

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2017/087433

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 12
because they relate to subject matter not required to be searched by this Authority, namely:
[1] claim 12 relates to a treatment method for diseases; however, the search is made based on the application of the claimed compounds in preparing drugs.

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

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PCT/CN2017/087433

A. CLASSIFICATION OF SUBJECT MATTER

C07D 471/04 (2006.01) i; A61K 31/4545 (2006.01) i; A61P 3/10 (2006.01) i; A61P 3/06 (2006.01) i; A61P 5/48 (2006.01) i
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 471/-; A61K 31/-; A61P 3/-; A61P 5/-

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)

WPI, EPODOC, CNTXT, CNABS, CNKI, CAPLUS (STN), REGISTRY (STN), ISI WEB OF KNOWLEDGE: XUANZHU PHARMA CO., LTD.; CHU, Shutian; pyridine, imidazole, amino, piperidin+, imidazo, diabetes, peptidase, 1314944-07-4

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 102127072 A (SHANDONG XUANZHUPHARMA CO., LTD.), 20 July 2011 (20.07.2011), description, embodiment 17, and claims 10-11	1-13
A	CN 102863440 A (SHANDONG XUANZHUPHARMA CO., LTD.), 09 January 2013 (09.01.2013), claim 1	1-13
A	SHU, Chutian et al., "Discovery of Imigliptin, a Novel Selective DPP-4 Inhibitor for the Treatment of Type 2 Diabetes", ACS MEDICINAL CHEMISTRY LETTERS, vol. 5, no. 8, 16 June 2014 (16.06.2014), ISSN: 1948-5875, pages 921-926, and Scheme 1.	1-13

Further documents are listed in the continuation of Box C.

See patent family annex.

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search
18 July 2017 (18.07.2017)

Date of mailing of the international search report
03 August 2017 (03.08.2017)

Name and mailing address of the ISA/CN:
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2017/087433

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date		
CN 102127072 A	20 July 2011	CN 102127071 A	20 July 2011		
		US 8680089 B2	25 March 2014		
		CN 102741251 B	25 March 2015		
		CN 102741251 A	17 October 2012		
		WO 2011085643 A8	05 July 2012		
		EP 2524917 A4	11 March 2015		
		JP 5719382 B2	20 May 2015		
		US 2012289497 A1	15 November 2012		
		EP 2524917 A1	21 November 2012		
		WO 2011085643 A1	21 July 2011		
		CN 102127070 A	20 July 2011		
		JP 2013517225 A	16 May 2013		
		CN 102863440 A	09 January 2013	ES 2547687 T3	08 October 2015
				EP 2730575 A1	14 May 2014
US 2014206874 A1	24 July 2014				
JP 5695800 B2	08 April 2015				
WO 2013007167 A1	17 January 2013				
EP 2730575 B1	16 September 2015				
CN 102863440 B	27 May 2015				
HK 1192231 A1	29 January 2016				
US 8927572 B2	06 January 2015				
JP 2014520763 A	25 August 2014				
EP 2730575 A4	26 November 2014				