

United States Patent [19]

Sams

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[54] **MEASURED DOSE DISPENSING DEVICE**
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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 81,241, Aug. 4, 1987, abandoned.

Foreign Application Priority Data

Jun. 12, 1987 [GB] United Kingdom 8713810

[51] **Int. Cl.⁴** **A61M 5/315**

[52] **U.S. Cl.** **604/186; 604/208; 604/209; 604/211; 222/287; 222/391**

[58] **Field of Search** **604/186, 208, 209, 210, 604/211; 222/43, 309, 325, 326, 327, 391, 287**

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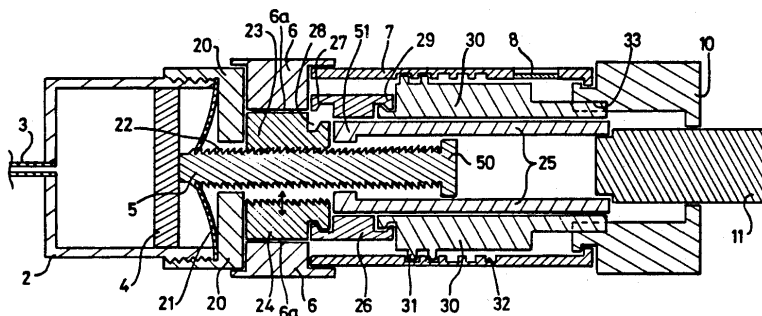
[57] **ABSTRACT**

The present invention relates to a device for dispensing a fluid from a container by means of the axial movement of a piston within the container under the influence of a plunger moved by the device, which device is adapted to receive the container on its forward end and to move the plunger axially forward towards or within the container so as to dispense a selected amount of fluid from the container upon each actuation of the device, characterized in that the device comprises:

- i. a disengageable drive mechanism adapted to be reciprocated axially of the device and adapted to positively engage the plunger whereby the plunger can be moved axially forward by the drive mechanism and to be disengaged from the plunger to permit relative axial movement between the drive mechanism and the plunger;
- ii. a disengagement means for selectively engaging or disengaging the drive means from the plunger;
- iii. an actuating means, which may be integral with or separate from the disengagement means, for actuating the disengagement means, which actuation means requires a positive operation from a user of the device to engage and/or disengage the drive mechanism from the plunger; and
- iv. means for selecting the extent of travel of the drive mechanism so as to control the extent of axial movement of the plunger upon actuation of the device.

The invention also provides a device of the invention in association with a container of the fluid to be dispensed.

19 Claims, 4 Drawing Sheets



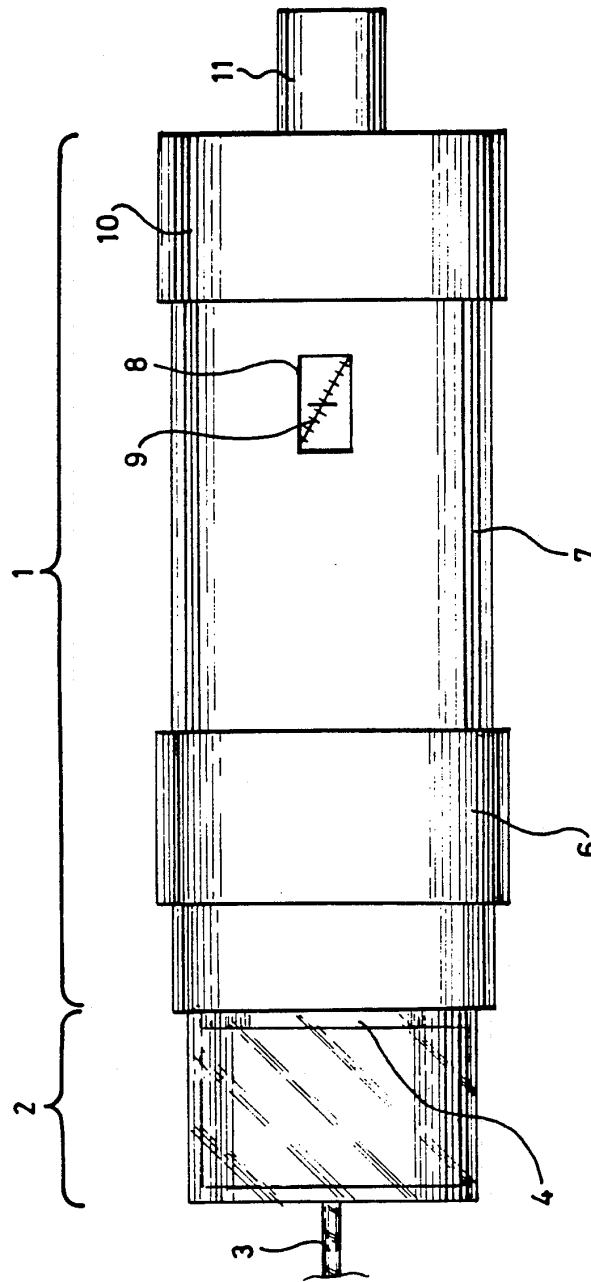


Fig. 1

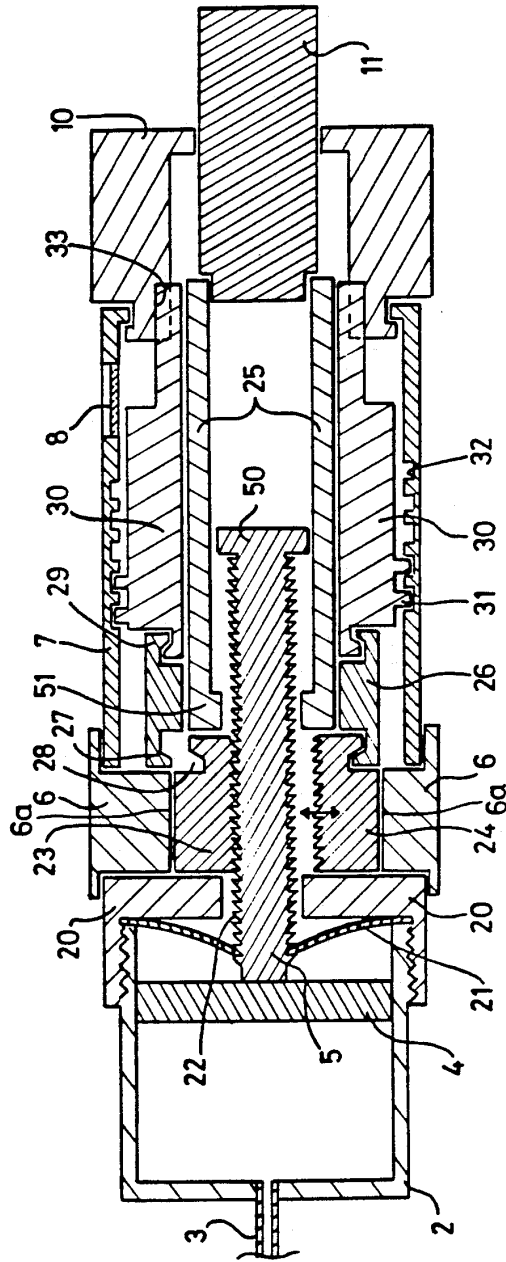


Fig. 2

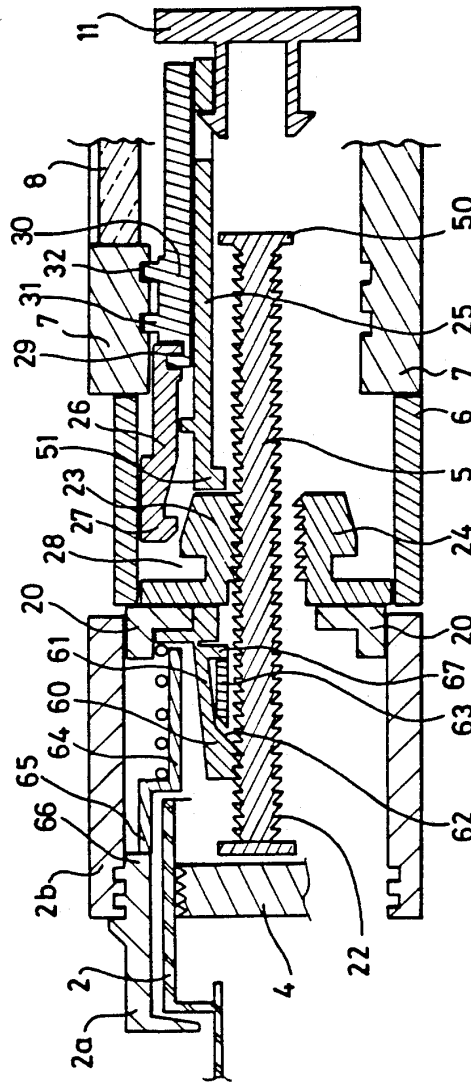


Fig. 3

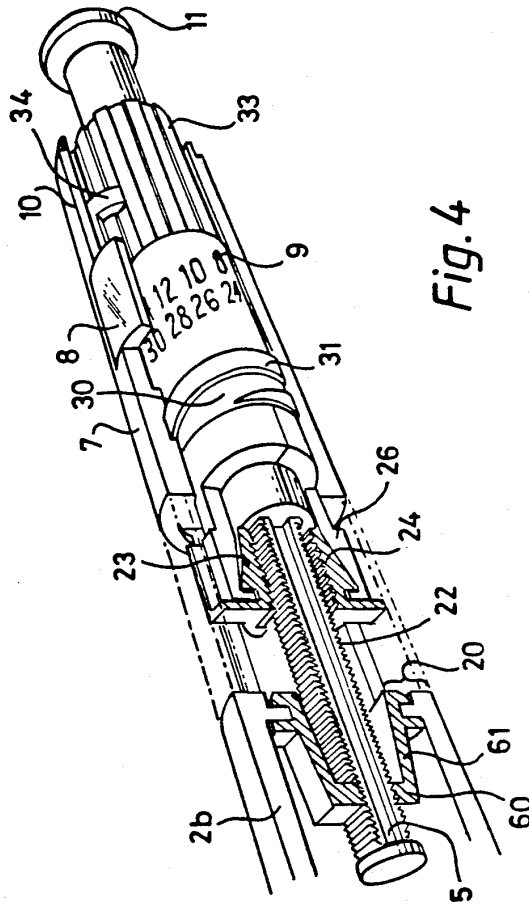


Fig. 4

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