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(71) Applicant (for all designated States except US): **GENERAL ELECTRIC COMPANY** [US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WANG, Hua** [US/US]; Global Research, Patent Docket Room, Bldg K1-4A59, Niskayuna, NY 12309 (US). **OLSON, David, Allen** [US/US]; 5951 Clear Water Drive, Minnetonka, MN 55343 (US). **Ji, Jiang** [CA/US]; 45 Parlmont Park, North Billerica, MA 01862 (US). **LUTTRELL, Michael, Todd** [US/US]; Global Research, Patent Docket Room, Bldg K1-4A59, Niskayuna, NY 12309 (US). **YEAGER, Gary, William** [US/US]; Global Research, Patent Docket Room, Bldg K1-4A59, Niskayuna, NY 12309 (US). **SURIANO, Joseph, Anthony** [US/US]; Global Research, Patent Docket Room, Bldg K1-4A59, Niskayuna, NY 12309 (US). **COSTA, Lawrence, Charles** [US/US]; 65 Grove Street, Water Town, MA 02472 (US).

(74) Agents: **WINTER, Catherine, J** et al.; General Electric Company, Global Patent Operation, 2 Corporate Drive, Suite 648, Shelton, CT 06484 (US).

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(54) Title: REVERSE OSMOSIS COMPOSITE MEMBRANES FOR BORON REMOVAL

(57) Abstract: Improved methods for reducing boron concentration in seawater or brackish water, while simultaneously maintaining or improving the salt rejection of membrane and flow performance of polyamide reverse osmosis (RO) membranes include contacting the water with a composite membrane comprising moieties derived from an aromatic sulfonyl halide, a heteroaromatic sulfonyl halide, a sulfinyl halide; a sulfenyl halide; a sulfonyl halide; a phosphoryl halide; a phosphonyl halide; a phosphinyl halide; a thiophosphoryl halide; a thiophosphonyl halide, an isocyanate, a urea, a cyanate, an aromatic carbonyl halide, an epoxide or a mixture thereof.



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