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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 June 2008 (12.06.2008)

PCT

(10) International Publication Number
WO 2008/070088 A3

(51) International Patent Classification:
H01L 33/00 (2006.01)

(21) International Application Number:
PCT/US2007/024855

(22) International Filing Date:
5 December 2007 (05.12.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/872,801 5 December 2006 (05.12.2006) US

(71) Applicant *(for all designated States except US)*: **NANO TERRA INC.** [US/US]; 790 Memorial Drive, Suite 202, Cambridge, MA 02139 (US).

(71) Applicants and
(72) Inventors: **MAYERS, Brian, T.** [US/US]; 40 Vinal Avenue #3, Somerville, MA 02143 (US). **CARBECK, Jeffrey** [US/US]; 124 Radcliffe Road, Belmont, MA 02478 (US). **SAADI, Wajeeh** [US/US]; 348 Franklin Street Apt. 2C, Cambridge, MA 02139 (US). **WHITESIDES, George, M.** [US/US]; 124 Grasmere Street, Newton, MA 02158 (US).

(74) Agents: **FEATHERSTONE, Donald, J.** et al.; Sterne, Kessler, Goldstein & Fox P.L.L.C., 1100 New York Avenue, N.W., Washington, DC 20005-3934 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, 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, 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, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

[Continued on next page]

(54) **Title:** EDGE-EMITTING LIGHT-EMITTING DIODE ARRAYS AND METHODS OF MAKING AND USING THE SAME

FIG. 1A

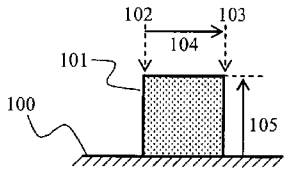


FIG. 1B

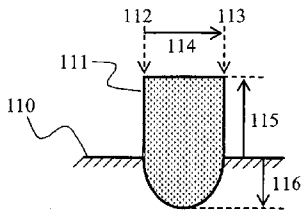


FIG. 1C

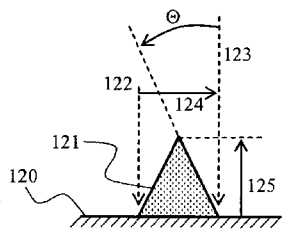
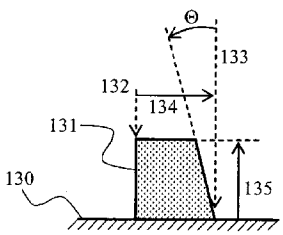


FIG. 1D



(57) **Abstract:** The present invention is directed to edge-emitting light-emitting diode arrays, a process to prepare the edge-emitting light-emitting diode arrays, and process products prepared by the process.

WO 2008/070088 A3

(88) Date of publication of the international search report:
25 September 2008