(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 1 717 182 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
30.05.2007 Bulletin 2007/22

(43) Date of publication A2:
02.11.2006 Bulletin 2006/44

(21) Application number: **06003997.1**

(22) Date of filing: **27.02.2006**

(51) Int Cl.:
B65H 51/22 *(2006.01)* ***D01H 13/10*** *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

(30) Priority: **28.04.2005 JP 2005132522**

(71) Applicant: **MURATA KIKAI KABUSHIKI KAISHA**
Minami-ku
Kyoto-shi
Kyoto 601 (JP)

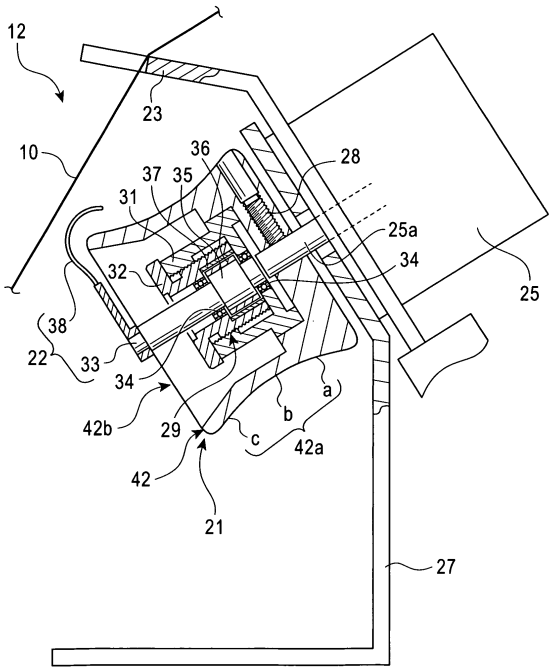
(72) Inventors:
- **Ueda, Kenichi**
  Kusatsu-shi
  Shiga (JP)
- **Yagi, Hiroyuki**
  Izumiotsu-shi
  Osaka (JP)

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

(54) **Yarn slack eliminating device in textile machine**

(57) The present invention provides a yarn slack eliminating device in a textile machine which allows a yarn hooking member to offer a stable rotational resistance to a slack eliminating roller to enable the formation of packages of a stable quality. A yarn slack eliminating device (12) includes a rotatively driven slack eliminating roller (21) and a yarn hooking member (22) attached concentrically and relatively rotatably to the slack eliminating roller (21). A flyer shaft (33) of the yarn hooking member (22) includes a columnar portion (35) the axis of which coincides with a rotation axis. A permanent magnet (36) is placed around an outer peripheral surface of the columnar portion (35). A hysteresis material (37) is placed opposite the permanent magnet (36) in a radial direction. A cylindrical adjustment bolt (32) in which the hysteresis material (37) is installed is screwed into a nut member (31) fixed to the slack eliminating roller (21). Rotating the adjustment bolt (32) enables a change in the opposite area of the permanent magnet (36) and hysteresis material (37).

FIG. 4



EP 1 717 182 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 06 00 3997

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 Y	EP 1 457 448 A (MURATA MACHINERY LTD [JP]) 15 September 2004 (2004-09-15) * page 5, paragraph 35 - paragraph 39 * * figure 10 * -----	1,5 2-4	INV. B65H51/22 D01H13/10
Y A	EP 1 462 405 A (SAURER ALLMA GMBH [DE]) 29 September 2004 (2004-09-29) * page 3, paragraph 13 * * figure 2 * * abstract * -----	2-4 1	
D,A	JP 2004 277946 A (MURATA MACHINERY LTD) 7 October 2004 (2004-10-07) * abstract; figure 19 * -----	1,3,5	
A	GB 2 128 213 A (SCHUBERT & SALZER MASCHINEN) 26 April 1984 (1984-04-26) * page 1, line 24 - line 49 * * page 3, line 107 - line 127 * * page 4, line 69 - line 106 * * page 5, line 19 - line 32 * * page 5, line 74 - line 86 * * page 6, line 33 - line 91 * * figure 1 * -----	1,3,5	TECHNICAL FIELDS SEARCHED (IPC) B65H D01H D04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	26 March 2007	Guisan, Thierry

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 06 00 3997

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.

26-03-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1457448 A	15-09-2004	CN 1530478 A	22-09-2004
		JP 3700706 B2	28-09-2005
		JP 2004277031 A	07-10-2004
EP 1462405 A	29-09-2004	NONE	
JP 2004277946 A	07-10-2004	NONE	
GB 2128213 A	26-04-1984	CS 8306264 A2	16-09-1988
		DE 3238376 A1	26-04-1984
		EP 0108195 A1	16-05-1984
		HK 30187 A	24-04-1987
		IN 161751 A1	30-01-1988
		JP 1725573 C	19-01-1993
		JP 4013272 B	09-03-1992
		JP 59138563 A	09-08-1984
		MY 35987 A	31-12-1987
		SE 454876 B	06-06-1988
		SE 8305087 A	17-04-1984

EPO FORM P0459

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