(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 June 2009 (11.06.2009)

PCT

(10) International Publication Number
WO 2009/073206 A1

(51) International Patent Classification:
H01L 21/304 (2006.01)

(21) International Application Number:
PCT/US2008/013395

(22) International Filing Date:
5 December 2008 (05.12.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/992,416 5 December 2007 (05.12.2007) US
12/328,327 4 December 2008 (04.12.2008) US

(71) Applicant *(for all designated States except US)*: **MOLECULAR IMPRINTS, INC.** [US/US]; 1807 West Braker Ln, Bldg., C-100, Austin, TX 78758-3605 (US).

(72) Inventors: **SCHUMAKER, Philip, D.**; 7600 Sandia Loop, Austin, TX 78735 (US). **MOKABERI, Babak**; 1702 Harvest Bend Lane, Cedar Park, Texas 78613 (US). **RAFFERTY, Tom H.**; 1906 Stamford Ln, Austin, Texas 78703 (US).

(74) Agent: **WOOD, Laura**; Po Box 81536, Austin, TX 78708-1536 (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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, 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, MT, NL, NO, 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*

(54) Title: SPATIAL PHASE FEATURE LOCATION

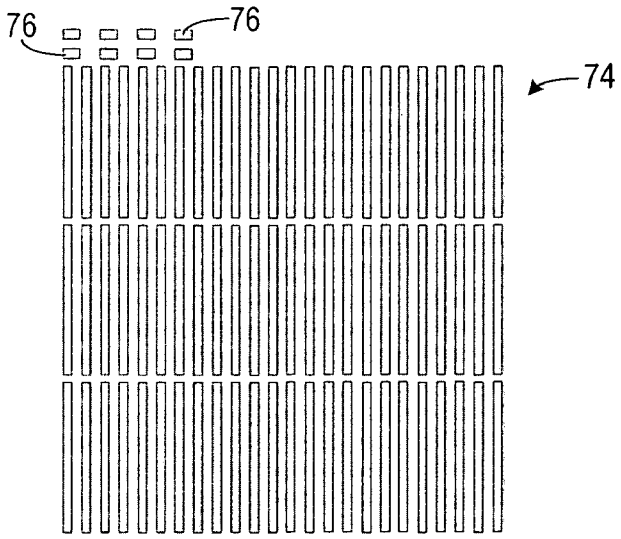

FIG. 5A

(57) Abstract: Methods for locating an alignment mark on a substrate are described. Generally, the substrate includes one or more locator marks adjacent to a substrate alignment mark. Locator marks provide the relative location of the substrate alignment mark such that the substrate alignment mark may be used in aligning a substrate with a template within a lithographic system with a reduced magnitude of relative displacement.

WO 2009/073206 A1