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(54) Title: ANTIMICROBIAL COMPOSITIONS COMPRISING A BENZOIC ACID ANALOG AND A METAL SALT

(57) Abstract: The present invention relates to antimicrobial compositions which provide enhanced immediate as well as residual anti-viral and antibacterial efficacy. The antimicrobial compositions of the present invention provide previously unseen residual effectiveness against Gram negative bacteria, Gram positive bacteria, and viruses, fungi, and improved immediate germ reduction upon use. These compositions comprise: (a) a safe and effective amount of a benzoic acid analog; (b) a safe and effective amount of a metal salt; and (c) a dermatologically acceptable carrier for the acid and salt wherein said composition has a pH of from about 1 to about 7. The invention further relates to methods of use for the present compositions as well as antimicrobial products which incorporate the compositions.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/28897

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 A01N59/16 A01N31/10 A61K7/00 A61K31/192 A61K33/24  
 C11D9/50 //(A01N59/16, 37:40, 37:10), (A61K33/24, 31:60, 31:192)

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 A01N

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, WPI Data, PAJ, BIOSIS, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 049 440 A (NELSON JERRY R ET AL) 17 September 1991 (1991-09-17) column 3, line 43 -column 3, line 52 column 4, line 5 -column 4, line 15 column 4, line 26 -column 4, line 38 example 1 ---	1, 4, 7, 8, 10, 11
X	WO 99 45771 A (PROCTER & GAMBLE) 16 September 1999 (1999-09-16) page 1, paragraph 1 ---	14-19
Y	page 16, last paragraph -page 17, paragraph 2 examples 1-5 ---	9
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- \*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

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Date of mailing of the international search report

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	DE 27 15 711 A (ROBUGEN GMBH) 19 October 1978 (1978-10-19) page 3, last paragraph -page 4, paragraph 1 -----	1-13

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Information on patent family members

International Application No

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