

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 November 2006 (16.11.2006)

PCT

(10) International Publication Number
WO 2006/121741 A3

(51) International Patent Classification:
G03F 1/14 (2006.01)

(21) International Application Number:
PCT/US2006/017067

(22) International Filing Date: 2 May 2006 (02.05.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/126,708 10 May 2005 (10.05.2005) US

(71) Applicant (for all designated States except US): **LAM RESEARCH CORPORATION** [US/US]; 4650 Cushing Parkway, Fremont, California 94438-6470 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SADJADI, S., M., Reza** [US/US]; 20311 Carol Lane, Saratoga, California 95070 (US). **BRIGHT, Nicolas** [US/US]; 5950 Country Club Parkway, San Jose, California 95138 (US).

(74) Agents: **LEE, Michael, B., K.** et al.; Beyer Weaver & Thomas, LLP, P.O. Box 70250, Oakland, California 94612-0250 (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, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, 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, IS, IT, LT, LU, LV, 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).

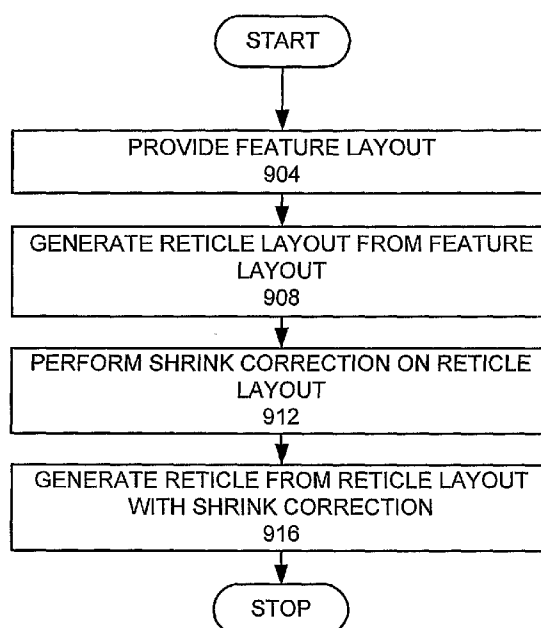
Published:

— with international search report

(88) Date of publication of the international search report:
15 February 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: COMPUTER READABLE MASK SHRINK CONTROL PROCESSOR



(57) Abstract: An apparatus comprising computer readable media is provided. The computer readable media comprises computer readable code for receiving a feature layout and computer readable code for applying shrink correction on the feature layout. The computer readable code for applying the shrink correction comprises providing corner cutouts, adjusting line width and length, shape modifications, etc. for forming features in a patterned layer.

WO 2006/121741 A3