



11) Publication number:

0 584 583 A3

(2) EUROPEAN PATENT APPLICATION

(21) Application number: 93112300.4

(51) Int. Cl.5: **G03B** 17/26, G03C 3/00

(2) Date of filing: 30.07.93

Priority: 03.08.92 JP 206653/92 12.10.92 JP 272987/92 07.12.92 JP 326982/92

Date of publication of application:02.03.94 Bulletin 94/09

Designated Contracting States:
DE NL

Date of deferred publication of the search report: 18.05.94 Bulletin 94/20

Applicant: FUJI PHOTO FILM CO., LTD. No. 210, Nakanuma Minami-Ashigara-shi Kanagawa-ken(JP)

 Inventor: Shimizu, Makoto, c/o Fuji Photo Film Co., Ltd.
 210 Nakanuma, Minami-Ashigara-shi Kanagawa-ekn(JP)

Inventor: Esaki, Toshiro, c/o Fuji Photo Film

Co., Ltd.

210 Nakanuma,

Minami-Ashigara-shi

Kanagawa-ekn(JP)

Inventor: Shibata, Tadayoshi, c/o Fuji Photo

Film Co., Ltd. 210 Nakanuma,

Minami-Ashigara-shi

Kanagawa-ekn(JP)

Inventor: Takahashi, Koichi, c/o Fuji Photo

Film Co., Ltd. 210 Nakanuma, Minami-Ashigara-shi Kanagawa-ekn(JP)

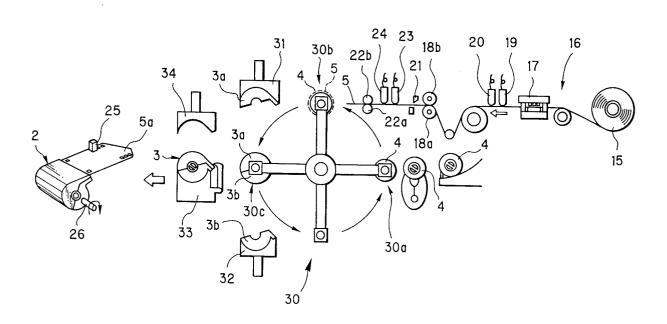
Representative: Patentanwälte Grünecker, Kinkeldey, Stockmair & Partner Maximilianstrasse 58 D-80538 München (DE)

Method and apparatus for manufacturing photographic film and photographic film cassette.

properties in a photographic film cassette manufacturing apparatus, a perforator (7) for providing a long film (15) with perforations and a cutter (21) for cutting the long film into individual filmstrip to be contained in the film cassette are driven synchronously with transport of the long film. A magnetic recording head (19) for recording data on a magnetic recording layer of the long film is driven in synchronism with the perforator or the cutter. The long film is transported in a first direction before being cut into the individual filmstrips. In cooperation with the cutting, the trailing end of the individual filmstrip in the first direction is held to be displaced from the long film transport

path, and moved in the reverse of the first direction so as to secure the trailing end to the spool. A cassette shell (3) consisting of a pair of shell halves is temporarily assembled by mating the shell halves together while containing a spool inside the shell halves, and thereafter opened to an extent that confining elements still confine the flanges of the spool. The trailing end of the filmstrip is inserted into the opened cassette shell and secured to the spool. Then, the shell halves are mated together again and the spool is rotated so as to wind the filmstrip into the closed cassette shell.

FIG.4





EUROPEAN SEARCH REPORT

Application Number EP 93 11 2300

		DERED TO BE RELEVAN		
Category	Citation of document with i of relevant pa	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
Y	US-A-4 574 563 (S.		1,2,16, 19,20, 22,23	G03B17/26 G03C3/00
A	* column 3, line 24 * figures *	- column 7, line 3 *	18	
`			10	
Y	WO-A-90 04254 (EAST	MAN KODAK COMPANY)	1,2,16, 19,20, 22,23	
	* abstract; figure	1 *		
4			18	
A	EP-A-O 082 675 (KOM CO. LTD.) * page 4, line 21 -	IISHIROKU PHOTO INDUSTRY page 7, line 1 *	1,18,19, 22	
	* figures 1-4 *			
				TECHNICAL FIELDS SEARCHED (Int.Cl.5)
				G03B G03C
	The present search report has b	een drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	THE HAGUE	26 November 1993	HER	YET, C
X : part Y : part	CATEGORY OF CITED DOCUME icularly relevant if taken alone icularly relevant if combined with an	E : earlier patent doc after the filing da other D : document cited in	cument, but publi ate n the application	shed on, or
doci A: tech O: non	ument of the same category mological background -written disclosure rmediate document	L : document cited fo & : member of the sa document	or other reasons	



	CLAIMS INCURRING FEES			
The present European patent application comprised at the time of filing more than ten claims.				
	1	All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.		
[Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid.		
		namely claims:		
[No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.		
	ł	CK OF UNITY OF INVENTION		
		Division considers that the present European patent application does not comply with the requirement of unity of		
invention and relates to several inventions or groups of inventions, namely:				
172111	51 y .			
		See sheet -B-		
		All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims		
	_	Only part of the further search fees have been paid within the fixed time limit. The present European search		
		report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid.		
		namely claims:		
	X	None of the further search fees has been paid within the fixed time limit. The present European search report		
	تت	has been drawn up for those parts of the European patent application which relate to the invention first		
		mentioned in the claims.		
l		. 1-24		



European Patent Office

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions.

1. Claims 1-24 : Magnetic marking of filmstrip

2. Claims 25-36: Cutting and spooling of filmstrip

3. Claims 37-44: Widening of cartridge housing mouth for insertion of filmstrip