

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 November 2005 (10.11.2005)

PCT

(10) International Publication Number
WO 2005/106076 A3

(51) International Patent Classification:
C23F 13/06 (2006.01) *C23F 13/10* (2006.01)

(21) International Application Number:
PCT/GB2005/001651

(22) International Filing Date: 29 April 2005 (29.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0409521.2 29 April 2004 (29.04.2004) GB

(71) Applicant (for all designated States except US): **FOSROC INTERNATIONAL LIMITED** [GB/GB]; 11 Grosvenor Crescent, London SW1X 7EE (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DAVISON, Nigel** [GB/GB]; 3 Chapmans Croft, Coton-in-the-elms, Swadlincote, Derbyshire DE12 8DG (GB). **GLASS, Gareth** [ZA/GB]; 3 Hillside, Lichfield, Staffordshire WS14 9DQ (GB). **ROBERTS, Adrian** [GB/GB]; 11 Calvert Close, Chilwell, Nottingham NG9 5HG (GB).

(74) Agent: **BARKER BRETTELL**; 138 Hagley Road, Edgbaston, Birmingham B16 9PW (GB).

(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, KM, 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, SM, 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, IS, IT, LT, 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).

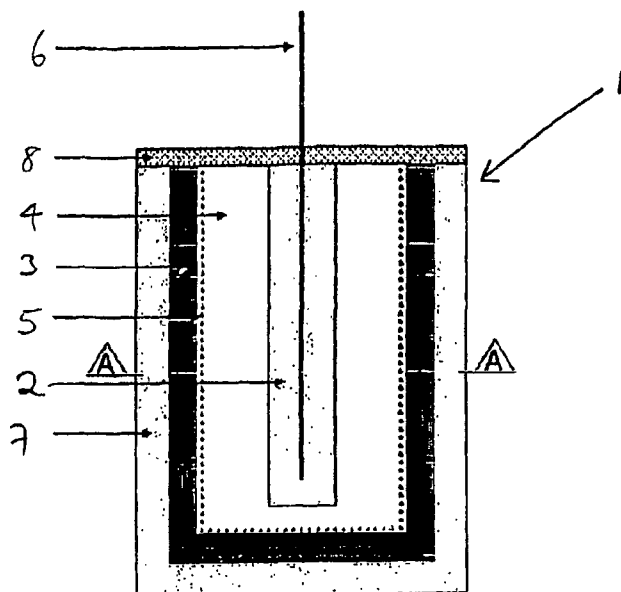
Published:

— 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

(88) Date of publication of the international search report:
26 May 2006

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: SACRIFICIAL ANODE ASSEMBLY



(57) Abstract: A sacrificial anode assembly (1) for cathodically protecting and/or passivating a metal section, comprising: (a) a cell, which has an anode (2) and a cathode (3) arranged so as to not be in electronic contact with each other but so as to be in ionic contact with each other such that current can flow between the anode and the cathode; (b) a connector (6) attached to the anode of the cell for electrically connecting the anode to the metal section to be cathodically protected; and (c) a sacrificial anode (7) electrically connected in series with the cathode of the cell; wherein the cell is otherwise isolated from the environment such that current can only flow into and out of the cell via the sacrificial anode and the connector. The invention also provides a method of cathodically protecting metal in which such a sacrificial anode assembly is cathodically attached to the metal via the connector of the assembly, and a reinforced concrete structure wherein some or all of the reinforcement is cathodically protected by such a method.