

(11) **EP 2 584 079 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 13.11.2013 Bulletin 2013/46

(51) Int Cl.: **D03D 49**/12^(2006.01)

(43) Date of publication A2: **24.04.2013 Bulletin 2013/17**

(21) Application number: 12006669.1

(22) Date of filing: 24.09.2012

(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: 19.10.2011 JP 2011229500

(71) Applicant: TSUDAKOMA KOGYO KABUSHIKI KAISHA
Kanazawa-shi,
Ishikawa-ken 921-8650 (JP)

(72) Inventor: Myogi, Keiichi Ishikawa-ken, 921-8650 (JP)

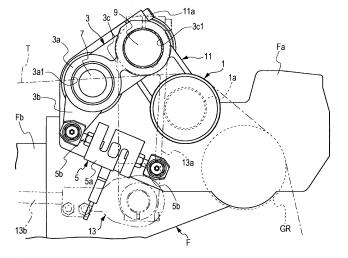
(74) Representative: Samson & Partner Widenmayerstrasse 5 80538 München (DE)

(54) Tension detection apparatus for loom

(57) A tension detection apparatus for a loom includes a tension detection roller (1) that extends in a weaving-width direction between a pair of loom frames (F) and around which warp yarns (T) or a woven cloth is wound, a tension detection lever (3) provided on at least one of the loom frames (F) and connected to an end portion of the tension detection roller (1) so as to support the end portion, and a tension detector (5) connected to the tension detection lever (3). The tension detection lever (3) includes a base portion (3a) and an arm portion

(3c). The base portion (3a) is rotatably supported on the at least one of the loom frames (F) by means of a first shaft (7) that is parallel to the tension detection roller (1). The arm portion (3c) extends from the base portion (3a) and supports a second shaft (9) that supports the tension detection roller (1). The second shaft (9) extends in the weaving-width direction and is supported by the at least one of the loom frames (F), on which the tension detection lever (3) is supported, at a position different in the weaving-width direction from a position at which the second shaft (9) is supported by the tension detection lever (3).







EUROPEAN SEARCH REPORT

Application Number EP 12 00 6669

	DOCUMENTS CONSID	ERED TO BE RELEVANT	_		
ategory	Citation of document with i of relevant pass	ndication, where appropriate, ages	Relevar to claim		
A,D	EP 1 878 821 A1 (TS [JP]) 16 January 20 * figures 1-9 *		1-4	INV. D03D49/12	
1	EP 0 527 705 A1 (TO WORKS [JP]) 17 Febr * figures 1-3 *	OYODA AUTOMATIC LOOM ruary 1993 (1993-02-17)	1-4		
1	FR 2 450 301 A1 (SU 26 September 1980 (* figure 1 *		1-4		
4	EP 0 547 003 A1 (TO WORKS [JP]) 16 June * figure 1 *	YODA AUTOMATIC LOOM 1993 (1993-06-16)	1-4		
				TECHNICAL FIELDS SEARCHED (IPC)	
				D03D	
			4		
	The present search report has	been drawn up for all claims			
	Place of search	Date of completion of the search	<u> </u>	Examiner	
	Munich	2 October 2013	I	amandi, Daniela	
C	ATEGORY OF CITED DOCUMENTS	T : theory or princip			
X : particularly relevant if taken alone Y : particularly relevant if combined with another		after the filing date her D : document cited	arlier patent document, but published on, or ter the filing date ocument cited in the application		
Y:part					
docu	ıment of the same category ınological background	L : document cited		ns 	

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

EP 12 00 6669

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.

02-10-2013

EP 1878821 A1 16-00 JP 4955325 B2 20-00 JP 2008019516 A 31-00 EP 0527705 A1 17-02-1993 EP 0527705 A1 17-00 JP H0551845 A 02-00 FR 2450301 A1 26-09-1980 AT 360922 B 10-00	01-200
JP H0551845 A 02-0 FR 2450301 A1 26-09-1980 AT 360922 B 10-0	91-200
	92-199 93-199
CS 219268 B2 25-0 DE 2911863 A1 04-0 FR 2450301 A1 26-0 GB 2044303 A 15-1 IT 1141901 B 08-1 JP S55116840 A 08-0 SU 952112 A3 15-0	
JP 2534202 Y2 30-0	96-199 94-199 97-199

 $\stackrel{\text{O}}{\text{all}}$ For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

FORM P0459