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(12) **United States Patent**  
Naka et al.(10) **Patent No.:** US 6,624,193 B1  
(45) **Date of Patent:** Sep. 23, 2003(54) **PREVENTIVE AND THERAPEUTIC AGENTS FOR EYE DISEASES**(75) Inventors: **Hiroaki Naka**, Kobe (JP); **Kazuhiro Kawabata**, Mishima-gun (JP); **Hideki Tokushige**, Kobe (JP)(73) Assignees: **Ono Pharmaceutical Co., Ltd.**, Osaka (JP); **Senju Pharmaceutical Co., Ltd.**, Osaka (JP)

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(21) Appl. No.: **10/070,307**(22) PCT Filed: **Sep. 5, 2000**(86) PCT No.: **PCT/JP00/06014**

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(2), (4) Date: **Apr. 2, 2002**(87) PCT Pub. No.: **WO01/17527**PCT Pub. Date: **Mar. 15, 2001**(30) **Foreign Application Priority Data**

Sep. 6, 1999 (JP) ..... 11-251538

(51) **Int. Cl.**<sup>7</sup> ..... **A01N 37/02**; A01N 37/12; A61K 31/22; A61K 31/195; C07C 69/00(52) **U.S. Cl.** ..... **514/546**; 514/562; 514/604; 514/618; 514/619; 560/138; 560/142(58) **Field of Search** ..... 514/546, 562, 514/604, 618, 619, 564; 560/138, 142(56) **References Cited**

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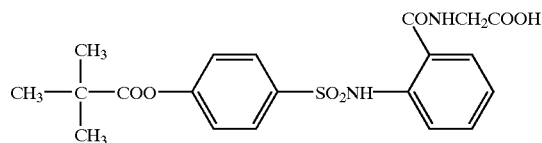
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*Primary Examiner*—Richard L. Raymond*Assistant Examiner*—Zachary C. Tucker(74) *Attorney, Agent, or Firm*—Wenderoth, Lind & Ponack, L.L.P.(57) **ABSTRACT**

The present invention provides a prophylactic and therapeutic medicament for ophthalmic diseases, especially ophthalmic inflammatory diseases and corneal ulcer, comprising as an active ingredient a compound represented by the formula (I):



or a pharmacologically acceptable salt or hydrate thereof.

