

(19)



(11)

EP 2 749 516 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
23.07.2014 Bulletin 2014/30

(51) Int Cl.:
B65H 67/08 (2006.01)

(43) Date of publication A2:
02.07.2014 Bulletin 2014/27

(21) Application number: **13190833.7**

(22) Date of filing: **30.10.2013**

(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

(71) Applicant: **Murata Machinery, Ltd.**
Minami-ku
Kyoto-shi
Kyoto 601-8326 (JP)

(72) Inventor: **Nakayama, Noboru**
Kyoto, 612-8686 (JP)

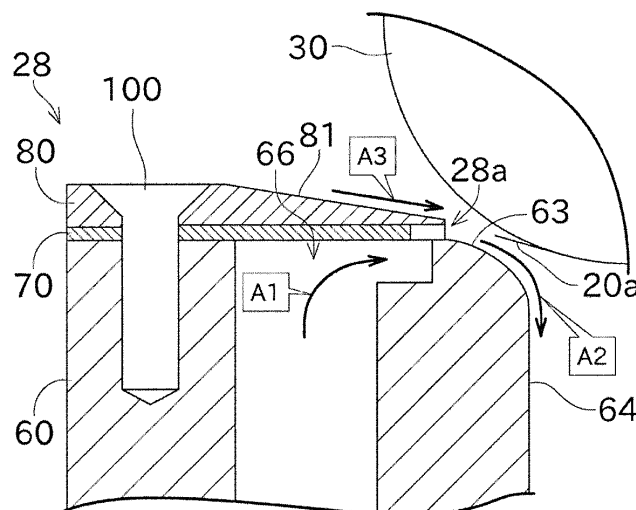
(30) Priority: **27.12.2012 JP 2012285714**

(74) Representative: **HOFFMANN EITLE**
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

(54) Yarn guiding-out device and yarn winding machine

(57) A yarn guiding-out device is proposed. Slits (28a) are formed in a yarn guiding-out device (28). The yarn guiding-out device (28) blows an airflow through the slits (28a) in a direction in which a yarn end (20a) of a package (30) is guided out from the package (30). The

slits (28a) are formed so as to generate the airflow that flows along an outer wall surface (specifically, a curved portion (63) and a flat portion (64)) having no opposing wall surface.

FIG.5**EP 2 749 516 A3**



EUROPEAN SEARCH REPORT

Application Number
EP 13 19 0833

5

10

15

20

25

30

35

40

45

50

55

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	JP H08 245081 A (MURATA MACHINERY LTD) 24 September 1996 (1996-09-24) * paragraph [0014]; figures *	1,9-12, 14	INV. B65H67/08
X	GB 1 074 772 A (REINERS) 5 July 1967 (1967-07-05) * page 1, lines 14-45 * * page 2, lines 5-35; figures *	1-4, 12-14 5-8	
X	EP 0 983 955 A2 (MURATA MACHINERY LTD [JP]) 8 March 2000 (2000-03-08) * paragraphs [0005], [0006], [0007], [0017]; figures *	1-4, 9-12,14	
X	JP H04 246072 A (MURATA MACHINERY LTD) 2 September 1992 (1992-09-02) * abstract; figures *	1-4, 9-12,14	
X	DE 24 26 724 B1 (PALITEX PROJECT CO GMBH) 3 July 1975 (1975-07-03) * figure 6 *	1,4	
A	CH 699 278 A2 (RIETER AG MASCHF [CH]) 15 February 2010 (2010-02-15) * figures 3,7 *	1,3	
A	EP 2 388 224 A2 (OERLIKON TEXTILE GMBH & CO KG [DE]) 23 November 2011 (2011-11-23) * figures *	1,3	B65H
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 13 June 2014	Examiner Lemmen, René
CATEGORY OF CITED DOCUMENTS		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	
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			

3

EPO FORM 1503 03.82 (P04C01)

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

EP 13 19 0833

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.

13-06-2014

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP H08245081	A	24-09-1996	NONE	

GB 1074772	A	05-07-1967	BE 650034 A	03-11-1964
			CH 417427 A	15-07-1966
			GB 1074772 A	05-07-1967

EP 0983955	A2	08-03-2000	EP 0983955 A2	08-03-2000
			JP 2000072334 A	07-03-2000
			US 6272831 B1	14-08-2001

JP H04246072	A	02-09-1992	NONE	

DE 2426724	B1	03-07-1975	NONE	

CH 699278	A2	15-02-2010	NONE	

EP 2388224	A2	23-11-2011	CN 102275776 A	14-12-2011
			DE 102010021153 A1	24-11-2011
			EP 2388224 A2	23-11-2011

EPO FORM P0459

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