



PCT

(51) International Patent Classification:

C02F 1/58 (2006.01) *C08L 33/06* (2006.01)
C08F 20/10 (2006.01) *C08L 33/26* (2006.01)
C08F 20/56 (2006.01)

(21) International Application Number:

PCT/US2011/031145

(22) International Filing Date:

5 April 2011 (05.04.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/754,683 6 April 2010 (06.04.2010) US

(71) Applicant (for all designated States except US): **NALCO COMPANY** [US/US]; 1601 W. Diehl Road, Naperville, Illinois 60563-1198 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ZINN, Paul J.** [US/US]; 1820 Stirling Lane, Montgomery, Illinois 60538 (US). **SHAH, Jitendra T.** [US/US]; 3148 Landore Drive, Naperville, Illinois 60564 (US). **ANDREWS, William J.** [US/US]; 1820 Stirling Lane, Montgomery, Illinois 60538 (US).

(74) Agents: **BISHOP, Joshua D.** et al.; 1601 W. Diehl Road, Naperville, Illinois 60563 (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, 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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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).

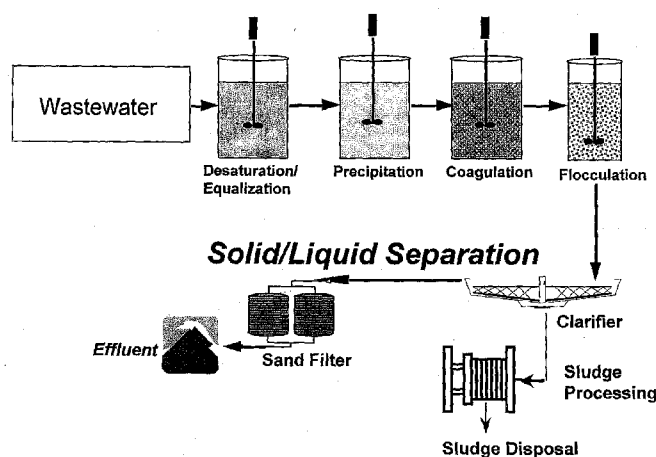
Declarations under Rule 4.17:

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

[Continued on next page]

(54) Title: METAL SCAVENGING POLYMERS AND USES THEREOF

FIGURE 1
Physical-Chemical Method for Heavy Metal/Pollutant Removal



•Example treatment scheme based on treatment of flue gas desulphurization chloride purge from a power plant.

(57) Abstract: Uses for a composition comprising a polymer derived from at least two monomers: acrylic-x and an alkylamine, wherein said polymer is modified to contain a functional group capable of scavenging one or more metals are disclosed. These polymers have many uses in various mediums, including wastewater systems.



-
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *of inventorship (Rule 4.17(iv))*
- Published:**
- *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*