

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 81843-WO-REG-ORG-P-1	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2020/059924	International filing date (<i>day/month/year</i>) 7 April 2020 (07-04-2020)	(Earliest) Priority Date (<i>day/month/year</i>) 11 April 2019 (11-04-2019)
Applicant SYNGENTA CROP PROTECTION 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 4 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/EP2020/059924

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07D401/04 C07D403/04 A01N43/26 A61P33/00
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 A61P

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, 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	WO 2013/092943 A1 (BASF SE [DE]) 27 June 2013 (2013-06-27)	1-4,6-13
A	claims 1-61; table C.2; compound 2.47 -----	5
A	WO 2017/192385 A1 (ELANCO TIERGESUNDHEIT AG [CH]; LILLY CO ELI [US]) 9 November 2017 (2017-11-09) cited in the application claims 1-16; example 57 -----	1-13
A	WO 2016/091776 A1 (EVOTEC AG [DE]) 16 June 2016 (2016-06-16) claims 1-38; compound 324 -----	1-13



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

24 April 2020

Date of mailing of the international search report

06/05/2020

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

Sáez Díaz, R

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2020/059924

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2013092943	A1	27-06-2013	AR 090045 A1 15-10-2014
		AU 2012356947 A1 10-07-2014	
		BR 112014015553 A2 13-06-2017	
		CA 2858766 A1 27-06-2013	
		CL 2014001688 A1 07-11-2014	
		CN 104169278 A 26-11-2014	
		CO 6980665 A2 27-06-2014	
		CR 20140276 A 23-07-2014	
		EP 2794601 A1 29-10-2014	
		ES 2727479 T3 16-10-2019	
		JP 6415983 B2 31-10-2018	
		JP 2015502967 A 29-01-2015	
		KR 20140115329 A 30-09-2014	
		US 2014364466 A1 11-12-2014	
		WO 2013092943 A1 27-06-2013	
		ZA 201405336 B 29-11-2017	
WO 2017192385	A1	09-11-2017	AR 108222 A1 01-08-2018
		AU 2017261187 A1 04-10-2018	
		BR 112018069578 A2 22-01-2019	
		CA 3023208 A1 09-11-2017	
		CL 2018003021 A1 15-02-2019	
		CN 109311841 A 05-02-2019	
		CO 2018011825 A2 22-11-2018	
		DK 3452460 T3 16-03-2020	
		EA 201892191 A1 30-04-2019	
		EP 3452460 A1 13-03-2019	
		JP 6370504 B2 08-08-2018	
		JP 2018517716 A 05-07-2018	
		KR 20180132100 A 11-12-2018	
		PT 3452460 T 24-03-2020	
		TW 201803863 A 01-02-2018	
		TW 201938548 A 01-10-2019	
		US 2018186778 A1 05-07-2018	
		US 2019256501 A1 22-08-2019	
		WO 2017192385 A1 09-11-2017	
WO 2016091776	A1	16-06-2016	AR 102948 A1 05-04-2017
		AU 2015359626 A1 29-06-2017	
		BR 112017012327 A2 27-02-2018	
		CA 2969952 A1 16-06-2016	
		CL 2017001488 A1 23-02-2018	
		CN 107207507 A 26-09-2017	
		CN 110256418 A 20-09-2019	
		CR 20170242 A 02-02-2018	
		CU 20170077 A7 07-11-2017	
		DO P2017000137 A 31-07-2017	
		DO P2018000182 A 15-09-2018	
		EA 201791261 A1 29-12-2017	
		EA 201891120 A1 31-10-2018	
		EP 3230281 A1 18-10-2017	
		EP 3587417 A1 01-01-2020	
		IL 252665 A 31-10-2019	
		JP 6544665 B2 17-07-2019	
		JP 6647371 B2 14-02-2020	
		JP 2017537122 A 14-12-2017	
		JP 2019059742 A 18-04-2019	
		KR 20170093203 A 14-08-2017	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2020/059924

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		PE 20180227 A1	31-01-2018
		PH 12017501079 A1	18-10-2017
		SG 11201704717V A	30-08-2017
		SV 2017005461 A	30-04-2018
		TN 2017000244 A1	19-10-2018
		TW 201629053 A	16-08-2016
		US 2018093980 A1	05-04-2018
		US 2018118731 A1	03-05-2018
		US 2019185466 A1	20-06-2019
		UY 36422 A	30-06-2016
		WO 2016091776 A1	16-06-2016
