

(11) **EP 1 972 589 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **07.10.2009 Bulletin 2009/41**

(51) Int Cl.: **B65H 67/06** (2006.01)

(43) Date of publication A2: **24.09.2008 Bulletin 2008/39**

(21) Application number: 08004413.4

(22) Date of filing: 10.03.2008

(84) Designated Contracting States:

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

Designated Extension States:

AL BA MK RS

(30) Priority: 23.03.2007 JP 2007076273

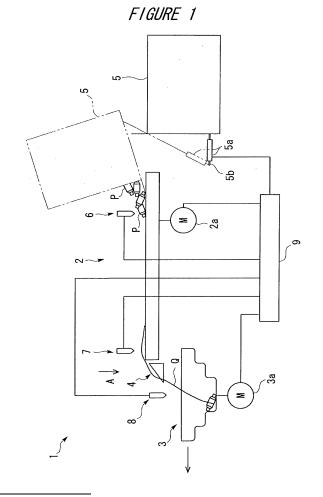
(71) Applicant: Murata Machinery, Ltd. Kyoto 601 (JP)

(72) Inventor: Nakagawa, Takashi Fushimi-ku Kyoto-shi Kyoto (JP)

(74) Representative: Liedl, Christine et al c/o Hansmann & Vogeser,
Albert-Rosshaupter-Strasse 65
81369 München (DE)

(54) Yarn package supply apparatus

(57)The present invention provides a yarn package supply apparatus including a compactly configured yarn end cutting device that allows a yarn end to be reliably processed using only a small number of cutters. The yarn package supply apparatus 1 includes a parts feeder conveyor 2, a parts feeder 3 that aligns and supplies a plurality of yarn packages P dropped from the parts feeder conveyor 2, and a yarn end cutting device 4 that cuts a yarn end Q extending from each of the yarn packages dropped into the parts feeder 3 so as to straddle between the parts feeder conveyor 2 and the parts feeder 3. The yarn end cutting device 4 includes a yarn end cutting section 21 having a cutter 20 that cuts the yarn end Q, a linear guide 22 that guides the yarn end cutting section 21 along a single track R extending along a width direction of the parts feeder conveyor 2, and a rodless cylinder 23 that drives the yarn end cutting section 21 guided by the linear guide 22 so that the yarn end cutting section 21 reciprocates along the single track R (Fig. 1).



EP 1 972 589 A3



EUROPEAN SEARCH REPORT EP 08 00 4413

Application Number

Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	DE 30 45 824 A1 (SC 19 August 1982 (198 * page 11, paragrap		1	INV. B65H67/06
X,D	JP 06 065370 U (-) 16 September 1994 (* figures *	1994-09-16)	1	
Х	DE 33 34 873 A1 (SC 18 April 1985 (1985 * page 7, paragraph		1	
А	US 3 699 833 A (STO 24 October 1972 (19 * column 5, line 50 figures 1-3,6 *		1	
A	JP 02 018265 A (MUR 22 January 1990 (19 * figures *		1	
A	JP 06 049421 U (-) 8 July 1994 (1994-6 * figures *	07-08)	1	TECHNICAL FIELDS SEARCHED (IPC) B65H
A	JP 52 115738 U (-) 2 September 1977 (1 * figure 4 *	.977-09-02)	1	
	The present search report has	been drawn up for all claims		
	Place of search	Date of completion of the search	1	Examiner
	The Hague	28 August 2009	le	mmen, René
X : part Y : part docu A : tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anotiument of the same category inological background written disclosure	T : theory or princip E : earlier patent de after the filing da her D : document cited L : document cited	ole underlying the ocument, but pub ate in the applicatior for other reasons	invention lished on, or

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

EP 08 00 4413

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.

28-08-2009

DE 3045824 A1 JP 6065370 U DE 3334873 A1 US 3699833 A JP 2018265 A JP 6049421 U JP 52115738 U	19-08-1982 16-09-1994 18-04-1985 24-10-1972 22-01-1990 08-07-1994 02-09-1977	CH CS IT JP JP US NONE CH IT JP US NONE NONE	654272 A5 246053 B2 1142995 B 1010409 B 1537676 C 57121514 A 4506572 A 664750 A5 1178438 B 60112522 A 4596173 A	14-02-1 16-10-1 15-10-1 21-02-1 16-01-1 29-07-1 26-03-1
DE 3334873 A1 US 3699833 A JP 2018265 A JP 6049421 U	18-04-1985 24-10-1972 22-01-1990 08-07-1994	CH IT JP US NONE NONE	1178438 B 60112522 A	09-09-1 19-06-1
US 3699833 A JP 2018265 A JP 6049421 U	24-10-1972 22-01-1990 08-07-1994	IT JP US NONE NONE NONE	1178438 B 60112522 A	09-09-1 19-06-1
JP 2018265 A JP 6049421 U	22-01-1990 08-07-1994	NONE NONE		
JP 6049421 U	08-07-1994	NONE		
JP 52115738 U	02-09-1977	NONE		

FORM P0459

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