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(54) **Thermal dot printer**

(57) A thermal dot printer controls energy applied to individual heat generating members (101) to control the amount of heat generated by the heat generating members (101), thereby controlling the ink melting area on an ink ribbon, and transfers the melted ink on a paper to print a gradation image on the paper. The size L_m of each heat generating element (101) in the main scanning direction and the arranging pitch DOP_m of the heat

generating elements (101) in the main scanning direction have a relationship of $L_m \leq DOP_m \times (2/3)$, while the size L_s of each heat generating element (101) in the sub scanning direction has a relationship of $L_m < L_s \leq DOP_s$ with respect to the pitch DOP_s in the sub scanning direction and the size L_m of the heat generating elements (101) in the main scanning direction.

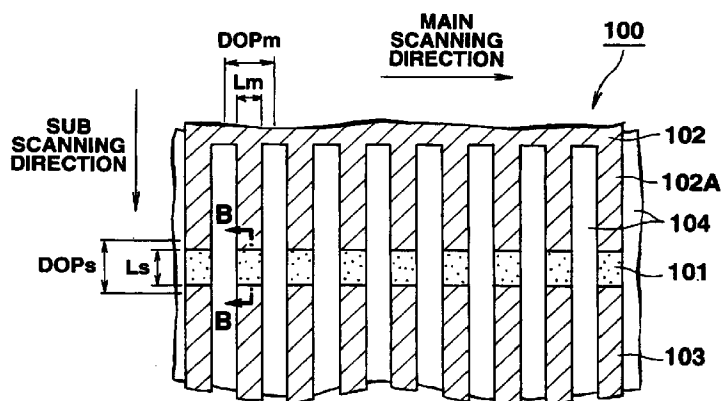


FIG. 11A

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EUROPEAN SEARCH REPORT

Application Number
EP 94 11 3071

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.6)
X A	EP-A-0 500 334 (RISO KAGAKU CORPORATION) * page 3, line 19 - line 29; claim 1; figure 2 *	1-10 11-21	B41J2/345
P,X	EP-A-0 572 193 (BROTHER KOGYO K.K.) * column 3, line 20 - column 4, line 28; claims 1,2; figures 1,2 *	1-21	
X	EP-A-0 371 457 (CANON K.K.) * abstract; figures 48,49 *	16-21	
A	PATENT ABSTRACTS OF JAPAN vol. 11, no. 76 (M-569) [2523] , 7 March 1987 & JP-A-61 230959 (MATSUSHITA ELECTRIC IND CO LTD), 15 October 1986, * abstract *	3,8,13, 19	
A	PATENT ABSTRACTS OF JAPAN vol. 12, no. 190 (M-704) [3037] , 3 June 1988 & JP-A-62 297161 (HITACHI LTD), 24 December 1987, * abstract *	5,10,15, 21	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	PATENT ABSTRACTS OF JAPAN vol. 13, no. 526 (M-897), 22 November 1989 & JP-A-01 214456 (SHINKO ELECTRIC CO LTD), 28 August 1989, * abstract *	1-21	B41J
A	EP-A-0 159 642 (HITACHI LTD) * the whole document *	1-21	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10 October 1996	Examiner Joosting, T
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