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(21) International Application Number: PCT/US99/14290 (22) International Filing Date: 24 June 1999 (24.06.99) (30) Priority Data: 09/177,588 23 October 1998 (23.10.98) US (71) Applicant: GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US). (72) Inventor: SILVA, James, Manio; 20 Nottingham Way North, 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: 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.</i>
(54) Title: METHOD FOR REDUCING METAL ION CONCENTRATION IN BRINE SOLUTION (57) Abstract The method reduces the concentration of multivalent metal cations such as calcium, magnesium, iron, nickel, and chromium in brine solution containing a water-soluble metal chelating agent such as sodium gluconate. The method comprises subjecting the brine to primary brine treatment, and then readjusting the brine solution to a pH ranging from about 1.5 to about 5.5, and contacting the brine solution with at least one resin bed comprising a chelating ion exchange resin, typically at a temperature ranging from about 10 °C to about 90 °C and at a flow rate ranging from about 4 to about 32 resin bed volumes per hour; and recovering the brine solution.		