

(19) World Intellectual Property Organization  
International Bureau



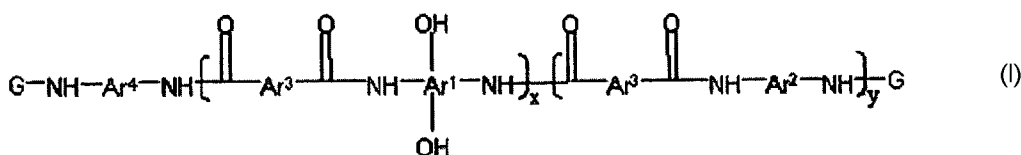
(43) International Publication Date  
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number  
WO 2004/111726 A3

- (51) International Patent Classification:  
G03F 7/023 (2006.01) G03F 7/30 (2006.01)
- (21) International Application Number:  
PCT/US2004/017486
- (22) International Filing Date: 3 June 2004 (03.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/476,816 6 June 2003 (06.06.2003) US
- (71) Applicant (for all designated States except US): FUJIFILM ELECTRONIC MATERIALS U.S.A., INC. [US/US]; 80 Circuit Drive, North Kingstown, Rhode Island 02852 (US).
- (72) Inventors: RUSHKIN, Lilya; 6 Lois Drive, Walpole, MA 02081 (US). NAIINI, Ahmad, A.; 355 Shippee Road, East Greenwich, RI 02818 (US). HOPLA, Richard; 4 Jessica Court, Cranston, RI 02920 (US). WATERSON, Pamela, J.; 504 School Street, Northbridge, MA 01534 (US). WEBER, William, D.; 1490 Pawtucket Avenue, Rumford, RI 02916 (US). POWELL, David, B.; 14336 Spring Lake RD., Minnetonka, MN 55345 (US).
- (74) Agent: GREELEY, Paul, D.; Ohlandt, Greeley, Ruggiero & Perle, L.L.P., 1 Landmark Square, 10th Floor, Stamford, CT 06901-2682 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- (88) Date of publication of the international search report:  
28 June 2007
- 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.

(54) Title: NOVEL PHOTSENSITIVE RESIN COMPOSITIONS



(57) Abstract: A heat resistant negative working photosensitive composition that comprises (a) one or more polybenzoxazole precursor polymers (I), wherein x is an integer from about 10 to about 1000, y is an integer from 0 to about 900 and (x+y) is about less than 1000; Ar<sup>1</sup> is a tetravalent aromatic group, a tetravalent heterocyclic group, or mixtures thereof; Ar<sup>2</sup> is a divalent aromatic, a divalent heterocyclic, a divalent alicyclic, or a divalent aliphatic group that may contain silicon; Ar<sup>3</sup> is a divalent aromatic group, a divalent aliphatic group, a divalent heterocyclic group, or mixtures thereof; Ar<sup>4</sup> is Ar<sup>1</sup>(OH)<sub>2</sub> or Ar<sup>2</sup>; G is a monovalent organic group a carbonyl, carbonyloxy or sulfonyl group; (b) one or more photo-active compounds which release acid upon irradiation 20 (PAGs); (c) one or more latent crosslinkers each of which contains at least two ~N-(CH<sub>2</sub>OR)<sub>n</sub> units (n=1 or 2, wherein R is a linear or branched C<sub>1</sub>-C<sub>8</sub> alkyl group); (d) at least one solvent, and (e) at least one dissolution rate modifier, with the proviso that when the latent crosslinker is highly reactive, the dissolution rate modifier does not contain carboxylic acid groups.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/17486

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **G03F 7/023( 2006.01),7/30( 2006.01)**

USPC: 430/18,191,270.1,325,330,906  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 430/18,191,270.1,325,330,906

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 EAST

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,760,162 A (SEZI et al ) 02 June 1998 (03.06.1998), whole reference	---
A	US 5,486,447 A (Hammerschmidt et al) 23 January 1996 (23.01.1996), whole reference	---
A	US 6,183,934 (KAWAMONZEN) 06 February 2001 (06.02.2001). whle reference	---
A,P	US 2004/0023147 A1 (HIRANO et al) 04 February 2004 (04.02.2004), whole reference	---

Further documents are listed in the continuation of Box C.

See patent family annex.

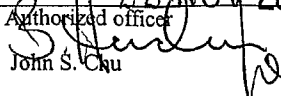
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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search  
 21 September 2006 (21.09.2006)

Date of mailing of the international search report

22 NOV 2006

Name and mailing address of the ISA/US  
 Mail Stop PCT, Attn: ISA/US  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 Facsimile No. (571) 273-3201

Authorized officer  
  
 John S. Chu  
 Telephone No. 703-308-0661