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(21) International Application Number: PCT/GB99/01396 (22) International Filing Date: 5 May 1999 (05.05.99) (30) Priority Data: 9809773.6 7 May 1998 (07.05.98) GB (71) Applicant (for all designated States except US): NATIONAL POWER PLC [GB/GB]; Windmill Hill Business Park, Whitehill Way, Swindon, Wilts SN5 6PB (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): CALVER, Timothy, James [GB/GB]; 8 Inkerman Close, Abingdon OX14 1NH (GB). MALE, Stewart, Ernest [GB/GB]; 68 Farm Close, East Grinstead, West Sussex RH19 3QG (GB). MITCHELL, Philip, John [GB/GB]; 1 Compton Close, Loughborough LE1 13SF (GB). WHYTE, Ian [GB/GB]; 23 Nante-Y-Felin, Efailisaf, Pontypridd, Mid Glamorgan CS38 1YY (GB). (74) Agent: BOULT WADE TENNANT; 27 Fumival Street, London EC4A 1PQ (GB).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: CARBON BASED ELECTRODES (57) Abstract A carbon based electrode for the electrochemical reduction of sulfur or oxygen, which comprises an electrode core and, in electrical contact therewith, a structure comprising a porous particulate activated carbon bonded with a polymeric binder material, characterised in that the structure is at least 1 mm thick, in that the particulate activated carbon is prepared from a lignocellulosic material and has the following properties: i) a particle size in the range of from 200 to 850 μm; ii) a pore volume of from 0.45 to 1.0 cm^3 per gram; iii) a surface area in the range of from 800 to 1500 m^2/g; and in that the binder is used in an amount not exceeding 25 % by weight based upon the mixture of activated carbon and binder material.		