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09/757,610 11 January 2001 (11.01.2001) US
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(54) Title: INHIBITING GS-FDH TO MODULATE NO BIOACTIVITY

(57) Abstract: Patients needing NO donor therapy or inhibition of pathologically proliferating cells or increased NO bioactivity are treated with a therapeutically effective amount of an inhibitor of glutathione-dependent formaldehyde dehydrogenase.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/44709

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : A61K 38/00
 US CL : 514/18, 21; 424/456;
 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)
 U.S. : 514/18, 424/456, 514/21

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)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/0012834 A1 (STAMLER et al.) 9 August 2001(09.08.2001), see page 5, claims 1 and 4, page 3, and paragraph 22, line 6.	2, 3
X	US 5,648,393 A (STAMLER et al.) 15 July 1997(15.07.1997), see abstract, page 1, line 4.	5
X	US 6,159,500 A (DEMOPOULOS et al.) 12 December 2000(12.12.2001), see column 40, claims 1, 13, 14, 19, 29, and 30.	10-11, 16, 18-19
X	US 6,204,248 B1 (DEMOPOULOS et al.) 20 March 2001(20.03.2001), see column 78, claim 12.	12

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search: 05 June 2002 (05.06.2002)
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Name and mailing address of the ISA/US: Commissioner of Patents and Trademarks, Box PCT, Washington, D.C. 20231, Facsimile No. (703)305-3230
 Authorized officer: Roy Teller *Felicia D. Roberts for*, Telephone No. (703)308-1235

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/44709

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim 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. Claim 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:
Please See Continuation Sheet

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

International application No.

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BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claims 1-7 and 15-20 are drawn to a method of treatment, comprising non-cancerous diseases.

Group II, claims 8-14 are drawn to a method of treatment, comprising cancerous diseases.

The special technical features of the group I invention are the non-cancerous diseases.

The special technical feature of the group II invention are the cancerous diseases.

Since none of the special technical features of the group I or group II inventions are found in more than one of the inventions, unity of invention is lacking.

Continuation of B. FIELDS SEARCHED Item 3:

CAPLUS, BIOSIS, MEDLINE, USPATFULL on STN

search terms: nitric oxide, glutathione, mycophenolic acid, GS-FDH