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

(19) World Intellectual Property Organization
International Bureau

PCT

(43) International Publication Date
28 August 2008 (28.08.2008)

(10) International Publication Number
WO 2008/103430 A3

(51) **International Patent Classification:**
C12N 13/00 **(2006.01)**

(21) **International Application Number:**
PCT/US2008/002331

(22) International Filing Date:
22 February 2008 (22.02.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/902,664 22 February 2007 (22.02.2007) US

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(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, FT, 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, 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*

[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR MULTIFORCE HIGH THROUGHPUT SCREENING

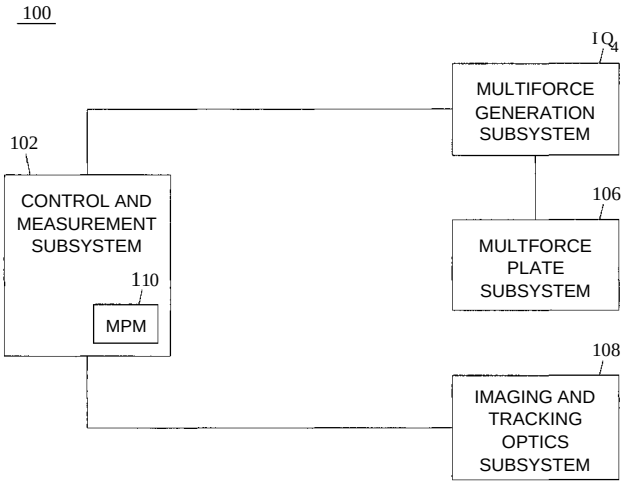

FIG. 1

(57) Abstract: Methods and systems for multiforce high throughput screening are disclosed. According to one aspect, the subject matter includes a high throughput screening system that includes a multiforce plate having a plurality of field forming poles where each field forming pole is positioned on the multiforce plate at a location corresponding to a well in a multiwell plate. The system also includes an exciter assembly with excitation poles positioned at locations corresponding to the field forming poles. The excitation poles are utilized for electrically or magnetically coupling to the field forming poles and for delivering at least one of an electric and magnetic field in the vicinity of the field forming poles. The coupled field forming poles apply force via the field(s) to probes located in the wells of the multiforce plate in order to move the probes and test mechanical properties of specimens in the wells.

WO 2008/103430 A3

(88) Date of publication of the international search report:
9 October 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/US 08/02331

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - C12N 13/00 (2008.04)
USPC - 435/173.1
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)
IPC(8) - C12N 13/00 (2008 04)
USPC - 435/173 1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 435/173 1. 287 1, 288 3, 288 4, 305 2, 436/8, 166, 518, 526, 538
(Text Search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (PGPB, USPT, USOC, EPAB, JPAB), DialogPRO (Engmee πng) and Google Scholar
Search Terms high throughput screening, magnetic, electric, field, probe, teardrop, gradient index, unattached, lens, robot, robotic, microscope, stage, simultaneous, simultaneously, magnetic, field, electric field, multiforce, multiS

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 2006/0229842 A1 (VICCI et al) 12 October 2006 (12 10 2006) fig 8, para [0006], 0010], [001 1], [0013], [0018], [0043], [0044], [0046], [0051], [0053], [0054], [0064], [0065], [0069], [0071], [0074]	1-36
Y	US 2004/0241759 A1 (TOZER et al) 02 December 2004 (02 12 2004) para [0002], [0032], [0148], [0149], [0288], [0290], [0301]	1-36
Y	US 2001/0055462 A1 (SEIBEL) 27 December 2001 (27 12 2001) para [0095], [0158]	10
Y	US 2003/01 18222 A1 (FORAN et al) 26 June 2003 (26 06 2003) para [0023]	14
Y	US 2004/0191915 A1 (BAWENDI et al) 30 September 2004 (30 09 2004) para [0030]	15
Y	US 2005/0064395 A1 (ISRAEL et al) 24 March 2005 (24 03 2005) para [0004], [0241]	29 and 31
Y	US 2005/0276727 A1 (PAWLISZYN et al) 15 December 2005 (15 12 2005) para [0282], [0307]	32

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'P'	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
14 June 2008 (14 06 2008)

Date of mailing of the international search report
25 JUN 2008

Name and mailing address of the ISA/US
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Facsimile No 571-273-3201

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PCT Helpd βsk 571-272-4300
PCT OSP 571-272-7774

Form PCT/ISA/210 (second sheet) (April 2007)