



(51) International Patent Classification:

B81B 1/00 (2006.01) **G01N 27/00** (2006.01)
B81B 7/00 (2006.01) **B01L 3/00** (2006.01)
H01L 21/44 (2006.01)

(21) International Application Number:

PCT/US2009/034635

(22) International Filing Date:

20 February 2009 (20.02.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/030,887 22 February 2008 (22.02.2008) US
61/045,578 16 April 2008 (16.04.2008) US

(71) Applicant (for all designated States except US): **FLUIDIGM CORPORATION** [US/US]; 7000 Shoreline Court, Suite 100, South San Francisco, California 94080 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **AMIN, Yusuf, D** [US/US]; 2278 Burgundy, Fairfield, California 94533 (US).

(74) Agents: **AUSTIN, James, E.** et al.; WEAVER AUSTIN VILLENEUVE & SAMPSON LLP, P.O. Box 70250, Oakland, California 94612-0250 (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, MK, 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).

[Continued on next page]

(54) Title: INTEGRATED CARRIER FOR MICROFLUIDIC DEVICE

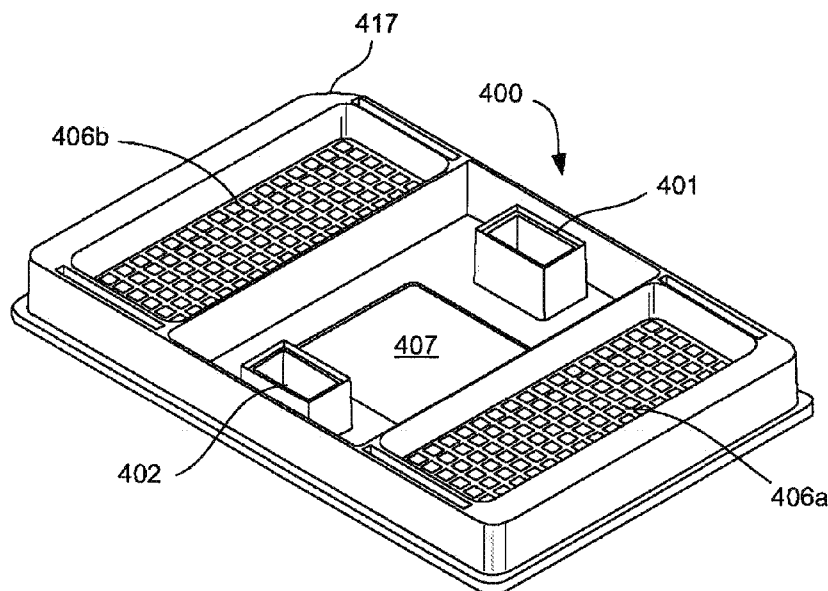


FIG. 4A

(57) Abstract: A carrier for holding a microfluidic device includes a substrate with a plurality of wells, each well defining a volume of between 0.1 μ l and 100 μ l; a plurality of channels within the substrate wherein each well is in fluid communication with at least one of the plurality of channels; and a receiving portion for receiving a microfluidic device and placing the microfluidic device in fluid communication with the plurality of wells. The carrier has a polymeric composition and/or an array of structural features that enhance its performance and compatibility with existing instrumentation.



Published:

— *with international search report (Art. 21(3))*