**27 Claims, 9 Drawing Sheets**

Fig. 1

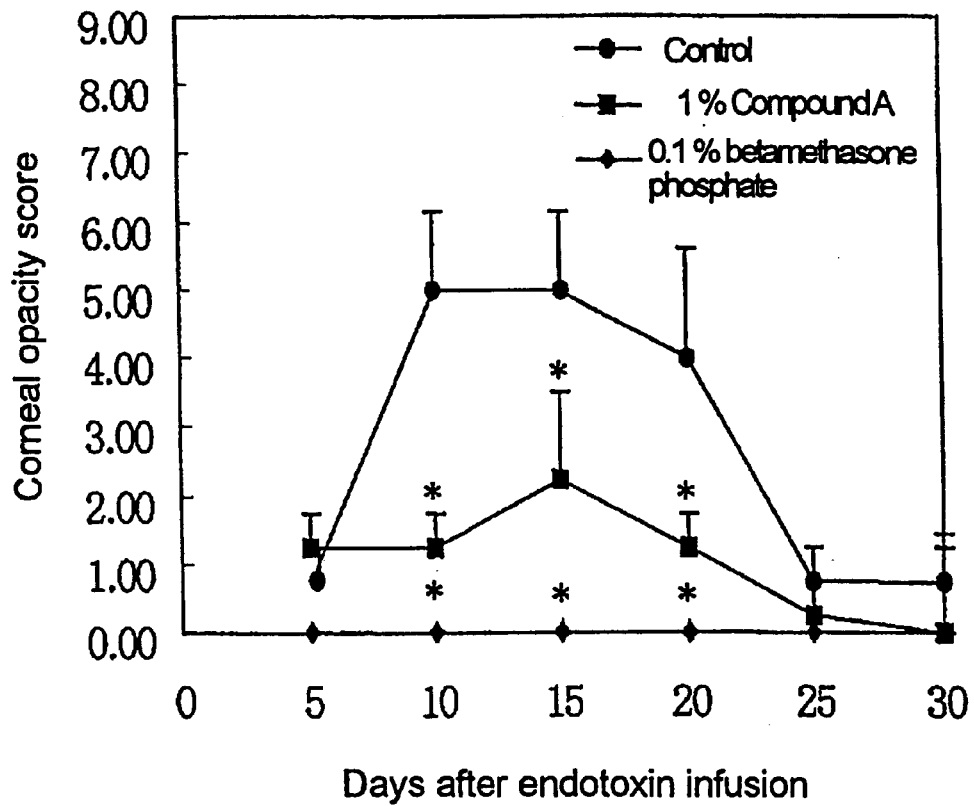


Fig. 2

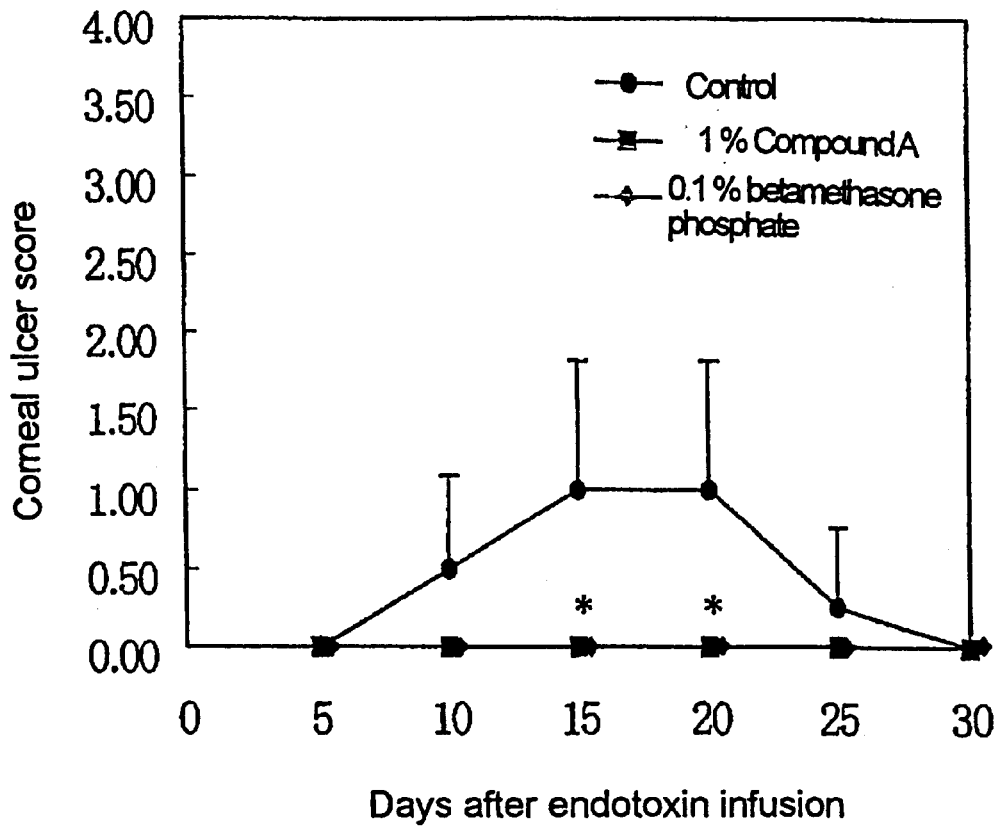


Fig. 3

