

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: THOMSON, ANDREW J. KIMBERLY-CLARK WORLDWIDE, INC. 2300 WINCHESTER ROAD NEENAH WI 54956 USA

Date of mailing (day/month/year)	23 May 2018 (23.05.2018)
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Applicant's or agent's file reference 65037774PC01	FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/US2017/049765	International filing date (day/month/year) 31 August 2017 (31.08.2017)	Priority date(day/month/year)
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International Patent Classification (IPC) or both national classification and IPC H04L 12/28(2006.01)i
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Applicant KIMBERLY-CLARK WORLDWIDE, INC.
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1. This opinion contains indications relating to the following items:

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|-------------------------------------|--------------|--|
| ☒ | 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/KR International Application Division Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon, 35208, Republic of Korea Facsimile No. +82-42-481-8578	Date of completion of this opinion 23 May 2018 (23.05.2018)	Authorized officer KANG, Hee Gok Telephone No. +82-42-481-8264
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2017/049765

Box No. 1 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*. I(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*. I(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*. I(a)).
☐ on paper or in the form of an image file (Rule 13*ter*. I(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/US2017/049765

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	1-14	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-14	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims	NONE	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: US 2009-0066473 A1 (PAUL R. SIMONS) 12 March 2009

D2: US 2008-0218334 A1 (STEPHEN M. PITCHERS et al.) 11 September 2008

D3: EP 1455482 A1 (HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.) 08 September 2004

D4: KR 10-2012-0127803 A (LEE, DONG HUN) 26 November 2012

D5: US 2014-0022940 A1 (THE PROCTER & GAMBLE COMPANY) 23 January 2014

2.1 Novelty (PCT Article 33(2)) and Inventive Step (PCT Article 33(3))

2.1.1 Claims 1-6

Independent claim 1 differs from these prior art documents in that a system of claim 1 comprises a mobile installation tool configured, for each facility, to wirelessly communicate installation data to a data processing apparatus for use with a first protocol, wherein the first protocol defines one or more rules for generating naming information based on (i) a sequence of end point devices based on spatial orientations of the end point devices and (ii) a reference defining a starting point for the sequence, wherein the sequence is the same for each facility regardless of types or number of end point devices. And it is not obvious to a person skilled in the art over the documents (D1-D5), taken alone or in combination. Therefore, claim 1 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 2-6 are directly or indirectly dependent on claim 1 and therefore meet the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Continued on Supplemental Box

Supplemental Box

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

Continuation of : Box No. V

2.1.2 Claims 7-10

Independent claim 7 differs from these prior art documents in that a system of claim 7 comprises a first protocol defining one or more rules for generating naming information based on (i) a sequence of end point devices based on spatial orientations of the end point devices and (ii) a reference defining a starting point for the sequence. And it is not obvious to a person skilled in the art over the documents (D1-D5), taken alone or in combination. Therefore, claim 7 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 8-10 are dependent on claim 7 and therefore meet the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

2.1.3 Claims 11-14

Independent claim 11 differs from these prior art documents in that a method of claim 11 comprises a first protocol defining one or more rules for generating naming information based on (i) a sequence of end point devices based on spatial orientations of the end point devices and (ii) a reference defining a starting point for the sequence. And it is not obvious to a person skilled in the art over the documents (D1-D5), taken alone or in combination. Therefore, claim 11 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 12-14 are dependent on claim 11 and therefore meet the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

2.2 Industrial Applicability (PCT Article 33(4))

Claims 1-14 are industrially applicable under PCT Article 33(4).