

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 April 2006 (27.04.2006)

PCT

(10) International Publication Number
WO 2006/043921 A1

(51) International Patent Classification : **F16L 37/08**,
37/088

(21) International Application Number:
PCT/US2004/033786

(22) International Filing Date: 13 October 2004 (13.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **EATON CORPORATION** [US/US]; Eaton Center, 1111 Superior Avenue, Cleveland, OH 44114-2584 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **OLSON, Darwin, C.** [US/US]; 28985 White Road, Perrysburg, OH 43661 (US).

(74) Agents: **DIEDRICH, Bradley, J.** et al.; Honigman Miller Schwartz and Cohn LLP, 32270 Telegraph Road, Suite 225, Bingham Farms, MI 48025 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

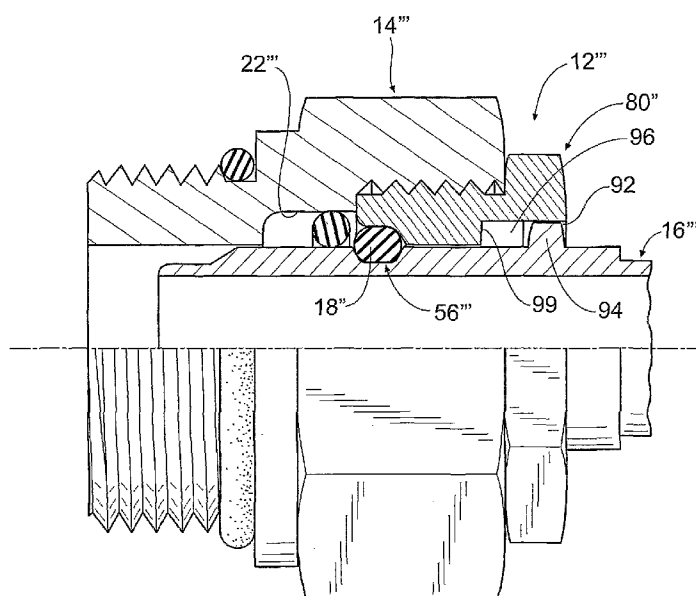
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LOW PRESSURE FITTING



(57) Abstract: A fitting (12) is provided that includes a receptacle having an inner wall forming a female member (14). The inner wall includes a shoulder (44) and a land (42). A male member (16) is received in the female member (14) with a gap therebetween. The male member (16) includes an outwardly opening groove (56). An O-ring (18) is seated between the outwardly opening groove (56) in the male member (16) and the shoulder (44) and the land (42) of the receptacle to prevent removal of the male member (16) from the receptacle. The outwardly opening groove (56), the shoulder (44) and the land (42) are configured such that compression of the O-ring (18) is sufficient to prevent removal of the male member (16) from the female member (14).

WO 2006/043921 A1