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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**

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[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.<sup>6</sup> ..... **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**

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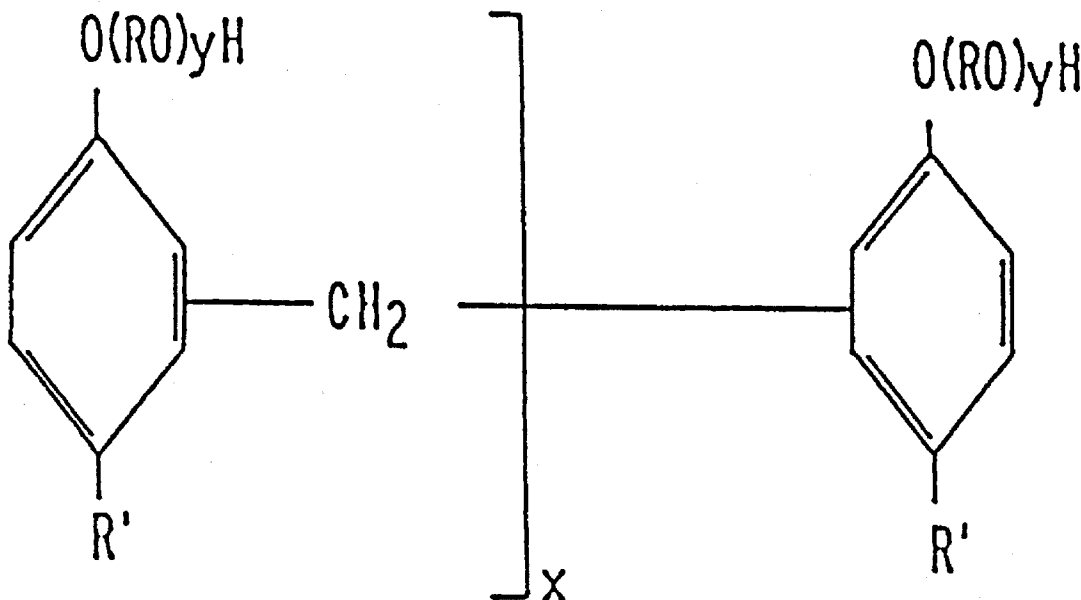
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### [57] **ABSTRACT**

