

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: SINGH, HEMANT INTTL ADVOCARE F-252, LANE W/5, WESTERN AVENUE, SAINIK FARMS, NEW DELHI ,DELHI-110062 INDIA

Date of mailing <i>(day/month/year)</i> 30-07-2020

Applicant's or agent's file reference 1011-41-PCT	FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/IN2020/050181	International filing date <i>(day/month/year)</i> 27-02-2020	Priority date <i>(day/month/year)</i> 28-02-2019
International Patent Classification (IPC) or both national classification and IPC A01N53/00,A01N47/40 Version=2020.01		
Applicant WILLOWOOD CHEMICALS PRIVATE LIMITED		

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. I(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 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/ Indian Patent Office Plot No. 32, Sector 14, Dwarka, New Delhi-110075 Facsimile No.	Date of completion of this opinion 30-07-2020	Authorized officer Preeti Bansal Telephone No. +91-1125300200
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IN2020/050181

Box No. I Basis of this 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(b)).
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:
 - ☐ in the form of an Annex C/ST.25 text file.
 - ☐ on paper or in the form of an image file.
 - b. ☐ furnished together with the international application under PCT Rule 13ter.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
 - c. ☐ furnished subsequent to the international filing date for the purposes of international search only:
 - ☐ in the form of an Annex C/ST.25 text file (Rule 13ter.1(a)).
 - ☐ on paper or in the form of an image file (Rule 13ter.1(b) and Administrative Instructions, Section 713).
4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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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

1. Statement

Novelty (N)	Claims	<u>1-14</u>	YES
	Claims	<u>NONE</u>	NO
Inventive step (IS)	Claims	<u>NONE</u>	YES
	Claims	<u>1-14</u>	NO
Industrial applicability (IA)	Claims	<u>1-14</u>	YES
	Claims	<u>NONE</u>	NO

2. Citations and explanations:

Reference is made to the following document:

D1: IN201621027690

Present application describes a synergistic insecticidal composition comprising: a) methoxyfenozide (15 to 25% w/w), b) emamectin benzoate (0.1 to 3% w/w), c) any one of deltamethrin, lambda-cyhalothrin, pymetrozine, or flubendiamide (0.5 to 20% w/w), d) excipient.

Novelty under PCT Article 33(2)

The present application meets the requirements of Article 33(2) PCT because the subject matter of the present claims 1-14 is new as the claimed subject matter can not be anticipated by the above cited document D1.

The present claims 1-14 are novel as an insecticidal composition comprising methoxyfenozide, emamectin benzoate, and anyone of deltamethrin, lambda-cyhalothrin, pymetrozine, or flubendiamide is not disclosed in document D1.

Inventive step under PCT Article 33(3)

The subject matter of the claims 1-14 of the present application does not meet the requirements of Article 33(3) PCT in view of the cited document D1.

D1 discloses a pesticidal composition comprises a) Methoxyfenozide (0.1-40% w/w) b) Emamectin Benzoate (0.1-40% w/w) c) at least one more insecticide selected from Bifenthrin, Deltamethrin, Lambda cyhalothrin, or, Fipronil (0.1-40% w/w) d) dispersant(tristyrylphenoethoxylate phosphate esters and graft copolymers), e) wetting agent (dioctylsulphosuccinate), f)

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The subject matter of specification (Table 12, page 34) lacks clarity and does not meet the requirements of Article 6 PCT, as the prior art experiment clearly shows that the percentage of larva control of Diamondback moth using the pesticidal composition comprising methoxyfenozide, emamectin Benzoate and bifenthrin is 88.36% (Table 2, page 49) whereas in the present application percentage of larva control of Diamondback moth is 69.81% using the same pesticidal composition.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Continuation of Citation and Explanation(Box5)

anti-freezing agent (ethylene glycol), g) anti-foam agent (dimethylpolysiloxane), h) biocide (1,2-benzisothiazolin-3-one), i) thickener (xanthan gum) where the composition is formulated as the suspension concentrate. (see claims 1-7, pages 16-19)

D1 also discloses the larval control of Diamondback moth with the pesticidal composition comprising methoxyfenozide, emamectin Benzoate and bifenthrin where the amount of all the three components are within the scope of the insecticidal composition of the present application (Table 2, page 49).

The difference between the subject matter of present claims and D1 is that D1 does not explicitly disclose any working example for the combination of Methoxyfenozide, emamectin benzoate with pyrethroid compound (deltamethrin or lambda-cyhalothrin).

However, D1 clearly discloses the combination of methoxyfenozide, emamectin Benzoate and bifenthrin in a pesticidal composition where bifenthrin is also a synthetic pyrethroid insecticide.

Hence the choice of replacing bifenthrin with other pyrethroid compounds (deltamethrin, or lambda-cyhalothrin) in an insecticidal composition appears to be a part of routine experimentation and can be simply attained by the common synthetic method in the art without any special effort.

Thus, the subject matter of present claims concerns only minor modifications which lie within the normal practice of the person skilled in the art. Routine experimentation would lead the skilled person to combine the teachings of the above-said document D1 with the common general knowledge to arrive at the present invention. Hence, claims 1-14 lack inventive step.

Thus, the subject matter of claims 1-14 does not comply with the requirements of Article 33(3) PCT in view of document D1.

Industrial Applicability Under PCT Article 33(4)

Claims 1-14 meet the criteria set out in Article 33(4) PCT, and thus have industrial applicability because the subject matter claimed can be made or used in the industry.