

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BPULBB0212PC	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2018/055106	International filing date ( <i>day/month/year</i> ) 1 March 2018 (01-03-2018)	(Earliest) Priority Date ( <i>day/month/year</i> ) 1 March 2017 (01-03-2017)
Applicant  UNIVERSITE LIBRE DE BRUXELLES		

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. 11A  
 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/EP2018/055106

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. A61B17/3205 A61B17/32  
 ADD. A61B17/00 A61B17/3209 A61B17/11 F16H7/08

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 F16H

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 2011/295285 A1 (MCWEENEY JOHN [US] ET AL) 1 December 2011 (2011-12-01) paragraphs [0028], [0045] - [0052]; figures 8-11	1-9, 13-16
X	US 2008/188766 A1 (GERTNER MICHAEL [US]) 7 August 2008 (2008-08-07) paragraphs [0221] - [0228], [0242]; figure 1L	1-5,7,8, 10-13, 15,17
X	US 2007/093861 A1 (VARDI GIL [US]) 26 April 2007 (2007-04-26) paragraphs [0025] - [0043]; figures 1-3	1-8, 10-17
A	US 2016/022266 A1 (LUKIN PETER [US] ET AL) 28 January 2016 (2016-01-28) paragraphs [0054] - [0088]; figures 1-22	1-9,13, 16,17
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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 <b>22 May 2018</b>	Date of mailing of the international search report <b>30/05/2018</b>
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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  <b>Kink, Thomas</b>
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/EP2018/055106

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2012/007052 A1 (ETHICON ENDO SURGERY INC [US]; GALVAO NETO MANOEL [BR]; ZEINER MARK S) 19 January 2012 (2012-01-19) page 15, line 8 - page 16, line 26; figures 24-26	1,4,8,9,13
A	----- WO 2014/055193 A1 (ETHICON ENDO SURGERY INC [US]) 10 April 2014 (2014-04-10) paragraphs [0031] - [0051]; figures 1-8D -----	1-5,7,8,13,15,17

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2018/055106

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2011295285	A1	01-12-2011	EP 2632346 A2	04-09-2013
			US 2011295285 A1	01-12-2011
			US 2014343583 A1	20-11-2014
			US 2017119394 A1	04-05-2017
			WO 2011085006 A2	14-07-2011
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US 2008188766	A1	07-08-2008	NONE	
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			US 2007203511 A1	30-08-2007
			WO 2007051107 A2	03-05-2007
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US 2016022266	A1	28-01-2016	CN 106999188 A	01-08-2017
			EP 3171790 A1	31-05-2017
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			WO 2014055193 A1	10-04-2014
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