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(54) Title: PREPARATION AND USE OF α -KETO PHOSPHONATES

(57) Abstract: Novel phosphonate compounds are provided including a phosphonoglyoxylamide ester, an α -keto phosphonophosphate ester, a carbonylbisphosphonate analog of a nucleotide, and a diazomethylenebisphosphonate analog of a nucleotide, as well as methods of making synthetically and medically useful α -keto phosphonate compounds.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : CO7F 9/40; CO7C 245/00

US CL : 534/558; 558/100, 145, 158, 161

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. : 534/558; 558/100, 145, 158, 161

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)
EAST, CAS ONLINE**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 2111672 (WOLFGANG ET AL) 21 September 1972 (21.09.1972), page 4.	1-3
X	COX et al. Rhodium-Carbenoid Mediated O-H Insertion reactions. O-H Insertion vs. H-Abstraction and Effect of Catalyst. Tetrahedron. April 1994, Vol. 50, No. 10, pages 3195-212.	4-22



Further documents are listed in the continuation of Box C.



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* Special categories of cited documents:

"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

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