

DIVISION DE NUEVAS CREACIONES

RADICACIÓN EXPEDIENTE No. 03- 2521

EL EXTRACTO DE LA PRESENTE SOLICITUD DE PATENTE DE INVENCION

- PCT, FUE PUBLICADO EN LA GACETA DE PROPIEDAD INDUSTRIAL No 543,

DE FECHA 01 DE SEPTIEMBRE DE 2004, EL TERMINO HABIL SEÑALADO

POR LA LEY EXPIRA EL 29 DE NOVIEMBRE DE 2004.

NOTA: Dentro del plazo de los seis (6) meses siguientes a partir de la fecha de publicación en la gaceta de Propiedad Industrial, deberá solicitar y cancelar el examen de patentabilidad so pena de que la solicitud caiga en abandono, de acuerdo con lo establecido en el Artículo 44 de la Decisión 486/2000.

SE PRESENTARON OPOSICIONES POR PARTE DE TERCEROS.

SI ☐ ☐

NO ☒ ☐

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : A01N 25/14	A1	(11) International Publication Number: WO 93/25074 (43) International Publication Date: 23 December 1993,(23.12.93)		
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> (21) International Application Number: PCT/US93/05371 (22) International Filing Date: 10 June 1993 (10.06.93) (30) Priority data: 07/899,405 16 June 1992 (16.06.92) US (60) Parent Application or Grant (63) Related by Continuation US 07/899,405 (CIP) Filed on 16 June 1992 (16.06.92) (71) Applicant (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). </td> <td style="width: 50%; vertical-align: top;"> (72) Inventors; and (75) Inventors/Applicants (for US only) : FREEMAN, Roy, Quinn, III [US/US]; 5117 New Kent Road, Wilmington, DE 19808 (US). SANDELL, Lionel, Samuel [US/US]; 2900 Bodine Drive, Wilmington, DE 19810-2247 (US). ZAUCHA, Thomas, Joseph [US/US]; 213 Harris Circle, Newark, DE 19711-2430 (US). (74) Agents: GREGORY, Theodore, C. et al.; E.I. du Pont de Nemours and Company, Legal/Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US). (81) Designated States: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i> </td> </tr> </table>			(21) International Application Number: PCT/US93/05371 (22) International Filing Date: 10 June 1993 (10.06.93) (30) Priority data: 07/899,405 16 June 1992 (16.06.92) US (60) Parent Application or Grant (63) Related by Continuation US 07/899,405 (CIP) Filed on 16 June 1992 (16.06.92) (71) Applicant (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).	(72) Inventors; and (75) Inventors/Applicants (for US only) : FREEMAN, Roy, Quinn, III [US/US]; 5117 New Kent Road, Wilmington, DE 19808 (US). SANDELL, Lionel, Samuel [US/US]; 2900 Bodine Drive, Wilmington, DE 19810-2247 (US). ZAUCHA, Thomas, Joseph [US/US]; 213 Harris Circle, Newark, DE 19711-2430 (US). (74) Agents: GREGORY, Theodore, C. et al.; E.I. du Pont de Nemours and Company, Legal/Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US). (81) Designated States: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(21) International Application Number: PCT/US93/05371 (22) International Filing Date: 10 June 1993 (10.06.93) (30) Priority data: 07/899,405 16 June 1992 (16.06.92) US (60) Parent Application or Grant (63) Related by Continuation US 07/899,405 (CIP) Filed on 16 June 1992 (16.06.92) (71) Applicant (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).	(72) Inventors; and (75) Inventors/Applicants (for US only) : FREEMAN, Roy, Quinn, III [US/US]; 5117 New Kent Road, Wilmington, DE 19808 (US). SANDELL, Lionel, Samuel [US/US]; 2900 Bodine Drive, Wilmington, DE 19810-2247 (US). ZAUCHA, Thomas, Joseph [US/US]; 213 Harris Circle, Newark, DE 19711-2430 (US). (74) Agents: GREGORY, Theodore, C. et al.; E.I. du Pont de Nemours and Company, Legal/Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US). (81) Designated States: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>			
(54) Title: WATER-DISPERSIBLE GRANULAR AGRICULTURAL COMPOSITIONS				
(57) Abstract This invention comprises three types of pesticidal granules containing a principal heat-activated binder (HAB) selected from polyethylene glycol, polyethylene oxide, polyethoxylated fatty acids and alcohols, ethylene oxide/propylene oxide copolymers and polyethoxylated alkylphenols. The granules can be in the form of agglomerates, extrudates or pastilles.				



