

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 0 939 156 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
16.05.2001 Bulletin 2001/20

(51) Int. Cl.⁷: **D03D 47/34, B65H 51/22**

(43) Date of publication A2:
01.09.1999 Bulletin 1999/35

(21) Application number: **99102773.1**

(22) Date of filing: **23.02.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: **Zenoni, Pietro**
24026 Leffe (IT)

(74) Representative:
Modiano, Guido, Dr.-Ing. et al
Spandonari & Modiano S.r.l.,
Corso Duca degli Abruzzi, 16
10129 Torino (IT)

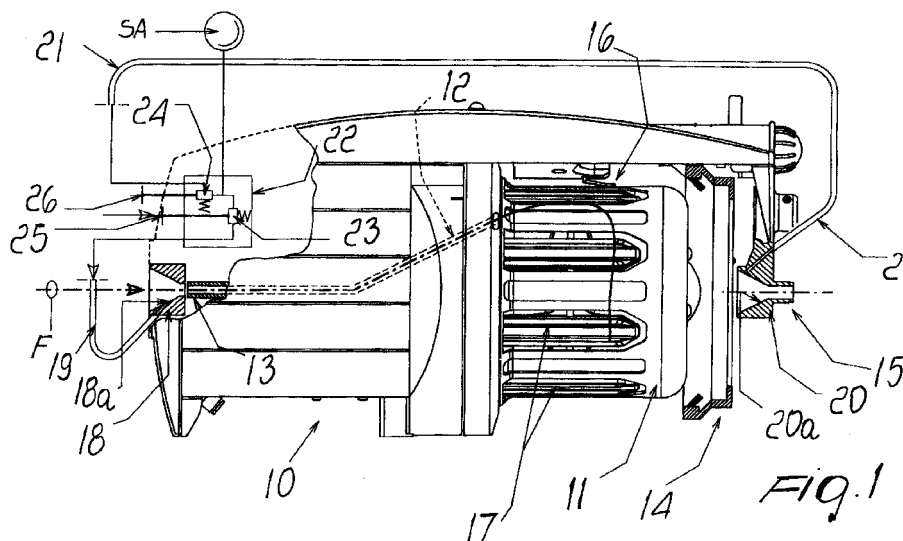
(30) Priority: **26.02.1998 IT TO980152**

(71) Applicant:
L.G.L. Electronics S.p.A.
24024 Gandino (Bergamo) (IT)

(54) Method and device for the pneumatic threading of textile machine weft feeders

(57) A method for the pneumatic threading of weft feeders (10) comprising a fixed drum (11), a hollow driving shaft (13), a hollow windmilling arm (12) which winds the thread onto the drum, braking means (14) and a final thread guiding ring (15). The method comprises the steps of: providing the feeder (10) with a first pneumatic element (18) and with a second pneumatic element (20) which are located at the infeed of the driving shaft (13) and at the output (15) of the feeder, respectively, and selectively activating the pneumatic elements

in order to obtain the partial threading of the front part of the feeder (10) only, by guiding the thread (F) through the braking means (14) and the final thread guiding ring (15), or the partial threading of the rear part of the feeder (10) only, by activating the first pneumatic element (20) in order to guide the thread from the infeed of the driving shaft (13) to the base of the drum (11) through the windmilling arm (12).



EP 0 939 156 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 10 2773

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US 5 441 087 A (HELLSTROEM JERKER ET AL) 15 August 1995 (1995-08-15) * column 1, line 64 - column 3, line 5; figure 1 *	1-3, 5	D03D47/34 B65H51/22
X	US 5 487 415 A (MAINA BRUNO) 30 January 1996 (1996-01-30) * column 3, line 48 - column 4, line 2; figure 2 *	1, 3-5	
A	EP 0 567 045 A (LGL ELECTRONICS SPA) 27 October 1993 (1993-10-27) * claim 1; figure 1 *	3	
D,A	EP 0 446 447 A (SOBREVIN) 18 September 1991 (1991-09-18) * column 1, line 5 - line 34; figure 1 *	3	
D,A	EP 0 370 066 A (IRO AB) 30 May 1990 (1990-05-30) * claim 1; figure 1 *	3	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			D03D B65H
Place of search	Date of completion of the search	Examiner	
THE HAGUE	23 March 2001	D'Souza, J	
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04C01)

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

EP 99 10 2773

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.

23-03-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5441087 A	15-08-1995	DE 9117045 U	11-05-1995
		DE 59204616 D	18-01-1996
		WO 9222693 A	23-12-1992
		EP 0589944 A	06-04-1994
		JP 6510824 T	01-12-1994
		KR 231524 B	15-11-1999
		DE 4120413 A	24-12-1992
US 5487415 A	30-01-1996	IT VC910010 U	19-03-1993
		CZ 9400583 A	15-06-1994
		DE 69207202 D	08-02-1996
		DE 69207202 T	15-05-1996
		EP 0607147 A	27-07-1994
		JP 3058914 B	04-07-2000
		JP 6510823 T	01-12-1994
		KR 248532 B	01-04-2000
		AT 132212 T	15-01-1996
		WO 9306277 A	01-04-1993
		ES 2083740 T	16-04-1996
EP 0567045 A	27-10-1993	IT 1259551 B	20-03-1996
		DE 69308062 D	27-03-1997
		DE 69308062 T	05-06-1997
		US 5351724 A	04-10-1994
EP 0446447 A	18-09-1991	DE 4007131 A	12-09-1991
		AT 124732 T	15-07-1995
		BR 9100911 A	05-11-1991
		CN 1054624 A, B	18-09-1991
		CS 9100584 A	15-09-1991
		DE 9018101 U	02-02-1995
		DE 59009377 D	10-08-1995
		EP 0659918 A	28-06-1995
		EP 0657379 A	14-06-1995
		ES 2074112 T	01-09-1995
		JP 3021712 B	15-03-2000
		JP 4213561 A	04-08-1992
		US 5181544 A	26-01-1993
EP 0370066 A	30-05-1990	DE 3734284 A	13-04-1989
		DE 8712946 U	10-12-1987
		AT 83273 T	15-12-1992
		BR 8807715 A	09-10-1990
		CN 1033851 A, B	12-07-1989
		CS 277012 B	18-11-1992
		DE 3876629 A	21-01-1993

EPO FORM P0459

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

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

EP 99 10 2773

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.

23-03-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0370066 A		DE 3876629 D	21-01-1993
		DE 3876629 T	08-04-1993
		WO 8902944 A	06-04-1989
		ES 2011113 A	16-12-1989
		JP 2840846 B	24-12-1998
		JP 3500308 T	24-01-1991
		KR 9601892 B	06-02-1996
		SU 1836507 A	23-08-1993
		US 5094275 A	10-03-1992