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**



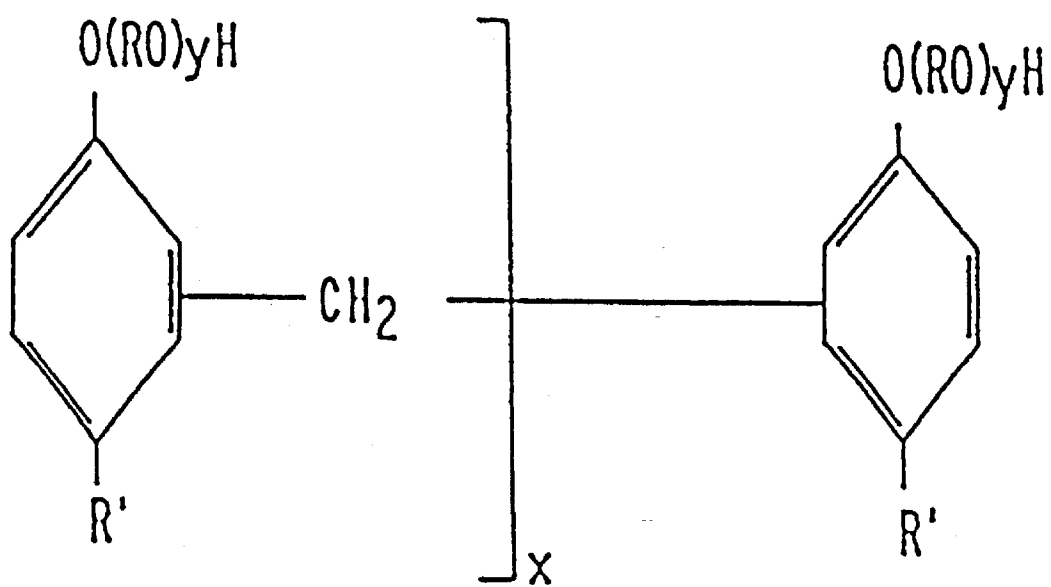


FIG. 1

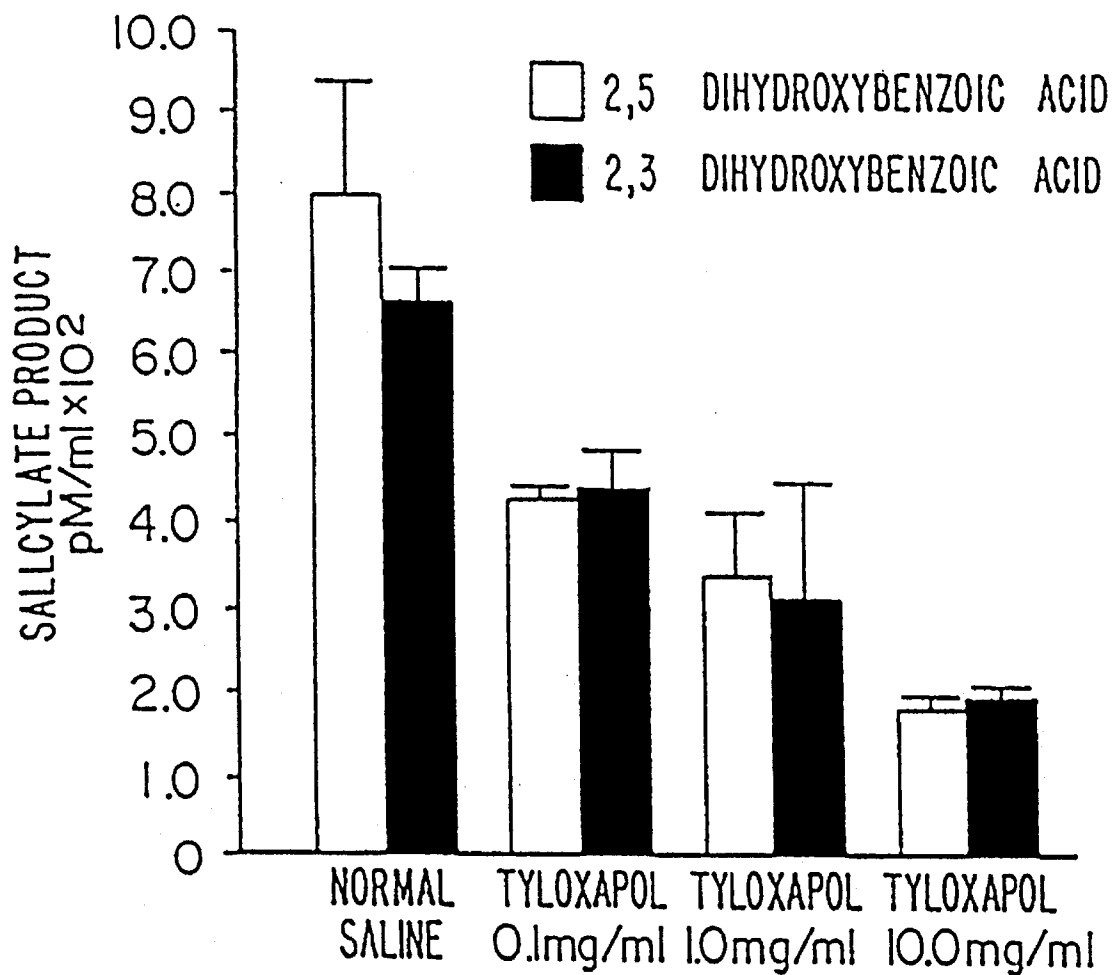


FIG. 2

