Europäisches Patentamt

European Patent Office

Office européen des brevets



EP 0 713 780 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 07.08.1996 Bulletin 1996/32 (51) Int. Cl.6: **B41J 19/14**

(11)

(43) Date of publication A2: 29.05.1996 Bulletin 1996/22

(21) Application number: 96200209.3

(22) Date of filing: 30.01.1991

(84) Designated Contracting States: DE ES FR GB IT NL

(30) Priority: 02.02.1990 JP 22177/90 25.07.1990 JP 198851/90

(62) Application number of the earlier application in accordance with Art. 76 EPC: 91300699.5

(71) Applicant: CANON KABUSHIKI KAISHA Tokyo (JP)

(72) Inventors:

 Masumoto, Kazuyuki Ohta-ku, Tokyo (JP)

 Arakawa, Junichi Ohta-ku, Tokyo (JP)

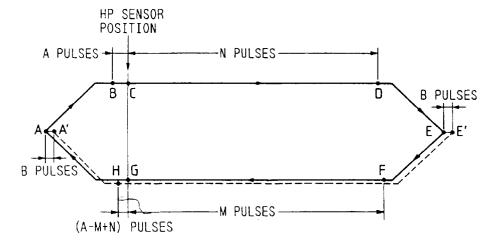
(74) Representative: Beresford, Keith Denis Lewis et BERESFORD & Co.

2-5 Warwick Court **High Holborn** London WC1R 5DJ (GB)

(54)Serial recording apparatus for bidirectional recording

(57)A serial recording apparatus for reciprocating a recording head with respect to a recording medium to perform bidirectional recording includes a position detector for detecting a reference position of the recording head, a driving unit for reciprocating the recording head within a predetermined area including the reference position, a calculating unit for calculating a difference between reference positions detected by the position detector by reciprocal movement when the recording head is reciprocated by the driving unit within the predetermined area, and a correcting unit for correcting a positional error in bidirectional recording on the basis of the difference calculated by the calculating

FIG 5





EUROPEAN SEARCH REPORT

Application Number EP 96 20 0209

Category	Citation of document with in of relevant pa	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)	
X A	13 April 1988	- column 5, line 8;	2-5,8,9, 19 6,7,10, 12,23,24	B41J19/14	
X A	PATENT ABSTRACTS OF vol. 007, no. 153 (& JP-A-58 062084 (S * abstract *		2,4,6,8, 9,19 12,23,24		
X	PATENT ABSTRACTS OF vol. 006, no. 117 (JAPAN JAPAN M-139), 30 June 1982 UJITSU LTD), 13 March	2,4,19		
Α	US-A-4 321 609 (COM ET AL.) * the whole documen	 PUTER PERIPHERALSFIDLER t *	13-15		
А	PATENT ABSTRACTS OF vol. 008, no. 195 (1984 & JP-A-59 083675 (R * abstract *		6	TECHNICAL FIELDS SEARCHED (Int.Cl.6) B41J	
A	FR-A-2 554 050 (CEN 3 May 1985 * page 3, line 10 -	TRONICS DATA COMPUTER) line 33; claim 1 *	10		
A	FR-A-2 390 287 (TRI AG) 8 December 1978 * page 1, line 1 -		16		
	The present search report has be	-			
		Date of completion of the search 31 May 1996	ქიი	Examiner Disting, T	
X : part Y : part doc A : tech	CATEGORY OF CITED DOCUMENT ticularly relevant if taken alone ticularly relevant if combined with anouncer of the same category included by the cat	T : theory or principle E : earlier patent doc after the filing da	e underlying the ument, but publi te the application r other reasons	invention shed on, or	



EUROPEAN SEARCH REPORT

Application Number EP 96 20 0209

	DOCUMENTS CONSI				
Category	Citation of document with in of relevant pa	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)	
Α	1990	E-0890), 16 February	1,18		
ļ	& JP-A-01 295695 (M CO LTD), 29 Novembe * abstract *	ATSUSHITA ELECTRIC IN r 1989, 	ND		
A	PATENT ABSTRACTS OF vol. 007, no. 059 (& JP-A-57 203578 (0 December 1982, * abstract *	JAPAN M-199), 11 March 1983 KI DENKI KOGYO KK), 1	1,18		
A	PATENT ABSTRACTS OF vol. 011, no. 210 (& JP-A-62 027169 (0 LTD), 5 February 19 * abstract *	M-604), 8 July 1987 KI ELECTRIC IND CO	1,18		
				TECHNICAL FIELDS SEARCHED (Int.Cl.6)	
į					
	The present search report has be	en drawn up for all claims			
	Place of search		Examiner		
Place of search Date of completion THE HAGUE 31 May 1			Joo	Joosting, T	
(CATEGORY OF CITED DOCUMEN		inciple underlying the		
Y: part docu	icularly relevant if taken alone icularly relevant if combined with ano ment of the same category nological background	after the fili ther D : document ci L : document ci	: earlier patent document, but published on, or after the filing date : document cited in the application : document cited for other reasons		
O: non-	written disclosure mediate document		& : member of the same patent family, corresponding document		