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(54) **Title:** KINASE PROTEIN BINDING INHIBITORS

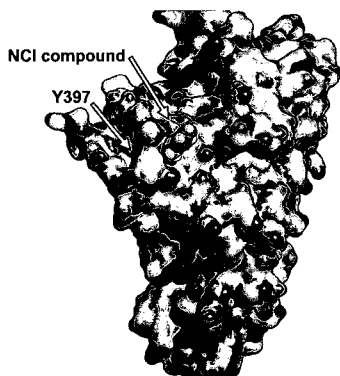


FIG. 1A

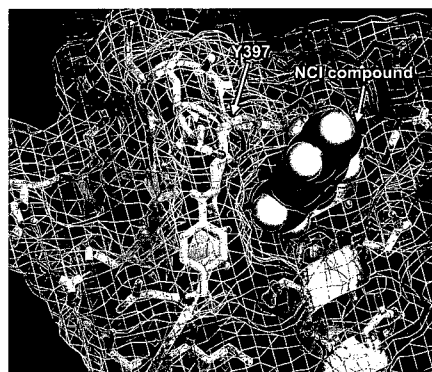


FIG. 1B

(57) **Abstract:** The invention relates to phosphorylation inhibitor compounds and methods of identifying and using them. The invention further relates to pharmaceutical compositions and methods for treating cell proliferative disorders, especially cancer.



A. CLASSIFICATION OF SUBJECT MATTER*A61K 31/136(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)

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)

eKOMPASS(KIPO internal), PubMed, "Keywords: cancer, apoptosis, FAK, Y397 phosphorylation, 1,2,4,5-benzenetetraamine tetrahydrochloride"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	GOLUBOVSKAYA et.al., "A Small Molecule Inhibitor, 1,2,4,5-Benzenetetraamine Tetrahydrochloride, Targeting the Y397 Site of Focal Adhesion Kinase Decreases Tumor Growth", J. Med. Chem., July 2008, Vol. 51, pp.7405-7416 See the whole document	1-15
P,X	HOCHWALD S.N. et.al., "41: A Novel Small Molecule Inhibitor of FAK Decreases Growth of Human Pancreatic Cancer", Journal of Surgical Research, Available online 14 January 2009, Volumn 151, Issue 2, Page 190 See abstract	1-15
P,X	STRIMPAKOS ALEXIOS S et.al., "Pancreatic Cancer: Translating Lessons from Mouse Models", JOP. J Pancreas, January 2009, Vol. 10, No. 2, pp.98-103 See abstract	1-15
Y A	LIAO CHIUNG-HO et.al., "Garcinol Modulates Tyrosine Phosphorylation of FAK and Subsequently Induces Apoptosis Through Down-Regulation of Src, ERK, and Akt Survival Signaling in Human Colon Cancer Cells", Journal of Cellular Biochemistry, 2005, Vol. 96, pp.155-169 See abstract	1-2 and 9-14 3-8 and 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

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INTERNATIONAL SEARCH REPORT

International application No.

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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.
Y A	SHIRATSUCHI HIROE et.al., "Extracellular pressure stimulates macrophage phagocytosis by inhibiting a pathway involving FAK and ERK", Am J Physiol Cell Physiol, 2004, Vol. 286, pp.C1358-C1366 See page 9, 12, 15	1-2 and 9-14 3-8 and 15
A	US 2003/0105057 A1 (FU XIN-YUAN et.al.) 5 June 2003 See claims 1, 9, 11, 29	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/001071

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003-0105057 A1	05.06.2003	AU6763098 A W09841090 A1	12.10.1998 24.09.1998