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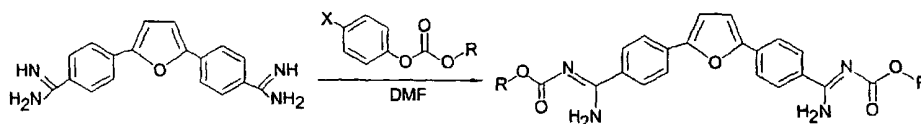
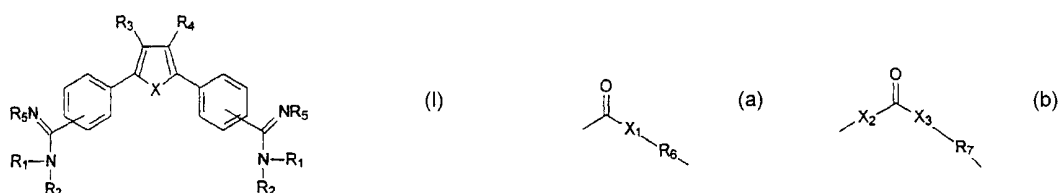
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(54) Title: NOVEL PRODRUGS FOR ANTIMICROBIAL AMIDINES



Synthesis of Carbamates from 2,5-bis (4-aminophenyl) furan

(57) Abstract: A methods of treating an infection comprises administering a therapeutically effective amount of a compound de-
scribed by Formula (I), wherein: X may be O, S, or NR' wherein R' is H or loweralkyl; R₁ and R₂ may be independently selected
from the group consisting of H, loweralkyl, oxyalkyl, alkoxyalkyl, cycloalkyl, aryl, hydroxyalkyl, aminoalkyl, and alkylaminoalkyl;
R₃ and R₄ are each independently selected from the group consisting of H, loweralkyl, halogen, oxyalkyl, oxyaryl, and oxyarylalkyl;
R₅ is represented by a formula selected from the group consisting of: (a) and (b), wherein: X₁, X₂, and X₃ are independently se-
lected from O and S; and R₆ and R₇ are independently selected from the group consisting of loweralkyl, aryl, alkylaryl, oxyaryl, an
ester-containing substituent, and oxyalkyl; or a pharmaceutically acceptable salt thereof.

INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K31/40 A61K31/34 A61K31/38 C07D307/54 C07D333/24 C07D207/32 A61P31/06		
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 A61K C07D A61P		
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, BEILSTEIN Data, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	WO 97 17949 A (UNIV NORTH CAROLINA ;UNIV GEORGIA (US)) 22 May 1997 (1997-05-22) claim 1 --- -/--	1-27
☒ 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 *E* earlier document but published on or after the international filing date *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) *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. *Z* document member of the same patent family		
Date of the actual completion of the international search 11 January 2002		Date of mailing of the international search report 25/01/2002
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 Steendijk, M

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Int. Patent Application No.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	WO 85 05105 A (RORER INT OVERSEAS) 21 November 1985 (1985-11-21) see page 16 and 34 ---	17-27
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