

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 April 2008 (17.04.2008)

PCT

(10) International Publication Number
WO 2008/045850 A3

(51) International Patent Classification:

AOIN 25/00 (2006.01) A0IN 25/10 (2006.01)
AOIN 25/34 (2006.01) A0IN 25/12 (2006.01)
AOIN 25/30 (2006.01) A0IN 25/14 (2006.01)
AOIN 25/28 (2006.01) A0IN 25/16 (2006.01)
AOIN 25/32 (2006.01) A0IN 25/18 (2006.01)
AOIN 25/02 (2006.01) AOiJV 25/20 (2006.01)
AOIN 25/04 (2006.01) AOiJV 25/22 (2006.01)
AOIN 25/06 (2006.01) AOiJV 25/24 (2006.01)
AOIN 25/08 (2006.01) AOiJV 25/26 (2006.01)

(US). STERN, Alan, J. [US/US]; 5925 Ranch Lake Drive, Magnolia, TX 77354 (US).

(74) Agent: SHELDON, Rhonda, L.; Huntsman Corporation, Legal Department, 10003 Woodloch Forest Drive, The Woodlands, TX 77380 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FT, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

(21) International Application Number:

PCT/US2007/080764

(22) International Filing Date: 9 October 2007 (09.10.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/828,715 9 October 2006 (09.10.2006) US

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, 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, IS, IT, LT, LU, LV, MC, MT, 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).

(71) Applicant (for all designated States except US): HUNTS-
MAN PETROCHEMICAL CORPORATION [US/US];
10003 Woodloch Forest Drive, The Woodlands, TX 77380
(US).

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

(72) Inventors; and

(75) Inventors/Applicants (for US only): ELSIK, Curtis, M.
[US/US]; 42 North Terrace Mill Circle, The Woodlands,
TX 77382 (US). ARZOLA, Joe, C. [US/US]; 4603 Cob-
bler Cover, Austin, TX 78744 (US). STRIDDE, Howard,
M. [US/US]; 1214 Mark Street, George West, TX 78022

(88) Date of publication of the international search report:
9 October 2008

(54) Title: LIQUID CRYSTAL AGROCHEMICAL FORMULATIONS

(57) Abstract: An agrochemical composition includes a homogeneous single-phase liquid crystal in thermodynamic equilibrium. The agrochemical composition can be a surfactant composition or a pesticide composition. The surfactant composition is a blend of surfactants, whereas a pesticide composition has an active ingredient and one or more surfactant adjuvants. A pesticide composition, or a surfactant composition in combination with an active ingredient, may be used to control pests.



WO 2008/045850 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT7US07/80764

A. CLASSIFICATION OF SUBJECT MATTER

IPC Please See Continuation Sheet

USPC 504/363

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U S 504/363

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X --- Y	U S 2006/0194699 A1 (MOUCHARAFIEH et al) 10 January 2004 (10 01 2004), abstract and [0052]	1,2,14-1 6,1 8,23, and 24 ----- 1,3,4-13,1 7, 19-22
Y	U S 6,881,707 B2 (HOWART et al) 02 February 2004 (04 02 2004), column 7, example 1, column 9, lines 36-40, examples 5 1-7 1	1,3-5,7, and 18-22
Y	U S 2004/0009882 A1 (ELSIK et al) 09 May 2003 (9 05 2003), [0042] and [0046]	1 and 10-12
Y	U S 7,049,270 B2 (LENNON et al) 21 May 2001 (21 05 2001), column 1, lines 1-10, column 8, lines 38-40, column 66, lines 37-45	1,6,8, and 9

Further documents are listed in the continuation of Box C **D** See patent family annex

* Special categories of cited documents	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

26 May 2008 (26 05 2008)

Date of mailing of the international search report

28 JUL 2008

Name and mailing address of the ISA/US

Mail Stop PCT, Ann ISA/US
Commissioner of Patents
P O Box 1450
Alexandria, Virginia 22313-1450

Facsimile No (5711 273-3201)

Authorized officer

Johann R Richter

Telephone No 571-272-1 600

Jansie Ford for

INTERNATIONAL SEARCH REPORT

PCT/US07/80764

Continuation of IPC:

AOIN 25/00(2006.01),25/34(2006.01),25/30(2006.0 1),**25/28**(2006.01)

AOIN 25/32(2006.01),25/02(2006.0 1),25/04(2006.0 1),25/06(2006.01),25/08(2006.01),25/10(2006.01),25/12(2006.01),25/14(2006.01),25/16(2006.01),2S/18(2006.01),25/20(2006.01),25/22(2006.01),25/24(2006.0 1),25/26(2006.01)