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(54) Title: TREATMENT OF EXCESSIVE RADIATION (E.G. SUNBURN) EXPOSURE

(57) Abstract: A method is disclosed whereby a formulation is applied to the skin of a patient which may be a human. The formulation is comprised of a carrier and a compound which has a first lipid solubility and a first aqueous solubility. The compound is allowed to permeate the patient's skin and reach viable cells and react in the presence of enzymes of the cells. The reaction results in a compound which has a second lipid solubility which is substantially less than the first lipid solubility and also obtain a second aqueous solubility which is substantially greater than the first aqueous solubility thereby allowing the compound to permeate to viable cells and remain in contact with those cells. The compound may be a nitroxide which aids in modulating adverse effects of reactive oxygen species.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/28692

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 7/42, 9/00
 US CL : 424/59, 400

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. : 424/59, 400

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)
 BRS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,840,734 A (BERNSTEIN) 24 November 1998 (24.11.1998), see entire document, column 2, lines 11-49, column 3, lines 42-67.	1-9 ----- 10-20
X --- Y	WO 00/78316 A1 (BERNSTEIN) 28 December 2000 (28.12.2000), see entire document.	1-9 ----- 10-20
A	US 6,048,967 A (HSIA) 11 April 2000 (11.04.2000), see entire document.	1-20

Further documents are listed in the continuation of Box C.

See patent family annex.

* 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
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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