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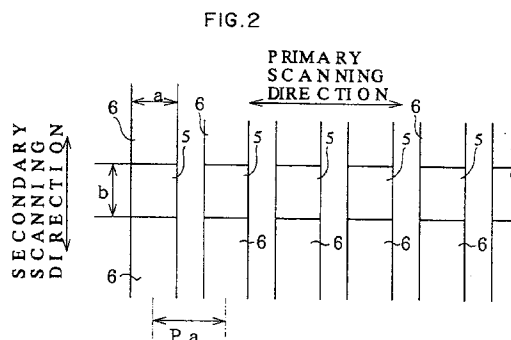
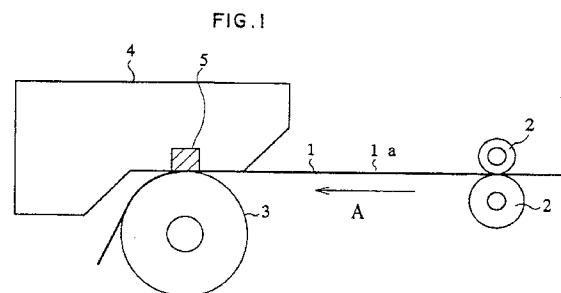
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(54) **Dot-matrix thermal recording device.**

(57) Provided is a device which can form favorable perforated images corresponding to the resolution of the thermal head, reproduce faithful printed images for all kinds of original picture images, avoid ink transfer, and adapt itself to different environmental conditions, and is suitable for use with different thermal recording materials such as thermal recording paper, OHP TP sheets, and thermal stencil master plates.

In the device of the present invention, a thermal head 4 consisting of a plurality of heat emitting elements 5 arranged in a single row in the primary scanning direction is directly contacted to the recording surface of a thermal recording material 1 such as thermal recording paper, and the thermal recording material 1 is moved relative to the thermal head 4 in the secondary scanning direction which is perpendicular to the direction of the row of the heat emitting elements so that picture images may be formed with a dot matrix by selectively heating the thermal heat emitting elements, the ratios of the length of each heat emitting element 5 in the primary and secondary scanning directions to the pitches of the primary and secondary scanning are set 30 to 70% and 60 to 95%, respectively.





European Patent
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EUROPEAN SEARCH REPORT

Application Number

EP 92 30 1345

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.5)
X	US-A-4 781 113 (T.YAMAMOTO ET AL.) * column 2, line 55 - column 3, line 17; figure 2 *	1-5	B41C1/14 B41C1/055 B41J2/345
X	US-A-4 675 692 (T.GOSHIMA ET AL.) * column 3, line 7 - line 30; figures 8-11 * * column 5, line 49 - line 59; figure 18 * * column 6, line 42 - line 49 *	1-5	
X	US-A-4 559 542 (T.MITA) * column 2, line 38 - line 63; figure 2 * * column 3, line 21 - line 47 *	1-5	
X	US-A-4 428 690 (T.MITA) * column 2, line 16 - line 32; figure 4 * * column 2, line 51 - line 59; figure 6 *	1-5	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B41C B41J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 SEPTEMBER 1992	Examiner BACON A. J.
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 O : non-written disclosure P : intermediate document 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 & : member of the same patent family, corresponding document			

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