

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C01D 3/16, C07C 209/86, B01D 15/08	A1	(11) International Publication Number: WO 99/51523 (43) International Publication Date: 14 October 1999 (14.10.99)
(21) International Application Number: PCT/US99/05019 (22) International Filing Date: 9 March 1999 (09.03.99) (30) Priority Data: 09/055,461 6 April 1998 (06.04.98) US (71) Applicant: GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US). (72) Inventor: SILVA, James, Manio; 8 Barkwood Lane, Clifton Park, NY 12065 (US). (74) Agents: SNYDER, Bernard et al.; General Electric Company, 3135 Easton Turnpike W3C, Fairfield, CT 06431 (US).		(81) Designated States: BR, CN, JP, KR, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: PROCESS FOR REMOVAL OF QUATERNARY AMMONIUM SALT (57) Abstract The present invention relates to a process to remove quaternary ammonium salt (QS), from brine solution. The process uses an adsorbent selected from the group consisting of activated carbon and pyrolyzed sulfonated polystyrene divinylbenzene resin, or mixtures thereof which aids in removing the quaternary ammonium salt (QS). The process can be generally carried out at a temperature ranging from about -10 °C to about 90 °C, at a pH ranging from about 1 to about 13.		