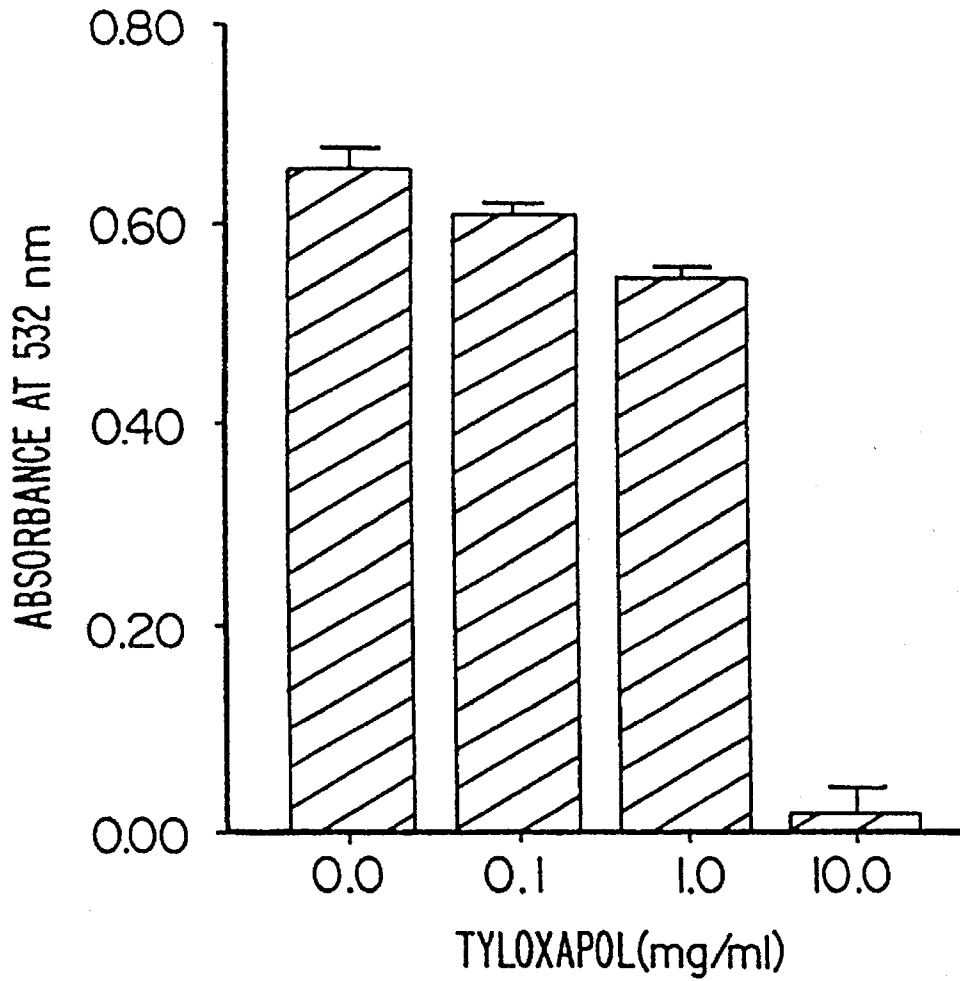


FIG. 3

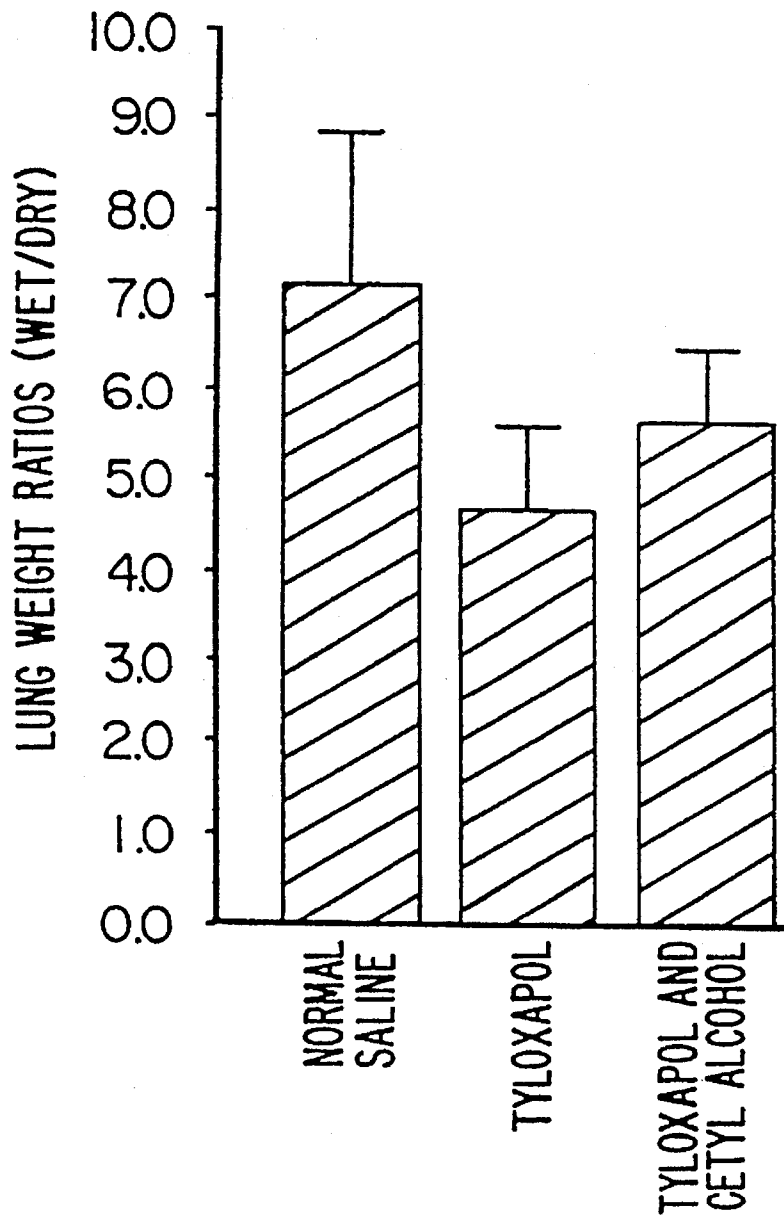


FIG. 4

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