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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 July 2010 (15.07.2010)

PCT

(10) International Publication Number
WO 2010/080625 A3

(51) International Patent Classification:
*F04B 39/12* (2006.01) *F04B 35/01* (2006.01)

(21) International Application Number:
PCT/US2009/068773

(22) International Filing Date:
18 December 2009 (18.12.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/138,776 18 December 2008 (18.12.2008) US

(71) Applicant *(for all designated States except US)*: **WEIR SPM, INC.** [US/US]; 7601 Wyatt Drive, Fort Worth, TX 76108 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **HAWES, John, E.** [US/US]; 1314 Meadow Ridge Ct., Southlake, TX 76092 (US). **MATZNER, Mark, D.** [US/US]; 2009 Tarver, Burleson, TX 76028 (US).

(74) Agent: **DERRINGTON, Keith, R.**; Bracewell & Giuliani LLP, P.O. Box 61389, Houston, TX 77208-1389 (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).

**Published**:

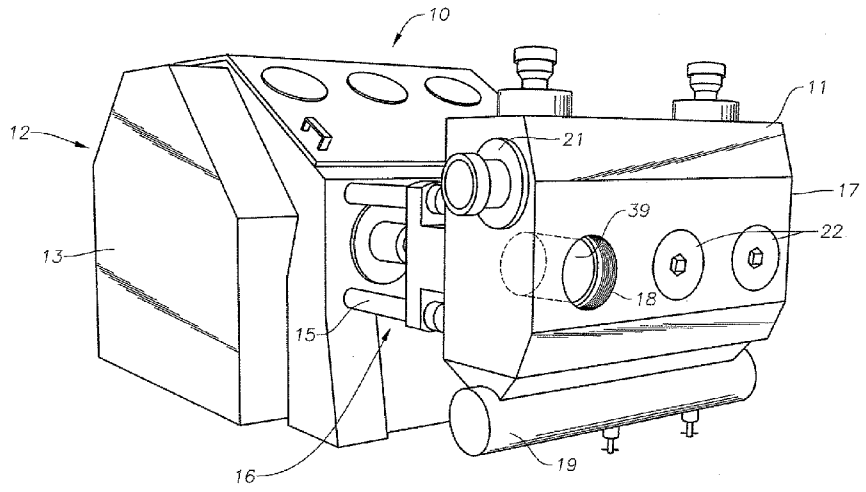
— *with international search report (Art. 21(3))*

— *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:
23 September 2010

(54) Title: SUCTION PORT LOCK NUT WITH STUB BUTTRESS THREADS

Fig. 1




(57) Abstract: A reciprocating pump assembly having a block body, a cylinder chamber in the block body, a plunger reciprocatingly disposed in the block body, an opening in the block body adjacent the cylinder chamber, and a cover plate in the opening. Threads on the outer periphery of the cover plate engage threads formed within the opening. The threaded outer periphery of the cover plate extends into the cylinder chamber and past the threaded portion of the opening so thai the load on the cover plate transfers from fully formed threads on the cover plate to threads formed on the opening.

WO 2010/080625 A3