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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 August 2009 (13.08.2009)

PCT

(10) International Publication Number
WO 2009/100188 A3

(51) **International Patent Classification**:
C12Q 1/68 (2006.01)

(21) **International Application Number**:
PCT/US2009/033171

(22) **International Filing Date**:
5 February 2009 (05.02.2009)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
61/065,165 8 February 2008 (08.02.2008) US

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(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).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

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))*

— *with sequence listing part of description (Rule 5.2(a))*

(88) **Date of publication of the international search report**:
15 October 2009

WO 2009/100188 A3

(54) **Title**: METHODS FOR DETECTION OF CORN EVENT DAS-59132

(57) **Abstract**: The invention provides assays for detecting the presence of the maize DAS-59132 event based on the DNA sequence of the recombinant construct inserted into the maize genome and the DNA sequences flanking the insertion site. Kits and conditions useful in conducting the assays are provided.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2009/033171

A. CLASSIFICATION OF SUBJECT MATTER
INV. C12Q1/68

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)
C12N C12Q

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, BIOSIS, EMBASE, Sequence Search, 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	WO 2006/039376 A (PIONEER HI BRED INT [US]; DOW AGROSCIENCES LLC [US]; DU PONT [US]; BIN) 13 April 2006 (2006-04-13) pages 7-8, paragraph 26; sequence 24	1-8,11, 14-19
Y	GAO YONG ET AL: "Characterization of Cry34Ab1 and Cry35Ab1 insecticidal crystal proteins expressed in transgenic corn plants and Pseudomonas fluorescens" JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol. 52, no. 26, 29 December 2004 (2004-12-29), pages 8057-8065, XP002528713 ISSN: 0021-8561 table 1	1-8,11, 14-19

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[X] Further documents are listed in the continuation of Box C.

[X] 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.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
28 May 2009	28/08/2009

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Dolce, Luca

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Form PCT/ISA/210 (second sheet) (April 2005)

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MOELLENBECK DANIEL J ET AL: "Insecticidal proteins from Bacillus thuringiensis protect corn from corn rootworms" NATURE BIOTECHNOLOGY, vol. 19, no. 7, July 2001 (2001-07), pages 668-672, XP002528714 ISSN: 1087-0156 the whole document	1-8,11, 14-19
A	WO 03/060159 A (MATFORSK [NO]; RUDI KNUT [NO]; HOLCK ASKILD [NO]; GARDNER REBECCA [GB]) 24 July 2003 (2003-07-24) sequence 54	1-8,11, 14-19
A	WO 2004/099447 A (DOW AGROSCIENCES LLC [US]; DU PONT [US]; PIONEER HI BRED INT [US]; BAR) 18 November 2004 (2004-11-18) the whole document	1-8,11, 14-19
A	WO 03/052073 A (SYNGENTA PARTICIPATIONS AG [CH]; STEINER HENRY-YORK [US]; DAWSON JOHN) 26 June 2003 (2003-06-26) the whole document	1-8,11, 14-19
A	WO 2005/103266 A (DOW AGROSCIENCES LLC [US]; SONG PING; TAGLIANI LAURA; PELLOW JOHN W) 3 November 2005 (2005-11-03) the whole document	1-8,11, 14-19
A	JAMES DELANO ET AL: "Reliable detection and identification of genetically modified maize, soybean, and canola by multiplex PCR analysis" JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 51, no. 20, 24 September 2003 (2003-09-24), pages 5829-5834, XP002433742 ISSN: 0021-8561 the whole document	1-8,11, 14-19

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/033171

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see additional sheet(s)

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: (claims 1-7, 14-19 all partially; claims 8, 11 all completely)

methods for identifying/detecting DAS-59132 event in corn, methods for screening seeds/confirming seed purity, and products based on SEQ ID NOs: 4 and 5; and SEQ ID NO: 10 .

Invention 2: (claims 1-7, 14-19 all partially; claims 9, 12 all completely)

methods for identifying/detecting DAS-59132 event in corn, methods for screening seeds/confirming seed purity, and products based on SEQ ID NOs: 6 and 7; and SEQ ID NO: 11.

Invention 3: (claims 1-7, 14-19 all partially; claims 10, 13 all completely)

methods for identifying/detecting DAS-59132 event in corn, methods for screening seeds/confirming seed purity, and products based on SEQ ID NOs: 8 and 9; and SEQ ID NO: 12

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2009/033171

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