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71 Applicant: **XEROX CORPORATION, Xerox Square - 020, Rochester New York 14644 (US)**

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72 Inventor: **Genovese, Frank C., 17 Shelbourne Chase, Fairport New York 14450 (US)**

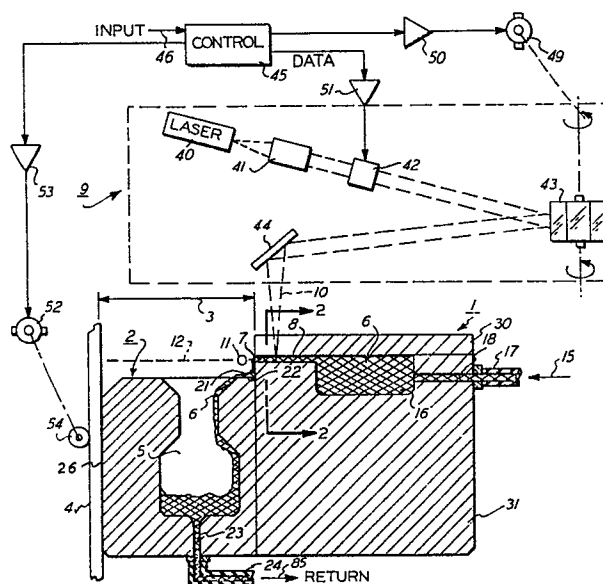
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74 Representative: **Goode, Ian Roy et al, European Patent Attorney c/o Rank Xerox Patent Department 338 Euston Road, London NW1 3BH (GB)**

54 **Drop-on-demand ink drop marking apparatus and method.**

57 Drop-on-demand ink drop marking apparatus and method of the type employing a plurality of capillaries (8). The capillaries are coupled to a pressurized liquid source (16) to cause the liquid ink (6) to weep from the orifice (7). A drop (11) is formed by stimulating the ink (6) in the capillary (8). High drop generation rates are possible because the weeping ink flow enables the liquid ink (6) consumed in the process of forming a drop (11) to be more rapidly replaced in the capillary (8) than if capillary action alone is relied upon for the replacement. A laser scanning beam (10) reflected from a rotating polygon mirror (43) is one embodiment for stimulating the ink (6) to cause its expulsion from the capillary (8), and into flight towards a target (4). The beam heats the ink (6) to expel it. Alternatively, a solid state laser adjacent each capillary (8) is disclosed for stimulating the capillary (8) to expel a drop (11) into flight toward a target (4).





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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	<u>DE - A1 - 2 945 658</u> (CANON K.K.) * page 6 * & <u>US - A - 4 251 824</u> ---	1,2	B 41 J 3/04
A	<u>DE - A1 - 2 460 913</u> (IBM CORP.) * claims 1, 2, 3; page 5; fig. 1 * & <u>US - A - 3 878 519</u>	1,2,3, 4	
D,A	<u>US - A - 3 907 429</u> (L. KUHN et al.) * complete document * ---		TECHNICAL FIELDS SEARCHED (Int.Cl. 3)
D,A	<u>US - A - 4 047 183</u> (H.H. TAUB) * complete document * ---		
D,A	<u>US - A - 4 097 373</u> (J.C. ALLRED) * complete document * -----		B 41 J 3/04
			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
☒ The present search report has been drawn up for all claims			&: member of the same patent family, corresponding document
Place of search Berlin		Date of completion of the search 14-10-1982	Examiner ZOPF