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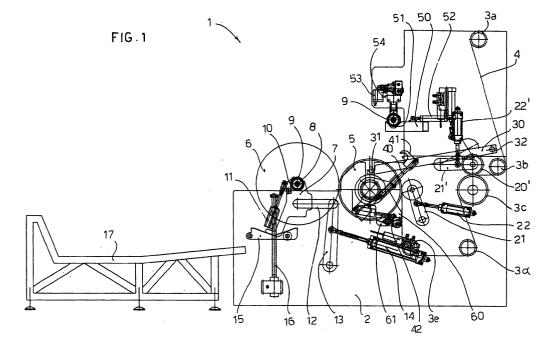
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- (54) Automatic rewinder particularly for flexible film of plastic material and relative method for producing rolls

(57) An automatic rewinding machine (1), particularly for film of plastic material, comprising film feeding means (3a, 3b, 3c, 3d, 3e, 5) able to feed a film (4) toward at least one core (9) supported by a mandrel (8) rotatably mounted in a winding cradle (7), so as to generate at least one roll (6) of film, roll unloading means (15) able to unload at least one finished roll (6) out of the winding area of the rewinder, core feeding means

(110, 111) able to feed cores (9) from a magazine toward a loading support (50) mounted on a frame (2) of the rewinder, a mandrel loading/unloading device (100) able to load a mandrel (8') inside the cores (9) disposed in the loading support (50) and unload the mandrel (8) from the cores (9), and mandrel handling means (30, 40) able to pick up the mandrel (8') from the loading support (50) to carry it toward the winding area.





## **EUROPEAN SEARCH REPORT**

Application Number

EP 02 01 7908

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
Х	WO 00 61480 A (CELL (IT)) 19 October 20	I SPA ;ACCIARI GIUSEPPE 00 (2000-10-19)	14	B65H18/00 B65H19/22
A		page 10, line 6; figure	1	B65H19/30 B65H19/28
X	EP 0 943 569 A (VAL 22 September 1999 (		14	
A		- paragraph '0030!;	1	
Х	DE 88 04 614 U (SUL 19 May 1988 (1988-0	ZER ESCHER WYSS GMBH) 5-19)	14	
A	* page 8, line 16 - figures *		1	
Α	US 5 217 177 A (STE 8 June 1993 (1993-0		1,14	
		- column 6, line 46;		
Α	EP 1 070 675 A (CEL 24 January 2001 (20		1,14	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
		- paragraph '0030!;		B65H
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			}	,
			}	
	The present search report has			
	Place of search	Date of completion of the search		Examiner
	THE HAGUE	20 November 2003		ken, W
X ; part Y : part	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot ument of the same category	E : earlier patent doo after the filing dat	cument, but publi te n the application	invention ished on, or
A : tech O : non	nnological background -written disclosure rmediate document			

EPO FORM 1503 03 82 (P04C01)

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

EP 02 01 7908

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.

20-11-2003

	Patent docume cited in search re		Publication date		Patent fam member(s		Publication date
WO	0061480	A	19-10-2000	IT AU BR CA CN EP WO JP	F1990085 4311900 0009733 2369568 1350505 1169250 0061480 2002541041	A A1 T A1 A1	12-10-2000 14-11-2000 02-01-2000 19-10-2000 22-05-2000 09-01-2000 03-12-2000
EP	0943569	A	22-09-1999	SE AT AT BR CA DE DE DE JP JP SE WO SE US	511670 232832 247593 9908860 2322021 69905410 6990556 0943569 1071627 3388231 2002506784 9800838 9947442 511829 9900460 6047916 6145778	T T A A1 D1 T2 D1 A2 A1 B2 T A A1 C2 A	08-11-1999 15-03-2003 15-09-2003 31-10-2000 23-09-1999 27-03-2003 25-09-2003 22-09-1999 31-01-2003 17-09-1999 23-09-1999 17-09-1999 11-04-2000 14-11-2000
DE	8804614	U	19-05-1988	DE	8804614	U1	19-05-1988
US 	5217177	Α	08-06-1993	NONE			
EP	1070675	A	24-01-2001	IT EP AT DE DK EP ES US	FI980131 1070675 221021 69902208 69902208 962411 0962411 2180264 6199789	A2 T D1 T2 T3 A1 T3	01-12-1999 24-01-2007 15-08-2007 29-08-2007 21-08-2007 14-10-2007 08-12-1999 01-02-2007 13-03-2007