

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 August 2009 (27.08.2009)

(10) International Publication Number
WO 2009/103455 A3

PCT

(51) International Patent Classification:

A01N 37/22 (2006.01) A01N 41/10 (2006.01)
A01N 37/26 (2006.01) A01N 43/56 (2006.01)
A01N 25/28 (2006.01) A01N 43/80 (2006.01)
A01N 25/04 (2006.01) A01N 57/20 (2006.01)

(21) International Application Number:

PCT/EP2009/000979

(22) International Filing Date:

12 February 2009 (12.02.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/029,996 20 February 2008 (20.02.2008) US

(71) Applicant (for all designated States except US): **SYNGENTA PARTICIPATIONS AG.** [CH/CH];
Schwarzwaldallee 215, CH-4058 Basel (CH).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **NELSON, Alan, Frederick** [US/US]; Syngenta Crop Protection Inc, 410 Swing Road, Greensboro, NC 27409 (US).

(74) Agent: **INTELLECTUAL PROPERTY DEPARTMENT SYNGENTA LIMITED**; PO Box 3538, Jealott's Hill Research Centre, Bracknell, RG42 6YA (GB).

(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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

16 September 2010

(54) Title: HERBICIDE FORMULATION

(57) Abstract: The present invention relates, inter alia, to a novel herbicide formulation comprising: (a) an aqueous phase; (b) an HPPD inhibitor in suspension in the aqueous phase; (c) an encapsulated chloroacetamide and/or an isoxazoline herbicide in suspension in the aqueous phase; (d) glyphosate and/or glufosinate or an agrochemically acceptable salt thereof, in solution in the aqueous phase. The invention further relates to a process for the preparation of an herbicide formulation of the invention and to a process for the control of unwanted vegetation.



WO 2009/103455 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/000979

A. CLASSIFICATION OF SUBJECT MATTER

INV. A01N37/22 A01N37/26 A01N25/28 A01N25/04 A01N41/10
A01N43/56 A01N43/80 A01N57/20

ADD.

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)

A01N

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 practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 912 207 A (SCHER HERBERT B [US] ET AL) 15 June 1999 (1999-06-15) column 8 - column 15; examples 1,3-8 -----	1-18
Y	WO 2004/112481 A1 (SYNGENTA PARTICIPATIONS AG [CH]; CORNES DEREK [CH]; JOHNSON MICHAEL DO) 29 December 2004 (2004-12-29) page 1, line 20 - page 2, line 6 claim 1 page 10 - page 12; table 1 -----	1-18
Y	WO 01/43550 A2 (AVENTIS CROPS SCIENCE SA [FR]; IRONS STEPHEN MALCOLM [US]) 21 June 2001 (2001-06-21) page 2, line 4 - page 4, line 5 page 8 - page 10; example 1 ----- -/--	1-18

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

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)

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

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

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

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.

G document member of the same patent family

Date of the actual completion of the international search

30 June 2010

Date of mailing of the international search report

07/07/2010

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Davies, Maxwell

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/000979

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2004/080178 A1 (SYNGENTA PARTICIPATIONS AG [CH]; CUSH SARAH BETH [US]; HOPKINSON MICHA) 23 September 2004 (2004-09-23) page 7 - page 16; examples 1-7 -----	1-18
Y	WO 97/34486 A1 (RHONE POULENC AGROCHIMIE [FR]) 25 September 1997 (1997-09-25) page 2, line 10 - line 24 -----	3,4

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2009/000979

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5912207	A	15-06-1999	NONE	
WO 2004112481	A1	29-12-2004	AT 406098 T AU 2004248952 A1 BR PI0411571 A CA 2527087 A1 CN 1809276 A DK 1672982 T3 EC SP066289 A EP 1672982 A1 ES 2309523 T3 HR 20051004 A2 JP 2006527745 T KR 20060029226 A MX PA05013275 A NZ 544590 A PT 1672982 E SI 1672982 T1 US 2006211578 A1 ZA 200509375 A	15-09-2008 29-12-2004 08-08-2006 29-12-2004 26-07-2006 08-12-2008 28-07-2006 28-06-2006 16-12-2008 31-10-2006 07-12-2006 05-04-2006 09-03-2006 31-03-2009 28-10-2008 28-02-2009 21-09-2006 25-04-2007
WO 0143550	A2	21-06-2001	AU 2842501 A	25-06-2001
WO 2004080178	A1	23-09-2004	AT 362312 T BR PI0409577 A CA 2517220 A1 CL 4752004 A1 CN 1756481 A DE 602004006500 T2 DK 1603388 T3 EP 1603388 A1 ES 2283983 T3 GT 200400025 A JP 4444951 B2 JP 2006519792 T MX PA05009525 A PT 1603388 E UA 81945 C2 US 2006183643 A1 ZA 200506300 A	15-06-2007 18-04-2006 23-09-2004 06-05-2005 05-04-2006 10-01-2008 17-09-2007 14-12-2005 01-11-2007 09-03-2005 31-03-2010 31-08-2006 18-10-2005 23-08-2007 25-02-2008 17-08-2006 31-05-2006
WO 9734486	A1	25-09-1997	AU 2096697 A HR 970148 A2 ZA 9702237 A	10-10-1997 30-04-1998 17-09-1997