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2528 Rutland Place, Thousand Oaks, CA 91362 (US).
DANILENKO, Dimitri Michael [US/US]; 750 Rolling
Oaks Drive, Thousand Oaks, CA 91361 (US).

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(74) Agent: **NOONAN, Kevin, E.**; McDonnell Boehnen Hulbert & Berghoff, 300 South Wacker Drive, Suite 3200, Chicago, IL 60606 (US).

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(71) Applicant (*for all designated States except US*): **AMGEN, INC.** [US/US]; One Amgen Center Drive, Thousand Oaks, CA 91320 (US).

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(72) Inventors; and
(75) Inventors/Applicants (*for US only*): **THOMASON, Arlen, Read** [US/US]; 2298 Watertown Court, Thousand Oaks, CA 91360 (US). **LIU, Benxian** [CN/US];

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.



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(54) Title: FIBROBLAST GROWTH FACTOR-LIKE POLYPEPTIDES

(57) Abstract: The present invention provides Fibroblast Growth Factor-like (FGF-like) polypeptides and nucleic acid molecules encoding the same. The invention also provides vectors, host cells, antibodies and methods for producing FGF-like polypeptides. Also provided for are methods for the diagnosis and treatment of diseases associated with FGF-like polypeptides.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/24373

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/19 C07K14/52 G01N33/50 G01N33/68 C07K16/24
 G01N33/53 A61K38/19 C07K19/00 C12Q1/68 A01K67/027
 C12N15/11

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 C12N C07K G01N A61K C12Q A01K

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, CHEM ABS 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.
E	WO 01 32678 A (SMITHKLINE BEECHAM CORP (US); AGARWAL; BARONE; FEILD; KABNICK MCQUENEY) 10 May 2001 (2001-05-10) SEQ ID NO:1,2 the whole document ---	1-26, 29-32, 35,37-41
E	WO 01 38357 A (MILLENNIUM PHARMACEUTICALS, INC. (US); KHODADOUST MEHRAN MOHAMAD) 31 May 2001 (2001-05-31) the whole document figure 1 --- -/--	1-29, 31-33, 35,37-41

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
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- *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.
- *G* document member of the same patent family

Date of the actual completion of the international search

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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

Macchia, G

INTERNATIONAL SEARCH REPORT

International Application No

PC1/US 00/24373

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No.
E	WO 01 36640 A (CHIRON CORP (US); KYOTO UNIVERSITY (JP); ITOH N.; KAVANAUGH W. MICHAEL) 25 May 2001 (2001-05-25) the whole document figure 5 ---	1-12, 14-24, 26-29, 31-33, 35-39, 41
E	WO 01 18209 A (CURAGEN CORP (US) SHIMKETS VERNET BURGESS FERNANDES TAUPIER QUINN ET A) 15 March 2001 (2001-03-15) the whole document page 7 ---	1-12, 14-24, 26-32, 35, 37-41
E	WO 01 49849 A (ZYMOGENETICS INC. (US); CONKLIN DARRELL C.) 12 July 2001 (2001-07-12) SEQ ID NO:1,2 the whole document ---	1-12, 14-23, 26, 29-33, 35, 37-41
E	WO 00 54813 A (CHIRON CORP (US) MANNING DWARKI RENDAHL ZHOU MCGEE LAU FLANNERY MILLER) 21 September 2000 (2000-09-21) page 8; figure 30 the whole document ---	1-6, 9, 11, 13-17
X	DATABASE EMBL 'Online! ID: AB006136; Accession number: AB006136, 27 August 1997 (1997-08-27) KODA Y.: "Homo sapiens gene for alpha 1,2-fucosyltransferase, 5' flanking region and partial cds." XP002165898 abstract ---	1-5, 7, 11
X	DATABASE EMBL 'Online! ID: AQ175436; Accession number: AQ175436, 21 September 1998 (1998-09-21) MAKAHAIRAS G.G. ET AL.: "HS_3207_A1_H09_MR CIT approved genomic sperm library D Homo sapiens genomic clone plate=3207 col=17 row=0, genomic survey sequence" XP002188227 abstract --- -/--	1-5, 7, 11

INTERNATIONAL SEARCH REPORT

International Application No

PC1/US 00/24373

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online! ID: AV050323; Accession number: AV050323, 16 June 1999 (1999-06-16) CARNINCI P. ET AL.: "Mus musculus adult male pancreas cDNA, partial sequence, clone 1810013H18" XP002165897 abstract</p>	1-5,7,11
A	<p>--- GALZIE Z. ET AL: "Fibroblast Growth Factors and their receptors" BIOCHEMISTRY AND CELL BIOLOGY, vol. 75, no. 6, 1997, pages 669-685, XP000925802 ISSN: 0829-8211</p>	
A	<p>--- SMALLWOOD P.M. ET AL.: "Fibroblast Growth Factor (FGF) homologous factors: new members of the FGF family implicated in nervous system development" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE USA, vol. 93, September 1996 (1996-09), pages 9850-9857, XP002058996 ISSN: 0027-8424</p> <p>-----</p>	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 32-34 all in part

Present claims 32-34 (claims 33 and 34 in part) relate to a method involving an agonist/antagonist, without giving a true technical characterization of said agonist/antagonist.

The claims cover all agents having this agonist/antagonist effect, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such agents.

In fact, on page 53, present application recites that " an FGF-like polypeptide agonist or antagonist may be a protein, peptide, carbohydrate, lipid or small molecular weight molecule that interacts with FGF-like polypeptide to regulate its activity ". Moreover, on the same page 53, present application refers to antisense nucleic acid molecules as potential regulator of expression of the gene encoding the FGF-like polypeptide of the invention.

However, no specific carbohydrate, lipid or small molecular weight molecules are disclosed or defined in present application as having said agonist/antagonist effect. Moreover, concerning proteins and peptides, only antibodies against the polypeptide(s) disclosed can be derived from present application.

Therefore, in the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define an agent by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to antibodies raised against the polypeptide(s) of the invention and antisense molecules.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/24373

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