

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number  
**WO 2005/075623 A1**

(51) International Patent Classification<sup>7</sup>: **C11D 17/00**,  
C07C 303/00

(21) International Application Number:  
PCT/US2004/025968

(22) International Filing Date: 11 August 2004 (11.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/537,511 20 January 2004 (20.01.2004) US

(71) Applicant (for all designated States except US): **HUNTS-  
MAN PETROCHEMICAL CORPORATION** [US/US];  
7114 North Lamar Blvd., Austin, TX 78752 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ANANTANENI,  
Prakasa, R.** [US/US]; 13019 Partridge Bend Drive,  
Austin, TX 78729 (US). **GRAY, John** [US/US]; 8420  
Sea Ash Circle, Round Rock, TX 78681 (US). **REN-  
NER, Marty, J.** [US/US]; 1004 St. Williams Avenue,

Round Rock, TX 78681 (US). **SMITH, George, A.**  
[US/US]; 3148 Burks Lane, Austin, TX 78732 (US).  
**LEWIS, David, C.** [CA/US]; 8109 Darwin Cove, Austin,  
TX 78729 (US). **CHAMPION, Donald, H.** [US/US];  
707 Goodspeed Parkway, Pflugerville, TX 78660 (US).  
**WHEWELL, Christopher, J.** [US/US]; 6020 Tonkowa  
Trail, Georgetown, TX 78628 (US).

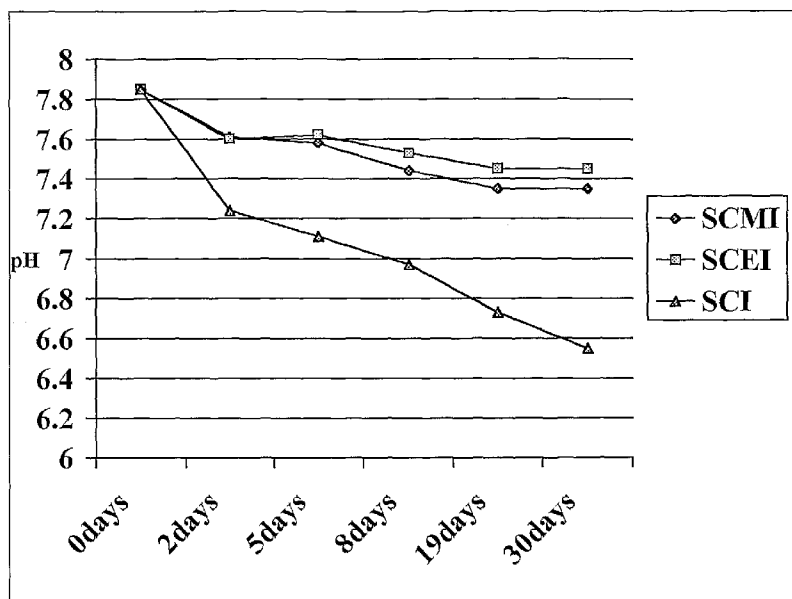
(74) Agents: **WHEWELL, Christopher, J.** et al.; Huntsman  
LLC, Legal Department, 7114 North Lamar Blvd., Austin,  
TX 78752 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, 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, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: NOVEL ACYLALKYLISETHIONATE ESTERS AND APPLICATIONS IN CONSUMER PRODUCTS



(57) Abstract: The present invention provides acylalkylisethionate esters useful in consumer products. The acylalkylisethionate esters are produced by reacting one or more carboxylic acids with one or more alkyl-substituted hydroxyalkyl sulfonates under esterification reaction conditions. The alkyl-substituted hydroxyalkyl sulfonates used as a raw material in producing the esters are prepared by reacting bisulfite with one or more alkylene oxides.

WO 2005/075623 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, 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)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, 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, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, 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, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

**Published:**

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.