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13 March 2008

(54) Title: HEPATOCYTE GROWTH FACTOR (HGF) BINDING PROTEINS

(57) Abstract: The present application provides a family of binding proteins that bind and neutralize the activity of hepatocyte growth factor (HGF), in particular human HGF. The binding proteins can be used as diagnostic and/or therapeutic agents. With regard to their therapeutic activity, the binding proteins can be used to treat certain HGF responsive disorders, for example, certain HGF responsive tumors.

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INTERNATIONAL SEARCH REPORT

International application No  
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A. CLASSIFICATION OF SUBJECT MATTER  
INV. C07K16/22 A61K39/395 A61P35/00

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)  
A61P A61K C07K

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 practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2005/017107 A (AMGEN INC [US]; ABGENIX INC [US]; BURGESS TERESA L [US]; COXON ANGELA) 24 February 2005 (2005-02-24)	1-10, 12-28
A	the whole document	11
X	BURGESS TERESA ET AL: "FULLY HUMAN MONOCLONAL ANTIBODIES TO HEPATOCYTE GROWTH FACTOR WITH THERAPEUTIC POTENTIAL AGAINST HEPATOCYTE GROWTH FACTOR/C-MET-DEPENDENT HUMAN TUMORS" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 66, no. 3, 1 February 2006 (2006-02-01), pages 1721-1729, XP008075112 ISSN: 0008-5472	1-10, 12-28
A	the whole document	11

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 document 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

15 January 2008

Date of mailing of the international search report

30/01/2008

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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.
A	<p>KIM K JIN ET AL: "Systemic anti-hepatocyte growth factor monoclonal antibody therapy induces the regression of intracranial glioma xenografts."            CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH 15 FEB 2006,            vol. 12, no. 4,            15 February 2006 (2006-02-15), pages 1292-1298, XP008075162            ISSN: 1078-0432            the whole document</p>	1-28
A	<p>BURR A W ET AL: "ANTI-HEPATOCTE GROWTH FACTOR ANTIBODY INHIBITS HEPATOCTE PROLIFERATION DURING LIVER REGENERATION"            JOURNAL OF PATHOLOGY, CHICHESTER, SUSSEX, GB,            vol. 185, July 1998 (1998-07), pages 298-302, XP000983932            ISSN: 0022-3417            the whole document</p>	1-28
A	<p>ZACCOLO M ET AL: "DIMERIZATION OF FAB FRAGMENTS ENABLES READY SCREENING OF PHAGE ANTIBODIES THAT AFFECT HEPATOCTE GROWTH FACTOR/SCATTER FACTOR ACTIVITY ON TARGET CELLS"            EUROPEAN JOURNAL OF IMMUNOLOGY, WEINHEIM, DE,            vol. 27, no. 3, 1997, pages 618-623, XP000983909            ISSN: 0014-2980            the whole document</p>	1-28

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/012939

## 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.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 24 and 25 (partially, as far as an in vivo method is concerned) and 26-28 (completely) are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
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 allsearchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers 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/US2007/012939

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2005017107 A	24-02-2005	AU 2004265595 A1	24-02-2005
		BR PI0412885 A	03-10-2006
		CA 2532027 A1	24-02-2005
		EP 1648998 A2	26-04-2006
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		KR 20060054321 A	22-05-2006
		MX PA06000508 A	05-04-2006
		SG 131943 A1	28-05-2007

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