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United States Patent [19]

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Ghio et al.

[45] **Date of Patent:** Dec. 12, 1995

[54] **METHOD OF INHIBITING OXIDANTS USING ALKYLARYL POLYETHER ALCOHOL POLYMERS**

[75] Inventors: **Andrew J. Ghio; Claude A. Piantadosi**, both of Durham, N.C.; **Thomas P. Kennedy**, Richmond, Va.

[73] Assignee: **Duke University**, Durham, N.C.

[21] Appl. No.: **219,770**

[22] Filed: **Mar. 29, 1994**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 39,732, Mar. 30, 1993, abandoned.

[51] Int. Cl.⁶ **A61K 9/12; A61K 31/765**

[52] U.S. Cl. **424/45; 424/78.37; 514/828; 514/851**

[58] Field of Search **424/45, 78.37; 514/851, 828**

[56] References Cited

PUBLICATIONS

Robert A. Greenwald, *CRC Handbook of Methods for Oxygen Radical Research*; Determination of HOCl Production by Micloperoxidase; p. 300 (1987).

Cantin et al.; *The Journal of Clinical Investigation, Inc.* Protection by Antibiotics against Myeloperoxidase-dependent Cytotoxicity to Lung Epithelial Cells in Vitro; vol. 91, pp. 38-45 (Jan., 1993).

Ramsey, et al. *The New England Journal of Medicine*; Efficacy of Aerosolized Tobramycin in Patients with Cystic Fibrosis; vol. 328 No. 24 pp. 1740-1746 (Jun. 17, 1993).

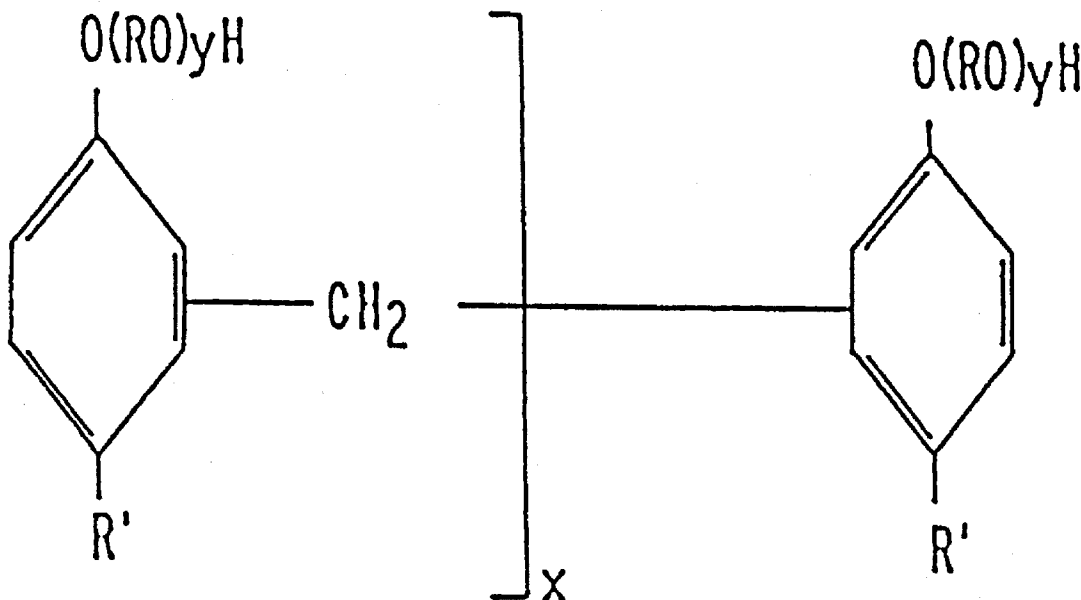
Vasconcellos, et al. *Science*; Reduction in Viscosity of Cystic Fibrosis Sputum in Vitro by Gelsolin; vol. 263, pp. 969-971 (Feb. 18, 1994).

