

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 January 2009 (29.01.2009)

(10) International Publication Number
WO 2009/013100 A3

PCT

(51) International Patent Classification:

A01N 37/32 (2006.01) A01N 37/44 (2006.01)
A01N 53/02 (2006.01) A01N 31/14 (2006.01)
A01N 53/06 (2006.01) A01P 7/04 (2006.01)
A01N 53/08 (2006.01)

(21) International Application Number:

PCT/EP2008/058557

(22) International Filing Date:

3 July 2008 (03.07.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

07112866.4 20 July 2007 (20.07.2007) EP

(71) Applicant (for all designated States except US): BASF SE [DE/DE]; 67056 Ludwigshafen (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HEGGER, Martin [DE/DE]; An der Eller 18, 36145 Hofbieber (DE). VANTIEGHEM, Herve, R. [BE/DE]; Mörkestr. 5, 76297 Stutensee (DE).

(74) Common Representative: BASF SE; 67056 Ludwigshafen (DE).

(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, 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:

28 January 2010

(54) Title: METHOD OF COMBATING POLLEN BEETLES

(57) Abstract: This invention relates to a method of combating insect pests of *Meligethes* spp. (also commonly referred to as pollen beetles) comprising contacting the pests or their food supply, habitat, breeding grounds or their locus with pesticidally effective amounts of N-2-ethylhexyl)bicyclo[2.2.1]hept-5-ene-dicarboximide and at least one pyrethroid.



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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2008/058557

A. CLASSIFICATION OF SUBJECT MATTER

INV. A01N37/32 A01N53/02 A01N53/06 A01N53/08 A01N37/44
A01N31/14 A01P7/04

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, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 1992, WITKOWSKI, WITOLD ET AL: "Effectiveness of pyrethroids in the control of the pollen beetle (Meligethes aeneus F.) in winter rape in Poland" XP002557501 retrieved from STN Database accession no. 116:78557 abstract & MATERIALY SESJI NAUKOWEJ INSTYTUTU OCHRONY ROSLIN (POZNAN) , VOLUME DATE 1989, 29(1), 141-54 CODEN: MSNRD5; ISSN: 0208-4414, 1990, ----- -/--	1-15

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

☒ See patent family annex.

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Date of the actual completion of the international search

26 November 2009

Date of mailing of the international search report

10/12/2009

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

Muellners, Wilhelm

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2008/058557

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WU DANXIA ET AL: "Mechanisms of fenvalerate resistance in the German cockroach, <i>Blattella germanica</i> (L.)" PESTICIDE BIOCHEMISTRY AND PHYSIOLOGY, vol. 61, no. 1, 15 August 1998 (1998-08-15), pages 53-62, XP002557498 ISSN: 0048-3575 page 53, the abstract page 53, paragraph 1 page 57, right-hand column, paragraph 1 - page 61, left-hand column; table 1 right-hand column	1-15
A	HANSEN LARS MONRAD: "Insecticide-resistant pollen beetles (<i>Meligethes aeneus</i> F) found in Danish oilseed rape (<i>Brassica napus</i> L) fields." PEST MANAGEMENT SCIENCE, vol. 59, no. 9, September 2003 (2003-09), pages 1057-1059, XP002557499 ISSN: 1526-498X page 1057, the abstract page 1057 page 1059, paragraph 2 - right-hand column, paragraph 2	1-15
A	US 6 207 707 B1 (TESHIMA HAYATO [JP] ET AL) 27 March 2001 (2001-03-27) column 1, line 10 - line 25 column 3, formulation example 10	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2008/058557

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 6207707	B1	27-03-2001	AU	3683093 A		20-01-1994
			BR	9302814 A		16-02-1994
			CN	1081320 A		02-02-1994
			IL	106309 A		15-04-1997
			MX	9303955 A1		31-01-1994