

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 January 2003 (03.01.2003)

PCT

(10) International Publication Number
WO 03/001294 A1

(51) International Patent Classification⁷: **G03C 1/73**,
G03F 7/028, 7/004

(21) International Application Number: PCT/US01/47816

(22) International Filing Date:
13 December 2001 (13.12.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/886,428 21 June 2001 (21.06.2001) US

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant: **INTERNATIONAL BUSINESS MACHINES** [—/—]; New Orchard Road, Armonk, NY 10504 (US).

Published:
— with international search report

(72) Inventors: **LI, Wenjie**; 10 Manor Way, Poughkeepsie, NY 12603 (US). **VARANASI, Pushkara, Rao**; 24 Misty Ridge Circle, Poughkeepsie, NY 12603 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(74) Agent: **PEPPER, Margaret, A.**; International Business Machines Corporation, Dept. 18G/Bldg. 300-482, 2070 Route 52, Hopewell Junction, NY 12533 (US).

(54) Title: RESIST COMPOSITIONS WITH POLYMERS HAVING 2-CYANO ACRYLIC MONOMER

(57) Abstract: Acid-catalyzed positive resist compositions which are imageable with 193 nm radiation and/or possibly other radiation and are developable to form resist structures of improved development characteristics and improved etch resistance are enabled by the use of resist compositions containing imaging polymer having a 2-cyano acrylic monomer.



WO 03/001294 A1