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## (54)Layered roller

(57)A roller that is insensitive to changes in engagement and drag torque, includes a rigid core; a first layer surrounding the core and having a Poisson's ratio of between 0.4 and 0.5 and a modulus of elasticity of between 0.2 and 10 MPa; a second layer surrounding the first layer and having a modulus of elasticity between 50 thousand and 210 thousand MPa; and a third layer surrounding the second layer and having a Poisson ratio of between 0.4 and 0.5 and a modulus of elasticity of between 0.2 and 10 Mega-Pascals.

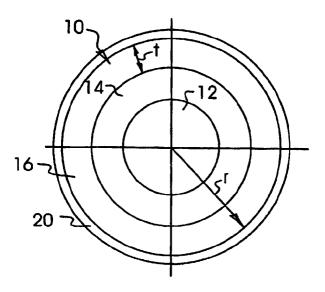


FIG. 3



## **EUROPEAN SEARCH REPORT**

Application Number

EP 01 12 1795

Category	Citation of document with indic	ation, where appropriate,	Relevant	CLASSIFICATION OF THE		
Calegory	of relevant passages		to claim	APPLICATION (Int.CI.7)		
A	US 5 607 039 A (BYERS 4 March 1997 (1997-03 * column 3, line 43 - * figure 13 *	-04)	* 1,2	B65H27/00 F16C13/00 B41N7/00 B41F13/08		
A	DE 197 01 542 A (TOA ELECTRIC CO LTD (JP)) 24 July 1997 (1997-07 * abstract * * column 2, line 37 - * figure 2 *	-24)	1,2			
A	EP 0 894 757 A (EASTM 3 February 1999 (1999 * abstract * * paragraph [0009] - * figure 1B *	-02-03)	1,2			
A	EP 0 385 948 A (HUBER 5 September 1990 (199 * page 2, line 27 - p * figure 1 *	0-09-05) age 4, line 45 *	1,2	TECHNICAL FIELDS SEARCHED (Int.CI.7) B65H F16C B41N B41F		
	Place of search	Date of completion of the search	<del></del>	Examiner		
	MUNICH	9 March 2004	Vog	Vogel, T		
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		E : earlier patent after the filing D : document cite L : document cite	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			
A : technological background O : non-written disclosure P : intermediate document		& mambar of the	& : member of the same patent family, corresponding document			

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

EP 01 12 1795

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.

09-03-2004

	Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US	5607039	Α	04-03-1997	NONE		
DE	19701542	Α	24-07-1997	JP DE		29-07-1997 24-07-1997
EP	0894757	A	03-02-1999	US EP JP	5924967 A 0894757 A1 11071050 A	20-07-1999 03-02-1999 16-03-1999
EP	0385948	Α	05-09-1990		0385948 A1	

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

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