

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 September 2010 (30.09.2010)

PCT

(10) International Publication Number
WO 2010/110848 A1

(51) International Patent Classification:
G03F 7/42 (2006.01) **C11D 11/00** (2006.01)
C11D 7/34 (2006.01)

(21) International Application Number:
PCT/US2010/000776

(22) International Filing Date:
15 March 2010 (15.03.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/413,085 27 March 2009 (27.03.2009) US

(71) Applicant: **EASTMAN CHEMICAL COMPANY** [US/
US]; 200 South Wilcox Drive, Kingsport, TN 37660
(US).

(72) Inventors: **QUILLEN, Michael, Wayne**; 424 Hidden
Acres Road, Kingsport, TN 37664 (US). **O'DELL, Dale,
Edward**; 274 Samlola Road, Blountville, TN 37617
(US). **LEE, Zachary, Philip**; 9187 Jeanette Court, Cov-
ington, GA 30014 (US). **MOORE, John, Cleaon**; 5316
Fieldcrest Drive, Camarillo, CA 93012 (US). **MCEN-
TIRE, Edward, Enns**; 1913 Ashfield Drive, Kingsport,
TN 37664 (US).

(74) Agent: **NELSON, Brett, L.**; P.O. Box 511, Kingsport,
TN 37662-5075 (US).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: COMPOSITIONS AND METHODS FOR REMOVING ORGANIC SUBSTANCES

(57) Abstract: Compositions and methods useful for the removal of organic substances from substrates, for example, electronic device substrates such as microelectronic wafers or flat panel displays, are provided. A method is presented which applies a minimum volume of the composition as a coating to the inorganic substrate whereby sufficient heat is added and immediately rinsed with water to achieve complete removal. These compositions and methods are particularly suitable for removing and completely dissolving photoresists of the positive and negative varieties as well as thermoset polymers from electronic devices.



WO 2010/110848 A1