

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 UC-1083-PCT	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2016/084417	International filing date (<i>day/month/year</i>) 21 November 2016 (21.11.2016)	Priority date (<i>day/month/year</i>) 22 December 2015 (22.12.2015)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant UNICHARM CORPORATION			

<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 8 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
<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																						

	Date of issuance of this report 26 June 2018 (26.06.2018)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yukari Nakamura
Facsimile No. +41 22 338 82 70	e-mail: pct.team7@wipo.int

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)	07.02.2017
-------------------------------------	-------------------

Applicant's or agent's file reference UC-1083-PCT	FOR FURTHER ACTION See paragraph 2 below
---	--

International application No. PCT/JP2016/084417	International filing date (day/month/year) 21.11.2016	Priority date (day/month/year) 22.12.2015
---	---	---

International Patent Classification (IPC) or both national classification and IPC
A61F13/49 (2006.01) i

Applicant
UNICHARM CORPORATION

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

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2016/084417

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(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 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:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No. PCT/JP2016/084417
--

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	1-7	YES
	Claims	_____	NO
Inventive step (IS)	Claims	6	YES
	Claims	1-5, 7	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims	_____	NO

2. Citations and explanations:	
--------------------------------	--

Document 1: US 6336922 B1 (KIMBERLY-CLARK WORLDWIDE, INC.) 08 January 2002, column 4, line 9 to column 5, line 28, column 8, line 39 to column 8, line 61, column 10, line 64 to column 11, line 12, column 14, line 50 to column 15, line 5, fig. 1-7 & WO 1997/048357 A1 & AU 3231697 A & CA 2256505 A & CO 4850614 A & AR 7416 A & ZA 9705162 A

Document 2: JP 2014-90902 A (KAO CORP.) 19 May 2014, paragraphs [0013]-[0036] (Family: none)

The invention as in claims 1 and 7 does not involve an inventive step in the light of document 1 cited in the ISR.

A comparison of the invention as in claim 1 and the invention disclosed in document 1 (column 4, line 9 to column 5, line 28, column 8, line 39 to column 8, line 61, column 10, line 64 to column 11, line 12, column 14, line 50 to column 15, line 5, fig. 1-7) shows that the inventions coincide in being

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2016/084417

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

"a disposable diaper (diaper 20), comprising a front waist area (front waist section 22), a rear waist area (rear waist section 24), and a crotch area (intermediate section 26) located between the front waist area and the rear waist area, a pair of fastening tapes (fasteners 50) that extend in a longitudinal direction extending from the front waist area toward the rear waist area, a width direction orthogonal to the longitudinal direction, and in the width direction in the rear waist area, and that are affixed to the front waist area, an absorbent core (absorbent body 36) that straddles the crotch area and extends toward at least the front waist area or the rear waist area, a hip stretch section (elastomeric fit panel 60), disposed on the rear edge of the disposable diaper, that stretches in the width direction, sheet materials (topsheet 34, backsheet 32), disposed so as to overlap with the hip stretch section and a joining section rows (attachment zones 104) in which joining sections that join the hip stretch section and the sheet materials are disposed at intervals in the longitudinal direction, wherein a plurality of the joining section rows are disposed at intervals in the width direction, the disposable diaper comprising first regions (outer side of attachment zones 104) that extend in the width direction inward from the outer edges of the hip stretch section and that does not comprise the joining sections and third regions (attachment zones 104), located on the inner side in the width direction of the first regions that comprise the joining section rows, and the first regions are located on the further outer side in the width direction of the absorbent core," and differ in the following difference 1.

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

Difference 1

In the invention as in claim 1, the disposable diaper comprises "a second region, extending rearward from the front edge of the hip stretch section, that does not comprise the joining sections," while it is unclear whether the invention disclosed in document 1 is provided with such a feature.

Difference 1 will be considered below. When an elastic member is joined to a sheet member in an absorbent article, choosing the width of the joining section is a design change associated with the specific intended use of the feature to solve the problem of ensuring joining and improving wearability, and does not exceed the exercise of the normal creative powers of a person skilled in the art.

The present application (paragraph [0059]) indicates that "the contour can be made to fit the body by the hip stretch section 85," but claim 1 and the detailed description of the invention do not mention the joining relationship of the first regions and the second region to the sheet materials, and thus it is unclear what kind of effect is exhibited by the first regions and the second region, and no effect exhibited by the second region is found to be mentioned.

The same applies to the invention as in claim 7.

The invention as in claim 2 does not involve an inventive step in the light of document 1 cited in the

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2016/084417

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

ISR.

Document 1 (fig. 1-7) further discloses a feature in which

"the rear edges of the joining section rows (attachment zones 104) are disposed on the rear edge of the disposable diaper (diaper 20).

The invention as in claim 3 does not involve an inventive step in the light of document 1 cited in the ISR.

Document 1 further discloses a feature in which

"at least a part of the hip stretch section (elastomeric fit panel 60) is disposed rearward of the absorbent core (absorbent body 36)."

The invention as in claim 4 does not involve an inventive step in the light of document 1 cited in the ISR.

Document 1 (column 4, line 9 to column 5, line 28) further discloses a feature in which "the sheet materials comprise a skin-side sheet (topsheet 34) located on the skin-facing side of the hip stretch section and a non-skin-side sheet (backsheet 32) located on the non-skin-facing side of the hip stretch section."

The invention as in claim 5 does not involve an inventive step in the light of document 1 cited in the ISR.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2016/084417

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

Document 1 (column 4, line 9 to column 5, line 28, fig. 1) further discloses features in which the disposable diaper "comprises leg stretch sections (leg elastic members 46), disposed around the legs of a wearer, that stretch in the longitudinal direction, and at a least part of the first regions (outer side of attachment zones 104) are disposed in a region extending from the leg stretch sections in the longitudinal direction."

The invention as in claim 6 is not disclosed in any of the documents cited in the ISR and would not be obvious to a person skilled in the art.

None of the documents discloses the feature of "comprising a fourth region, on the inner side in the width direction of the third regions, extending from the width center of the disposable diaper laterally outward, that has the joining section rows and fifth regions, located between the third regions and the fourth region, that do not comprise the joining sections, and the fifth regions and the fourth region are located on the laterally inner side of the outer edge of the absorbent core."

The invention as in claim 6, because of these features, exhibits the effect that

"leakage on the back side of the wearer can be suppressed."