



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
27.04.2016 Bulletin 2016/17

(51) Int Cl.:
B65H 54/44 (2006.01) **B65H 63/08** (2006.01)
B65H 63/036 (2006.01)

(43) Date of publication A2:
05.12.2012 Bulletin 2012/49

(21) Application number: **12159034.3**

(22) Date of filing: **12.03.2012**

(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

(72) Inventor: **Tanigawa, Yasunobu**
Kyoto, 612-8686 (JP)

(74) Representative: **Zimmermann, Tankred Klaus**
Schoppe, Zimmermann, Stöckeler
Zinkler, Schenk & Partner mbB
Patentanwälte
Radtkoferstrasse 2
81373 München (DE)

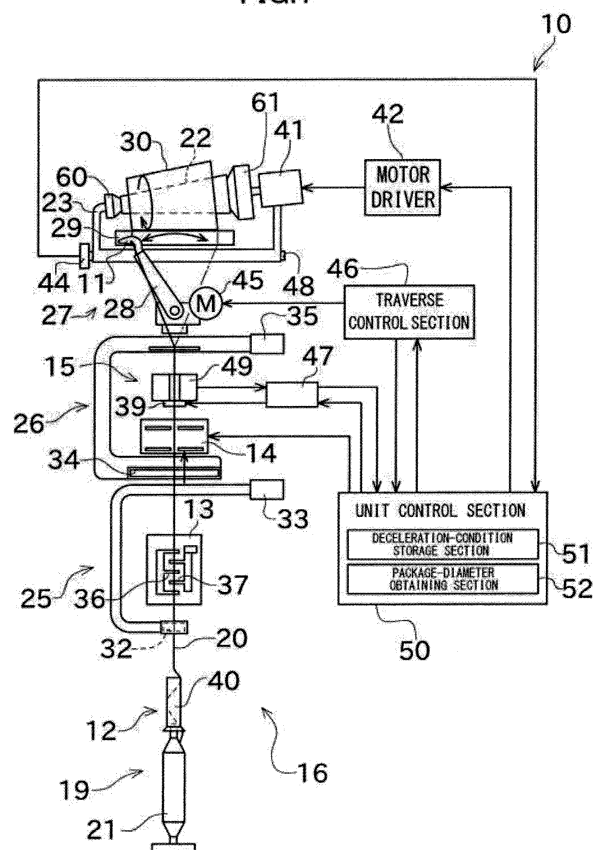
(30) Priority: **01.06.2011 JP 2011123692**

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

(54) **Yarn winding device**

(57) In a yarn winding device, a package drive motor (41) directly rotates a package (30). A package-diameter obtaining section (52) obtains a current package diameter of the package (30). A deceleration-condition storage section (51) stores therein a plurality of deceleration conditions, each of which is associated with a hypothetical package diameter and used in controlling the package drive motor (41) to decelerate the package (30) to a stop. A unit control section (50) controls the package drive motor (41) to decelerate the package (30) to a stop according to the current package diameter and a deceleration condition associated with a hypothetical package diameter corresponding to the current package diameter.

FIG.1





EUROPEAN SEARCH REPORT

Application Number
EP 12 15 9034

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)
A,D	JP S62 215476 A (TEIJIN SEIKI CO LTD) 22 September 1987 (1987-09-22) * abstract; figures 1-4 * -----	1-6	INV. B65H54/44 B65H63/08 B65H63/036
A	JP 2010 037083 A (MURATA MACHINERY LTD) 18 February 2010 (2010-02-18) * abstract *	1-6	
A	EP 0 316 974 A1 (SAVIO SPA [IT]) 24 May 1989 (1989-05-24) * claims 1,2,4,11; figure 6 * -----	1-6	
A	EP 1 460 015 A1 (MURATA MACHINERY LTD [JP]) 22 September 2004 (2004-09-22) * paragraphs [0058], [0059], [0081] * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65H B63H
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 March 2016	Examiner Pussemier, Bart
CATEGORY OF CITED DOCUMENTS 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		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	

EPO FORM 1503 03/82 (P04C01)

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

EP 12 15 9034

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.

08-03-2016

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP S62215476 A	22-09-1987	JP H0375471 B2 JP S62215476 A	02-12-1991 22-09-1987
JP 2010037083 A	18-02-2010	NONE	
EP 0316974 A1	24-05-1989	EP 0316974 A1 IT 1223115 B US 4958779 A	24-05-1989 12-09-1990 25-09-1990
EP 1460015 A1	22-09-2004	CN 1533975 A DE 602004001410 T2 EP 1460015 A1	06-10-2004 05-07-2007 22-09-2004