

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
26 February 2015 (26.02.2015)



(10) International Publication Number
WO 2015/026365 A9

(51) International Patent Classification:
G06T 17/00 (2006.01)

(21) International Application Number:

PCT/US2013/056388

(22) International Filing Date:

23 August 2013 (23.08.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant: **LANDMARK GRAPHICS CORPORATION** [US/US]; 2107 City West Boulevard, Building 2, Houston, Texas 77042 (US).

(72) Inventors: **YARUS, Jeffrey Marc**; 5234 N. Braeswood, Houston, Texas 77096 (US). **SHI, Genbao**; 17523 Indian Springs, Sugar Land, Texas 77479 (US). **CHAMBERS, Richard L.**; 9648 E. 119th Pl. SO., Bixby, Oklahoma 74008 (US). **LICERAS, Veronica**; 25931 Juniper Stone Lane, Katy, Texas 77494 (US).

(74) Agents: **BROWN, Randall, C.** et al.; Haynes and Boone, LLP, 2323 Victory Avenue, Suite 700, Dallas, TX 75219 (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, 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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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,

[Continued on next page]

(54) Title: LOCAL UPDATING OF 3D GEOCELLULAR MODEL

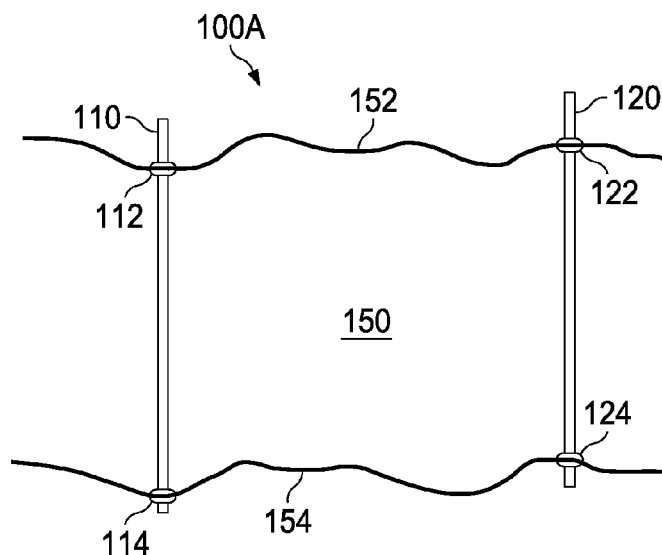


FIG. 1A

(57) Abstract: The disclosed embodiments include a method, apparatus, and computer program product for modifying a three-dimensional geocellular model. For example, one disclosed embodiment includes a system that includes at least one processor and at least one memory coupled to the at least one processor. The memory stores instructions that when executed by the at least one processor performs operations that includes loading into memory a three-dimensional geocellular model that corresponds to a two-dimensional geological model. The operations include determining a portion of the three-dimensional geocellular model affected by a change to the two-dimensional geological model and performing a local update to the portion of the three-dimensional geocellular model affected by the change.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG). **(48) Date of publication of this corrected version:**

28 January 2016

Published:

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

(15) Information about Correction:

see Notice of 28 January 2016