US005928992A

United States Patent [19]
Narayanan et al.

[11] **Patent Number:** **5,928,992**
 [45] **Date of Patent:** **Jul. 27, 1999**

[54] **SOLID DELIVERY SYSTEM (SDS) FOR ACTIVE AGRICULTURAL CHEMICALS**

[75] Inventors: **Kolazi S. Narayanan**, Wayne, N.J.;
Domingo Jon, New York, N.Y.; **Robert M. Ianniello**, Oak Ridge, N.J.

[73] Assignee: **ISP Investments Inc.**, Wilmington, Del.

[21] Appl. No.: **08/850,792**

[22] Filed: **May 2, 1997**

[51] Int. Cl.⁶ **A01N 25/02**

[52] U.S. Cl. **504/116; 504/118**

[58] Field of Search **504/116, 118**

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,230,892 7/1993 Feyen et al. 424/409

5,300,529	4/1994	Narayanan	514/788
5,338,762	8/1994	Narayanan	514/788
5,389,297	2/1995	Narayanan	252/312
5,427,795	6/1995	Feyen et al.	424/409
5,698,211	12/1997	Narayanan	424/409
5,731,264	3/1998	Narayanan et al.	504/116

Primary Examiner—Jose' G. Dees

Assistant Examiner—Sabiha N. Qazi

Attorney, Agent, or Firm—William J. Davis; Walter Katz; Marilyn J. Maue

[57] **ABSTRACT**

This invention relates to a solid delivery system (SDS) for active agricultural chemicals, and, more particularly, to a bioenhanced, stable SDS for sulfonyl and sulfamoylurea agricultural chemicals capable of forming aqueous micro-dispersions or tank mixes thereof suitable for application to a plant site.

2 Claims, No Drawings



OFICINA ESPAÑOLA DE
PATENTES Y MARCAS

ESPAÑA

⑪ N.º de publicación: **ES 2 059 888**

⑤① Int. Cl.⁵: A01N 25/22, A01N 25/30
A01N 47/30, A01N 39/00
A01N 39/02, A01N 39/04
A01N 57/20, A01N 43/88
A01N 43/40

⑫

TRADUCCION DE PATENTE EUROPEA

T3

⑧⑥ Número de solicitud europea: **90110793.8**
⑧⑥ Fecha de presentación : **07.06.90**
⑧⑦ Número de publicación de la solicitud: **0 402 770**
⑧⑦ Fecha de publicación de la solicitud: **19.12.90**

⑤④ Título: **Formulaciones herbicidas líquidas, mixtas.**

③⑩ Prioridad: **10.06.89 DE 39 19 037**

⑦③ Titular/es: **Hoechst Aktiengesellschaft
D-65926 Frankfurt, DE**

④⑤ Fecha de la publicación de la mención BOPI:
16.11.94

⑦② Inventor/es: **Frisch, Gerhard**

④⑤ Fecha de la publicación del folleto de patente:
16.11.94

⑦④ Agente: **Lehmann Novo, María Isabel**

Aviso: En el plazo de nueve meses a contar desde la fecha de publicación en el Boletín europeo de patentes, de la mención de concesión de la patente europea, cualquier persona podrá oponerse ante la Oficina Europea de Patentes a la patente concedida. La oposición deberá formularse por escrito y estar motivada; sólo se considerará como formulada una vez que se haya realizado el pago de la tasa de oposición (artº 99.1 del Convenio sobre concesión de Patentes Europeas).



US005888934A

United States Patent [19]
Townson et al.

[11] **Patent Number:** **5,888,934**
 [45] **Date of Patent:** **Mar. 30, 1999**

[54] **HERBICIDAL COMPOSITIONS AND ADJUVANT COMPOSITION COMPRISING ALKYL POLYGLYCOSIDE AND ETHOXYLATED ALCOHOL SURFACTANTS**
 [75] Inventors: **Jane Karen Townson**, Maidenhead; **Clifford Arthur Hart**, **Martin Keith Osborn**, both of Wokingham; **Michael John Bean**, Bracknell, all of United Kingdom

[73] Assignee: **Zeneca Limited**, United Kingdom
 [21] Appl. No.: **750,168**
 [22] PCT Filed: **Jun. 7, 1995**
 [86] PCT No.: **PCT/GB95/01310**
 § 371 Date: **Nov. 19, 1996**
 § 102(c) Date: **Nov. 19, 1996**
 [87] PCT Pub. No.: **WO96/00010**
 PCT Pub. Date: **Jan. 4, 1996**

