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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 June 2012 (21.06.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/082305 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2011/061225

(22) International Filing Date:
17 November 2011 (17.11.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/424,427 17 December 2010 (17.12.2010) US
61/549,056 19 October 2011 (19.10.2011) 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, 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, MD, 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).

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

WO 2012/082305 A2

(54) Title: WELLBORE APPARATUS AND METHODS FOR MULTI-ZONE WELL COMPLETION, PRODUCTION AND INJECTION

(57) Abstract: Completing a wellbore in a subsurface formation with packer assembly having first mechanically-set packer as first zonal isolation tool, and second zonal isolation tool comprises internal bore for receiving production fluids, and alternate flow channels. First packer has alternate flow channels around inner mandrel, and sealing element external to inner mandrel and includes operatively connecting packer assembly to a sand screen, and running into wellbore. First packer set by actuating sealing element into engagement with surrounding open-hole portion of the wellbore. Thereafter, injecting a gravel slurry and further injecting the gravel slurry through the alternate flow channels to allow it to bypass the sealing element, resulting in a gravel packed wellbore within an annular region between sand screen and surrounding formation below packer assembly.