

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference DE2019/013WOPCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2020/061813	International filing date (<i>day/month/year</i>) 29 April 2020 (29-04-2020)	(Earliest) Priority Date (<i>day/month/year</i>) 3 May 2019 (03-05-2019)
Applicant SANOFI		

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. 4
 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/EP2020/061813

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61M5/24
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)
A61M G01D

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	WO 2012/046199 A1 (MEIRING HENDRIK [ZA]) 12 April 2012 (2012-04-12) figure 4 page 1, lines 5-6 page 8, lines 7-19 page 10, lines 9-28	1,3-5, 7-16
X	US 2004/207385 A1 (GAFNER SIMONE [CH] ET AL) 21 October 2004 (2004-10-21) paragraphs [0002], [0003], [0007], [0009], [0012], [0017] figure 6a	1,10-12, 16
X	WO 2008/037801 A1 (NOVO NORDISK AS [DK]; MOELLER CLAUS SCHMIDT [DK]; KVOLSBJERG BO [DK]) 3 April 2008 (2008-04-03) page 6, lines 3-15 figure 7	1-5, 8-12, 14-16
	----- -/--	

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

16 June 2020

Date of mailing of the international search report

26/06/2020

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

Herz, Markus

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2020/061813

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 0 407 020 A1 (CUMMINS ELECTRONICS [US]) 9 January 1991 (1991-01-09) figures 4, 5 column 1, lines 1-4, 46-49 -----	1-6,8-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2020/061813

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2012046199	A1	12-04-2012	NONE

US 2004207385	A1	21-10-2004	DE 10133216 A1 30-01-2003
			EP 1407535 A1 14-04-2004
			JP 2004535590 A 25-11-2004
			JP 2009050709 A 12-03-2009
			US 2004207385 A1 21-10-2004
			WO 03009461 A1 30-01-2003

WO 2008037801	A1	03-04-2008	AU 2007301890 A1 03-04-2008
			BR PI0717260 A2 15-10-2013
			CA 2663239 A1 03-04-2008
			CN 101516421 A 26-08-2009
			CN 102895718 A 30-01-2013
			DK 2073871 T3 10-06-2013
			EP 2073871 A1 01-07-2009
			ES 2411732 T3 08-07-2013
			JP 5113847 B2 09-01-2013
			JP 2010504779 A 18-02-2010
			PL 2073871 T3 30-08-2013
			RU 2009114321 A 10-11-2010
			US 2009318865 A1 24-12-2009
			US 2012078194 A1 29-03-2012
			WO 2008037801 A1 03-04-2008

EP 0407020	A1	09-01-1991	DE 69002554 T2 18-11-1993
			EP 0407020 A1 09-01-1991
			JP H0348718 A 01-03-1991
			JP H0769186 B2 26-07-1995
			US 5012237 A 30-04-1991
