

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference X20460	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2015/065940	International filing date (<i>day/month/year</i>) 16 December 2015 (16-12-2015)	(Earliest) Priority Date (<i>day/month/year</i>) 22 December 2014 (22-12-2014)
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 3 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:

THIENO[2,3-C]PYRROL-4-ONE DERIVATIVES AS ERK INHIBITORS

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/US2015/065940

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07D513/04 A61K31/506
ADD. A61P35/00

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)
C07D 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, CHEM ABS Data, 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	US 2003/064982 A1 (DAVIES ROBERT [US] ET AL) 3 April 2003 (2003-04-03) page 226, biological testing exemple 4; claims 1-3,9,24-25 -----	1-19
A	WO 2013/130976 A1 (ARRAY BIOPHARMA INC [US]; GENENTECH INC [US]; BLAKE JAMES F [US]; CHIC) 6 September 2013 (2013-09-06) cited in the application claims 1,58-76 -----	1-19
A	WO 2007/053776 A1 (SGX PHARMACEUTICALS INC [US]; ARNOLD WILLIAM D [US]; CHEN CHIXU [US];) 10 May 2007 (2007-05-10) claims 1,3,43,44,47,48; tables 1,17 -----	1-19



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

23 March 2016

Date of mailing of the international search report

05/04/2016

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2015/065940

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003064982	A1	03-04-2003	NONE

WO 2013130976	A1	06-09-2013	AR 090220 A1 29-10-2014
		CA 2866086 A1 06-09-2013	
		CL 2014002301 A1 08-05-2015	
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		PH 12014501947 A1 24-11-2014	
		SG 11201405356Q A 27-11-2014	
		TW 201339146 A 01-10-2013	
		US 2013252934 A1 26-09-2013	
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		WO 2013130976 A1 06-09-2013	

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		EP 1948647 A1 30-07-2008	
		JP 2009519218 A 14-05-2009	
		US 2007117800 A1 24-05-2007	
		US 2010305128 A1 02-12-2010	
		WO 2007053776 A1 10-05-2007	
