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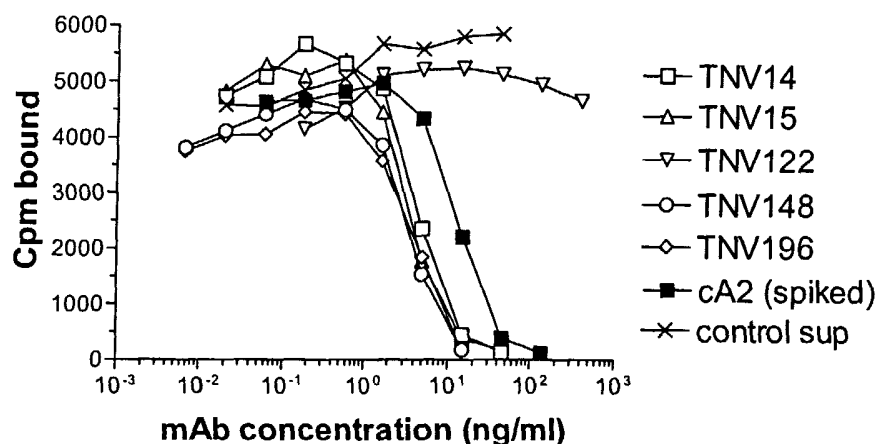
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09/920,137 1 August 2001 (01.08.2001) US
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— with sequence listing part of description published separately in electronic form and available upon request from the International Bureau
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[Continued on next page]

(54) Title: ANTI-TNF ANTIBODIES, COMPOSITIONS, METHODS AND USES



(57) Abstract: The present invention relates to at least one novel anti-TNF antibodies, including isolated nucleic acids that encode at least one anti-TNF antibody, TNF, vectors, host cells, transgenic animals or plants, and methods of making and using thereof, including therapeutic compositions, methods and devices.

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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.

INTERNATIONAL SEARCH REPORT

International Application No

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/13 C07K16/24 C12N15/79 C12N5/10 A61K39/395
 C07K16/42 G01N33/50 G01N33/577 A61P37/00

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)

IPC 7 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)

BIOSIS, EMBASE, CHEM ABS Data, WPI Data, PAJ, EPO-Internal, 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 97 29131 A (BASF AG) 14 August 1997 (1997-08-14) the whole document ---	1-101
X	US 5 654 407 A (BOYLE ET AL.) 5 August 1997 (1997-08-05) the whole document ---	1-101
X	M. MENDEZ ET AL.: "Functional transplant of megabase human immunoglobulin loci recapitulates human antibody response in mice." NATURE GENETICS, vol. 15, no. 2, February 1997 (1997-02), pages 146-156, XP002067603 New York, NY, USA the whole document --- -/--	1-101

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in 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
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- *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

28 June 2002

Date of mailing of the international search report

05/07/2002

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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.
X	WO 96 33735 A (CELL GENESYS INC.) 31 October 1996 (1996-10-31) example 2 figure 4; table 2 claims	1-101
X	--- S. STEPHENS ET AL.: "Comprehensive pharmacokinetics of a humanized antibody and analysis of residual anti-idiotypic responses." IMMUNOLOGY, vol. 85, no. 4, August 1995 (1995-08), pages 668-674, XP000881488 Oxford, GB abstract discussion	1-101
X	--- S. SIEGEL ET AL.: "The mouse/human chimeric monoclonal antibody cA2 neutralizes TNF in vitro and protects transgenic mice from cachexia and TNF lethality in vivo." CYTOKINE, vol. 7, no. 1, January 1995 (1995-01), pages 15-25, XP000990566 abstract	1-80,101
X	--- E. RANKIN ET AL.: "The therapeutic effects of an engineered human anti-tumour necrosis factor alpha antibody (CDP571) in rheumatoid arthritis." BRITISH JOURNAL OF RHEUMATOLOGY, vol. 34, no. 4, April 1995 (1995-04), pages 334-342, XP000674590 abstract	1-80,101
X	--- WO 91 09967 A (CELLTECH LTD.) 11 July 1991 (1991-07-11) example 5	1-80,101
X	--- US 5 698 419 A (WOLPE ET AL.) 16 December 1997 (1997-12-16) example claims	1-80,101
X	--- EP 0 525 570 A (MILES INC.) 3 February 1993 (1993-02-03) example claims	11,31, 51,71

INTERNATIONAL SEARCH REPORT

International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 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:
see FURTHER INFORMATION sheet PCT/ISA/210
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 II Observations where unity of invention is lacking (Continuation of item 2 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.

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

Continuation of Box I.1

Although claims 12-15, 32-35, 52-55, 72-75, 92-95 (all partially, as far as an in vivo method is concerned) are directed to a diagnostic method practised on the human/animal body or 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.

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Information on patent family members

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