



(12) **United States Patent**  
**Cloutier et al.**

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(45) **Date of Patent:** **\*Feb. 18, 2003**

(54) **METHOD FOR TREATING PERIPHERAL VASCULAR DISEASE BY ADMINISTERING BENZINDENE PROSTAGLANDINS BY INHALATION**

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(57) **ABSTRACT**

A method of delivering benzindene prostaglandins to a patient by inhalation is discussed. A benzindene prostaglandin known as UT-15 has unexpectedly superior results when administered by inhalation compared to parenterally administered UT-15 in sheep with induced pulmonary hypertension.

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(\* ) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) **Appl. No.:** **09/525,471**

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**Related U.S. Application Data**

(60) Provisional application No. 60/124,999, filed on Mar. 18, 1999, and provisional application No. 60/124,999, filed on Mar. 18, 1999.

(51) **Int. Cl.**<sup>7</sup> ..... **A61K 9/12; A61K 31/19**

(52) **U.S. Cl.** ..... **424/45; 424/46; 424/489; 514/573; 514/571**

(58) **Field of Search** ..... **424/45, 46, 489; 514/573, 571**

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**12 Claims, 18 Drawing Sheets**

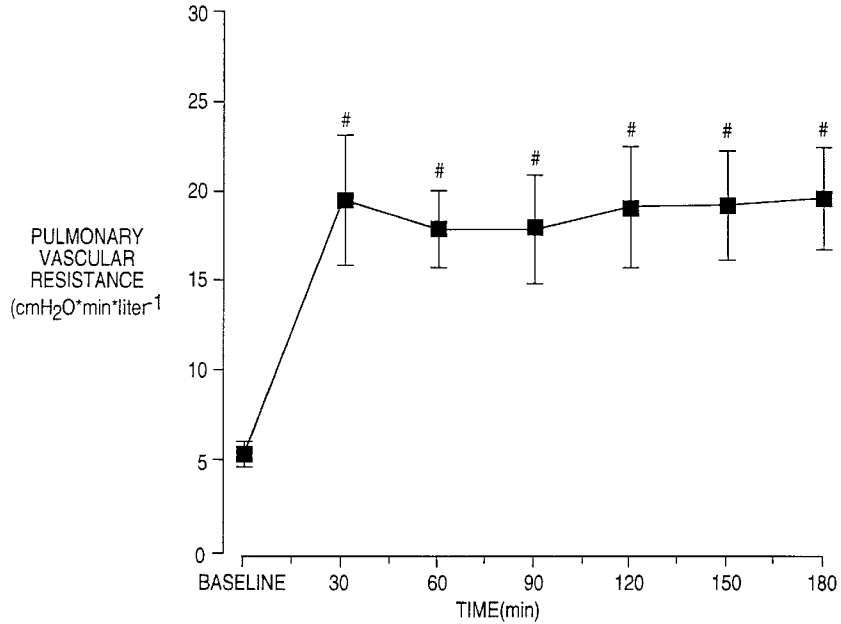


FIG. 1

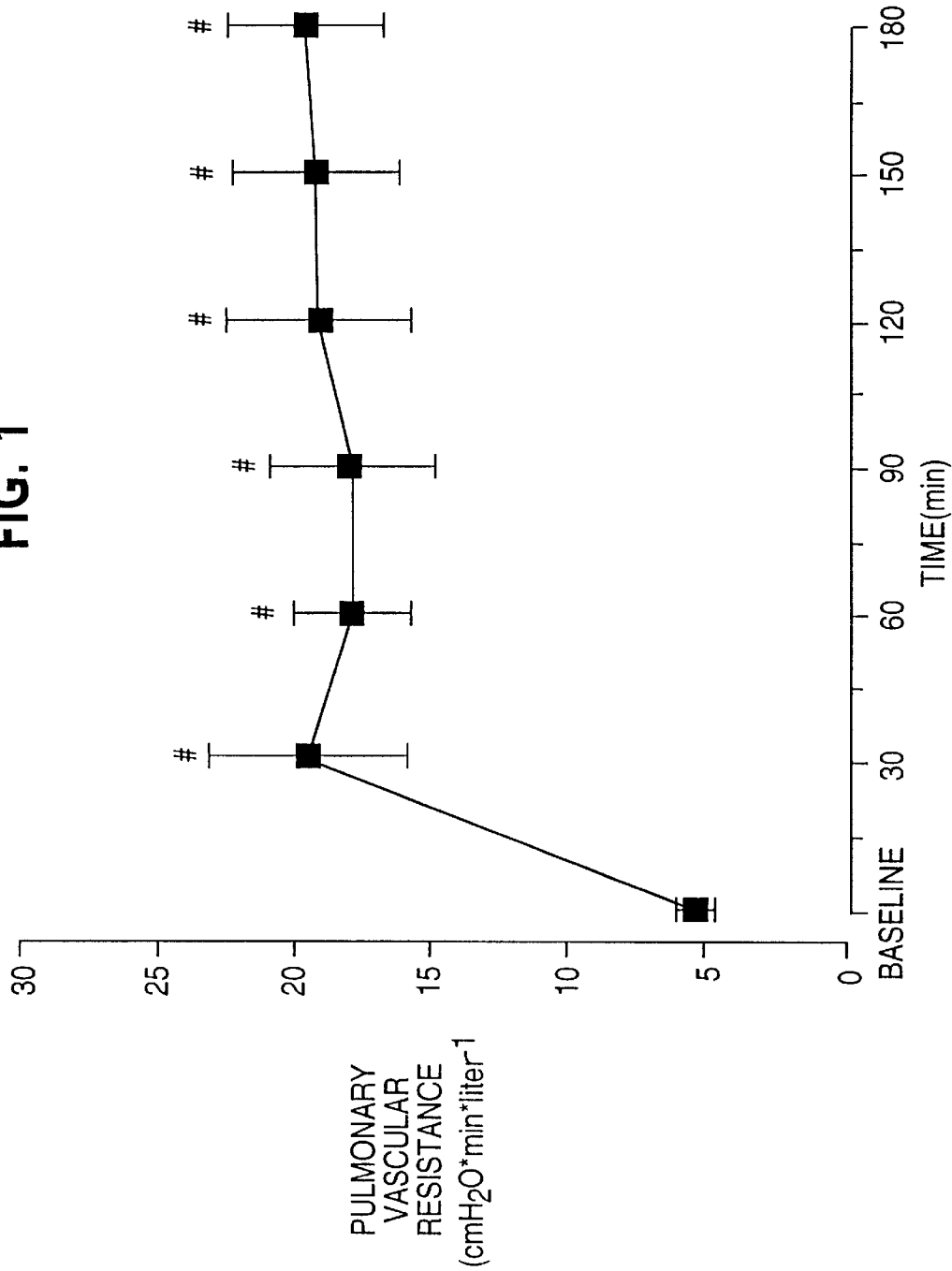


FIG. 2

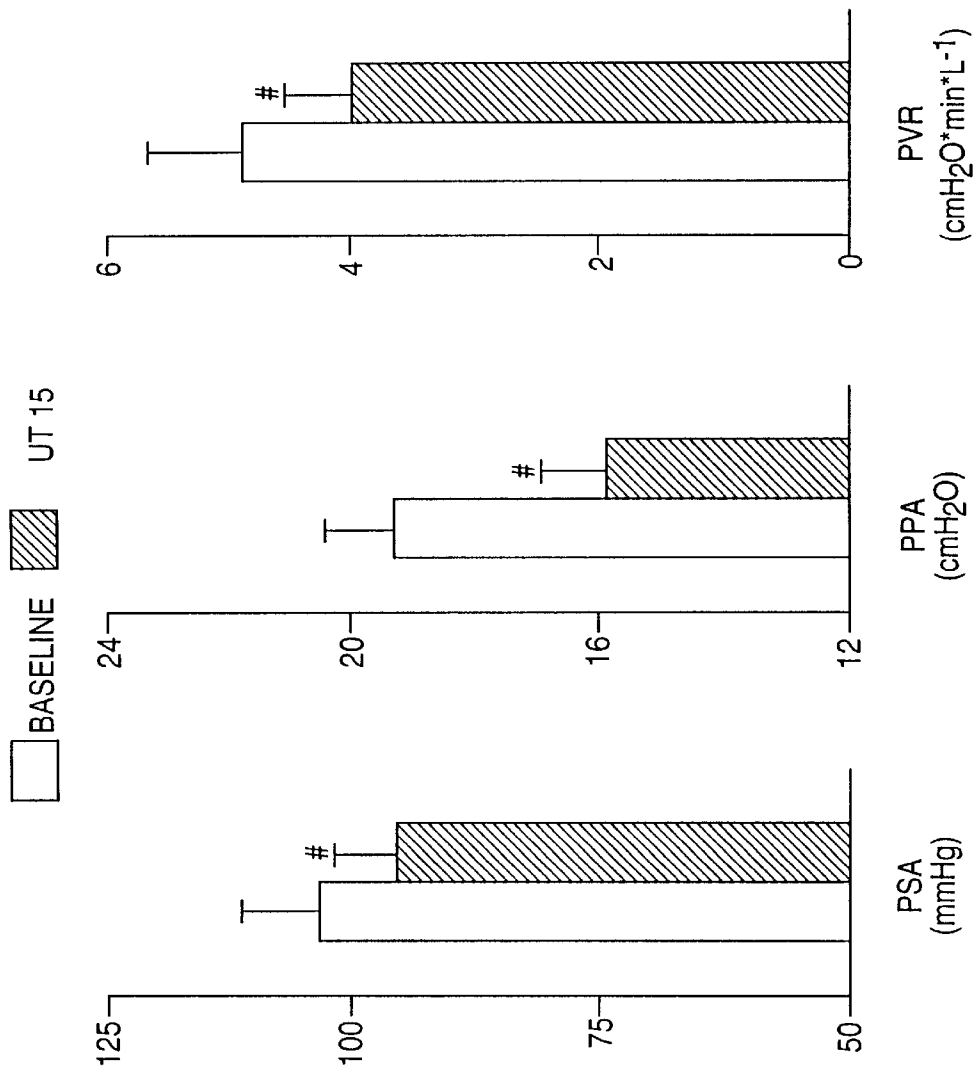
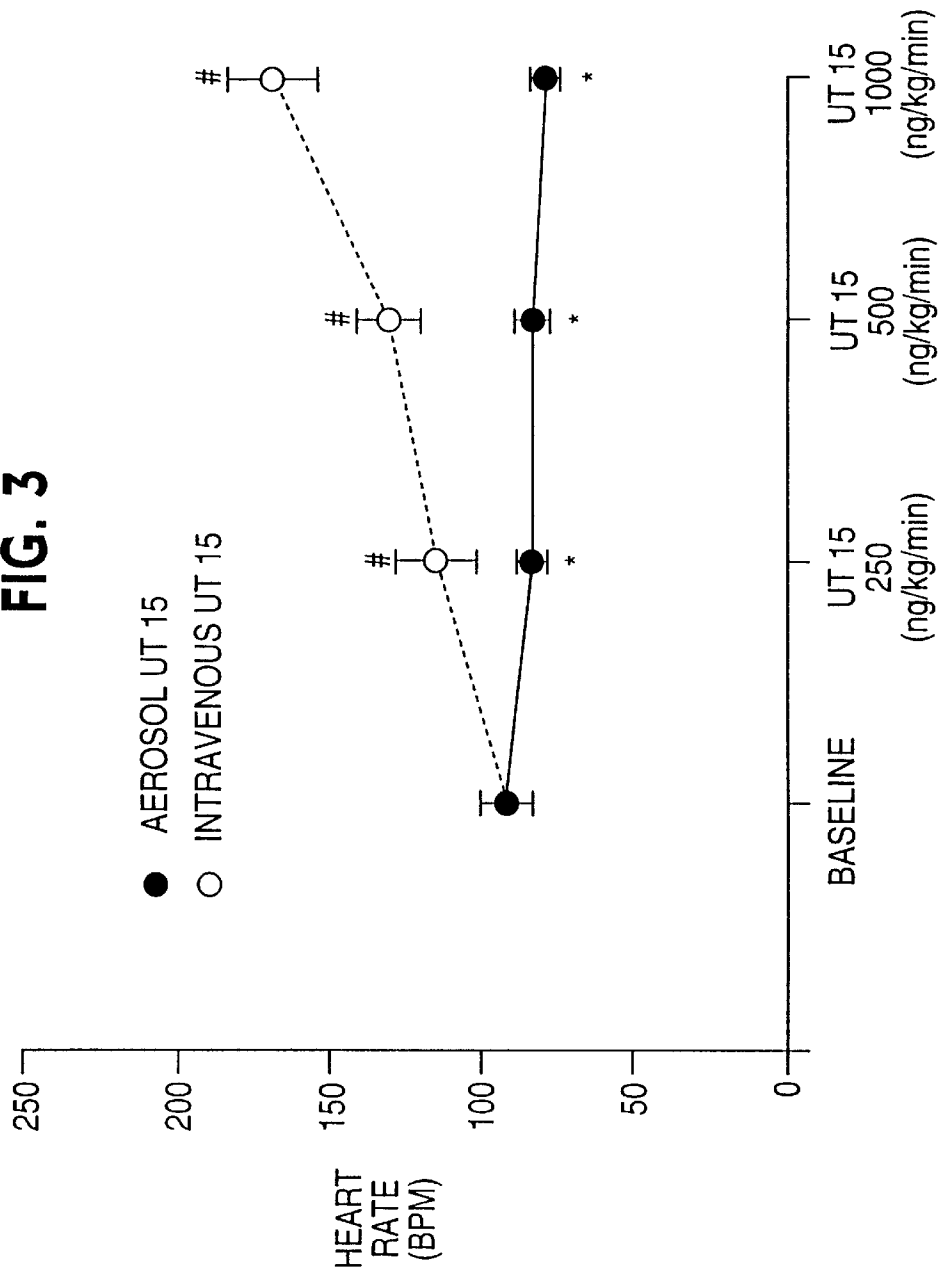
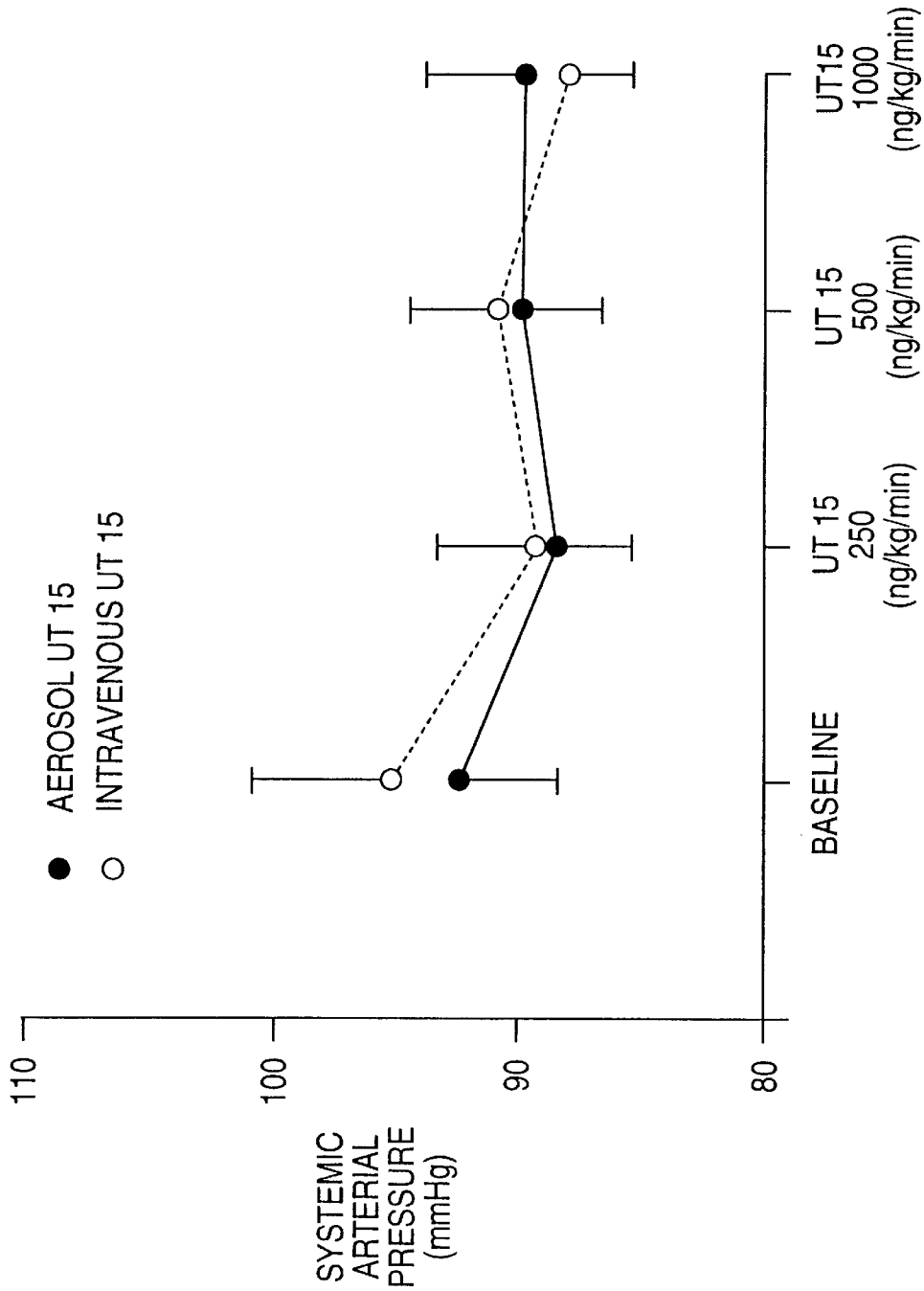


FIG. 3



**FIG. 4**



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