

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/035516 A1

(51) International Patent Classification⁷: **C07C 51/50**

(21) International Application Number:
PCT/US2003/027522

(22) International Filing Date:
2 September 2003 (02.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/271,962 15 October 2002 (15.10.2002) US

(71) Applicant: **ONDEO NALCO ENERGY SERVICES,
L.P.** [US/US]; 7701 Highway 90-A, Sugarland, TX 77478
(US).

(72) Inventor: **TONG, David, Youdong;** 5622 Jackwood,
Houston, TX 77096 (US).

(74) Agent: **KEEFER, Timothy, J.;** Wildman, Harrold, Allen
& Dixon, 225 West Wacker Drive, Suite 2800, Chicago, IL
60606 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: COMPOSITION AND METHOD FOR PREVENTING FOULING IN (METH)ACRYLIC ACID PROCESSES

(57) Abstract: An antifoulant composition comprising (meth)acrylic acid and one or more (meth)acrylate or (meth)acrylamide antifoulant polymers and a method of preventing fouling in (meth)acrylic acid processes comprising adding the (meth)acrylate or (meth)acrylamide antifoulant polymers to the (meth)acrylic acid process stream.

WO 2004/035516 A1