

(51) International Patent Classification:
E21B 43/08 (2006.01)(21) International Application Number:
PCT/US2009/064438(22) International Filing Date:
13 November 2009 (13.11.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/274,136 19 November 2008 (19.11.2008) US(71) Applicant (for all designated States except US): **BAKER HUGHES INCORPORATED** [US/US]; P.O. Box 4740, Houston, TX 77210-4740 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **PETERSON, Elmer, R.** [US/US]; 19606 Riverview Drive, Porter, TX 77367 (US).(74) Agent: **DUPHORNE, Darin, H.**; Baker Hughes Incorporated, P.O. Box 4740, Houston, Texas 77210-4740 (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, 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, 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
15 July 2010

(54) Title: METHOD FOR DOWNHOLE SCREEN MANUFACTURING

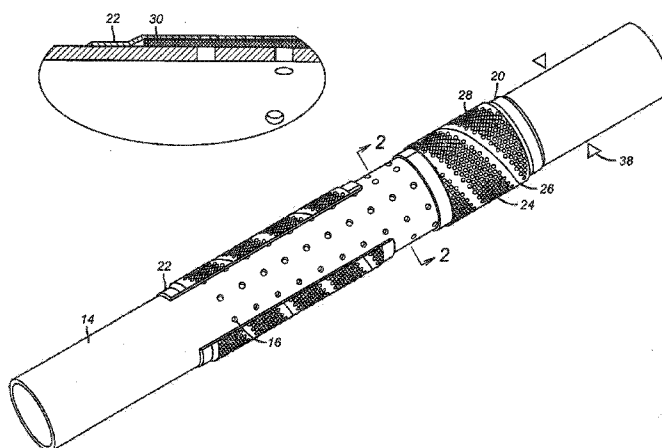


FIG. 1

(57) Abstract: A method of making a screen for downhole use uses mesh screen layers that are diffusion bonded to each other. The ends that will overlap to make a seam when the sheets that are attached together are rolled into a tube are compressed before the tube shape is created or thereafter when the tube shape and an inner base pipe are drawn through a die to join the seam made by the overlapping edges. Because of the compression of the edges, when they overlap to form a tube the wall thickness at the overlap is about the same as the remaining thickness of the screen portion. Optionally, a resilient material can be compressed into the open areas of the screen portions that will be overlapped to make the generally longitudinally oriented seam. The seam can be parallel to the screen axis or spiral around it. The outer perforated shroud provides a compressive force that maintains a barrier resistant to flow of sand particles between the seam overlapping surfaces as the outer perforated shroud, filtration tube and inner base pipe assembly is drawn through a die.