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A61K 35/14 (2006.01) *A61M 1/38* (2006.01)
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTI-CD71 MONOCLONAL ANTIBODIES AND USES THEREOF FOR TREATING MALIGNANT TUMOUR CELLS

(57) Abstract: The present invention provides novel anti-CD71 monoclonal antibodies, in particular mouse-human chimeric anti-CD71 monoclonal antibodies, advantageously associated to effector cells for triggering ADCC mechanisms. Anti-CD71 antibodies, as well as pharmaceutical compositions containing them, are useful for inhibiting proliferation and/or killing malignant tumour cells, especially metastatic cutaneous and uveal melanoma cells.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER					
INV.	C07K16/28	C07K16/42	A61K47/48	C07K16/46	A61K51/10
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	A61P37/04	A61P37/06	A61M1/38		
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) C07K A61K A61P C12N A61M					
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, Sequence Search, WPI Data					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages				Relevant to claim No.
X	US 6 290 956 B1 (BANDER NEIL H [US]) 18 September 2001 (2001-09-18) sequence 9 example 12				9-15,17, 25-27
X	WHITE S ET AL: "Combinations of anti-transferrin receptor monoclonal antibodies inhibit human tumor cell growth in vitro and in vivo: evidence for synergistic antiproliferative effects." CANCER RESEARCH 1 OCT 1990, vol. 50, no. 19, 1 October 1990 (1990-10-01), pages 6295-6301, XP008073808 ISSN: 0008-5472 page 6298 figures 3,4,6				9-24,37, 38
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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			Date of mailing of the international search report		
15 February 2007			14/03/2007		
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016			Authorized officer Bumb, Peter		

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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>WEISSMAN A M ET AL: "EXPOSURE OF K562 CELLS TO ANTI-RECEPTOR MONOCLONAL ANTIBODY OKT9 RESULTS IN RAPID REDISTRIBUTION AND ENHANCED DEGRADATION OF THE TRANSFERRIN RECEPTOR"</p> <p>JOURNAL OF CELL BIOLOGY, ROCKEFELLER UNIVERSITY PRESS, NEW YORK, US, US, vol. 102, no. 3, 1986, pages 951-958, XP008073813 ISSN: 0021-9525 the whole document</p>	
A	<p>RAMMENSEE H-G ET AL: "ANTIBODIES AGAINST THE TRANSFERRIN RECEPTOR BLOCK THE INDUCTION OF CYTOTOXIC T LYMPHOCYTES A NEW METHOD FOR ANTIGEN-SPECIFIC NEGATIVE SELECTION IN-VITRO"</p> <p>EUROPEAN JOURNAL OF IMMUNOLOGY, WEINHEIM, DE, vol. 15, no. 7, 1985, pages 687-692, XP008073858 ISSN: 0014-2980 the whole document</p>	
A	<p>TAETLE R ET AL: "EFFECTS OF MONOCLONAL ANTI-TRANSFERRIN RECEPTOR ANTIBODIES ON IN-VITRO GROWTH OF HUMAN SOLID TUMOR CELLS"</p> <p>CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 47, no. 8, April 1987 (1987-04), pages 2040-2044, XP008073792 ISSN: 0008-5472 figures 1-3</p>	
A	<p>WO 91/14452 A (SALK INST FOR BIOLOGICAL STUDI [US]; UNIV CALIFORNIA [US]) 3 October 1991 (1991-10-03) examples 1-6</p>	
P,A	<p>WO 2005/121179 A (RAVEN BIOTECHNOLOGIES INC [US]; MATHER JENNIE P [US]; ROBERTS PENELOPE) 22 December 2005 (2005-12-22) the whole document</p>	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2006/002331

Box 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.: 20-24, 32-38
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 20-24 & 32-38 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 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.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2006/002331

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