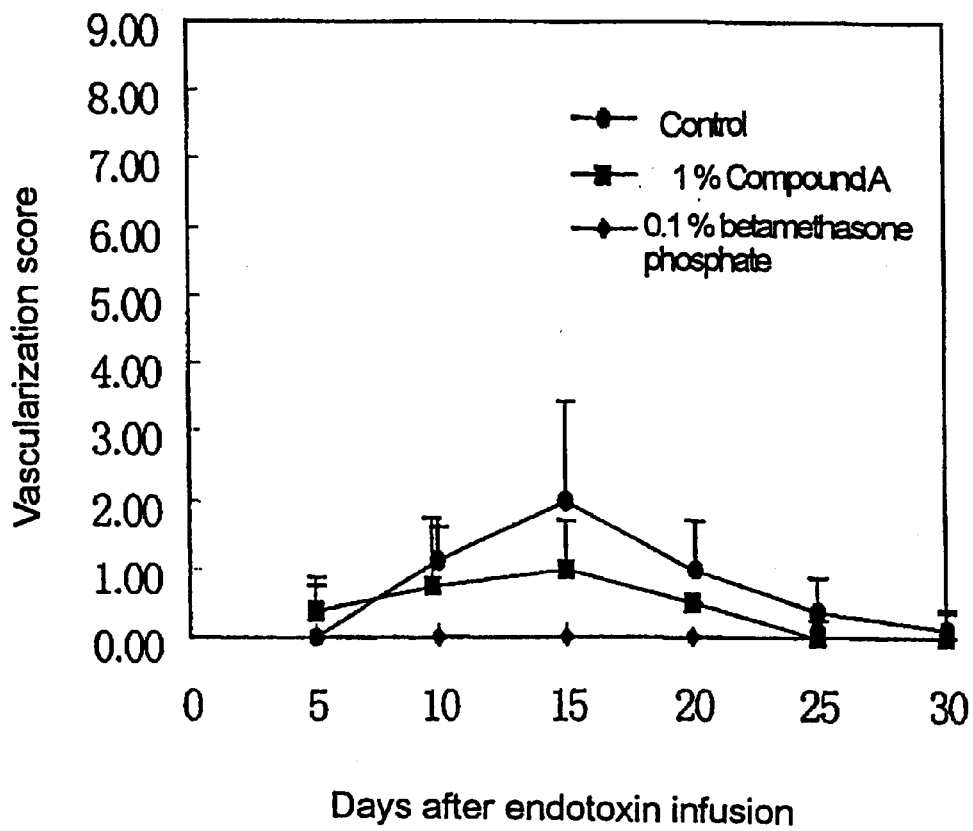
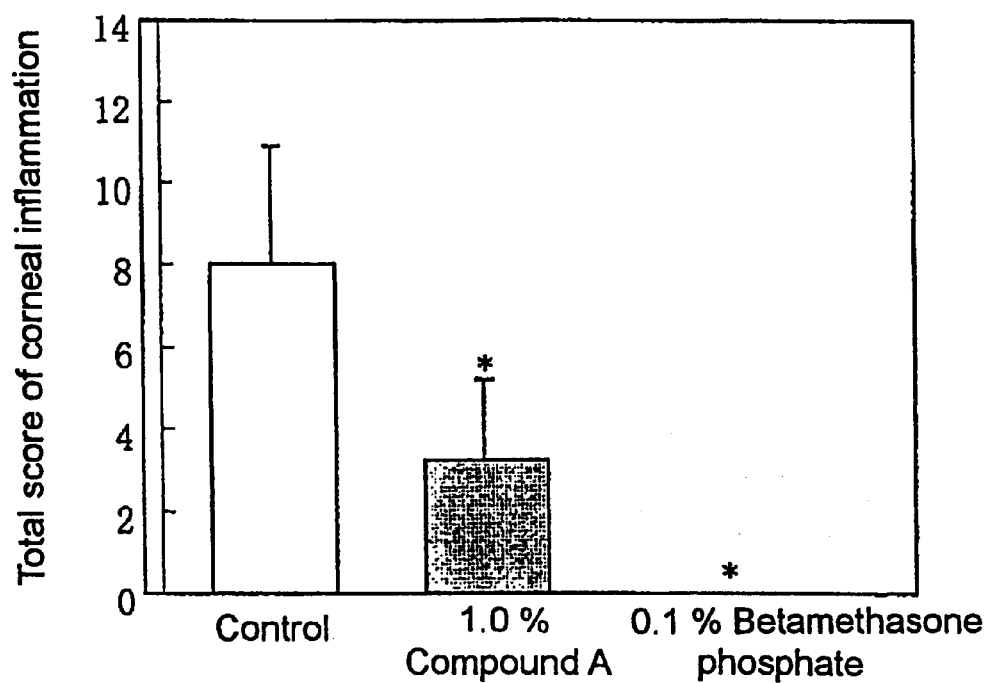


Fig. 4



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