10/04/03
2003019916

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

(19) World Intellectual Property Organization
International Bureau

162162

(43) International Publication Date
18 April 2002 (18.04.2002)

PCT

(10) International Publication Number
WO 02/31106 A1

(51) International Patent Classification[7]: C12M 1/34, 3/00, G01N 33/543

(21) International Application Number: PCT/US00/27925

(22) International Filing Date: 10 October 2000 (10.10.2000)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, 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, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, 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:
— *with international search report*

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.

ACTION

WO 02/31106 A1

(54) Title: METHOD AND DEVICE FOR CREATING MICRO-ARRAYS

(57) Abstract: A method and device are provided for simultaneously creating a plurality of identical micro-arrays of biological samples. The invention utilizes a plurality of substrates, each of which having a top side, a bottom side, and a pattern of through-holes. Each through-hole has a wider upper cross-section, a narrower lower cross-section, and a step or plateau formed in the transition area. When the substrates are stacked, through-holes are in registry and form tunnels extending through the stack of substrates. Reagents of interest are caused to flow through the tunnels and deposit on the step or plateau area. A barrier layer may be provided to prevent leak-through between neighboring holes. After the desired reagents have been deposited, the substrates are separated. In this manner a series of micro-arrays, each capable of containing hundreds or thousands of biological samples such as cDNA fragments, is formed simultaneously.