

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference X20348	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2015/048807	International filing date (<i>day/month/year</i>) 8 September 2015 (08-09-2015)	(Earliest) Priority Date (<i>day/month/year</i>) 16 September 2014 (16-09-2014)
Applicant ELI LILLY AND COMPANY		

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 6 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:

COMBINATION ALZHEIMER THERAPY USING ANTI-N3PGLU ABETA ANTIBODIES + A BACE INHIBITOR

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. _____
☐ 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/US2015/048807

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:

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2015/048807

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K31/542 C07D513/04 C07K16/18 A61K39/395
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 C07D C07K

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, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2012/021469 A1 (LILLY CO ELI [US]; LU JIRONG [US]; TANG YING [US]; DEMATTOS RONALD BRA) 16 February 2012 (2012-02-16) claims 1-13 & CN 103 068 848 A (LILLY CO ELI) 24 April 2013 (2013-04-24) claims 1-13	1-21
A	----- WO 2012/098213 A1 (EISAI R&D MAN CO LTD [JP]; HALL ADRIAN [GB]; FARTHING CHRISTOPHER NEIL) 26 July 2012 (2012-07-26) p 159, Tab 5	1-21
A	----- US 2009/209755 A1 (SUZUKI YUICHI [JP] ET AL) 20 August 2009 (2009-08-20) cited in the application claims 1-10 -/-	1-21



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

11 December 2015

Date of mailing of the international search report

22/12/2015

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

Lechner, Oskar

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2015/048807

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	-& JP 4 520533 B2 4 August 2010 (2010-08-04) ----- WO 2014/143579 A1 (LILLY CO ELI [US]) 18 September 2014 (2014-09-18) example 4; tables 1, 3 -----	11-21

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2015/048807

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2012021469	A1	16-02-2012	
		AU 2011289629 A1	14-02-2013
		CA 2805114 A1	16-02-2012
		CL 2013000390 A1	21-03-2014
		CN 103068848 A	24-04-2013
		CN 105111308 A	02-12-2015
		CO 6670526 A2	15-05-2013
		CR 20130016 A	21-03-2013
		DO P2013000029 A	15-03-2013
		EA 201270813 A1	30-05-2013
		EC SP13012436 A	28-03-2013
		EP 2603523 A1	19-06-2013
		GT 201300036 A	16-07-2014
		JP 2013536191 A	19-09-2013
		KR 20130051989 A	21-05-2013
		MA 34461 B1	01-08-2013
		NZ 606095 A	28-11-2014
		PE 08172013 A1	18-07-2013
		SG 187586 A1	28-03-2013
		UA 107600 C2	26-01-2015
		US 2013142806 A1	06-06-2013
		US 2014065138 A1	06-03-2014
		WO 2012021469 A1	16-02-2012
WO 2012098213	A1	26-07-2012	
		AR 084903 A1	10-07-2013
		AU 2012208526 A1	02-05-2013
		CA 2828738 A1	26-07-2012
		CL 2013002083 A1	06-12-2013
		CN 103328486 A	25-09-2013
		EP 2665732 A1	27-11-2013
		JP 2014502987 A	06-02-2014
		KR 20140002724 A	08-01-2014
		NZ 611365 A	24-04-2015
		PE 11822014 A1	14-09-2014
		RU 2013138717 A	27-02-2015
		SG 190908 A1	31-07-2013
		TW 201309710 A	01-03-2013
		US 2012190672 A1	26-07-2012
		US 2013203740 A1	08-08-2013
		US 2014142091 A1	22-05-2014
		WO 2012098213 A1	26-07-2012
US 2009209755	A1	20-08-2009	
		AU 2009205072 A1	23-07-2009
		BR PI0906962 A2	14-07-2015
		CA 2711655 A1	23-07-2009
		CN 101910143 A	08-12-2010
		DK 2233474 T3	19-10-2015
		EP 2233474 A1	29-09-2010
		ES 2548774 T3	20-10-2015
		HK 1147490 A1	10-01-2014
		HR P20151030 T1	06-11-2015
		IL 206952 A	30-09-2014
		JP 4520533 B2	04-08-2010
		KR 20100103702 A	27-09-2010
		NZ 586796 A	28-10-2011
		PE 14382009 A1	26-09-2009
		PT 2233474 E	26-10-2015
		RU 2010134403 A	27-02-2012
		SI 2233474 T1	30-11-2015

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2015/048807

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
		TW 200936581 A	01-09-2009	
		US 2009209755 A1	20-08-2009	
		US 2010317850 A1	16-12-2010	
		US 2012094984 A1	19-04-2012	
		US 2013203741 A1	08-08-2013	
		WO 2009091016 A1	23-07-2009	

JP 4520533	B2	04-08-2010	AU 2009205072 A1	23-07-2009
			BR PI0906962 A2	14-07-2015
			CA 2711655 A1	23-07-2009
			CN 101910143 A	08-12-2010
			DK 2233474 T3	19-10-2015
			EP 2233474 A1	29-09-2010
			ES 2548774 T3	20-10-2015
			HK 1147490 A1	10-01-2014
			HR P20151030 T1	06-11-2015
			IL 206952 A	30-09-2014
			JP 4520533 B2	04-08-2010
			KR 20100103702 A	27-09-2010
			NZ 586796 A	28-10-2011
			PE 14382009 A1	26-09-2009
			PT 2233474 E	26-10-2015
			RU 2010134403 A	27-02-2012
			SI 2233474 T1	30-11-2015
			TW 200936581 A	01-09-2009
			US 2009209755 A1	20-08-2009
			US 2010317850 A1	16-12-2010
			US 2012094984 A1	19-04-2012
			US 2013203741 A1	08-08-2013
			WO 2009091016 A1	23-07-2009

WO 2014143579	A1	18-09-2014	AU 2014228351 A1	17-09-2015
			CA 2898500 A1	18-09-2014
			CN 105026404 A	04-11-2015
			IL 240903 A	29-10-2015
			KR 20150119070 A	23-10-2015
			PE 15422015 A1	28-10-2015
			TW 201520217 A	01-06-2015
			US 2014275044 A1	18-09-2014
			US 2014350245 A1	27-11-2014
			US 2015157641 A1	11-06-2015
			WO 2014143579 A1	18-09-2014
