

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 2017P01978WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2018/072951	International filing date (<i>day/month/year</i>) 27 August 2018 (27-08-2018)	(Earliest) Priority Date (<i>day/month/year</i>) 5 September 2017 (05-09-2017)
Applicant KONINKLIJKE PHILIPS N.V.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out 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))

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box No. II)

3. **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- the text is approved as submitted by the applicant
 the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant
 the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1
 as suggested by the applicant
 as selected by this Authority, because the applicant failed to suggest a figure
 as selected by this Authority, because this figure better characterizes the invention
- b. none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2018/072951

A. CLASSIFICATION OF SUBJECT MATTER
 INV. A61B90/00 A61B34/20 A61B8/08 A61B5/02 A61B5/00
 A61B17/34 A61M5/42
 ADD.
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 A61B A61M G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2015/065916 A1 (MAGUIRE TIM [US] ET AL) 5 March 2015 (2015-03-05)	1,2, 5-12, 17-20
Y	the whole document	3,4, 13-16
Y	----- US 2016/324580 A1 (ESTERBERG JUSTIN [US]) 10 November 2016 (2016-11-10)	3,4, 13-16
A	paragraph [0018] - paragraph [0022] paragraph [0079] - paragraph [0149] paragraph [0158] - paragraph [0187]; figures	1,2, 5-12, 17-20
X	----- WO 2012/088471 A1 (VEEBOT LLC [US]; HARRIS RICHARD J [US]; MYGATT JOSEPH B [US]; HARRIS S) 28 June 2012 (2012-06-28)	1,2, 5-11, 17-20
A	page 6, line 6 - page 59, line 4; figures ----- -/--	13-16

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search 27 November 2018	Date of mailing of the international search report 05/12/2018
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Croatto, Loredana
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2018/072951

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2 289 578 A1 (NORY CO LTD [JP]) 2 March 2011 (2011-03-02)	1,2,5-8, 10-12, 17-20
A	paragraph [0028] - paragraph [0057]; figures	13-16
A	----- WO 2014/139022 A1 (SYNAPTIVE MEDICAL BARBADOS INC [BB]; PIRON CAMERON [CA]; WOOD MICHAEL) 18 September 2014 (2014-09-18) page 13, line 8 - page 38, line 9; figures -----	1,5,17

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2018/072951

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2015065916 A1	05-03-2015	US 2015065916 A1 WO 2015031481 A1	05-03-2015 05-03-2015

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WO 2014139022 A1	18-09-2014	AU 2014231344 A1 CA 2906414 A1 CA 2929702 A1 CN 105208958 A EP 2967292 A1 HK 1218502 A1 JP 6420938 B2 JP 2016517287 A SG 11201507612X A US 2015351860 A1 WO 2014139022 A1	05-11-2015 18-09-2014 18-09-2014 30-12-2015 20-01-2016 24-02-2017 07-11-2018 16-06-2016 29-10-2015 10-12-2015 18-09-2014
