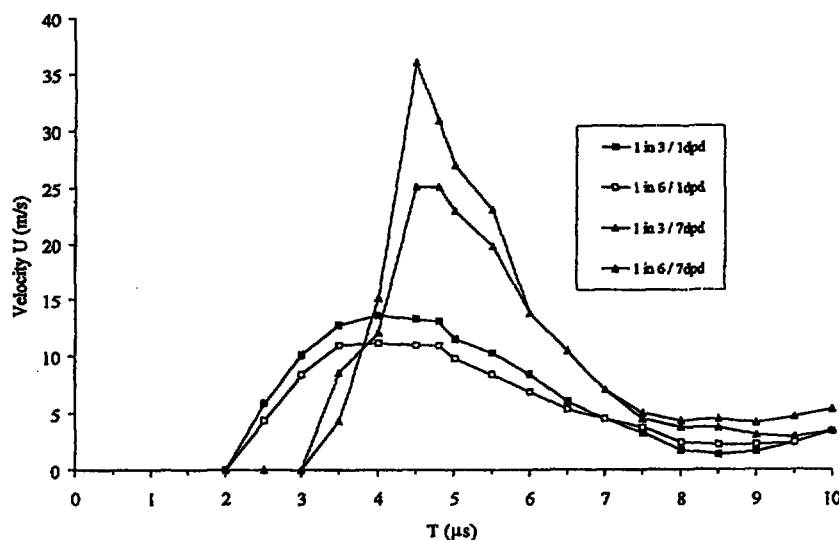




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B41J 2/045, 2/21	A1	(11) International Publication Number: WO 98/51504 (43) International Publication Date: 19 November 1998 (19.11.98)						
<p>(21) International Application Number: PCT/GB98/01387</p> <p>(22) International Filing Date: 15 May 1998 (15.05.98)</p> <p>(30) Priority Data:</p> <table border="0"> <tr> <td>9709862.8</td> <td>15 May 1997 (15.05.97)</td> <td>GB</td> </tr> <tr> <td>9802871.5</td> <td>12 February 1998 (12.02.98)</td> <td>GB</td> </tr> </table> <p>(71) Applicant (for all designated States except US): XAAR TECHNOLOGY LIMITED [GB/GB]; Science Park, Cambridge CB4 4FD (GB).</p> <p>(72) Inventor; and</p> <p>(75) Inventor/Applicant (for US only): WEBB, Laura, Anne [GB/GB]; 56 Middle Watch, Swavesey, Cambridge CB4 5RN (GB).</p> <p>(74) Agent: MOIR, Michael, Christopher; Mathys & Squire, 100 Grays Inn Road, London WC1X 8AL (GB).</p>		9709862.8	15 May 1997 (15.05.97)	GB	9802871.5	12 February 1998 (12.02.98)	GB	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, <u>SG</u>, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>
9709862.8	15 May 1997 (15.05.97)	GB						
9802871.5	12 February 1998 (12.02.98)	GB						

(54) Title: OPERATION OF DROPLET DEPOSITION APPARATUS



(57) Abstract

A method of operating an inkjet printhead for printing on a substrate, the printhead having an array of channels; a series of nozzles which communicate respectively with said channels for ejection of droplets therefrom; connection means for connecting the channels with a source of ink; and electrically actuatable means associated with each channel and actuatable a plurality of times in accordance with print tone data, thereby to eject a corresponding number of droplets to form a printed dot of appropriate tone on the substrate; the method comprising the steps of: applying one or a plurality of electrical signals to the electrically actuatable means associated with a channel in accordance with the print tone data, the duration of each signal being chosen such that the velocity of the corresponding ejected droplet is substantially independent of (a) whether or not channels in the vicinity of said selected channel are similarly actuated to effect drop ejection simultaneously with drop ejection from said selected channel, and (b) the number of droplets to be ejected in accordance with the print tone data.