



- (51) **International Patent Classification:**
E21B 43/08 (2006.01) *E21B 43/10* (2006.01)
- (21) **International Application Number:**
PCT/US2011/056371
- (22) **International Filing Date:**
14 October 2011 (14.10.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (71) **Applicant (for all designated States except US):** **HAL-LIBURTON ENERGY SERVICES, INC.** [US/US]; 10200 Bellaire Blvd., Houston, Texas 77072 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **HOLDERMAN, Luke William** [US/US]; 3709 Campstone Dr., Plano, Texas 75023 (US). **LOPEZ, Jean-Marc** [FR/US]; 7308 Stoddard Lane, Plano, Texas 75025 (US). **PENNO, Andrew David** [AU/FR]; 144 Rue Alfred Nobel, F-64000 Pau (FR). **FITZPATRICK, John** [CA/CA]; 645 - 7th Ave SWSuite 1600, Calgary, Alberta T2P 4GB (CA).
- (74) **Agents:** **GRISWOLD, Joshua A.** et al.; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, MN 55440 (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, 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).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

- with international search report (Art. 21(3))

(54) **Title:** WELL SCREEN WITH EXTENDING FILTER

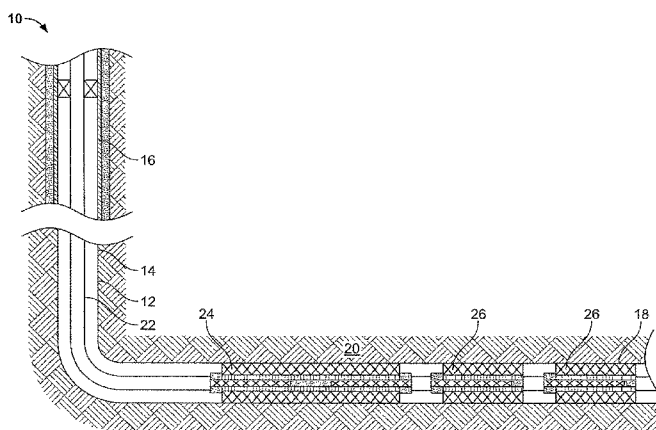


FIG. 1

(57) **Abstract:** A well screen assembly for a wellbore includes a base pipe and a filter assembly carried on the base pipe. The filter assembly has an internal passage in fluid communication with an opening through the base pipe. A swell material is carried in the base pipe between the filter assembly and the base pipe. The swell material is adapted to expand under specified conditions and displace the filter assembly radially toward a wall of the wellbore. A flow control device is provided in fluid communication between the internal passage of the filter assembly and the opening in the base pipe and is adapted to restrict communication of fluid with the opening in the base pipe. The well screen assembly can include a hydraulic, electric or optical communication line running axially through a length of the well screen assembly.