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(21) International Application Number: PCT/US98/06434 (22) International Filing Date: 31 March 1998 (31.03.98) (30) Priority Data: 08/832,266 3 April 1997 (03.04.97) US (71) Applicant: SACHEM, INC. [US/US]; 821 East Woodward Street, Austin, TX 78704 (US). (72) Inventors: SHARIFIAN, Hossein; 6136 Oliver Loving Trail, Austin, TX 78749 (US). HULME, David, R.; 2105-A Wordsworth Drive, Austin, TX 78704 (US). (74) Agent: TUROC, Gregory; Renner, Otto, Boisselle & Sklar, The Keith Building, 19th floor, 1621 Euclid Avenue, Cleveland, OH 44115 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, 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, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: SYNTHESIS OF ONIUM HYDROXIDES FROM ONIUM SALTS (57) Abstract The present invention provides a process for preparing onium hydroxide from a corresponding onium salt and for purifying onium hydroxide including providing an electrochemical cell containing a cathode, an anode, a divider and a bipolar membrane, the bipolar membrane having an anion selective side facing the anode and a cation selective side facing the cathode, wherein the divider is positioned between the cathode and the bipolar membrane, and the bipolar membrane is positioned between the divider and the anode, thereby defining a feed compartment between the divider and the bipolar membrane, a recovery compartment between the divider and the cathode, and a water compartment between the bipolar membrane and the anode, charging a solution containing at least one of the onium salt and the onium hydroxide to be purified to the feed compartment; charging a liquid electrolyte to the other compartments; passing a current through the electrochemical cell to produce the onium hydroxide in the recovery compartment; and recovering the onium hydroxide from the recovery compartment.		