

**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<br>201609qb6   | <b>FOR FURTHER ACTION</b>  |  | See item 4 below |
| International application No.<br>PCT/CN2016/104482   | International filing date ( <i>day/month/year</i> )<br>03 November 2016 (03.11.2016) | Priority date ( <i>day/month/year</i> )<br>25 August 2016 (25.08.2016) |                  |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |  |  |                  |
| Applicant<br>SHYA HSIN PACKAGING INDUSTRY(CHINA) 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 checked="" 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 checked="" 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 |
| <input checked="" type="checkbox"/>  | Box No. I                           | Basis of the report   |                     |                                     |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                          |              |   |
| <input checked="" 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   |                     |                                     |            |          |                          |             |  |                          |            |                            |                                     |           |   |                          |            |                         |                          |             |  |                          |              |   |

|   |  |
|---|--|
|   | Date of issuance of this report<br>26 February 2019 (26.02.2019) |
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland | Authorized officer<br><br>Xin Wang                               |
| Facsimile No. +41 22 338 82 70  | e-mail: pct.team2@wipo.int                                       |

From the INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

|   |   |  |
|---|---|--|
| Applicant's or agent's file reference<br><b>201609qb6</b>   |   | Date of mailing<br>(day/month/year) <b>23 May 2017</b> |
| International application No.<br><b>PCT/CN2016/104482</b>   |   | <b>FOR FURTHER ACTION</b><br>See paragraph 2 below     |
| International filing date (day/month/year)<br><b>03 November 2016</b>                                     | Priority date (day/month/year)<br><b>25 August 2016</b> |  |
| International Patent Classification (IPC) or both national classification and IPC<br>A45D 40/20(2006.01)i |   |  |
| Applicant<br><b>SHYA HSIN PACKAGING INDUSTRY(CHINA) CO., LTD.</b>   |   |  |

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 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/ | Date of completion of this opinion | Authorized officer |
|                                      |                                    |                    |

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/CN2016/104482

## 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 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 filed or furnished:
  - a. (means)
    - on paper
    - in electronic form
  - b. (time)
    - in the international application as filed
    - together with the international application in electronic form
    - subsequently to this Authority for the purposes of search
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 in 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/CN2016/104482

**Box No. II**      **Priority**

1.  The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43*bis*.1 and 64.1) is the claimed priority date.
2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:
  - [1] Upon verification, the right of priority is established.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/CN2016/104482

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>1-8</u>  | YES |
|                               | Claims | <u>None</u> | NO  |
| Inventive step (IS)           | Claims | <u>1-8</u>  | YES |
|                               | Claims | <u>None</u> | NO  |
| Industrial applicability (IA) | Claims | <u>1-8</u>  | YES |
|                               | Claims | <u>None</u> | NO  |

## 2. Citations and explanations :

[1] This opinion is given with reference to the following document :

[2] D1: CN 204561275 U (19 August 2015), description, paragraph [0005], and figure 1

[3] I. Novelty and Inventive step

[4] D1 discloses a direct liquid eyeliner, comprising a nib shell, wherein the nib shell has a nib inner cavity, and the nib shell comprises a shell segment and a closing off portion; the shell segment has a tail end opening, and the closing off portion has a front end opening; a brush seat is arranged on the closing off portion, an outer side wall of the brush seat is connected to an inner side wall of the closing off portion, and a brush head is arranged on the brush seat; a sealing rod is arranged in the nib inner cavity and comprises a penetrating core segment and a blocking seat connected to an inner wall of the shell segment for sealing; a sealing tail plug for sealing the tail end opening is arranged on the shell segment, and a liquid storage cavity is formed between the sealing tail plug, the blocking seat and the inner side wall of the shell segment; the liquid storage cavity is filled with eyeliner liquid, and a water diversion core passing through the penetrating core segment and compressed with the inner wall of the penetrating core segment is arranged in the nib inner cavity; one end of the water diversion core extends into the liquid storage cavity, and the other end of the water diversion core is connected to the brush head; a liquid absorption sponge is arranged in the nib inner cavity, and the water diversion core passes through the liquid absorption sponge and is attached to the liquid absorption sponge; and the liquid absorption sponge is located between the brush seat and the blocking seat, and several convection micro-slots are arranged in the brush seat. It can be seen therefrom that the eyeliner in D1 realizes automatic control of liquid output when the liquid storage amount is large by the structure of the sealing tail plug and the liquid absorption sponge, while, when the amount of residual liquid is small, realizing the air intake, air output and liquid output by the convection micro-slots on the brush seat.

[5] Comparing claim 1 with D1, at least the following differences exist: (1) at least one air inlet (211) extending in its axial direction is provided in a brush cover body (210) and at a position close to a front shaft end thereof in a penetrating manner, and the front side of the air inlet (211) is exposed outside a brush cover seat (20); and at least one first exhaust groove (212) extending in its axial direction is further formed on the outer peripheral sidewall of the brush cover body (210), the front side of the first exhaust groove (212) is in communication with the air inlet (211), and the rear side of the first exhaust groove (212) is in communication with a second exhaust groove on a distribution seat (22); and (2) at least one liquid storage groove unit is provided on the inner peripheral sidewall of the brush cover body (210), each liquid storage groove unit consists of several circular arc-shaped liquid storage grooves (213) extending along the circumference of the brush cover body (210), and the several circular arc-shaped liquid storage grooves (213) in each liquid storage groove unit are further arranged at intervals in the axial direction of the brush cover body (210). Therefore, claim 1 and dependent claims 2-8, which directly or indirectly refer thereto, are novel under PCT Article 33(2).

[6] The above-mentioned distinguishing features are neither disclosed in the prior art, nor are they common general knowledge in the art. This application makes the internal and external pressure in the liquid eyeliner equal by the first exhaust groove and the air inlet in the above-mentioned distinguishing features, so as to stabilize the dispensing of bristles; at the same time, the arrangement of the circular arc-shaped liquid storage groove means that, when the liquid amount is large, the excess eyeliner liquid is stored in the circular arc-shaped liquid storage groove, and when the liquid amount is insufficient, the eyeliner

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/CN2016/104482

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**

liquid in the liquid storage groove is added to the bristles to achieve stable dispensing. Therefore, claim 1 involves an inventive step under PCT Article 33(3), and dependent claims 2-8, which directly or indirectly refer thereto, also involve an inventive step under PCT Article 33(3).

[7] II. Industrial applicability

[8] Claims 1-8 comply with PCT Article 33(4).