



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12Q 1/00, G01N 33/566, 33/543, 33/551, 33/553, 33/544	A1	(11) International Publication Number: WO 00/63419 (43) International Publication Date: 26 October 2000 (26.10.00)
(21) International Application Number: PCT/US00/10181 (22) International Filing Date: 14 April 2000 (14.04.00) (30) Priority Data: 60/129,664 15 April 1999 (15.04.99) US 60/170,947 15 December 1999 (15.12.99) US (71) Applicant: VIRTUAL ARRAYS, INC. [US/US]; 1033 Tulipan Drive, San Jose, CA 95129 (US). (72) Inventors: RAVKIN, Ilya; 945 Colorado Avenue, Palo Alto, CA 94303 (US). GOLDBARD, Simon; 1033 Tulipan Drive, San Jose, CA 95129 (US). HYUN, William, C.; 622 Quintara Street, San Francisco, CA 94116 (US). ZAROWITZ, Michael, A.; 981 Sunset Drive, San Carlos, CA 94070 (US). (74) Agents: HEINKEL, Gregory, L. et al.; Iota Pi Law Group, P.O. Box 60850, Palo Alto, CA 94306-0850 (US).		(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: COMBINATORIAL CHEMICAL LIBRARY SUPPORTS HAVING INDICIA AT CODING POSITIONS AND METHODS OF USE		
(57) Abstract A method for multiplexed detection and quantification of analytes by reacting them with probe molecules attached to specific and identifiable carriers. These carriers can be of different size, shape, color, and composition. Different probe molecules are attached to different types of carriers prior to analysis. After the reaction takes place, the carriers can be automatically analyzed. This invention obviates cumbersome instruments used for the deposition of probe molecules in geometrically defined arrays. In the present invention the analytes are identified by their association with the defined carrier, and not (or not only) by their position. Moreover, the use of carriers provides a more homogeneous and reproducible representation for probe molecules and reaction products than two-dimensional imprinted arrays or DNA chips.		