

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/005873 A3

(51) International Patent Classification⁷: **B29C 37/02**

(21) International Application Number:
PCT/US2004/006161

(22) International Filing Date: 2 March 2004 (02.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/478,313 13 June 2003 (13.06.2003) US
10/788,921 26 February 2004 (26.02.2004) US

(71) Applicant (for all designated States except US): **UNDERGROUND SOLUTIONS INC.** [US/US]; 229 Howes Run Road, Sarver, PA 16055 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ST. ONGE, Bryan** [CA/CA]; Box 351, Hastings, Ontario K0L 1Y0 (CA). **ST. ONGE, Henri** [CA/CA]; RR# 2, Box 10, Hastings, Ontario K0L 1Y0 (CA).

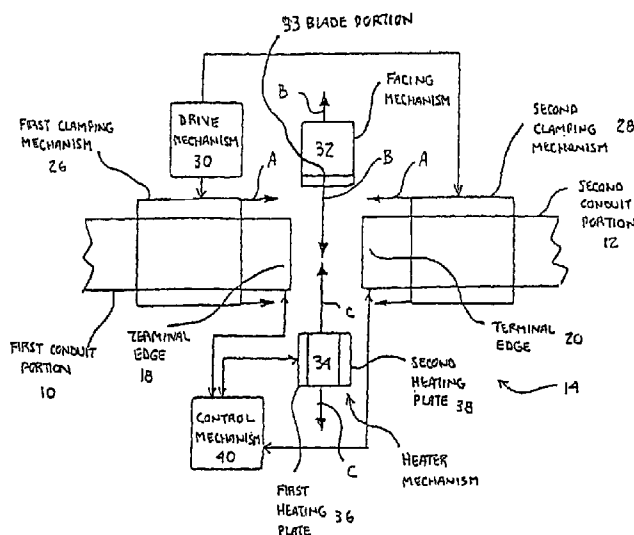
(74) Agents: **PREPELKA, Nathan, J.** et al.; Webb Ziesenheim Logsdon, Orkin & Hanson, 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, PA 15219-1818 (US).

(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, 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).

[Continued on next page]

(54) Title: FUSION PROCESS FOR CONDUIT



(57) Abstract: Disclosed is a method and apparatus for use in a fusion process for conduit. The method includes the steps of: removably positioning a first terminal edge (18) of a first conduit portion (10) with a first terminal edge (20) of a second conduit portion (12); facing the terminal edges (18, 20) of the first conduit portion (10) and the second conduit portion (12); aligning the terminal edges (18, 20) of the first conduit portion (10) and the second conduit portion (12); melting at least a portion of the terminal edges (18, 20) of the first conduit portion (10) and the second conduit portion (12); engaging the melted terminal edge of the first conduit portion (10) with the melted terminal edge of the second conduit portion (12); maintaining pressure between the engaged terminal edges, thereby creating a fused joint area (22); and removing at least a portion of the resultant external bead (24) extending around the fused joint area (22). A fusion apparatus (14) for employing this method is also disclosed.

WO 2005/005873 A3



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.

(88) Date of publication of the international search report:

21 April 2005