

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)**

To:

see form PCT/ISA/220

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2018/076197

International filing date (day/month/year)
26.09.2018

Priority date (day/month/year)
28.09.2017

International Patent Classification (IPC) or both national classification and IPC
INV. A61M16/06 A61M16/08

Applicant
KONINKLIJKE PHILIPS N.V.

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 usually 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:



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Date of completion of this opinion

see form PCT/ISA/210

Authorized Officer

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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 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:

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of

the entire international application

claims Nos. 12-14

because:

the said international application, or the said claims Nos. relate to the following subject matter which does not require an international search (*specify*):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

no international search report has been established for the whole application or for said claims Nos. 12-14

a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

furnish a sequence listing in the form of an Annex C/ST.25 text file, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.

furnish a sequence listing on paper or in the form of an image file complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.

pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

See Supplemental Box for further details

Box No. IV Lack of unity of invention

1. In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has, within the applicable time limit:
- paid additional fees
 - paid additional fees under protest and, where applicable, the protest fee
 - paid additional fees under protest but the applicable protest fee was not paid
 - not paid additional fees
2. This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- complied with
 - not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- all parts.
 - the parts relating to claims Nos. 1-11

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)	Yes: Claims	<u>3, 6-8</u>
	No: Claims	<u>1, 2, 4, 5, 9-11</u>
Inventive step (IS)	Yes: Claims	<u>6-8</u>
	No: Claims	<u>1-5, 9-11</u>
Industrial applicability (IA)	Yes: Claims	<u>1-11</u>
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

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:

see separate sheet

Re Item IV

Lack of unity of invention

This authority considers that there are 2 separate groups of inventions:

Group 1: Claims 1-11: A conduit with a dual walls

Group 2: Claims 12-14: A head gear with arm comprising an inner and outer wall

- 1 They are not so linked as to form a single general inventive concept (Rule 13.1 PCT) for the following reasons:
 - 1.1 Group 1 and 2 are linked by the general concept and features of a dual walled conduit where the walls create a sealed compartment there between and the inner wall is suitable for conveying a flow of a gas there through.
 - 1.2 However document D1(US 2016/279374 A1) discloses dual walled conduits with a sealed compartment (cf. fig. 6, para. 81,82) and hence the concept and features are not novel Art. 33(2) PCT.
 - 1.3 Claim 1 has the remaining feature of the sealed compartment being structured to house a fixed quantity of gas. This address the problem of how to improve isolation of the inner conduit from the exterior. The dependent claims 2-9 are directed to further features of a conduit in particular the incorporation of a valve into the conduit.
 - 1.4 Claim 12 has remaining features directed to the provision of a particular type of headgear with inner and outer walls coupled to each other at either end and extending from a top portion to a patient interface along the side of the head to a patient interface in use. This addresses the problem of how to position headgear on a patient.
 - 1.5 There are no further general concepts or features linking the groups of inventions.
 - 1.6 Consequently there is no single general inventive concept linking the above mentioned groups of inventions. Hence novelty, inventive step and industrial application are only discussed on the basis of the first independent claim in each category.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1 US 2016/279374 A1 (GRAHAM PETER KENNETH [NZ] ET AL) 29 September 2016 (2016-09-29)
- D2 GB 2 465 358 A (SLE LTD [GB]) 19 May 2010 (2010-05-19)
- D3 US 2 875 757 A (GALLEHER JR ELLIS A) 3 March 1959 (1959-03-03)

- 2 The present application does not meet the criteria of Article 33(2) PCT, because the subject-matter of claim 1 is not new.

Document D1 discloses:

A conduit (6) for conveying a flow of a gas therethrough (cf. para. 81), the conduit comprising: an inner wall (7) having a first end and an opposite second end (cf. fig. 6), the inner wall disposed around, and defining a central passage extending between the first end and the second end, the central passage is structured to convey the flow of the gas therethrough between the first end and the second end (cf. para. 81; fig. 81); an outer wall (8) disposed about the inner wall (cf. para. 82); and a sealed compartment (cf. para. 83) defined between the inner wall and the outer wall, the sealed compartment being structured to house a fixed quantity of a gas therein (cf. para. 83).

- 2.1 Dependent claims 2-5 9,10 and 11 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and inventive step. See the references cited in the search report, in particular: D1 (cf. fig. 2,6), D2 (cf. fig. 3-5) and D3 (cf. fig.3).
- 2.2 The combination of the features of dependent claims 6-8 is neither known from, nor rendered obvious by, the available prior art.

Re Item VII

Certain defects in the international application

- 3 The independent claim should have been drafted in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would have been appropriate, with those features known in combination from the prior art being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- 3.1 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.
- 3.2 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Re Item VIII

Certain observations on the international application

- 4 Claim 3 is not clear Art. 6 PCT as the acronym TPE should have been present in full form at least once in the claims i.e. it should have read "or TPE (Thermoplastic elastomer) mechanically bonded to the fabric material."