[30] **Foreign Application Priority Data**
 Jun. 24, 1994 [GB] United Kingdom 9412722
 [51] Int. Cl.⁶ **A01N 25/30; A01N 57/02**
 [52] U.S. Cl. **504/206**
 [58] Field of Search 504/116, 206; 252/351

[56] **References Cited**
 U.S. PATENT DOCUMENTS
 5,317,003 5/1994 Kassebaum et al. 504/116
 5,658,853 8/1997 Kassebaum et al. 504/206

FOREIGN PATENT DOCUMENTS
 0 256 608 2/1988 European Pat. Off. .
 0 257 686 3/1988 European Pat. Off. .
 0 364 202 4/1990 European Pat. Off. .
 0 498 145 8/1992 European Pat. Off. .
 0 498 785 8/1992 European Pat. Off. .
 0 526 443 2/1993 European Pat. Off. .
 0 531 269 3/1993 European Pat. Off. .

2 589 328 5/1987 France .
 39 25 846 2/1991 Germany .
 WO91 00010 1/1991 WIPO .
 WO92 01508 2/1992 WIPO .
 WO94 02021 2/1994 WIPO .
 WO95 02327 1/1995 WIPO .
 WO95 03881 2/1995 WIPO .
 WO95 16351 6/1995 WIPO .

OTHER PUBLICATIONS

Sherrick et al., *Weed Science*, Nov. 1986, Issue 6, V. 34:817-823, "Absorption and Translocation of MON 0818 Adjuvant in Field Bindweed (*Convolvulus arvensis*)".
 Green & Green, *Weed Technology*, Jul.-Sep. 1993, V. 7:633-640, "Surfactant Structure and Concentration Strongly Affect Rimsulfuron Activity".
 Smith et al., *Weed Res.*, 1966, V. 6:233-242, "Structure-Activity Relationships of Alkyl-phenol Ethylene Oxide Ether Non-Ionic Surfactants and Three Water-Soluble Herbicides".
 Knoche & Bukovac, *Weed Science*, Jan.-Mar. 1993, Issue 1, V. 41:87-93, "Interaction of Surfactant and Leaf Surface in Glyphosate Absorption".
 Gaskin & Holloway, *Pesticide Science*, 1992, V. 34:195-206, "Some Physicochemical Factors Influencing Foliar Uptake Enhancement of Glyphosatemono (isopropyl-ammonium) by Polyoxyethylene Surfactants".

Primary Examiner—S. Mark Clardy
Attorney, Agent, or Firm—Marian T. Thomson; David P. LeCroy

[57] **ABSTRACT**
 A glyphosate composition comprises (i) N-phosphonomethylglycine or an agriculturally acceptable salt thereof, (ii) an alkyl polyglycoside surfactant, (iii) an ethoxylated alcohol, for example an ethoxylated alcohol obtained by ethoxylation of a linear or branched chain aliphatic mono alcohol having a chain length of from 8 to 20 carbon atoms and a mean degree of ethoxylation of from 2 to 50 moles of ethylene oxide per mole of alcohol, and optionally (iv) an additional surfactant, and optionally (v) a humectant.

14 Claims, No Drawings



US005362705A

United States Patent [19]**Moucharafieh et al.**[11] **Patent Number:** **5,362,705**[45] **Date of Patent:** **Nov. 8, 1994**

[54] **HERBICIDAL FORMULATIONS
CONTAINING
N-PHOSPHONOMETHYLGLYCINE AND
ALKYL PHENOL POLYOXYALKYLENE
CARBOXYLIC ACID SURFACTANT**

[75] **Inventors:** **Nadim C. Moucharafieh, El
Sobranite; Kang-Chi Lin, Lafayette;
James L. Ahle, Novato, all of Calif.**

[73] **Assignee:** **Zeneca Ltd., London, United
Kingdom**

[21] **Appl. No.:** **90,583**

[22] **Filed:** **Jul. 13, 1993**

[51] **Int. Cl.⁵ A01N 25/30; A01N 57/12**

[52] **U.S. Cl. 504/206; 504/116;
71/DIG. 1**

[58] **Field of Search 504/116, 206;
71/DIG. 1**

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,799,758 3/1974 Franz 504/206
4,159,901 7/1979 Beestman et al. 71/86
4,182,621 1/1980 Ogata et al. 71/76
4,312,662 1/1982 Gaertner 560/132

4,931,080 6/1990 Chan et al. 71/86
5,047,079 9/1991 Djafar et al. 71/DIG. 1
5,118,338 6/1992 Moller 71/86
5,180,414 1/1993 Darchy et al. 504/206
5,196,044 3/1993 Caulder et al. 504/127

FOREIGN PATENT DOCUMENTS

378985 7/1990 European Pat. Off. .
472310 2/1992 European Pat. Off. .
531269 3/1993 European Pat. Off. .

