

(43) International Publication Date  
9 September 2011 (09.09.2011)(10) International Publication Number  
**WO 2011/106893 A1**

## (51) International Patent Classification:

*F16L 55/115* (2006.01) *F16L 55/00* (2006.01)  
*B23K 37/00* (2006.01) *F16L 55/10* (2006.01)

## (21) International Application Number:

PCT/CA2011/050121

## (22) International Filing Date:

1 March 2011 (01.03.2011)

## (25) Filing Language:

English

## (26) Publication Language:

English

## (30) Priority Data:

12/715,168 1 March 2010 (01.03.2010) US

(71) Applicant (for all designated States except US): **CARBER INVESTMENTS INC.** [CA/CA]; 911 Michigan Avenue, Point Edward, Ontario N7V 1H2 (CA).

## (72) Inventor; and

(75) Inventor/Applicant (for US only): **CARSON, Glenn** [CA/CA]; 1510 Venetian Boulevard, Unit M29, Point Edward, Ontario N7T 7X8 (CA).

(74) Agents: **CHARI, Santosh et al.**; Blake, Cassels & Graydon LLP, Box 25, Commerce Court West, 199 Bay Street, Suite 4000, Toronto, Ontario M5L 1A9 (CA).

(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, 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, 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))

[Continued on next page]

## (54) Title: PIPE SEALING TOOL WITH EXTERNAL CLAMP

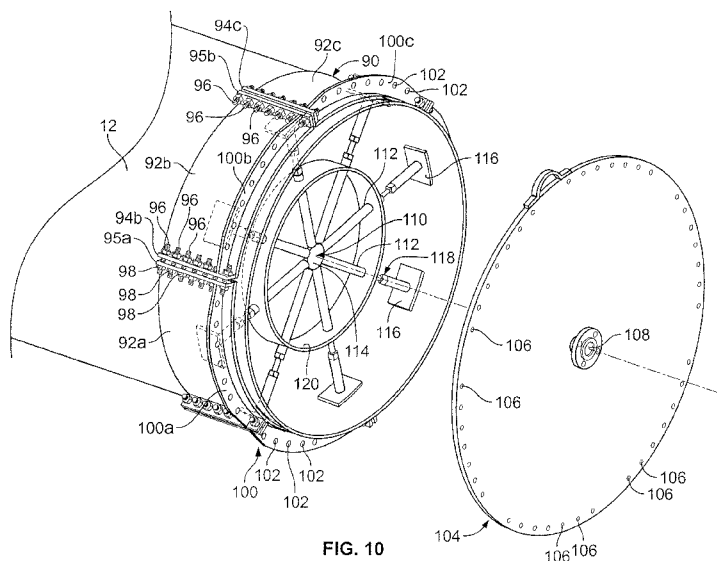


FIG. 10

(57) Abstract: An apparatus for sealing an open end of a pipe includes a clamp for frictionally being secured to the exterior of the pipe, a sealing plate for covering the open end of the pipe and being connectable to the clamp, and sealing means for urging the sealing plate towards the clamp and for forming a seal between the sealing plate and the open end of the pipe. In one aspect, the clamp comprises an annular body formed by at least two sections that are radially tightened over the pipe exterior. In another aspect, the clamp comprises cooperating annular bodies, one capable of radially narrowing the other for frictionally engaging the pipe outer surface. In another aspect the method provides a method of sealing an end of a pipe. According to the invention, once the open end is sealed, the interior of the pipe may be pressurized, for example for testing the integrity thereof.



---

— *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))*