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

## (19) World Intellectual Property Organization

International Bureau





(10) International Publication Number WO 2013/016413 A3

- (43) International Publication Date 31 January 2013 (31.01.2013)
- (51) International Patent Classification: *Gθ1N 35/θ8* (2006.01) *Gθ1N 27/θ2* (2006.01) *Gθ1N 1/1θ* (2006.01)
- (21) International Application Number:

PCT/US2012/048127

(22) International Filing Date:

25 July 2012 (25.07.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/511,184 25 July 2011 (25.07.2011)

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, BN, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

### (54) Title: DROPLET ACTUATOR APPARATUS AND SYSTEM

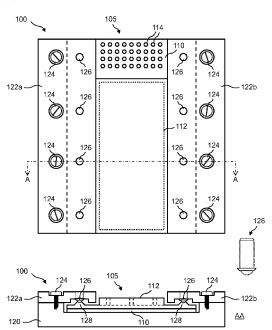


Figure 1

(57) Abstract: Droplet actuator apparatus and system are provided. An apparatus comprises: a microfluidics system having an insertion slot for insertion of a droplet actuator; a bottom plate against which the droplet actuator would slide when inserting the droplet actuator into the insertion slot; and means for forcing a substrate in the droplet actuator parallel to the bottom plate, wherein warpage in the substrate is corrected.







Published:

(88) Date of publication of the international search report: 4 April 2013

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

International application No. **PCT/US2012/048127** 

### A. CLASSIFICATION OF SUBJECT MATTER

G01N 35/08(2006.01)i, G01N 1/10(2006.01)i, G01N 27/02(2006.01)i

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)

 $G01N\ 35/08;\ C12M\ 1/00;\ B01F\ 13/00;\ B03C\ 9/00;\ G01N\ 27/26;\ B01J\ 19/00;\ B01D\ 57/02;\ B41J\ 2/045$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: droplet, actuator, microfluidics

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2010-0282608 A1 (SRINIVASAN, VIJAY et al.) 11 November 2010 See claims 1, 21.	1-30
A	US 2010-0120130 A1 (SRINIVASAN, VIJAY et al.) 13 May 2010 See claims 1, 17.	1-30
A	US 2010-0025250 A1 (PAMULA, VAMSEE K. et al.) 04 February 2010 See claims 17, 31.	1-30
A	US 2010-0307917 A1 (SRINIVASAN, VIJAY et al.) 09 December 2010 See claims 1, 39, 47.	1-30

	Further documents are	listed	in the	continuation	of Box C

See patent family annex.

- \* Special categories of cited documents:
- 'A" document defining the general state of the art which is not considered to be of particular relevance
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- "&" document member of the same patent family

Date of mailing of the international search report

Date of the actual completion of the international search

30 JANUARY 2013 (30.01.2013)

08 FEBRUARY 2013 (08.02.2013)

Name and mailing address of the ISA/KR

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Facsimile No. 82-42-472-7140

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/048127

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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