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(12) **United States Patent**  
**Kanios**

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(54) **COMPOSITIONS AND METHODS TO EFFECT THE RELEASE PROFILE IN THE TRANSDERMAL ADMINISTRATION OF ACTIVE AGENTS**

**FOREIGN PATENT DOCUMENTS**

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(73) Assignee: **Noven Pharmaceuticals, Inc.**, Miami, FL (US)  
(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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**Related U.S. Application Data**

(63) Continuation of application No. 09/765,932, filed on Jan. 19, 2001, now abandoned.  
(60) Provisional application No. 60/177,103, filed on Jan. 20, 2000.  
(51) **Int. Cl.**<sup>7</sup> ..... **A61K 9/70**; A61K 13/00  
(52) **U.S. Cl.** ..... **424/449**; 424/448; 424/443; 424/484  
(58) **Field of Search** ..... 424/448, 449, 424/484, 487, 488, 443

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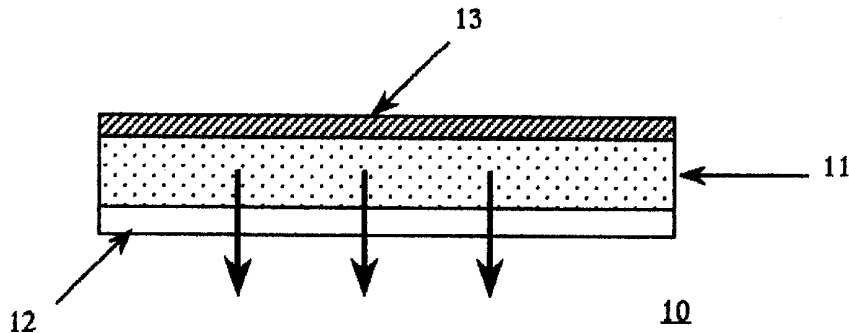
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(57) **ABSTRACT**

Compositions and methods for the transdermal delivery of active agents up to a period of seven days or more at substantially a zero-order release rate comprising a pharmaceutically acceptable adhesive matrix and a polymeric plastic material that provides a release rate regulating effect on the active agents.

**6 Claims, 6 Drawing Sheets**



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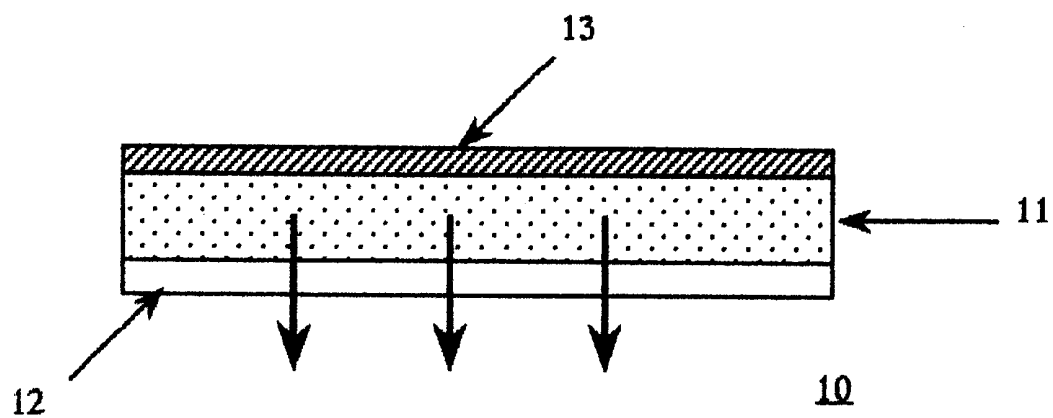


