

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PC72217A	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/IB2016/054217	International filing date (<i>day/month/year</i>) 14 July 2016 (14-07-2016)	(Earliest) Priority Date (<i>day/month/year</i>) 21 July 2015 (21-07-2015)
Applicant PFIZER INC.		

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 7 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

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out 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~~.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 13~~ter~~.1(a)).
- ☐ on paper or in the form of an image file (Rule 13~~ter~~.1(b) and Administrative Instructions, Section 713).
2. ☐ 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.
3. Additional comments:

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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K39/09 A61K39/385 A61K39/00
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)
A61K

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, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2010/125480 A1 (COLEY PHARM GROUP INC [US]; DAVIS HEATHER LYNN [CA]; KRIEG ARTHUR MERT) 4 November 2010 (2010-11-04) page 15, lines 38-41 page 13, lines 14-20 page 13, line 22 - page 14, line 18 page 15, lines 20-21 page 16, lines 6-7 page 17, lines 34-35 page 17, lines 38-39 pages 35-39; example 2	1-27
Y	US 2011/195086 A1 (CAULFIELD MICHAEL J [US] ET AL) 11 August 2011 (2011-08-11) abstract paragraph [0007] table 5 paragraph [0119] - paragraph [0121] ----- -/-	1-27



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

14 September 2016

Date of mailing of the international search report

26/10/2016

Name and mailing address of the ISA/

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2012/119972 A1 (GLAXOSMITHKLINE BIOLOG SA [BE]; BIEMANS RALPH LEON [BE]; DUVIVIER PIER) 13 September 2012 (2012-09-13) page 16, lines 13-19 -----	1-27
Y	WO 2014/097099 A2 (PFIZER [US]) 26 June 2014 (2014-06-26) claims 24,67,82 page 20, paragraph 1 -----	1-27
Y	WO 2014/092378 A1 (SK CHEMICALS CO LTD [KR]) 19 June 2014 (2014-06-19) abstract paragraph [0006] claims 1, 2 paragraph [0007] -& EP 2 932 980 A1 (SK CHEMICALS CO LTD [KR]) 21 October 2015 (2015-10-21) -----	1-27
Y	CN 103 656 631 A (SINOVAC RES & DEV CO LTD) 26 March 2014 (2014-03-26) abstract paragraph [0001] paragraphs [0011] - [0012] claims 3, 4 -----	1-27
Y	HICKS L A ET AL: "Incidence of pneumococcal disease due to non-pneumococcal conjugate vaccine (PCV7) serotypes in the United States during the era of widespread PCV7 vaccination, 1998-2004", JOURNAL OF INFECTIOUS DISEASES. JID, UNIVERSITY OF CHICAGO PRESS, CHICAGO, IL, vol. 196, no. 9, 1 November 2007 (2007-11-01), pages 1346-1354, XP002757890, ISSN: 0022-1899, DOI: 10.1086/521626 [retrieved on 2007-10-04] the whole document abstract ----- -/--	1-27

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JULIE M SKINNER ET AL: "Pre-clinical evaluation of a 15-valent pneumococcal conjugate vaccine (PCV15-CRM197) in an infant-rhesus monkey immunogenicity model", VACCINE, ELSEVIER LTD, GB, vol. 29, no. 48, 20 September 2011 (2011-09-20), pages 8870-8876, XP028326015, ISSN: 0264-410X, DOI: 10.1016/J.VACCINE.2011.09.078 [retrieved on 2011-09-22] the whole document abstract page 8870, right-hand column, paragraph 2 - page 8871, left-hand column, paragraph 1 -----	1-27
Y	RON DAGAN ET AL: "Glycoconjugate vaccines and immune interference: A review", VACCINE, vol. 28, no. 34, 1 August 2010 (2010-08-01), pages 5513-5523, XP55117016, ISSN: 0264-410X, DOI: 10.1016/j.vaccine.2010.06.026 page 5514, left-hand column, paragraph 1 - page 5517, left-hand column, paragraph 1 page 5519, right-hand column, paragraph 5 page 5519, right-hand column, paragraph 8 - page 5520, right-hand column, paragraph 3 -----	1-27
X,P	WO 2015/110940 A2 (PFIZER [US]) 30 July 2015 (2015-07-30) the whole document -----	1-27
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Information on patent family members

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