

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ G03F 7/11, C08B 15/06, C08L 1/12, 1/14, 1/10, 1/26	A1	(11) International Publication Number: WO 99/56178 (43) International Publication Date: 4 November 1999 (04.11.99)
(21) International Application Number: PCT/US99/08801 (22) International Filing Date: 20 April 1999 (20.04.99) (30) Priority Data: 09/069,573 29 April 1998 (29.04.98) US (71) Applicant: BREWER SCIENCE, INC. [US/US]; 2401 Brewer Drive, Rolla, MO 65401 (US). (72) Inventors: SHAO, Xie; Apartment 19, 1318 Truman Avenue, Rolla, MO 65401 (US). MEADOR, Jim, D.; 1126 Grenadier Lane, Ballwin, MO 63021 (US). BREWER, Terry, Lowell; Route 2, Box 297, Rolla, MO 65401 (US). (74) Agent: AMJAD, Holly, M.; Haverstock, Garrett & Roberts, Suite 1610, 611 Olive Street, St. Louis, MO 63101 (US).		(81) Designated States: CA, CN, JP, KR, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: FAST-ETCHING, THERMOSETTING ANTI-REFLECTIVE COATINGS DERIVED FROM CELLULOSIC BINDERS (57) Abstract Anti-reflective compositions are prepared from cellulosic binders and alkylated aminoplast cross-linking agents derived from melamine, urea, benzoguanamine or glycoluril. These compositions are used to form bottom anti-reflective layers with high plasma etch selectivity when used in multilayer photoresist processes.		