

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 82842-WO-REG-ORG-P-1	FOR FURTHER ACTION See item 4 below	
International application No. PCT/EP2024/060005	International filing date (<i>day/month/year</i>) 12 April 2024 (12.04.2024)	Priority date (<i>day/month/year</i>) 13 April 2023 (13.04.2023)
International Patent Classification (IPC) or national classification and IPC See relevant information in Form PCT/ISA/237		
Applicant SYNGENTA CROP PROTECTION AG		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| ☒ | Box No. I | Basis of the report |
| ☐ | Box No. II | Priority |
| ☐ | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| ☐ | Box No. IV | Lack of unity of invention |
| ☒ | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement |
| ☒ | Box No. VI | Certain documents cited |
| ☐ | Box No. VII | Certain defects in the international application |
| ☐ | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

	Date of issuance of this report 08 October 2025 (08.10.2025)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Thomas Rochaix e-mail pct.team5@wipo.int

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2024/060005

International filing date (day/month/year)
12.04.2024

Priority date (day/month/year)
13.04.2023

International Patent Classification (IPC) or both national classification and IPC
INV. A01N43/90 A01P3/00

Applicant
SYNGENTA CROP PROTECTION AG

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0

Date of completion of
this opinion

see form
PCT/ISA/210

Authorized Officer

Grégoire, Ariane

Telephone No. -0



Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established 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)).
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:
- a. ☒ forming part of the international application as filed.
 - b. ☐ furnished subsequent to the international filing date for the purposes of international search (Rule 13ter.1(a)),
 - ☐ accompanied by a statement to the effect that the sequence listing does not go beyond the disclosure in the international application as filed.
4. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established to the extent that a meaningful opinion could be formed without a WIPO Standard ST.26 compliant sequence listing.
5. Additional comments:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement
- | | | |
|-------------------------------|-------------|-------------|
| Novelty (N) | Yes: Claims | <u>1-15</u> |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | <u>1-15</u> |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | <u>1-15</u> |
| | No: Claims | |
2. Citations and explanations
- see separate sheet**

Box No. VI Certain documents cited

1. Certain published documents (Rules 43*bis*.1 and 70.10)
and / or
2. Non-written disclosures (Rules 43*bis*.1 and 70.9)
see form 210

Re Item V

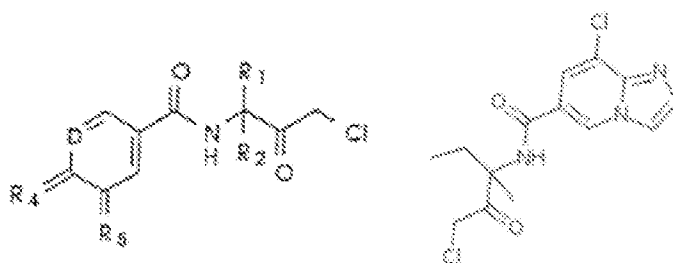
Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1) Reference is made to the following documents :

- D1 EP 1 229 028 A1 (DOW AGROSCIENCES LLC [US]) 7 August 2002
(2002-08-07)
- D2 WO 2014/078813 A1 (IRM LLC [US]; NOVARTIS AG [CH] ET AL.) 22 May
2014 (2014-05-22)

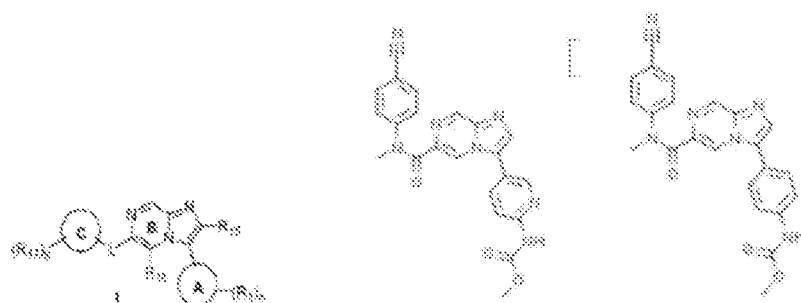
2) Novelty (Art. 33 (1) and (2) PCT) :

D1 discloses phytopathogenic fungicides including one imidazo[1,2-a]pyridine bonded to an amide (D1, claims 1, 2, example 131) but the fused imidazole moiety and the amide are otherwise substituted.