Primary Examiner—Jyothsna Venkat
Attorney, Agent, or Firm—Richard E. Jenkins

[57] ABSTRACT

A method and medicament for the inhibition of oxidants comprising administering a treatment effective amount of alkylaryl polyether alcohol polymers to a chemical or biologic system in need thereof. The medicament is preferably administered by aerosolization into the mammalian respiratory system. The medicament may also be applied to the mammalian skin. Preferably, the medicament includes a physiologically acceptable carrier which may be selected from the group consisting of physiologically buffered saline, isotonic saline, normal saline, petrolatum based ointments and U.S.P. cold cream.

5 Claims, 5 Drawing Sheets



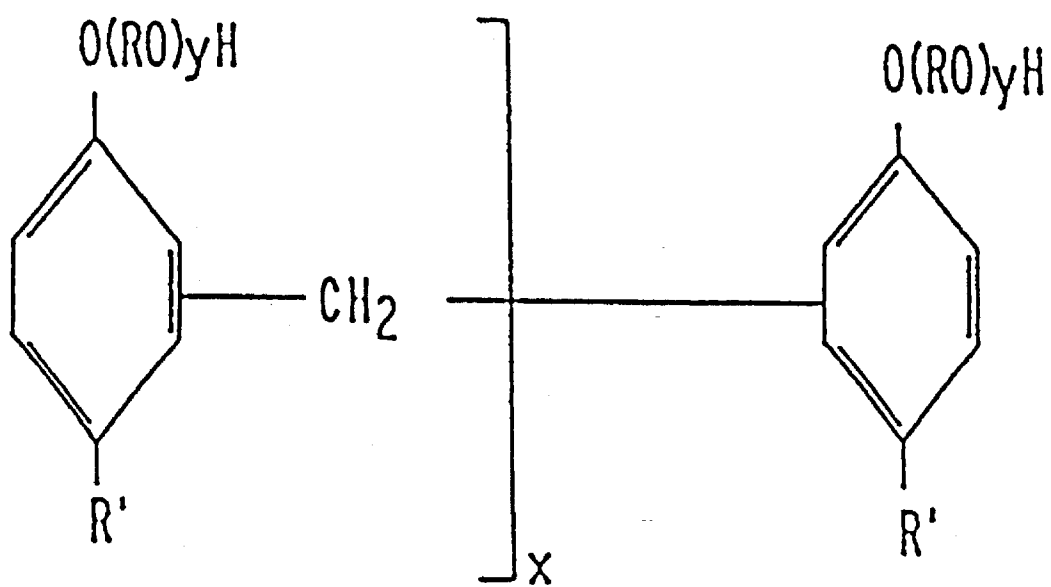


FIG. 1

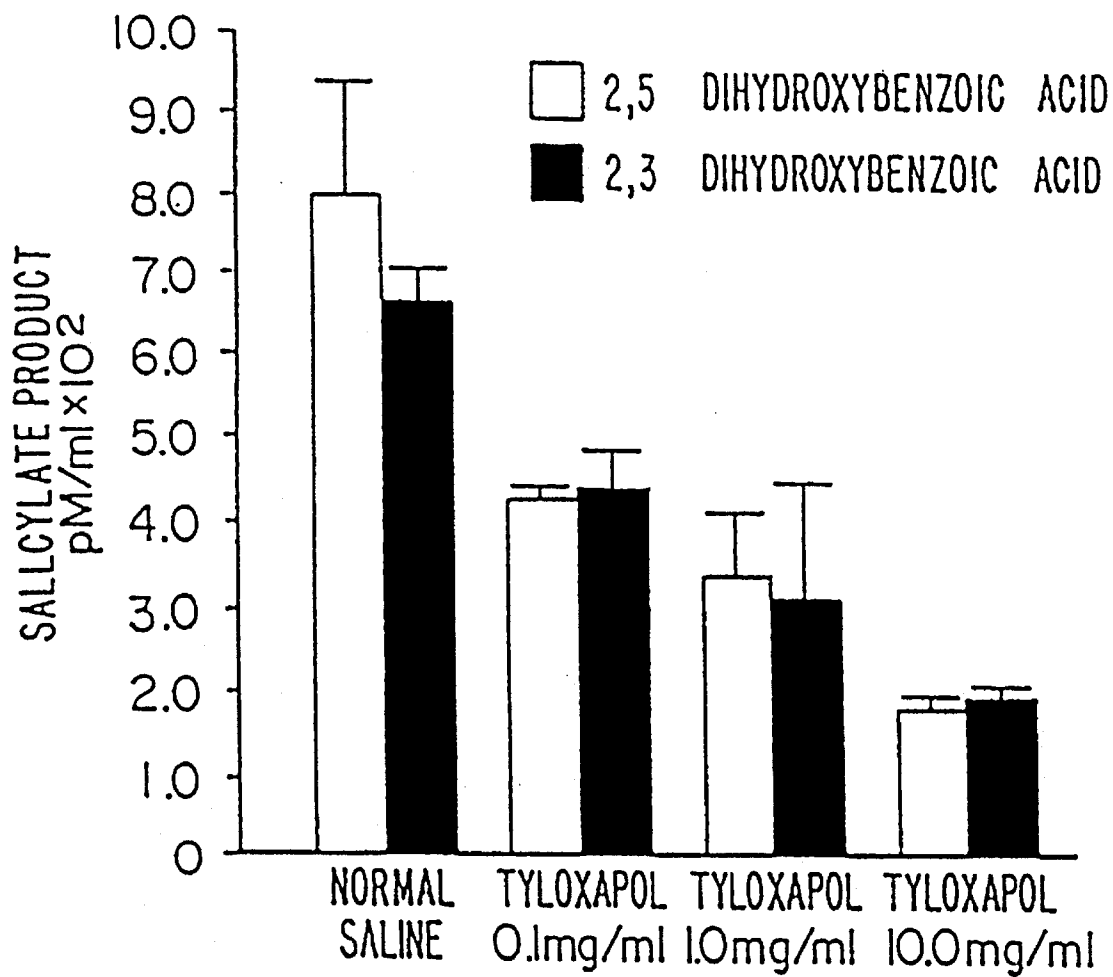


FIG. 2

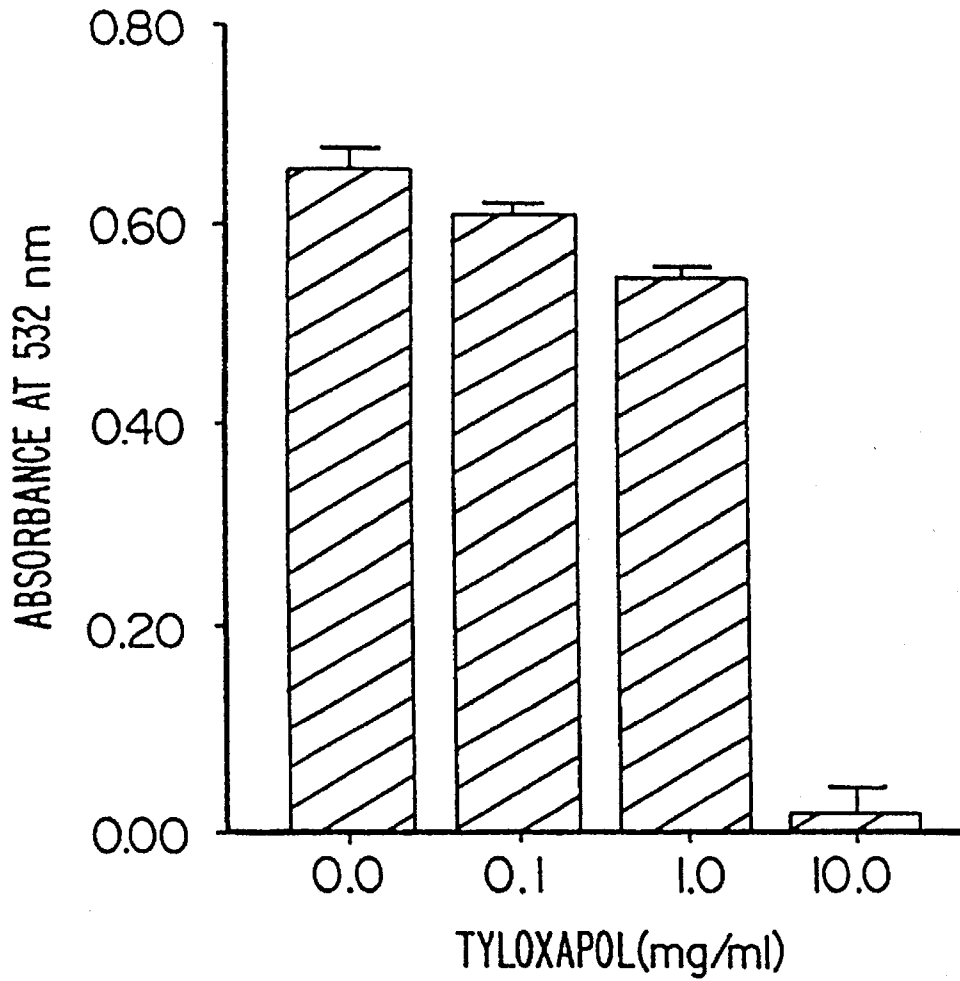


FIG. 3

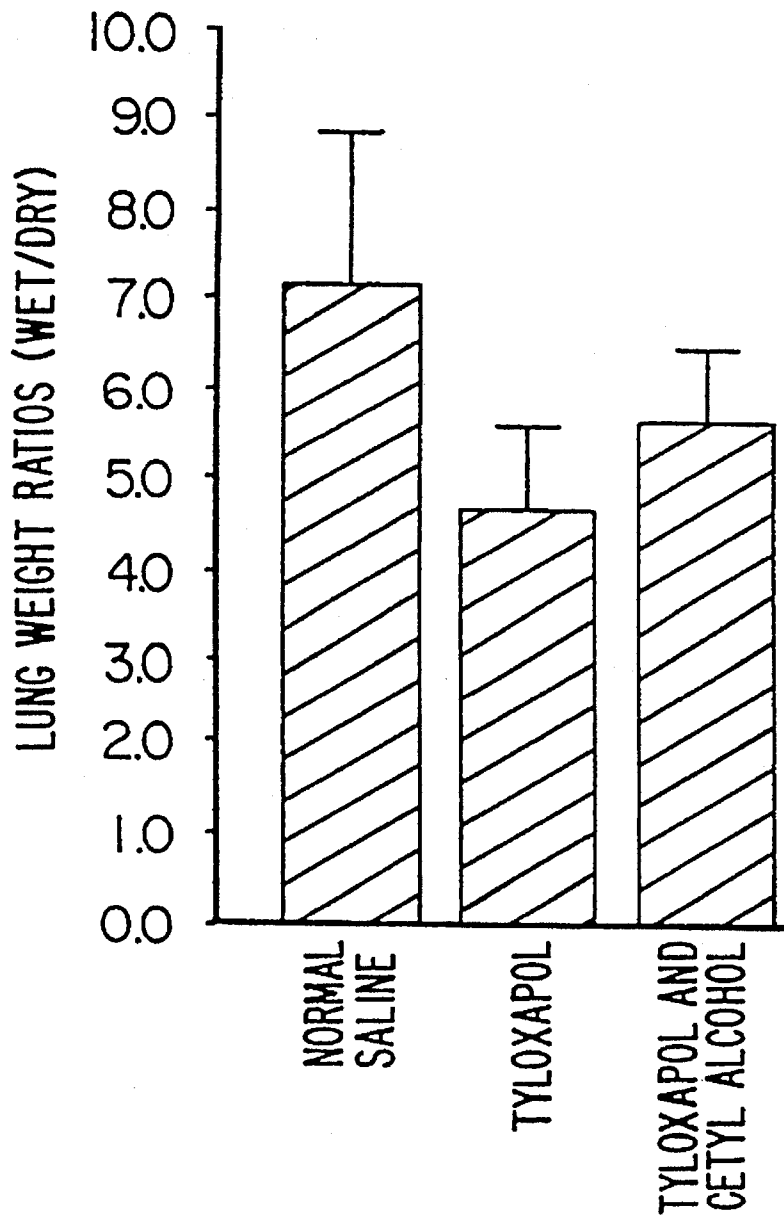


FIG. 4

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