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[Continued on next page]

(54) Title: SMALL MOLECULE INHIBITORS OF PARP ACTIVITY

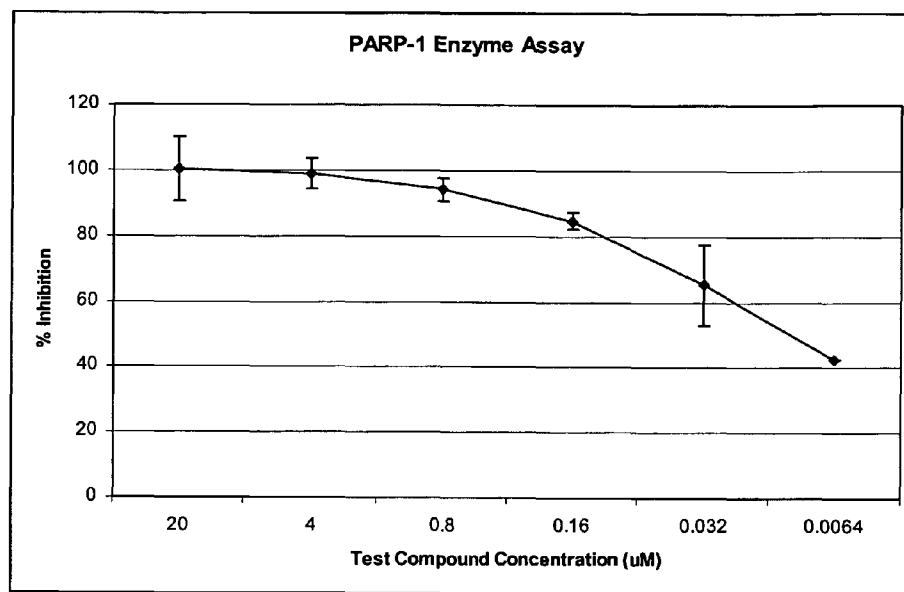


FIG. 1

(57) Abstract: Compounds and pharmaceutical compositions are provided that inhibit the activity of poly ADP-ribose synthetase (PARP). Such compounds are useful in the treatment of various diseases, conditions and injuries such as stroke, myocardial infarction, ischemia-perfusion injury in various organs, traumatic brain injury, atherosclerosis, inflammatory diseases and cancer.

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- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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**A. CLASSIFICATION OF SUBJECT MATTER**

*A61K 31/44(2006.01)i, A61K 31/522(2006.01)i, C07D 237/32(2006.01)i, C07D 401/12(2006.01)i, C07D 403/12(2006.01)i, C07D 405/12(2006.01)i, C07D 409/12(2006.01)i, C07D 417/12(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)

IPC as above

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)

eKIPASS, STN(REGISTRY, CAPLUS)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006036981 A2 (Angion Biomedica Corp.) 6 April 2006 See claims	1-15
X	US 6635642 B1 (Jackson, P.F. et al) 21 October 2003 See column 45-46, claims	1-15
X	US 6677333 B1 (Seko, T. et al) 13 January 2004 See claim 1-3	1-15
X	US 20020183325 A1 (Martin, N.M.B. et al) 5 December 2002 See abstract, paragraph [0183]	1-15
A	US 20060063767 A1 (Javaid, M.H. et al) 23 March 2006 See abstract, paragraph [0189]	1-15
A	Cockcroft, X. et al "Phthalazinones 2: Optimization and synthesis of novel potent inhibitors of poly(ADP-ribose)polymerase" Bioorganic & Medicinal Chemistry Letters. 2006, 16(4), 1040-1044 ISSN: 0960-894X See Table 1	1-15

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

25 JUNE 2009 (25.06.2009)

Date of mailing of the international search report

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Name and mailing address of the ISA/KR



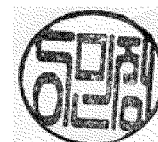
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**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

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.: 16-35  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 16-35 pertain to methods for treatment of the human by therapy, as well as diagnostic methods, 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 additional 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/US2008/011990**

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