D1, cl. 1 ex. 131

D2 discloses for the treatment or parasitic diseases bicyclic derivatives having the present substitution pattern (D2, claims 1, 11) but the bicycle is different (imidazo[1,2-a]pyrazine instead of present imidazo[1,2-a]pyridine).



D2, cl. 1 ex 260 and 482

3) Inventive Step (Art. 33 (1) and (3) PCT) :

D1 is the closest prior art to the claimed subject-matter because it discloses compounds having the same use.

The compounds of present formula (I) differ from those of D1 as mentioned above.

The technical problem underlying the application is the provision of alternative phytopathogenic fungicide compositions.

In view of the antifungal tests provided on pages 110-167, it can be assumed that this problem has been solved. The compounds of present formula (I) are structurally remote from those of D1. D2 discloses compounds which are structurally closer but they have a different use (i.e. treatment of parasitic diseases) and are therefore not relevant for the assessment of inventive step. Consequently, it is considered that the present application involves an inventive step.

Re Item VI

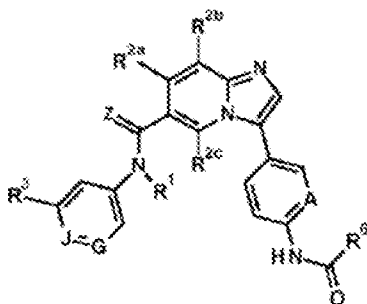
Certain documents cited

Reference is made to the following documents:

- D3 WO 2023/061838 A1 (SYNGENTA CROP PROTECTION AG [CH]) 20 April 2023 (2023-04-20)
- D4 WO 2024/126404 A1 (SYNGENTA CROP PROTECTION AG [CH]) 20 June 2024 (2024-06-20)

The priority rights presently claimed are only partially valid. For instance compositions comprising component (A) being a compound of formula (I) wherein R¹ is alkylsulfonylalkyl and/or J is N were not disclosed in the priority document. There is also no composition wherein component (C) is cyazofamid or *streptomyces chrestomycetius*. The intermediate compounds XXI of present claim 15 are also not disclosed.

Document D3 has a publication date after the present priority date. It will thus be relevant in the European phase for the assessment of novelty of the subject-matter for which the priority rights are valid and for the assessment of both novelty and inventive step for the subject-matter for which the priority rights are not valid. This document is considered highly prejudicial to the present application. It indeed discloses compounds of formula (I) which may be used in composition comprising agricultural adjuvants and other biologically active ingredients including those presently claimed (see page 72 and following pages). Compositions of claim 1 comprising compounds wherein R¹ is alkylsulfonylalkyl are for instance disclosed in Document D3 on a generic level. Both ingredients list being in the form of generic list in present claim 1, the overlap is considered prejudicial to the novelty of the present application. Document D3 also discloses examples of specific compositions falling within the scope presently claimed (see from page 72).



© WO2023061838, cl. 1

Furthermore the presently claimed intermediate compounds of claim 15 are not disclosed in Document D3 but appear obvious over the intermediate (XVI) disclosed on page 50 or 57.

Document D4 discloses a family of compounds referred to as compounds (XVI) which will be prejudicial to the novelty of present claim 15 in the European Phase if the requirements of rule 165 EPC are fulfilled : Claim 18 of Document D4 and the intermediate compound of example 10 in step 3 anticipate the subject-matter of present claim 15. These are also disclosed in the priority document of D4 (see example 10 step 3 page 125 and compounds XVII scheme 11 on page 63).