

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 16PP143	FOR FURTHER ACTION		See item 4 below
International application No. PCT/KR2016/014649	International filing date (<i>day/month/year</i>) 14 December 2016 (14.12.2016)	Priority date (<i>day/month/year</i>) 02 August 2016 (02.08.2016)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant NPC CO., LTD.			

<p>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).</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>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.</p>																								
<p>3. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>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).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<p align="center">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 05 February 2019 (05.02.2019)</p>
	<p>Authorized officer</p> <p align="center">Kihwan Moon</p> <p>e-mail: pct.team1@wipo.int</p>

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year)	25.04.2017
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Applicant's or agent's file reference 16PP143

FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/KR2016/014649	International filing date (day/month/year) 14.12.2016	Priority date (day/month/year) 02.08.2016
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International Patent Classification (IPC) or both national classification and IPC B65D1/20 (2006.01) i, B65D1/06 (2006.01) i, B65D1/26 (2006.01) i, B65D81/38 (2006.01) i

Applicant NPC CO., LTD.

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 or 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/KR	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

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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 43*bis*.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:
 - 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 13*ter*.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 13*ter*.1(a)).
 - on paper or in the form of an image file (Rule 13*ter*.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:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No. PCT/KR2016/014649
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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)	Claims	1-8	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-8	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims	NONE	NO
2. Citations and explanations:			
<p>Reference is made to the following documents:</p> <p>D1: KR 10-1498251 B1 (JRP CORPORATION) 09 March 2015</p> <p>D2: KR 10-1577386 B1 (NEX_IN TECHNOLOGIES CO., LTD.) 14 December 2015</p> <p>D3: KR 10-1243382 B1 (MUN, Ha Gyu) 21 March 2013</p> <p>D4: KR 20-0473800 Y1 (KIM, Jin Won et al.) 31 July 2014</p> <p>D5: KR 10-2004-0108795 A (SIG TECHNOLOGY LTD.) 24 December 2004</p> <p>1. Novelty and Inventive Step</p> <p>1.1 Independent Claim: Claim 1</p> <p style="padding-left: 40px;">The invention as set forth in claim 1 is different from the inventions disclosed in documents D1-D5 in that the invention as in the claim comprises a resilient section which is disposed between a lid section and a wing section and which applies a resilient force to the lid section in the direction whereby an injection aperture is closed, and formed in said resilient section</p>			

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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

there are a through hole into which a nozzle is inserted and injection ports linking through to the through hole, and also the resilient section is formed of a soft resilient material, and this difference would not be obvious to a person skilled in the art even having regard to documents D1-D5. Consequently, claim 1 is novel and involves an inventive step (PCT Article 33(2) and (3)).

1.2 Dependent Claims: Claims 2-7

Claims 2-7 are dependent on claim 1, and thus are novel and involve an inventive step (PCT Article 33(2) and (3)).

1.3 Independent Claim: Claim 8

The invention as set forth in claim 8 is different from the inventions disclosed in documents D1-D5 in that the invention as in the claim comprises the resilient section which is disposed between the lid section and the wing section and applies a resilient force to the lid section in the direction whereby an injection aperture is closed, and formed in said resilient section there are the through hole into which the nozzle is inserted and the injection ports linking through to the through hole, and also the resilient section is formed of a soft resilient material, and this difference would not be obvious to a person skilled in the art even having regard to documents D1-D5. Consequently, claim 8 is novel and involves an inventive step (PCT Article 33(2) and (3)).

2. Industrial Applicability

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

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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**

The invention as set forth in claims 1-8 is
industrially applicable (PCT Article 33(4)).