FIG. 1

FIGURE 2

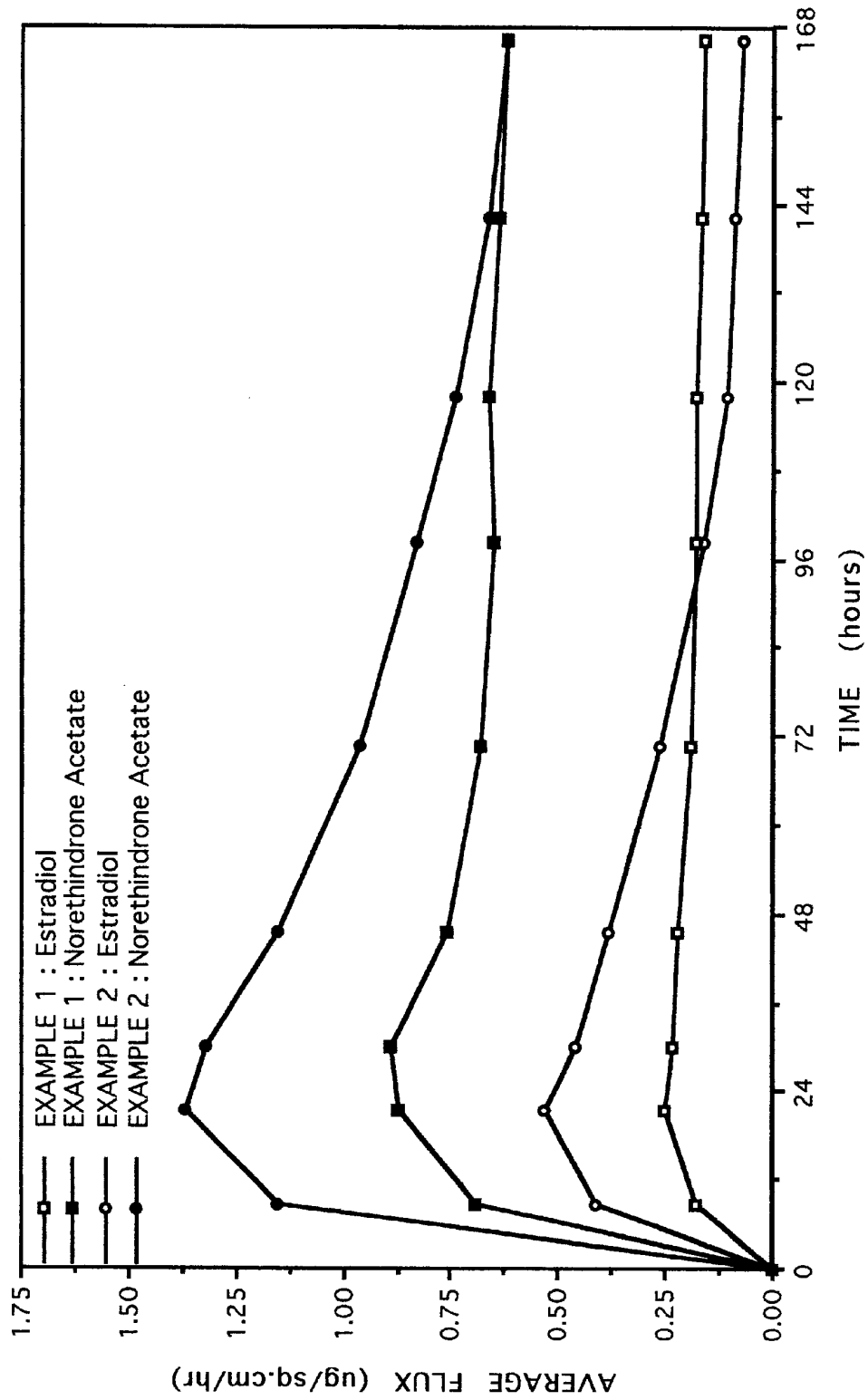
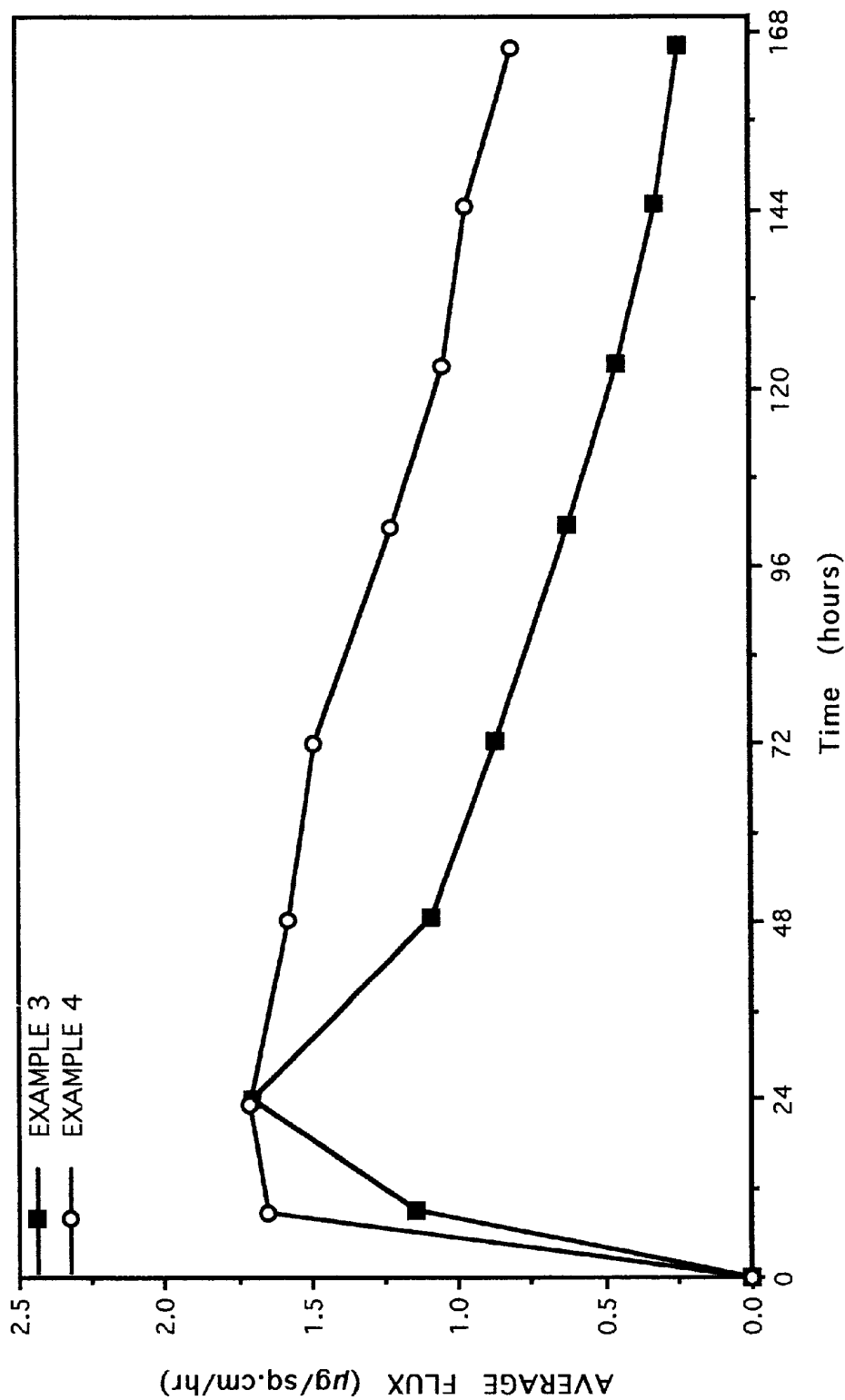


FIGURE 3



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