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(71) Applicant *(for all designated States except US)*: **THE REGENTS OF THE UNIVERSITY OF MICHIGAN** [US/US]; Office of Technology Transfer, 1600 Huron Parkway, 2nd Floor, Ann Arbor, MI 48109-2590 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **WANG, Shaomeng** [US/US]; 9343 Yorkshire Dr., Saline, MI 48176 (US). **ZHOU, Haibin** [CN/US]; 2361 Arrowwood Trail, Ann Arbor, MI 48105 (US). **CHEN, Jianfang** [CN/US]; 2725 Arrowwood Trail, Ann Arbor, MI 48105 (US). **AGUILAR, Angelo** [BZ/US]; 2364 Stone Rd., Ann Arbor, 48105 (US). **MEAGHER, Jennifer, Lynn** [US/US]; 589 Kellogg St., Ann Arbor, MI 48170 (US). **SUN, Duxin** [CN/US]; 3342 Honeysuckle Dr., Ann Arbor, 48103 (US). **YANG, Chao-Yie** [—/US]; 4826 Hillway Court, Ann Arbor, MI 48105 (US). **LIU, Liu** [CN/US]; 2358 Spring Ridge Ct, Ann Arbor, MI 48103 (US). **BAI, Longchuan** [CN/US]; 2546 Braeburn Circle, Ann Arbor, MI 48108 (US). **MCEACHERM, Donna** [US/US]; 2208 Glencoe Hills Dr. Apt 2, Ann Arbor, MI 48108 (US). **STUCKEY, Jeanne** [US/US]; 13536 Lakebrook Drive, Fenton, MI 43570 (US). **LI, Xiaoqin** [CN/US]; 2725 Arrowwood Trail, Ann Arbor, MI 48105 (US).

(74) Agent: **NAPOLI, James, J.**; Marshall, Gerstein & Borun LLP, 233 S. Wacker Drive, 6300 Willis Tower, Chicago, IL 60606-6357 (US).

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Published:
— *with international search report (Art. 21(3))*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
18 October 2012

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(54) Title: BCL-2/BCL-XL INHIBITORS AND THERAPEUTIC METHODS USING THE SAME

(57) Abstract: Inhibitors of Bcl-2/Bcl-xL and compositions containing the same are disclosed. Methods of using the Bcl-2/Bcl-xL inhibitors in the treatment of diseases and conditions wherein inhibition of Bcl-2/Bcl-xL provides a benefit, like cancers, also are disclosed.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/022315

A. CLASSIFICATION OF SUBJECT MATTER

C07D 403/10(2006.01)i, C07D 403/14(2006.01)i, A61K 31/496(2006.01)i, A61P 35/00(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 403/10; C07C 317/32; C07D 403/02; C07D 403/04; A61K 31/5377; C07D 401/04

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)
eKOMPASS(KIPO internal), Google, PubMed

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2010-010154 A1 (NERVIANO MEDICAL SCIENCES S.R.L.) 28 January 2010 See abstract, claims 1, 19-24.	1-20
X	US 2007-0197532 A1 (S. X. CAO et al.) 23 August 2007 See abstract, claims 1, 111.	1-20
A	US 2006-0084647 A1 (S. WANG et al.) 20 April 2006 See abstract, claims 1, 7.	1-20

☐ 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 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	Date of mailing of the international search report
24 AUGUST 2012 (24.08.2012)	**27 AUGUST 2012 (27.08.2012)**
Name and mailing address of the ISA/KR Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer LEE, Dong Wook Telephone No. 82-42-481-8163

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/022315

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.: 21-33
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 21-33 pertain to a method for treatment of the human by therapy, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.

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).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required addtional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/US2012/022315

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