



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
01.05.2013 Bulletin 2013/18

(51) Int Cl.:
D04B 1/24 (2006.01) D04B 1/28 (2006.01)

(43) Date of publication A2:
09.11.2011 Bulletin 2011/45

(21) Application number: **11003340.4**

(22) Date of filing: **20.04.2011**

(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

(72) Inventor: **Kino, Takashi**
Wakayama-shi
Wakayama 641-8511 (JP)

(74) Representative: **Wagner, Karl H.**
Wagner & Geyer
Gewürzmühlstrasse 5
80538 Munich (DE)

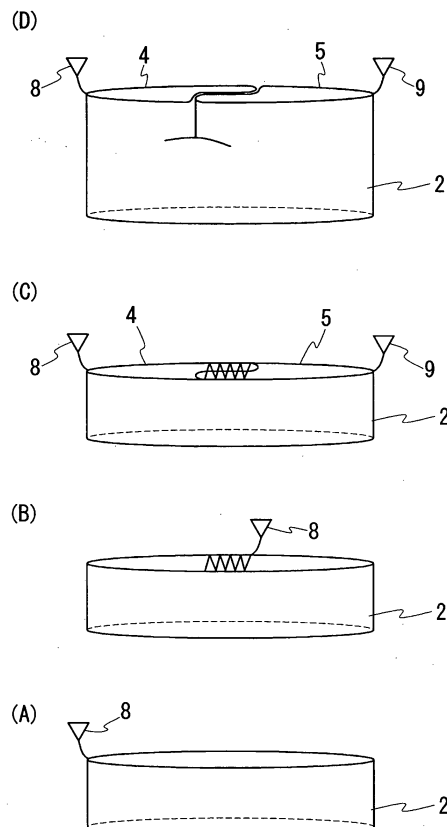
(30) Priority: **20.04.2010 JP 2010097362**

(71) Applicant: **Shima Seiki Mfg., Ltd**
Wakayama-shi,
Wakayama 641-8511 (JP)

(54) **Knitting method of tubular knitted fabric, and tubular knitted fabric**

(57) A knitting method of a tubular knitted fabric in which a gore is formed at a position of a crotch of a plurality of branched tubular portions branched from an integrated tubular portion, the tubular knitted fabric not being formed with a double stitch at the position of the gore. A rise 2 (integrated tubular portion) is knitted (S1). A held stitch is formed alternately to the front and the back with respect to the knitting needles of the front and back needle beds on which the stitches of the rise are not held within a knitting width of the rise 2 (S2). The held stitches of one needle bed (BB) are transferred to the other needle bed (FB), the knitting is performed using the knitting needles within the knitting width of the rise 2, and a left leg portion (branched portion) 4 following the rise 2 starts to be knitted (S3, S4). The stitches of the FB in the formed range of the held stitches formed in S2 of the stitches of the left leg portion 4 are transferred to the BB. The held stitches of the FB formed in S2 are transferred to the knitting needles of the BB, the knitting is performed using the knitting needles within the knitting width of the rise 2, and a right leg portion 5 (branched portion) adjacent to the left leg portion 4 starts to be knitted.

Fig. 3





EUROPEAN SEARCH REPORT

Application Number
EP 11 00 3340

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	GB 1 231 589 A (COURTAULDS LTD) 12 May 1971 (1971-05-12)	4	INV. D04B1/24
A	* page 1, line 68 - page 2, line 105; figures 4-8 *	1-3	ADD. D04B1/28
A	* page 3, line 61 - page 4, line 115 * ----- WO 2009/084167 A1 (SHIMA SEIKI MFG LTD) 9 July 2009 (2009-07-09) * the whole document *	1-4	
X	----- EP 1 408 145 A1 (SHIMA SEIKI MFG [JP]) 14 April 2004 (2004-04-14)	4	
A	* figure 1 *	1-3	
A,D	----- EP 1 283 290 A1 (SHIMA SEIKI MFG [JP]) 12 February 2003 (2003-02-12) * the whole document *	1-4	

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) D04B
Place of search Munich		Date of completion of the search 21 March 2013	Examiner Wendl, Helen
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

1
EPO FORM 1503 (03.02 (P04C01))

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

EP 11 00 3340

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.

21-03-2013

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 1231589	A	12-05-1971	AT 308273 B	25-06-1973
			BE 721428 A	03-03-1969
			CH 508078 A	31-05-1971
			CS 150593 B2	04-09-1973
			DE 1785468 A1	30-03-1972
			ES 358587 A1	01-04-1970
			FR 1583393 A	24-10-1969
			GB 1231589 A	12-05-1971
			IE 32369 B1	11-07-1973
			JP S4941502 B1	09-11-1974
			LU 56925 A1	04-01-1969
			NL 6813674 A	31-03-1969
			SE 351875 B	11-12-1972
			US 3668896 A	13-06-1972
WO 2009084167	A1	09-07-2009	CN 101910485 A	08-12-2010
			EP 2226417 A1	08-09-2010
			WO 2009084167 A1	09-07-2009
EP 1408145	A1	14-04-2004	CN 1516761 A	28-07-2004
			EP 1408145 A1	14-04-2004
			JP 4203414 B2	07-01-2009
			US 2004231367 A1	25-11-2004
			WO 02101133 A1	19-12-2002
EP 1283290	A1	12-02-2003	AU 5875701 A	26-11-2001
			CN 1429294 A	09-07-2003
			DE 60131389 T2	13-03-2008
			EP 1283290 A1	12-02-2003
			JP 3887408 B2	28-02-2007
			TW 491918 B	21-06-2002
			US 2003106344 A1	12-06-2003
			WO 0188243 A1	22-11-2001

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82