



[54] MEDICATION DELIVERY PEN HAVING AN IMPROVED CLUTCH ASSEMBLY

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[57] ABSTRACT

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An improved medication delivery pen is provided for injecting fluids such as insulin within body tissue. The medication delivery pen includes a mechanism that prevents the removal of a cartridge unless an injector button on the medication pen is in a predefined position, a bayonet attachment and an improved clutch assembly in a dose setting mechanism that provides improved control over the torque necessary to rotate a units counter ring in the medication delivery pen using a dose setting knob.

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[51] Int. Cl.⁶ A61M 5/00

[52] U.S. Cl. 604/207; 604/211; 604/232

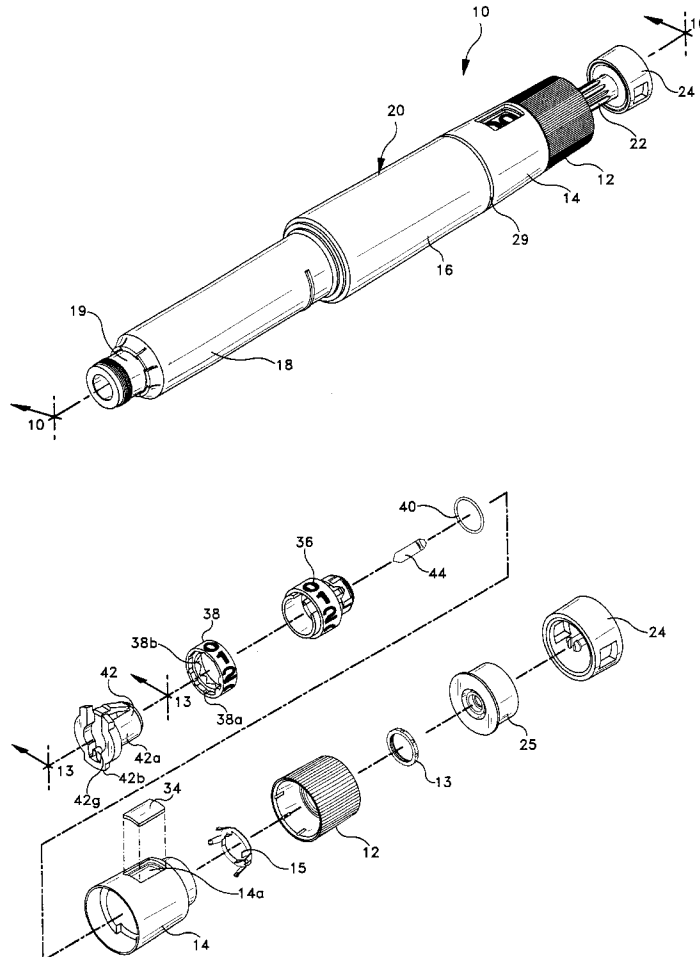
[58] Field of Search 604/207-211, 224, 604/232, 152, 218

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U.S. PATENT DOCUMENTS

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7 Claims, 14 Drawing Sheets



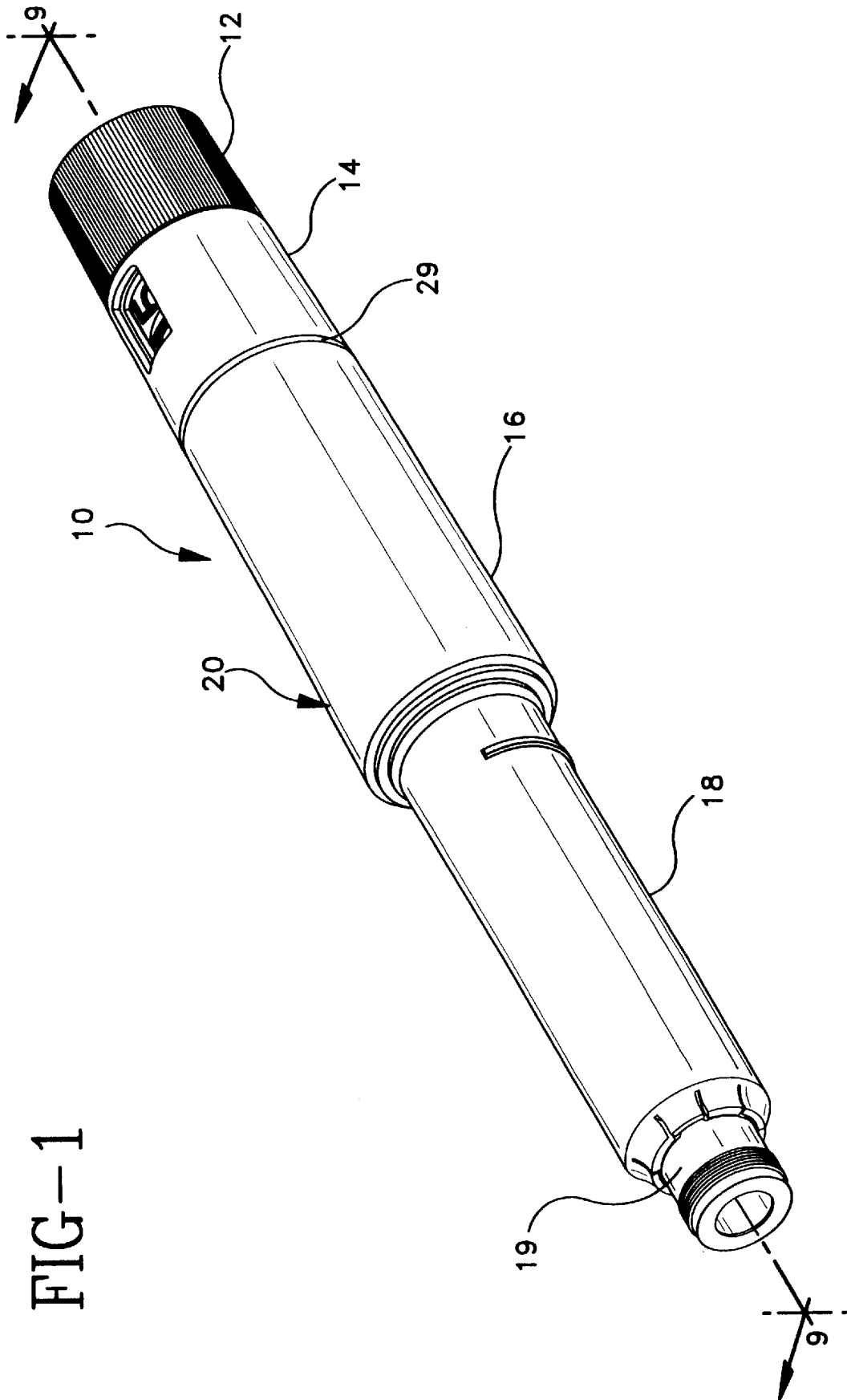


FIG-1

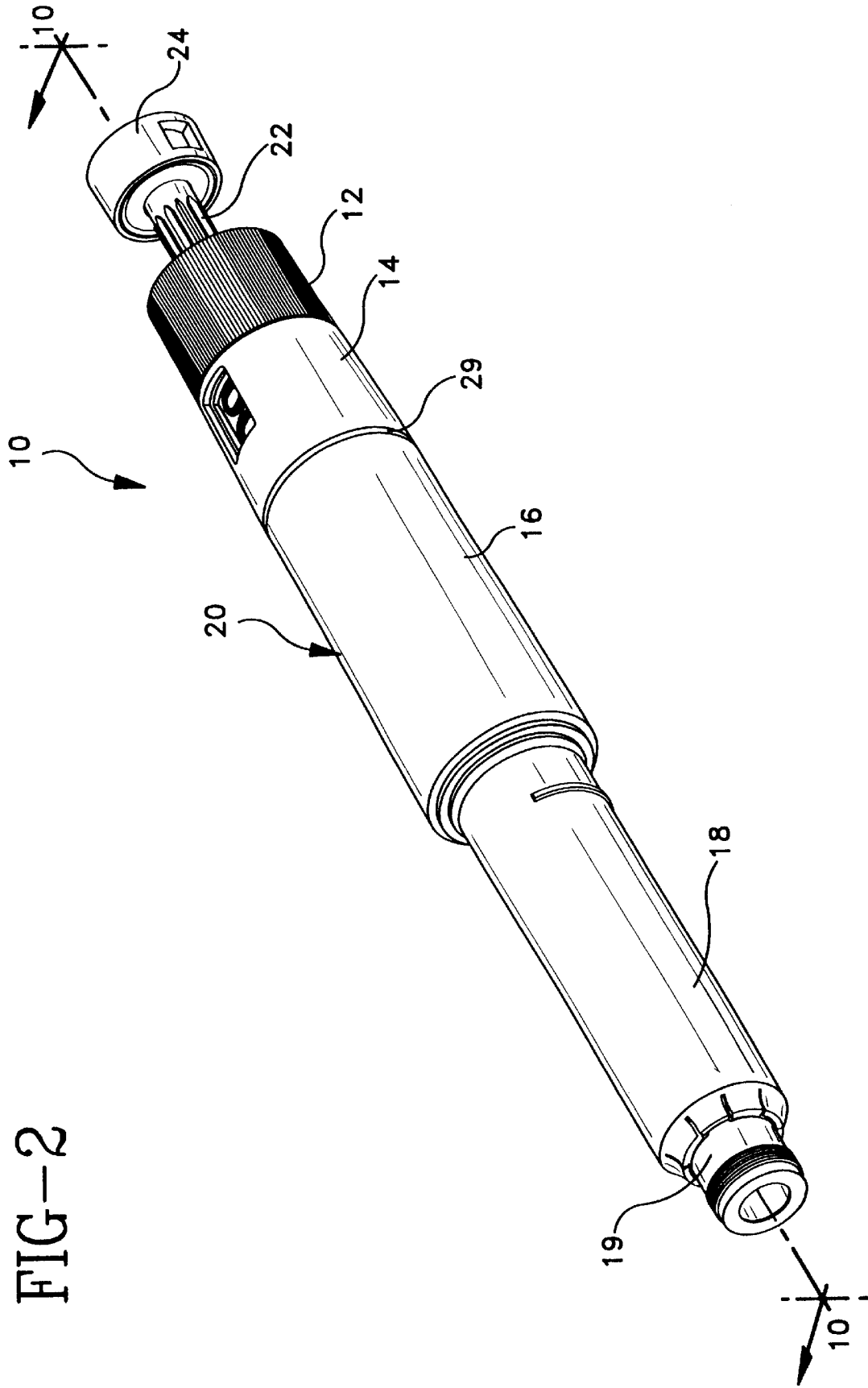


FIG-2

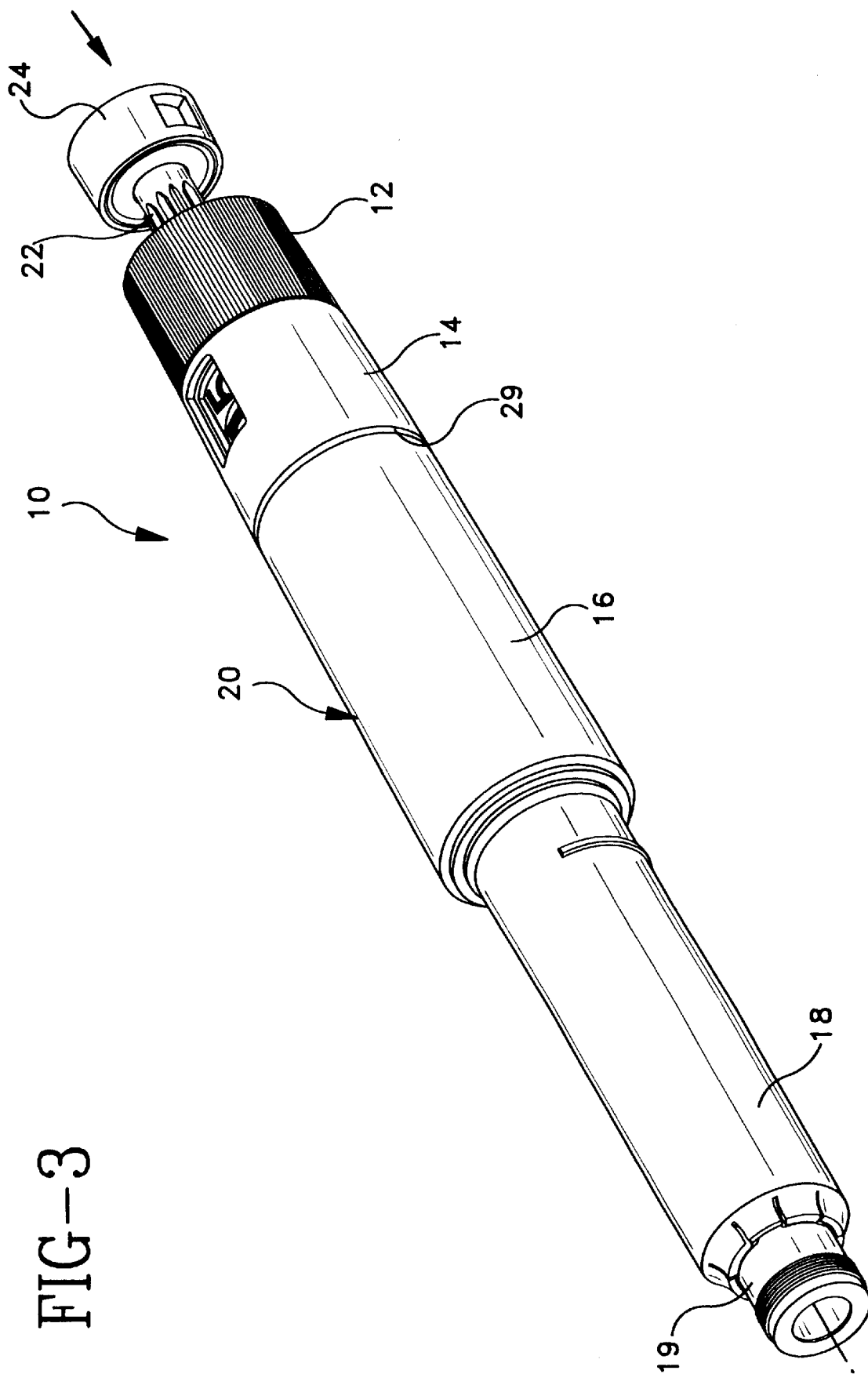
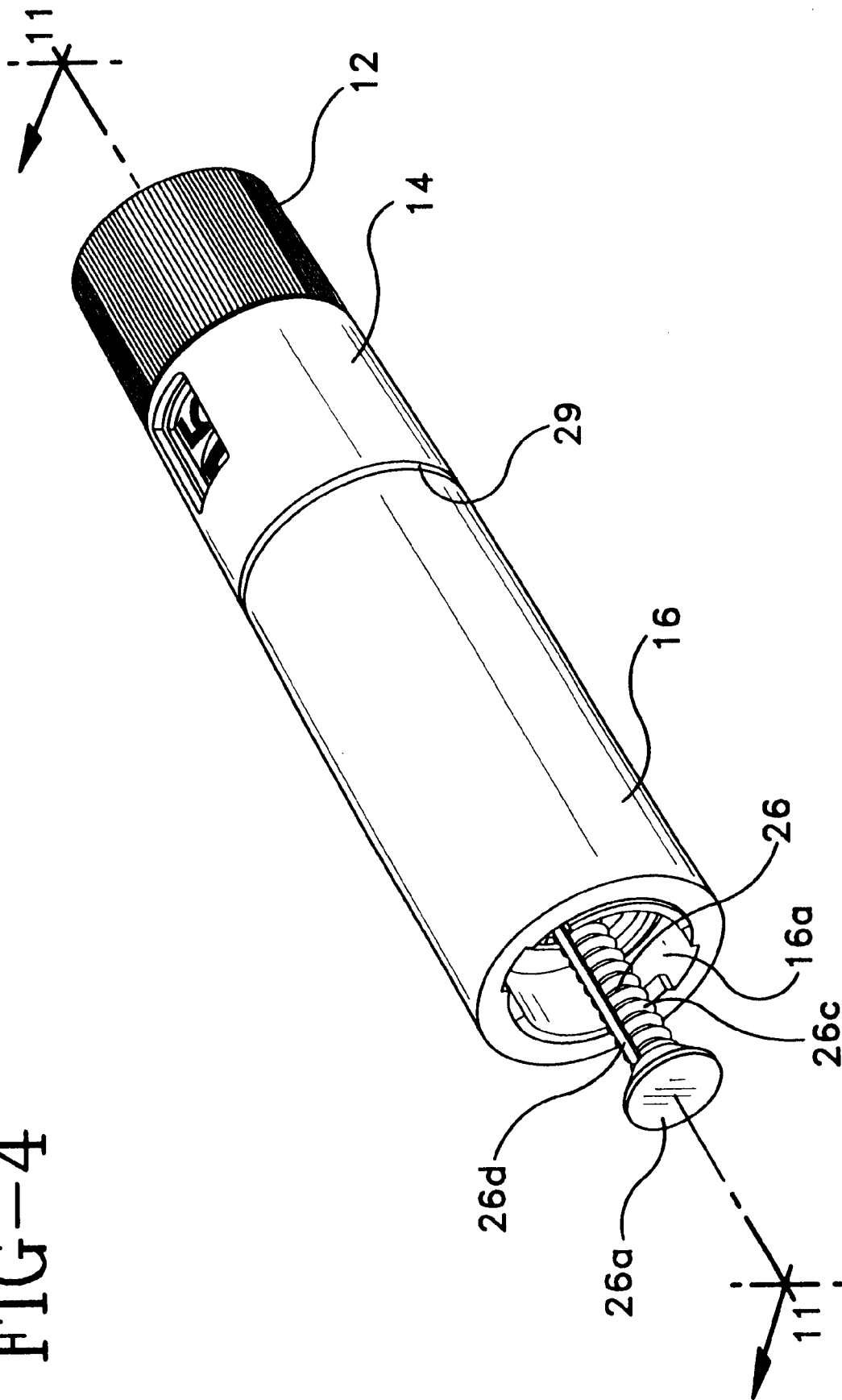


FIG-3

FIG-4



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