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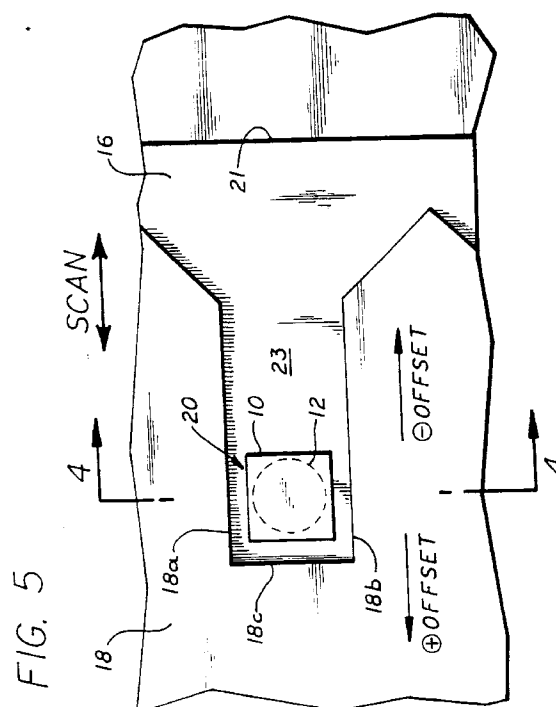
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(54) **Method for reducing spray in thermal ink jet pens firing polymer-containing inks.**

(57) Spray (or satellite drops) in thermal ink-jet pens firing inks containing polymer dispersants for pigments is reduced by increasing the distance between the firing resistor (10) and the nozzle (12). This may be done by offsetting the resistor with respect to the nozzle, increasing the thickness of the orifice plate (14), increasing the thickness of the barrier layer (18) which defines the firing chamber (20) and supports the nozzle plate, or recessing the resistor deeper into the substrate (16) on which it is supported. Any or all of the foregoing may be implemented to reduce spray. A combination of thicker top plates and offsetting the nozzle relative to the resistor is particularly efficacious in reducing spray.





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 30 2813

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-4 980 703 (NEC CORPORATION) * column 1, line 36 - line 50 * * column 2, line 18 - column 4, line 32; figures 2-4 *	1	B41J2/16		
X A	EP-A-0 303 350 (HEWLETT-PACKARD COMPANY) * column 2, line 46 - column 3, line 58; figures 3-4 *	1,2,7,8 3-6,9			
X A	US-A-4 794 411 (TAUB ET AL.) * column 1, line 30 - line 41 * * column 2, line 7 - column 4, line 3; figures 4-7 *	1,2,7,8 3-6,9			
A	PATENT ABSTRACTS OF JAPAN vol. 15, no. 39 (M-1075) (4567) 30 January 1991 & JP-A-02 276 648 (RICOH CO., LTD.) 13 November 1990 * abstract *	1			
A	EP-A-0 464 733 (XEROX CORPORATION) * column 12, line 48 - column 13, line 49; figures 5-7 *	1	<table border="1"> <thead> <tr> <th>TECHNICAL FIELDS SEARCHED (Int.Cl.5)</th> </tr> </thead> <tbody> <tr> <td>B41J</td> </tr> </tbody> </table>	TECHNICAL FIELDS SEARCHED (Int.Cl.5)	B41J
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The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 5 December 1994	Examiner RIVERO, C		
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