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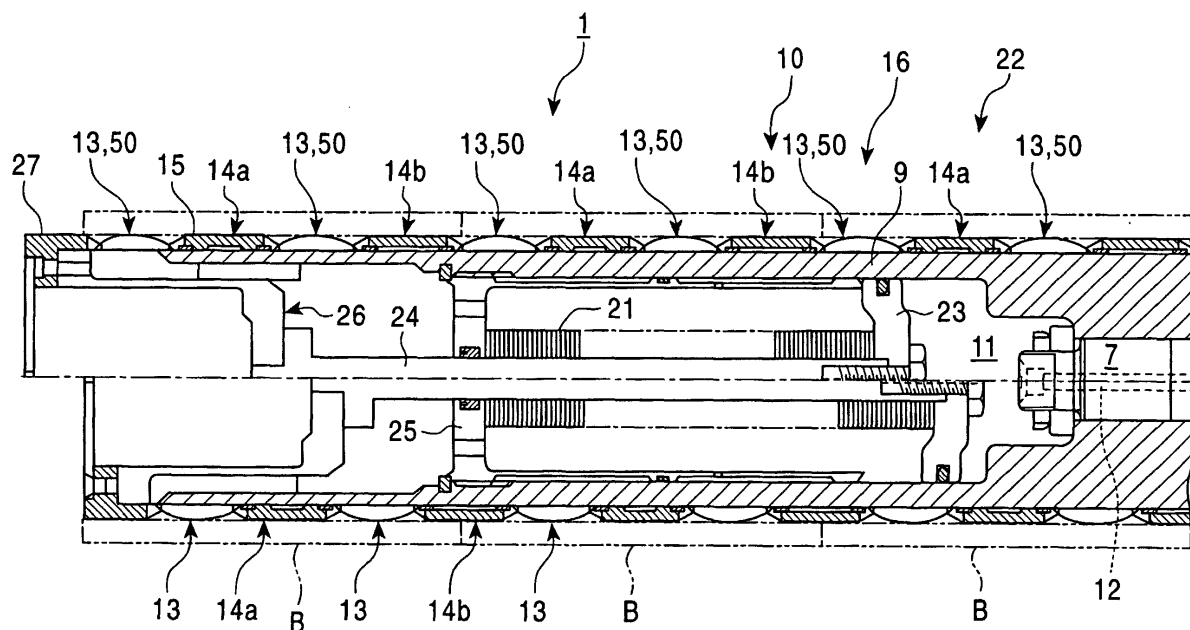
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(54) **Bobbin chuck mechanism of a bobbin holder**

(57) To provide a bobbin holder the critical speed of which is high and resulting in a high speed rotation of the bobbin and from which an accomplished package can be detached smoothly a curved or bending laminated chuck piece 13 is disposed between retention rings

14a, 14b in order to swell to the radial direction by compressing a peripheral part 15 of a cylindrical member 9 for inserting a bobbin B to the axis direction, and a spacer 50 is provided between the retention rings 14a, 14b for limiting the swell of the chuck piece 13 to the radial direction (Fig. 1).

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

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EP 02 00 5523

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.7)
X	DE 743 337 C (JAGENBERG-WERKE AG.) 23 December 1943 (1943-12-23) * the whole document *	1,4	B65H54/54 B65H75/24
X	US 5 603 463 A (I. KUMO ET AL.) 18 February 1997 (1997-02-18) * claims 1-6,10; figures 1-5 *	1,2	
A		4	
X	US 3 980 250 A (L. PERSSON) 14 September 1976 (1976-09-14) * column 7, line 4-25; figures *	1-3	
X	US 2 941 735 A (N.C. WYETH) 21 June 1960 (1960-06-21) * the whole document *	1,2,4,5	
P,X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 06, 4 June 2002 (2002-06-04) -& JP 2002 060132 A (MURATA MACH LTD), 26 February 2002 (2002-02-26) * abstract *	1,2,4-6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
X	US 3 434 675 A (I. ZUCKERMAN) 25 March 1969 (1969-03-25) * the whole document *	1,4	B65H
X	US 3 113 744 A (J. NISENSEN) 10 December 1963 (1963-12-10) * the whole document *	1,4	
A	DE 23 56 014 A (VEB SPINNEREIMASCHINENBAU) 18 July 1974 (1974-07-18) * claims; figures *	1-4	
A	US 5 217 175 A (A. STITZ ET AL.) 8 June 1993 (1993-06-08) * figures *	1,4	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 May 2003	Examiner D'Hulster, E
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 (P04001)

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

EP 02 00 5523

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.

07-05-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 743337	C	23-12-1943	FR 875630 A	29-09-1942
US 5603463	A	18-02-1997	JP 3198736 B2	13-08-2001
			JP 7034334 A	03-02-1995
			CN 1113382 A , B	13-12-1995
			DE 69418692 D1	01-07-1999
			DE 69418692 T2	02-12-1999
			DE 69429373 D1	17-01-2002
			DE 69429373 T2	18-07-2002
			EP 0663365 A1	19-07-1995
			EP 0850867 A2	01-07-1998
			WO 9502551 A1	26-01-1995
US 3980250	A	14-09-1976	SE 380782 B	17-11-1975
			SE 393792 B	23-05-1977
			BE 826761 A1	16-07-1975
			BR 7501616 A	16-12-1975
			CH 590941 A5	31-08-1977
			CS 198162 B2	30-05-1980
			DD 121765 A5	20-08-1976
			DE 2511988 A1	09-10-1975
			ES 435748 A1	16-03-1977
			FR 2264907 A1	17-10-1975
			GB 1499909 A	01-02-1978
			IT 1034391 B	10-09-1979
			JP 50132229 A	20-10-1975
			NL 7503123 A	23-09-1975
			SE 7414160 A	13-05-1976
US 2941735	A	21-06-1960	NONE	
JP 2002060132	A	26-02-2002	NONE	
US 3434675	A	25-03-1969	NONE	
US 3113744	A	10-12-1963	NONE	
DE 2356014	A	18-07-1974	DD 103209 A1	12-01-1974
			CS 182952 B1	31-05-1978
			DE 2356014 A1	18-07-1974
			PL 89631 B1	30-11-1976
			SU 616214 A1	25-07-1978
US 5217175	A	08-06-1993	CH 686723 A5	14-06-1996
			DE 4224100 A1	04-02-1993
			JP 5193829 A	03-08-1993

EPO FORM P0459

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