

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 81500-WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2018/084957	International filing date (<i>day/month/year</i>) 14 December 2018 (14-12-2018)	(Earliest) Priority Date (<i>day/month/year</i>) 19 December 2017 (19-12-2017)
Applicant SYNGENTA PARTICIPATIONS AG		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

- ☒ the international application in the language in which it was filed
☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6**bis**(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☒ **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant
☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____
☐ as suggested by the applicant
☐ as selected by this Authority, because the applicant failed to suggest a figure
☐ as selected by this Authority, because this figure better characterizes the invention
 b. ☒ none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2018/084957

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 all searchable 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 report covers 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.:

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.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2018/084957

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07D261/04 A01N43/80
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)
C07D 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 practicable, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2014/243375 A1 (EL QACEMI MYRIEM [CH] ET AL) 28 August 2014 (2014-08-28) page 118, paragraph 965	1-15
X	WO 2011/067272 A1 (SYNGENTA PARTICIPATIONS AG [CH]; CASSAYRE JEROME YVES [CH]; RENOLD PET) 9 June 2011 (2011-06-09) cited in the application pages 54-55 paragraph [0817]	1-15
	----- -/--	



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 application or patent 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

1 April 2019

Date of mailing of the international search report

26/04/2019

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

Grassi, Damian

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2018/084957

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Jim Bullock ET AL: "Crystallisation Science and Agrochemical Formulation", 4 February 2016 (2016-02-04), XP055548978, Retrieved from the Internet: URL:https://www.crystallizationsystems.com/media/files/Webinars/Technobis%20webinar%20on%20Agrochemical%20formulation.pdf [retrieved on 2019-01-29] pages 6,22 -----	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2018/084957

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2014243375	A1	28-08-2014	BR 112014007847 A2	18-04-2017
			CN 103842346 A	04-06-2014
			EP 2763970 A1	13-08-2014
			JP 2014534182 A	18-12-2014
			KR 20140075749 A	19-06-2014
			US 2014243375 A1	28-08-2014
			WO 2013050302 A1	11-04-2013

WO 2011067272	A1	09-06-2011	AR 079224 A1	04-01-2012
			AU 2010326766 A1	07-06-2012
			BR 112012013085 A2	08-09-2015
			CA 2780522 A1	09-06-2011
			CN 102639529 A	15-08-2012
			CO 6541622 A2	16-10-2012
			CR 20120299 A	04-07-2012
			DK 2507230 T3	30-04-2018
			EA 201200826 A1	30-01-2013
			EC SP12011940 A	31-07-2012
			EP 2507230 A1	10-10-2012
			ES 2666415 T3	04-05-2018
			HU E036528 T2	30-07-2018
			IL 219912 A	29-09-2016
			JP 5980119 B2	31-08-2016
			JP 2013512274 A	11-04-2013
			KR 20120102066 A	17-09-2012
			LT 2507230 T	10-05-2018
			MA 33782 B1	01-11-2012
			MY 157849 A	29-07-2016
			NZ 600036 A	31-05-2013
			PL 2507230 T3	31-07-2018
			PT 2507230 T	23-04-2018
			TN 2012000276 A1	12-12-2013
			TW 201130417 A	16-09-2011
			US 2012238517 A1	20-09-2012
			US 2014228577 A1	14-08-2014
			US 2017152250 A1	01-06-2017
			UY 33070 A	29-07-2011
			WO 2011067272 A1	09-06-2011
			ZA 201203587 B	29-10-2014

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-5, 8, 9(completely); 10-15(partially)

Polymorph of the compound of formula IA according to claims 1-5 and the racemate of claim 8 (the group is still not unitary).

2. claims: 6, 7(completely); 10-15(partially)

Polymorph of the compound of formula IB or IC according to claim 6 (the group is still not unitary).
