



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b>  <b>A61K 33/40</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 99/17787</b>  <b>(43) International Publication Date:</b> 15 April 1999 (15.04.99)
<b>(21) International Application Number:</b> PCT/IB98/01676  <b>(22) International Filing Date:</b> 6 October 1998 (06.10.98)  <b>(30) Priority Data:</b> 60/060,953                      6 October 1997 (06.10.97)                      US  <b>(71) Applicant:</b> OXO CHEMIE AG [CH/CH]; 4, rue Georges-Jordil, CH-1701 Fribourg (CH).  <b>(72) Inventors:</b> KUHNE, Frederich, W.; 155/1 Mooban Panya Soi 23, Pattanakarn Road, Bangkok 10250 (TH). MCGRATH, Michael; Oxo Chemie, Inc., Suite 450, 601 Gateway Boulevard, South San Francisco, CA 94080 (US). ENGLEMAN, Edgar, G.; Oxo Chemie, Inc., Suite 450, 601 Gateway Boulevard, South San Francisco, CA 94080 (US).  <b>(74) Agents:</b> OLGEMÖLLER, Luitgard et al.; Leonhard Olgemöller Fricke, Josephspitalstrasse 7, D-80331 München (DE).		<b>(81) Designated States:</b> AU, CA, CN, JP, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 17 June 1999 (17.06.99)
<b>(54) Title:</b> USE OF A CHEMICALLY-STABILIZED CHLORITE SOLUTION FOR INHIBITING AN ANTIGEN-SPECIFIC IMMUNE RESPONSE		
<b>(57) Abstract</b>  Methods of using a stabilized chlorite solution to inhibit antigen-specific immune responses are disclosed. The stabilized chlorite solution, when administered to a mammal in need thereof, can prevent the presentation of antigens by antigen presenting cells. The stabilized chlorite solution therefore is useful in treating, <i>inter alia</i> , auto-immune diseases, treating diseases caused by an inappropriate immune response, treating lymphoproliferative disease and in inhibiting rejection in transplant patients.		

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 98/01676

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 6 A61K33/40

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 6 A61K

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 200 157 A (OXO CHEMIE GMBH) 5 November 1986 cited in the application see claim 1 ---	1-26
A	ELSTNER E.F.: "Oxygen radicals - Biochemical basis for their efficacy" KLINISCHE WOCHENSCHRIFT (KLIN. WOCHENSCHR.), 1991, 69/21-23 (949-956), XP002098533 Germany see page 954, column 2, paragraph 3 - page 956, column 1, paragraph 1 see page 956, column 1, paragraph 4 - column 2, paragraph 1 --- -/--	1-26

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.
- "&" document member of the same patent family

Date of the actual completion of the international search

31 March 1999

Date of mailing of the international search report

13/04/1999

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INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 98/01676

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 96 28173 A (BIOXY INC) 19 September 1996 see page 8, line 28 - page 9, line 12 ----</p>	1-26
A	<p>US 4 851 222 A (KUEHNE FRIEDRICH W ET AL) 25 July 1989 see claims ----</p>	1-26
A	<p>EP 0 561 145 A (OXO CHEMIE AG ;OXO CHEMIE GMBH (DE)) 22 September 1993 see claims ----</p>	1-26
A	<p>DATABASE AIDSLINE US NATIONAL LIBRARY OF MEDICINE (NLM),BETHESDA, MD, US BUSCH HW ET AL: "Treatment of HIV-infected patients with advanced symptomatic disease with WF10 solution (TCDO)." XP002098534 see abstract &amp; INT CONF AIDS, AUG 7-12 1994, 10 (1) P204 (ABSTRACT NO. PB0245), ----</p>	1-26
A	<p>DATABASE EMBASE ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL KEMPF S.R. ET AL: "Comparative study on the effects of chlorite oxygen reaction product TCDO (tetrachlorodecaoxygen) and sodium chlorite solution (NaClOinf 2) with equimolar chlorite content on bone marrow and peripheral blood of BDIX rats" XP002098535 see abstract &amp; DRUGS UNDER EXPERIMENTAL AND CLINICAL RESEARCH (DRUGS EXP. CLIN. RES.), 1993, 19/4 (165-174), Switzerland -----</p>	1-26

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 98/01676

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: 1-26  
because they relate to subject matter not required to be searched by this Authority, namely:  
Remark: Although claims 1-26  
are directed to a method of treatment of the human/animal  
body, the search has been carried out and based on the alleged  
effects of the compound/composition.
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such  
an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all  
searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment  
of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report  
covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is  
restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 98/01676

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
EP 0200157	A	05-11-1986	DE 3515749 A AT 77956 T AU 599027 B AU 5684286 A CA 1268713 A DE 3685908 A JP 1607638 C JP 2034326 B JP 62030716 A	06-11-1986 15-07-1992 12-07-1990 06-11-1986 08-05-1990 13-08-1992 13-06-1991 02-08-1990 09-02-1987
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