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

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- (54) **MEDICATION DELIVERY PEN**
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- (73) Assignee: **Becton, Dickinson and Company**, Franklin Lakes, NJ (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 236 days.

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(57) **ABSTRACT**

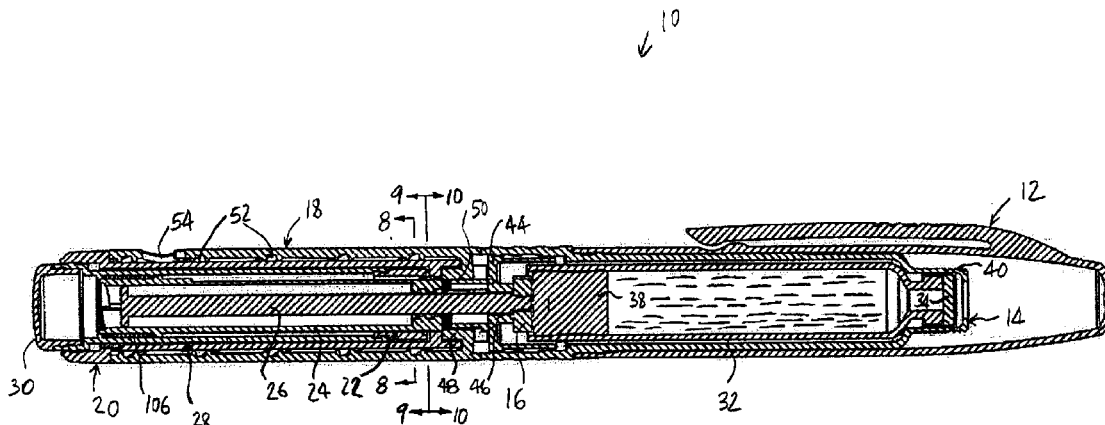
A medication delivery pen is provided including a leadscrew having a plurality of threads; a driver coaxially disposed about at least a portion of the leadscrew; a dosing ring non-rotatably disposed on the driver, the dosing ring also being slidable along the driver; and, a dose knob coaxially disposed about the dosing ring. At least one tooth is formed on one of the dose knob and the dosing ring, and at least one groove is formed on the other of the dose knob and the dosing ring, with the groove being formed to receive the tooth. The dosing ring is selectively movable relative to the dose knob from a first position where the tooth and the groove are spaced apart to a second position where the tooth is received within the groove, the dosing ring being rotatable with the dose knob with the dosing ring being in the second position. Incorrect dosage settings of the inventive pen may be easily corrected by a user via a novel dial-back feature that enables the user to reset the dose amount without expelling medication and without having to dial the dose knob to an extended, reset position.

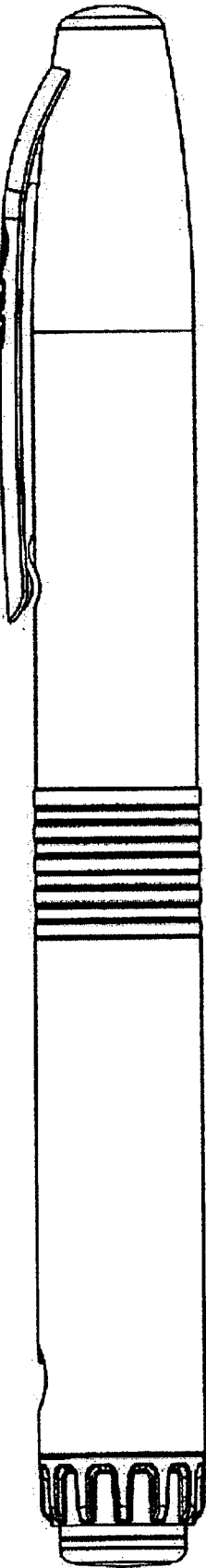
- (21) Appl. No.: **10/406,302**
- (22) Filed: **Apr. 3, 2003**
- (65) **Prior Publication Data**
US 2004/0199117 A1 Oct. 7, 2004
- (51) **Int. Cl.⁷** **A61M 5/00**
- (52) **U.S. Cl.** **604/207; 604/208; 604/211**
- (58) **Field of Search** **604/207, 208, 604/211, 209, 210, 232, 218, 224**

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18 Claims, 9 Drawing Sheets





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FIG. 1

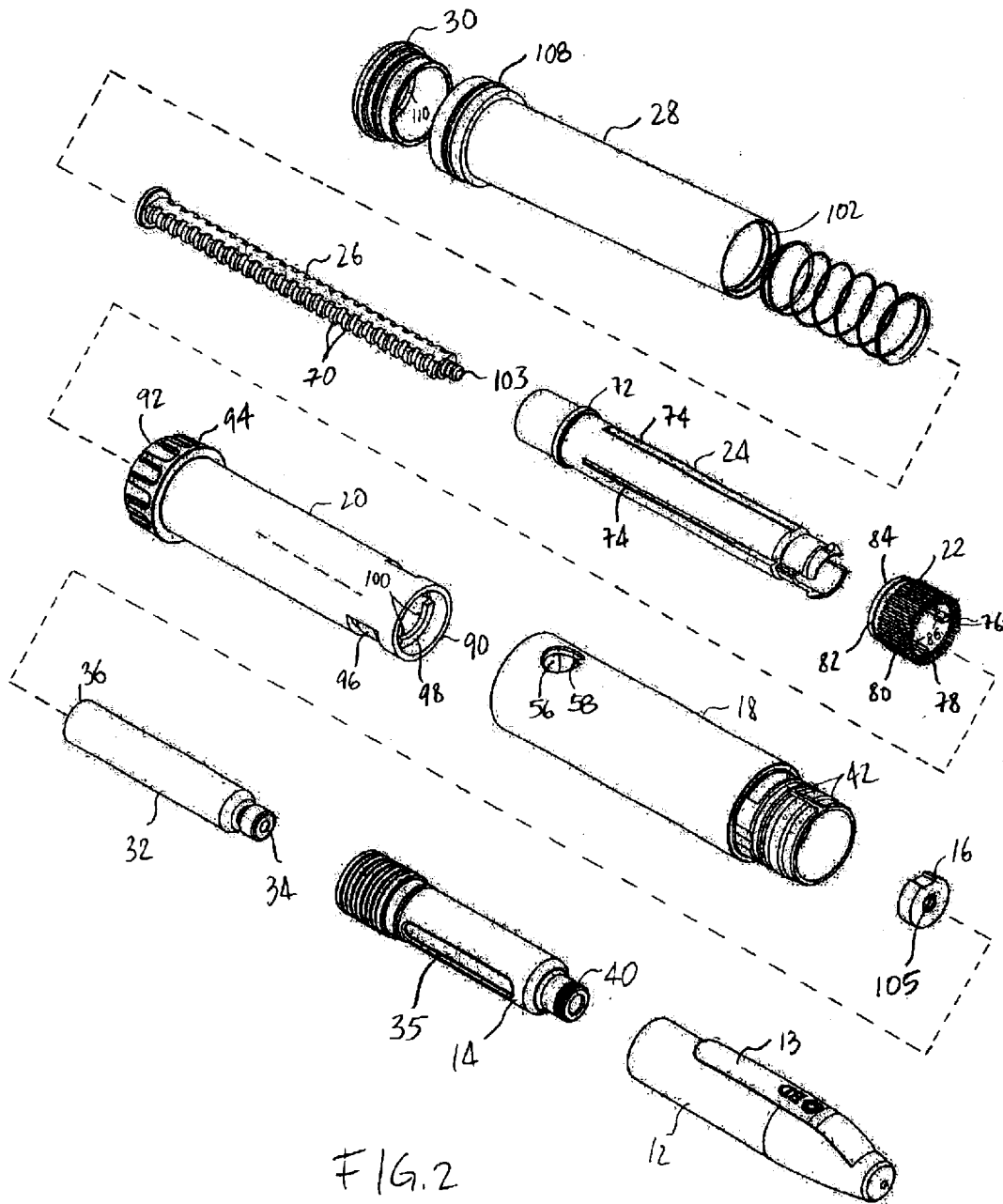


FIG. 2

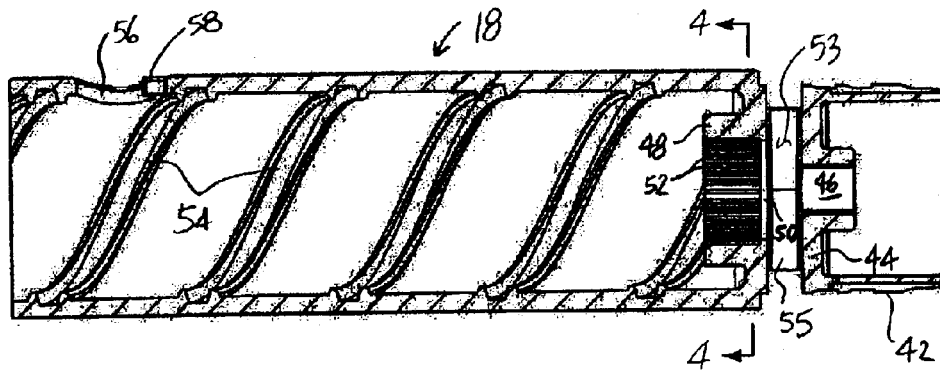


FIG. 3

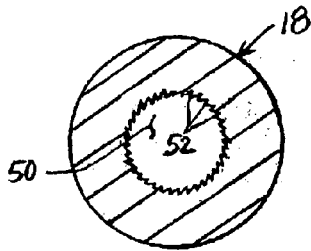


FIG. 4

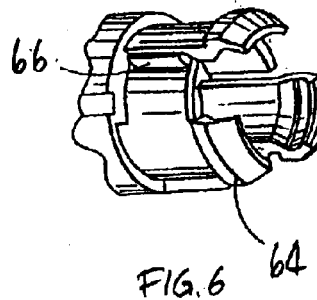


FIG. 6

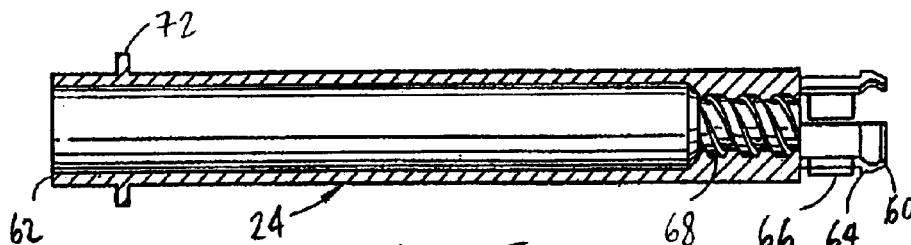
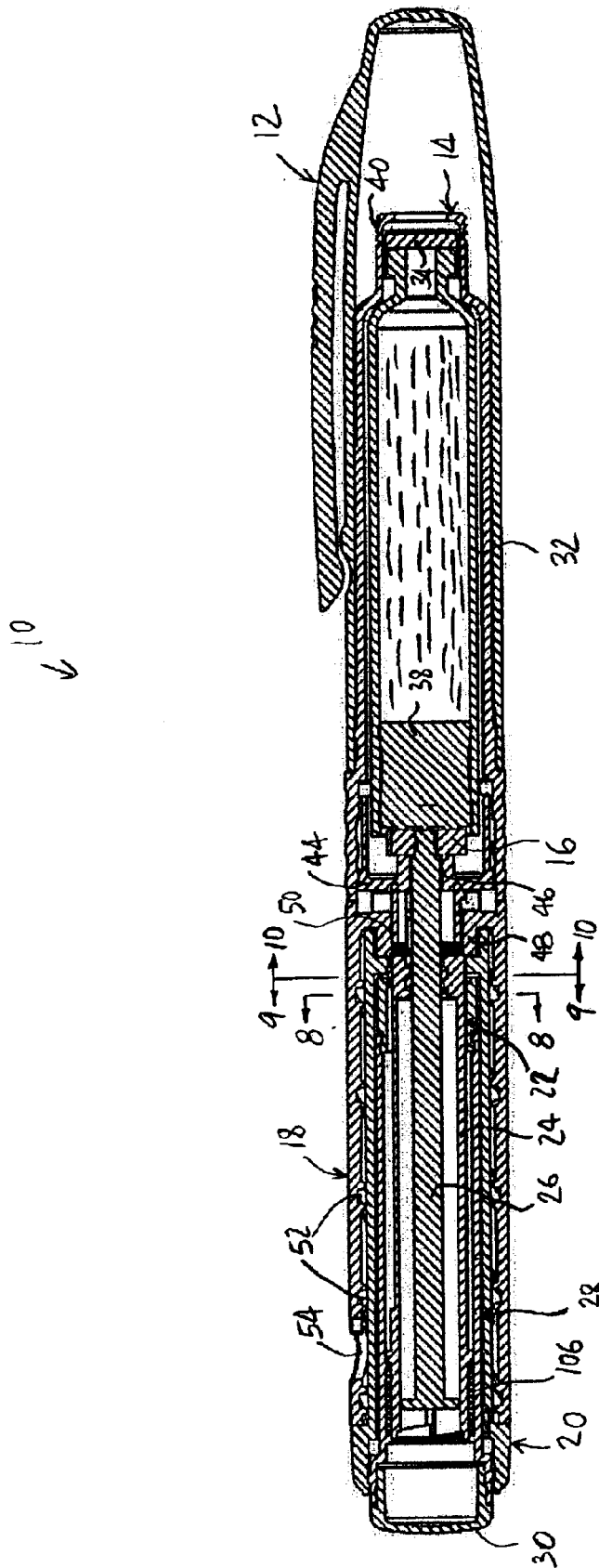


FIG. 5



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