

## (12) United States Patent Giambattista et al.

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### (54) LOW-COST MEDICATION DELIVERY PEN

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patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

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Feb. 23, 1998 (22) Filed:

(51) Int. Cl.<sup>7</sup> ...... A61M 5/00

U.S. Cl. ..... 604/207 (52)

**Field of Search** ...... 604/207, 208, 604/209, 210, 211, 187, 218, 224; 222/32,

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Primary Examiner-Sharon Kennedy Assistant Examiner—Catherine Serke

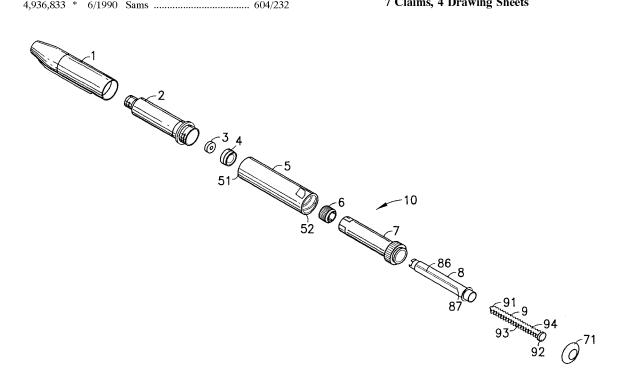
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(74) Attorney, Agent, or Firm—Alan W. Fiedler

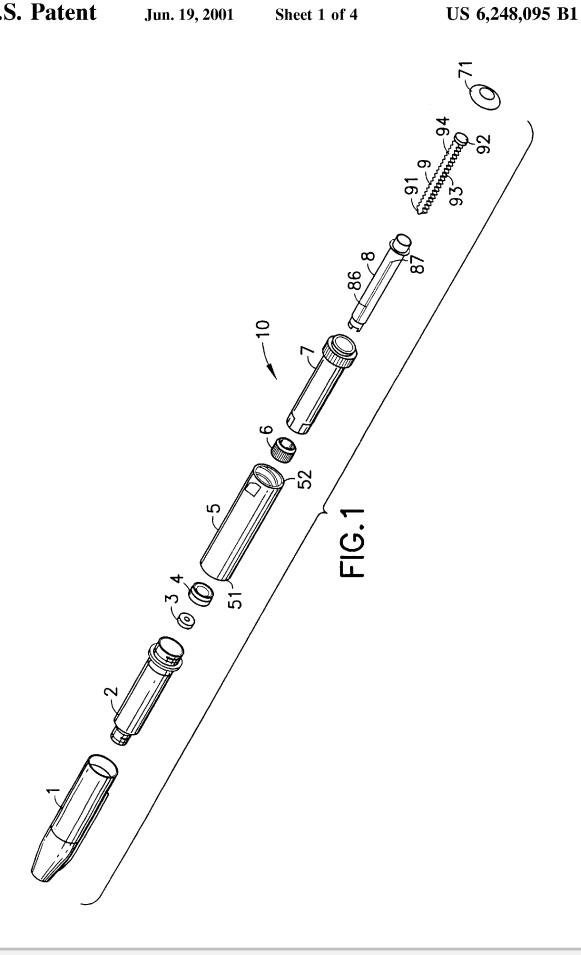
### **ABSTRACT** (57)

A medication delivery pen having very few parts allowing it to be manufactured at a very low-cost. The medication delivery pen also includes an automatic release mechanism to allow the user to easily reset the dose on the medication delivery pen and a mechanism for allowing the lead screw to easily retract back into the body of the medication delivery pen when the vial retainer has been removed to receive a new vial.

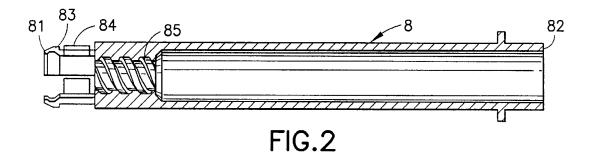
### 7 Claims, 4 Drawing Sheets











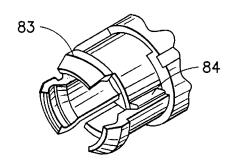
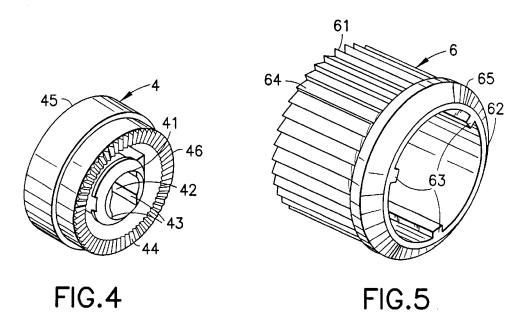
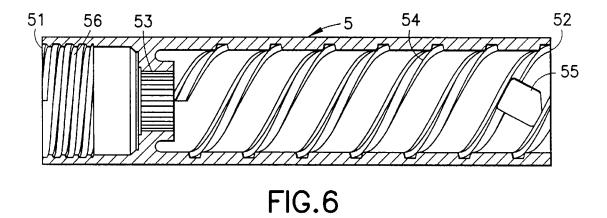


FIG.3







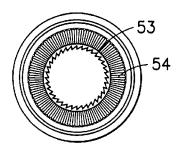
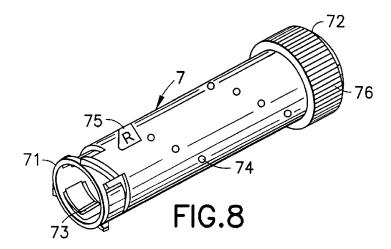
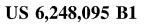


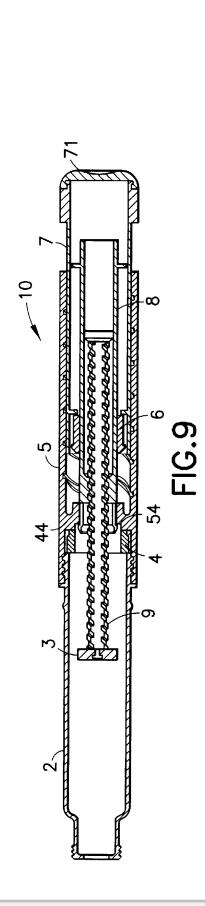
FIG.7

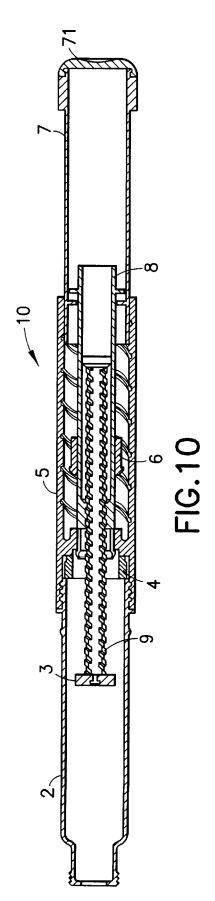




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