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(54) Title: METHODS AND COMPOSITIONS FOR REDUCING BLOOD HOMOCYSTEINE LEVELS

(57) Abstract: The invention provides methods for reducing blood homocysteine levels in mammals, and treating or preventing diseases associated with elevated blood homocysteine levels, such as cardiovascular diseases and cognitive disorders. The invention also provides nutritional and pharmaceutical compositions comprising 2-hydroxy-4-(thiomethyl)-butanoic acid, including esters, analogs, derivatives or complex thereof.

**INTERNATIONAL SEARCH REPORT**

International application No.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **A61K 31/70( 2006.01);C07H 23/00( 2006.01)**  
  
 USPC: 514/52,43,42;536/26.4,26.1  
 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. : 514/52, 43, 42; 536/26.4, 26.1

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)  
 STN DATABASE ONLINE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HANKEY, G. J. Homocysteine and Vascular Disease., The Lancet; July 31, 1999, Vol. 354. No. 9176, pages 407-413, see entire article.	1-17
A	US 2,745,745 (BLAKE et al) 15 May 1956 (15.05.1956), see entire patent.	1-17
A	US 5,583,243 (ABDEL-MONEM) 10 December 1996 (10.12.1996), see entire patent.	1-17

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

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