

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

D'hue, Cedric A.
Eli Lilly and Company
P.O. Box 6288
Indianapolis, IN 46206-6288
ETATS-UNIS D'AMERIQUE

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

RECEIVED

JUN 23 2022

(PCT Rule 44.1)

Date of mailing
(day/month/year)

10 June 2022 (10-06-2022)

Applicant's or agent's file reference
X22825

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US2022/018644

International filing date
(day/month/year)
3 March 2022 (03-03-2022)

Applicant

ELI LILLY AND COMPANY

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

How? Directly to the International Bureau preferably through ePCT, or on paper to:
The International Bureau of WIPO, 34 chemin des Colombettes, 1211 Geneva 20, Switzerland

For more detailed instructions, see the *PCT Applicant's Guide*, International Phase, paragraphs 9.004 - 9.011.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

The applicant may **submit comments on an informal basis on the written opinion of the International Searching Authority** to the International Bureau. These comments will be made available to the public after international publication. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established.

Shortly after the expiration of **18 months from the priority date**, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90bis.1 and 90bis.3).

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for **entry into the national phase** before those designated Offices. In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months. For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide*, National Chapters.

Within **22 months from the priority date**, the applicant may request that a **supplementary international search** be carried out by a different International Searching Authority that offers this service (Rule 45bis.1). The procedure for requesting supplementary international search is described in the *PCT Applicant's Guide*, International Phase, paragraphs 8.006-8.032.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference X22825	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2022/018644	International filing date (day/month/year) 3 March 2022 (03-03-2022)	(Earliest) Priority Date (day/month/year) 4 March 2021 (04-03-2021)
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 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 43.6bis(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. _____
☐ 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/US2022/018644

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61P35/00 C07D471/04

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)

C07D

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, CHEM ABS 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 2020/131627 A1 (ARRAY BIOPHARMA INC [US]) 25 June 2020 (2020-06-25) claims; examples -----	1-67
A	WO 2010/017047 A1 (MERCK & CO INC [US]; BANYU PHARMA CO LTD [JP] ET AL.) 11 February 2010 (2010-02-11) claims; examples -----	1-67
A	WO 2016/191172 A1 (PRINCIPIA BIOPHARMA INC [US]) 1 December 2016 (2016-12-01) claims; examples -----	1-67
A	WO 2016/134320 A1 (INCYTE CORP [US]) 25 August 2016 (2016-08-25) claims; examples -----	1-67
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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

30 May 2022

Date of mailing of the international search report

10/06/2022

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2

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Authorized officer

Bedel, Christian

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2022/018644

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MARTIN JAMES S ET AL: "Characterising covalent warhead reactivity", BIOORGANIC, vol. 27, no. 10, 3 April 2019 (2019-04-03), pages 2066-2074, XP085664299, ISSN: 0968-0896, DOI: 10.1016/J.BMC.2019.04.002 the whole document -----	1-67

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2022/018644

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2020131627 A1	25-06-2020	CN 113490666 A	08-10-2021
		EP 3898626 A1	27-10-2021
		JP 2022515198 A	17-02-2022
		US 2022081438 A1	17-03-2022
		WO 2020131627 A1	25-06-2020
WO 2010017047 A1	11-02-2010	AU 2009279936 A1	11-02-2010
		CA 2732520 A1	11-02-2010
		EP 2320907 A1	18-05-2011
		JP 2011530511 A	22-12-2011
		US 2011207711 A1	25-08-2011
		WO 2010017047 A1	11-02-2010
WO 2016191172 A1	01-12-2016	EP 3298011 A1	28-03-2018
		US 2018155340 A1	07-06-2018
		WO 2016191172 A1	01-12-2016
WO 2016134320 A1	25-08-2016	AU 2016219822 A1	31-08-2017
		AU 2020250211 A1	05-11-2020
		BR 112017017418 A2	10-04-2018
		CA 2976790 A1	25-08-2016
		CL 2017002123 A1	16-03-2018
		CN 107438607 A	05-12-2017
		CN 113004278 A	22-06-2021
		CO 2017008795 A2	16-01-2018
		CR 20170390 A	23-10-2017
		EA 201791866 A1	29-12-2017
		EC SP17062712 A	30-11-2017
		EP 3259269 A1	27-12-2017
		EP 3617205 A1	04-03-2020
		ES 2751669 T3	01-04-2020
		ES 2895769 T3	22-02-2022
		HK 1246794 A1	14-09-2018
		IL 253691 A	30-11-2020
		JP 6689871 B2	28-04-2020
		JP 2018511573 A	26-04-2018
		JP 2020121994 A	13-08-2020
		KR 20170127467 A	21-11-2017
		MA 51229 A	24-03-2021
		PE 20171514 A1	20-10-2017
		PH 12017501481 A1	05-02-2018
		SG 10201913036R A	27-02-2020
		SG 11201706287P A	28-09-2017
		TW 201639838 A	16-11-2016
		US 2016244449 A1	25-08-2016
		US 2017290839 A1	12-10-2017
		US 2019269693 A1	05-09-2019
		US 2020306256 A1	01-10-2020
		WO 2016134320 A1	25-08-2016

Information on Search Strategy - Pilot phase (see OJ 2015, A86)

The type of information contained in this sheet may change during the pilot for improving the usefulness of this new service.

Application Number

PCT/US2022/018644

TITLE: FGFR3 INHIBITOR COMPOUNDS

APPLICANT: ELI LILLY AND COMPANY

IPC CLASSIFICATION: A61P35/00, C07D471/04

EXAMINER: Bedel, Christian

CONSULTED DATABASES: WPI, NPL, CA, REAXYS, EPODOC

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC:

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION: