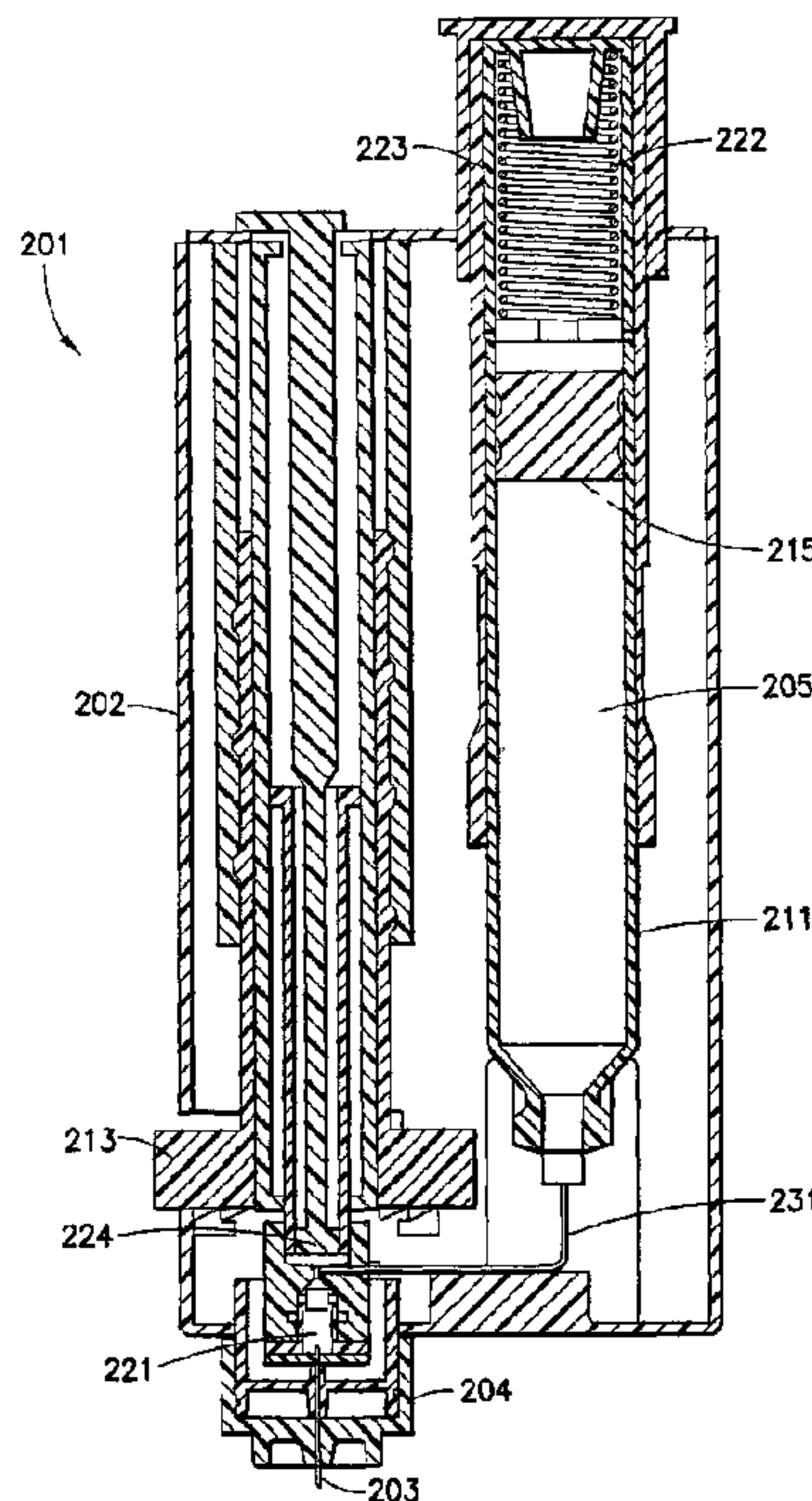




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(54) Titre : DISPOSITIF D'ADMINISTRATION DE MEDICAMENTS A DOUBLE CHAMBRE POUR INJECTIONS HAUTE
PRESSION
(54) Title: DUAL-CHAMBERED DRUG DELIVERY DEVICE FOR HIGH PRESSURE INJECTIONS



(57) Abrégé/Abstract:

A dual-chambered drug delivery device (201) includes a first chamber (205) in which a medicament is stored. A dose setting member (213) is rotated to set a medicament dose. The dose setting member (213) being rotatable to set the medicament dose. The dose setting member (213) is not axially moveable. A second chamber (221) is in fluid communication with the first chamber (205). The medicament dose is transferred to the second chamber (221) from the first chamber (205) prior to injecting the medicament dose. A needle (203) communicates with the second chamber (221) to inject the medicament dose into an injection site.

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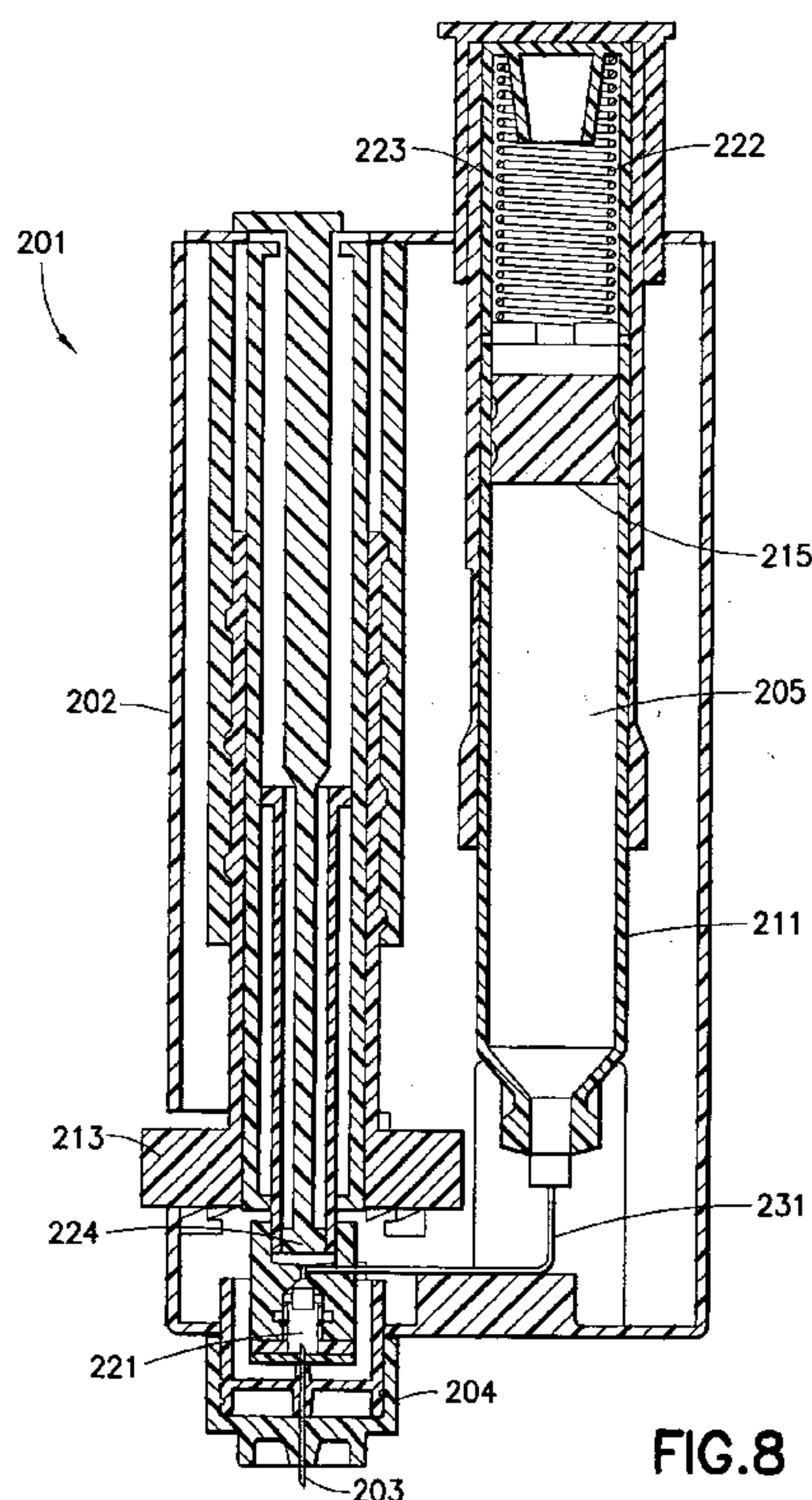


FIG. 8

(57) Abstract: A dual-chambered drug delivery device (201) includes a first chamber (205) in which a medicament is stored. A dose setting member (213) is rotated to set a medicament dose. The dose setting member (213) being rotatable to set the medicament dose. The dose setting member (213) is not axially moveable. A second chamber (221) is in fluid communication with the first chamber (205). The medicament dose is transferred to the second chamber (221) from the first chamber (205) prior to injecting the medicament dose. A needle (203) communicates with the second chamber (221) to inject the medicament dose into an injection site.

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DUAL-CHAMBERED DRUG DELIVERY DEVICE FOR HIGH PRESSURE INJECTIONS

Field of the Invention

[0002] The present invention relates generally to a drug delivery device that facilitates high pressure medication injections. More particularly, the present invention relates to a drug delivery device that diverts high pressures away from the original drug container to prevent medication leakage and inaccurate doses. Still more particularly, the present invention relates to a drug delivery device having a secondary chamber that amplifies the injection force, thereby facilitating intradermal medication injections.

Background of the Invention

[0003] Insulin and other injectable medications are commonly given with syringes into the intradermal layer of the skin and other dense tissues. Intradermal medication injections result in faster uptake of the medication, thereby resulting in improved therapy. Such injections require higher injection pressures, upwards of 200 psi, than traditional subcutaneous injections.

[0004] Techniques and devices are known for administering an injection into the intradermal region of the skin. One method, commonly referred to as the Mantoux technique, uses a "standard" needle and syringe, i.e., a syringe typically used to administer intramuscular or subcutaneous injections. The health care provider administering the injection follows a specific procedure that requires a somewhat precise orientation of the syringe with regard to the patient's skin as the injection is

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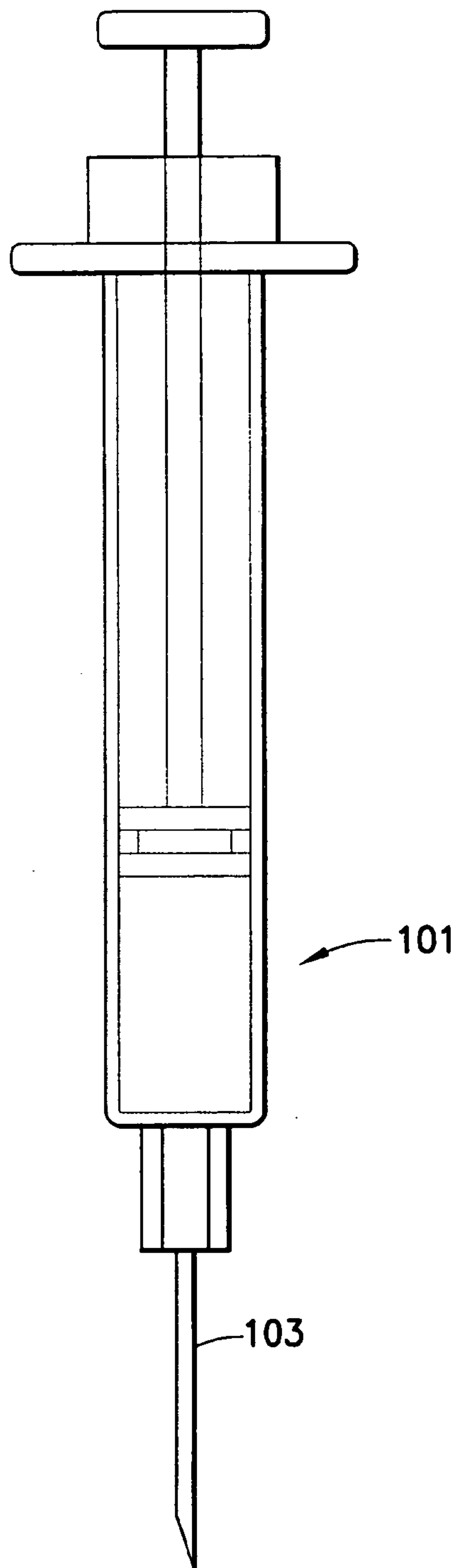


FIG. 1

