CONSID	ERED TO BE RELEVANT			
Category	Citation of document with ir of relevant passa	ndication, where appropriate, ages		Relevant o claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	WO 93/03213 A1 (COA 18 February 1993 (1 * page 10, line 20 figure 1 *		1-	9	INV. D02G3/36 D02G3/40
Х	WO 87/04197 A2 (BIR BIRKIN & CO LTD [GB BARRY DAWS) 16 July * page 2, line 28 - figure 1 *]; STOCKS FREDERICK 1987 (1987-07-16)	1,	3,9	
Х	13 February 2013 (2	YSER GMBH & CO KG [DE 013-02-13) - paragraph [0019] *]) 1,	3,9	
Х	W0 2012/124562 A1 (20 September 2012 (* paragraph [0009] figures 1-2 *		1-	5,9	
A	JP H07 173764 A (FU 11 July 1995 (1995- * abstract *		1		TECHNICAL FIELDS SEARCHED (IPC)
А	JP H06 166905 A (FU MICHIHARU; TOMOTA H HIROHISA) 14 June 1 * abstract *		1		A41D D06J B42B A41H D03D
	The present search report has	seen drawn up for all elaims			
	Place of search	Date of completion of the search			Examiner
	Munich	5 February 201		Po1	let, Didier
C	ATEGORY OF CITED DOCUMENTS	T : theory or prin			
X : part Y : part	icularly relevant if taken alone icularly relevant if combined with anot iment of the same category nological background	E : earlier patent after the filing	documer date ed in the	nt, but publi: application	



5

Application Number

EP 14 00 2483

	CLAIMS INCURRING FEES
10	The present European patent application comprised at the time of filing claims for which payment was due.
10	Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
15	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.
20	LACK OF UNITY OF INVENTION
	The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
25	
	see sheet B
30	
	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
35	As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
	Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
40	
45	None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
50	1-13(partially)
55	The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



5

10

15

20

25

30

35

40

45

LACK OF UNITY OF INVENTION SHEET B

Application Number

EP 14 00 2483

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

claims: 1-13(partially)

A stiffening thread for use in increasing the durability of a crease in a panel of fabric, the thread comprising at least one ply of thermofusible material having a melting point between 75°C and 125°C and at least one carrier ply of material which is not thermofusible, having a melting point above 125°C, the at least one thermofusible ply is a monofilament thermofusible ply.

2. claims: 1-9, 11-13(all partially)

A stiffening thread for use in increasing the durability of a crease in a panel of fabric, the thread comprising at least one ply of thermofusible material having a melting point between 75°C and 125°C and at least one carrier ply of material which is not thermofusible, having a melting point above 125°C, the thread is of wrapped construction with the carrier ply providing a core and the thermofusible ply being wrapped around the carrier ply.

claims: 1-13(partially)

A stiffening thread for use in increasing the durability of a crease in a panel of fabric, the thread comprising at least one ply of thermofusible material having a melting point between 75°C and 125°C and at least one carrier ply of material which is not thermofusible, having a melting point above 125°C, the carrier ply is of polyvinyl alcohol (PVA) and is soluble in water at temperatures of above 40°C.

4. claims: 1-10, 12, 13(all partially)

A stiffening thread for use in increasing the durability of a crease in a panel of fabric, the thread comprising at least one ply of thermofusible material having a melting point between 75°C and 125°C and at least one carrier ply of material which is not thermofusible, having a melting point above 125° C, the thread is of braided construction.

50

55

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

EP 14 00 2483

5

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.

05-02-2015

10		
15		
20		
25		
30		
35		

40

45

50

55

	Patent document ed in search report		Publication date		Patent family member(s)		Publication date
WO	9303213	A1	18-02-1993	AT AU BR CA CZ DE EP ES HU JP RU SK WO		B2 A A1 A3 D1 T2 A1 T3 B1 B2 A C1 A3 A	15-03-1998 12-10-1995 24-10-1995 18-02-1993 15-06-1994 02-04-1998 01-10-1998 25-05-1994 16-06-1998 28-07-2004 04-09-2001 20-10-1997 07-09-1994 20-04-1993 18-02-1993
WO	8704197	A2	16-07-1987	CN ES WO	87100153 2001822 8704197	A6	05-08-1987 16-06-1988 16-07-1987
EP	2557209	A1	13-02-2013	DE EP	102011052477 2557209		14-02-2013 13-02-2013
WO	2012124562	A1	20-09-2012	CN EP WO	103429279 2687238 2012124562	A1	04-12-2013 22-01-2014 20-09-2012
JP	H07173764	Α	11-07-1995	NON	IE		
JP	H06166905	Α	14-06-1994	NON	IE		
For more det	ails about this annex	: see Of	fficial Journal of the Euro	pean F	Patent Office, No. 12/8	2	