

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|                                                    |                                                                                                  |                                                                                      |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Applicant's or agent's file reference<br>X21772    | <b>FOR FURTHER ACTION</b><br>see Form PCT/ISA/220<br>as well as, where applicable, item 5 below. |                                                                                      |
| International application No.<br>PCT/US2019/050511 | International filing date ( <i>day/month/year</i> )<br>11 September 2019 (11-09-2019)            | (Earliest) Priority Date ( <i>day/month/year</i> )<br>14 September 2018 (14-09-2018) |
| Applicant<br><br>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:

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

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### 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:

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## A. CLASSIFICATION OF SUBJECT MATTER

INV. A61P37/06 A61P37/08 C07K16/28 A61K39/395 A61K39/00  
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)

A61P C07K 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, WPI Data, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                              | Relevant to claim No. |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| X         | US 2008/267967 A1 (GORCZYNSKI REGINALD M [CA] ET AL) 30 October 2008 (2008-10-30)<br>abstract, [0009] - [[0029], [0161] -<br>[0169], examples 1-8 and claims<br>-----                           | 1-41                  |
| X         | WO 2008/079352 A2 (SCHERING CORP [US];<br>PRESTA LEONARD G [US] ET AL.)<br>3 July 2008 (2008-07-03)<br>abstract, [0007] - [0022], [0091] -<br>[0124], examples 1-11 and claims<br>-----<br>-/-- | 1-41                  |



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

29 November 2019

Date of mailing of the international search report

10/12/2019

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

Hermann, Patrice

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| C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Category*                                            | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Relevant to claim No. |
| X                                                    | <p>David A Copland ET AL: "Immunopathology and Infectious Disease Monoclonal Antibody-Mediated CD200 Receptor Signaling Suppresses Macrophage Activation and Tissue Damage in Experimental Autoimmune Uveoretinitis",</p> <p>1 January 2007 (2007-01-01), pages 580-588070272, XP055413886, Retrieved from the Internet:<br/>URL: <a href="http://www.sciencedirect.com/science/article/pii/S0002944010619918/pdf?md5=7351adc6432bd39d2e48a1e32f3f5767&amp;pid=1-s2.0-S0002944010619918-main.pdf">http://www.sciencedirect.com/science/article/pii/S0002944010619918/pdf?md5=7351adc6432bd39d2e48a1e32f3f5767&amp;pid=1-s2.0-S0002944010619918-main.pdf</a><br/>abstract, p. 581 left-hand column third full paragraph, p. 584 left-hand column second full paragraph - p. 586 left-hand column line 13, p. 587 left-hand column line 12 - p. 588 left-hand column line 9, figures 3-7</p> | 1-41                  |
| A                                                    | <p>Y. LIU ET AL: "CD200R1 Agonist Attenuates Mechanisms of Chronic Disease in a Murine Model of Multiple Sclerosis",<br/>THE JOURNAL OF NEUROSCIENCE,<br/>vol. 30, no. 6,<br/>10 February 2010 (2010-02-10), pages 2025-2038, XP055413887,<br/>US<br/>ISSN: 0270-6474, DOI:<br/>10.1523/JNEUROSCI.4272-09.2010<br/>the whole document</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1-41                  |
| A                                                    | <p>WO 03/077947 A1 (SCHERING CORP [US])<br/>25 September 2003 (2003-09-25)<br/>the whole document</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1-41                  |
| A                                                    | <p>MUNIR AKKAYA ET AL: "Dissection of Agonistic and Blocking Effects of CD200 Receptor Antibodies",<br/>PLOS ONE,<br/>vol. 8, no. 5, 14 May 2013 (2013-05-14),<br/>page e63325, XP055647634,<br/>DOI: 10.1371/journal.pone.0063325<br/>the whole document</p> <p style="text-align: center;">-----<br/>-/--</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1-41                  |

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| 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>CHERWINSKI H M ET AL: "The CD200 receptor is a novel and potent regulator of murine and human mast cell function", THE JOURNAL OF IMMUNOLOGY, THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS, INC, US, vol. 174, no. 3, 1 February 2005 (2005-02-01), pages 1348-1356, XP002495063, ISSN: 0022-1767<br/>the whole document</p> <p>-----</p>                                | 1-41                  |
| A                                                    | <p>MIRIAM HERNANGÓMEZ ET AL: "CD200R1 agonist attenuates glial activation, inflammatory reactions, and hypersensitivity immediately after its intrathecal application in a rat neuropathic pain model", JOURNAL OF NEUROINFLAMMATION, vol. 13, no. 1, 18 February 2016 (2016-02-18), XP055647631, DOI: 10.1186/s12974-016-0508-8<br/>the whole document</p> <p>-----</p> | 1-41                  |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date         |
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