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(54) Title: HYDROLYTICALLY-RESISTANT BORON-CONTAINING THERAPEUTICS AND METHODS OF USE

(57) Abstract: Compositions and methods of use of borole derivatives, including benzoxaboroles, benzazaboroles and benzthiaboroles, as therapeutic agents for treatment of diseases caused by bacteria or viruses are disclosed, as well as methods for synthesis of said agents and compositions thereof.





INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A61K 31/69; C07F 5/02 US CL : 514/64; 568/6 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.: 514/64; 568/6				
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 c			
X	Zhdankin et al, Tetrahedron Letters, Symthesis and Structures of Benzoboroxoles: Novel 1, 2, 5 and 66			
x	Organoboron Heterocycles, 1999, 40, pages 6705-6708, see page 6707 bottom, compond 9. Koster et al, Liebigs Annalen der Chemie, Cyclisierung vo Bor-Stickstoff-Verbindungen in der Hitze, 1968, 720, pages 23-31, see page 25, top, compound 6c1.			
A	US 5,880,188 A (AUSTIN et al) 09 March 1999 (09.03.1999), see entire document. 20-43		20-43	
Further	documents are listed in the continuation of Box C.	See patent family annex.		
"A" document of particul	defining the general state of the art which is not considered to be ar relevance	"T" later document published after the inter date and not in conflict with the applica principle or theory underlying the inver "X" document of particular relevance; the	tion but cited to understand the ntion laimed invention cannot be	
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priority date claimed Date of the actual completion of the international search		Date of mailing of the international search report		
09 February 2005 (09.02.2005)		U 5 APR ZU	<i>u</i> ą	
Name and mailing address of the ISA/US		Authorized officer /////////		
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450		Paul A. Zucker Telephone No. 703-308-1235		
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HYDROLYTICALLY-RESISTANT BORONCONTAINING THERAPEUTICS AND METHODS OF USE

This application claims priority of U.S. Provisional Application Serial No. 60/478,921, filed 16 June 2003, the disclosure of which is hereby incorporated by reference in its entirety.

FIELD OF THE INVENTION

The present invention relates to novel compounds and compositions which have selective therapeutic activities, processes for making such compounds, synthetic intermediates employed in these processes and a method for treating human or other mammal in need of medical treatments.

BACKGROUND OF THE INVENTION

25 Many advances in medicine in the 20th century have been due to the discovery of new classes of small molecular weight effectors for various therapeutic needs. Herein we disclose the diverse, but selective pharmacologically active boron-containing entities.

One hallmark of the modern era of medicine has been the decline in morbidity and mortality associated with bacterial and fungal infections.



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