



(51) International Patent Classification:

C02F 1/42 (2006.01) *B01J 47/08* (2006.01)
B01J 49/00 (2006.01) *B01J 47/12* (2006.01)

(21) International Application Number:

PCT/US2012/049499

(22) International Filing Date:

3 August 2012 (03.08.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/208,537 12 August 2011 (12.08.2011) US

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

(72) Inventor; and

(75) Inventor/Applicant (for US only): **PARKE, Andrew** [GB/GB]; GE Water, Hydro House, Newcombe Way, Orton Southgate, Peterborough, Cambridgeshire PE2 6SE (GB).(74) Agents: **WINTER, Catherine, J.** et al.; General Electric Company, Global Patent Operation, 2 Corporate Drive, Suite 648, Shelton, CT 06484 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: MOBILE WATER TREATMENT AND RESIN TRANSFER HUB

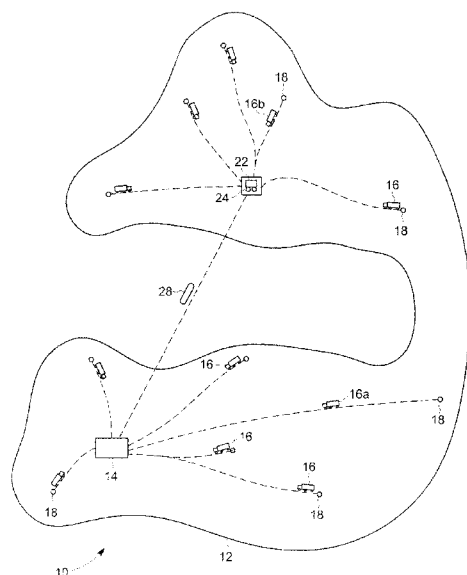


FIG. 1

(57) Abstract: A system and method for providing mobile or temporary water treatment involving ion exchange resins includes a service centre (14), one or more treatment vehicles (16), a resin transfer hub (22) and one or more resin transport vehicles (28). The service centre (14) can be used to regenerate one or more types of ion exchange resins. The treatment vehicle (16) carries water treatment equipment including a tank holding ion exchange resin. The resin transfer hub (22) facilitates moving resin between a treatment vehicle (16) and a resin transport vehicle (28). The resin transport vehicle (28) is adapted for carrying resin by one or more of land, sea and air between the resin transfer hub (22) and the service centre (14). In operation, a treatment vehicle (16) brings resin requiring regeneration to the resin transfer hub (22), where it is emptied and then re-filled with regenerated resin. Resin requiring regeneration is transferred to a resin transport vehicle (28) for transport to the service centre (14). The resin transport vehicle (28) is re-filled there with regenerated resin, which is taken back to the resin transfer hub (22) for transferred to a treatment vehicle (16).



-
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- Published:**
- *with international search report (Art. 21(3))*