

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 56342-WO-PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/IB2015/055951	International filing date (<i>day/month/year</i>) 5 August 2015 (05-08-2015)	(Earliest) Priority Date (<i>day/month/year</i>) 6 August 2014 (06-08-2014)
Applicant NOVARTIS AG		

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. _____
☐ 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/IB2015/055951

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07D401/14 C07D413/14 A61K31/506 A61P31/04
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, 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.
X	WO 2008/106692 A1 (NOVARTIS VACCINES & DIAGNOSTIC [US]; BURGER MATTHEW [US]; LINDVALL MIK) 4 September 2008 (2008-09-04) paragraphs [0001], [0004] examples 364-368, 377, 380, 381, 393, 394 claim 1	1-21
A	WO 2011/068898 A1 (RIGEL PHARMACEUTICALS INC [US]; SINGH RAJINDER [US]; TSO KIN [US]; ZHA) 9 June 2011 (2011-06-09) paragraphs [0221], [0290], [0303] claim 1 ----- -/--	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

3 September 2015

Date of mailing of the international search report

11/09/2015

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2015/055951

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JI-XIA REN ET AL: "Discovery of Novel Pim-1 Kinase Inhibitors by a Hierarchical Multistage Virtual Screening Approach Based on SVM Model, Pharmacophore, and Molecular Docking", JOURNAL OF CHEMICAL INFORMATION AND MODELING, vol. 51, no. 6, 27 June 2011 (2011-06-27), pages 1364-1375, XP55028701, ISSN: 1549-9596, DOI: 10.1021/ci100464b abstract page 1367; compound 8 page 1369; figure 4; compound K4 -----	1-21

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2015/055951

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008106692	A1	04-09-2008	
		AU 2008221263 A1	04-09-2008
		BR PI0808523 A2	19-08-2014
		CA 2679659 A1	04-09-2008
		CN 101679266 A	24-03-2010
		EA 200901144 A1	30-04-2010
		EP 2132177 A1	16-12-2009
		ES 2431163 T3	25-11-2013
		JP 5330274 B2	30-10-2013
		JP 2010520228 A	10-06-2010
		KR 20100015331 A	12-02-2010
		US 2012208815 A1	16-08-2012
		WO 2008106692 A1	04-09-2008

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		CA 2780759 A1	09-06-2011
		EP 2507227 A1	10-10-2012
		JP 2013512281 A	11-04-2013
		US 2011130415 A1	02-06-2011
		WO 2011068898 A1	09-06-2011