OTHER PUBLICATIONS

Wyrill et al., *Weed Science* 25, 275 (1977).
Grossbard et al., *The Herbicide Glyphosate* (Butterworths, London, 1985), pp. 223-225.

Primary Examiner—Allen J. Robinson
Assistant Examiner—Brian Bembenick
Attorney, Agent, or Firm—Joel G. Ackerman

[57] **ABSTRACT**

Herbicidal compositions contain N-phosphonomethylglycine and alkyl phenol polyoxyalkylene surfactant which contains from about 50 to about 90 weight percent of alkyl phenol polyoxyethylene carboxylic acid.

20 Claims, No Drawings

United States Patent [19]**Hillemann**[11] **Patent Number:** **4,632,693**[45] **Date of Patent:** **Dec. 30, 1986**[54] **HERBICIDAL SULFONAMIDES**[75] **Inventor:** **Craig L. Hillemann, Wilmington, Del.**[73] **Assignee:** **E. I. Du Pont de Nemours and Company, Wilmington, Del.**[21] **Appl. No.:** **699,869**[22] **Filed:** **Feb. 14, 1985****Related U.S. Application Data**[63] **Continuation-in-part of Ser. No. 613,412, May 24, 1984.**[51] **Int. Cl.⁴ A01N 43/66; C07D 251/42; C07D 251/16**[52] **U.S. Cl. 71/93; 544/211**[58] **Field of Search 544/206, 208, 211; 71/93**[56] **References Cited****U.S. PATENT DOCUMENTS**

4,383,113 5/1983 Levitt 544/212

Primary Examiner—John M. Ford[57] **ABSTRACT**

This invention relates to a novel herbicidal sulfonamide, agriculturally suitable compositions and a method for using it as an herbicide.

5 Claims, No Drawings



US005424072A

United States Patent [19]
Narayanan et al.

[11] **Patent Number:** **5,424,072**
[45] **Date of Patent:** **Jun. 13, 1995**

- [54] **WATER SOLUBLE WETTING AGENT FOR PESTICIDE FORMULATIONS**
- [75] **Inventors:** Kolazi S. Narayanan, Palisades Park; Ratan K. Chaudhuri, Butler; Robert B. Login, Oakland, all of N.J.; Sohan L. Paul, Harrow, England
- [73] **Assignee:** ISP Investments Inc., Wilmington, Del.
- [21] **Appl. No.:** 134,936
- [22] **Filed:** Oct. 12, 1993

Related U.S. Application Data

- [63] Continuation of Ser. No. 920,082, Jul. 27, 1992, abandoned.
- [51] **Int. Cl.⁶** A01N 25/24
- [52] **U.S. Cl.** 424/407; 424/405; 548/543
- [58] **Field of Search** 548/543; 424/405, 407

References Cited

U.S. PATENT DOCUMENTS

- 3,085,931 4/1963 Darlington 167/33
- 3,290,211 12/1966 Schickedantz 167/22

- 3,864,117 2/1975 Gante et al. 71/115
- 4,276,305 6/1981 Suchy 424/307
- 5,035,859 7/1991 Gu et al. 422/28

FOREIGN PATENT DOCUMENTS

- 5800184 1/1986 WIPO 548/543

Primary Examiner—Thurman K. Page
Assistant Examiner—Neil Levy
Attorney, Agent, or Firm—Jules E. Goldberg; Joshua J. Ward; William J. Sapone

[57] **ABSTRACT**

A water based wetting agent uses higher alkyl substituted lactam, anionic surfactant and water to enhance the wetting properties of herbicide and pesticide formulations. The composition is effective in enhancing wetting times, and in some instances increases the formulation effectiveness through enhanced contact, better penetration and lower surface tension. Utilizing a herbicide or pesticide formulation including the wetting agent provides a fast absorption of actives with rapid uptake to promote weed control with no or minimal phytotoxicity at the use levels.

18 Claims, No Drawings