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[54] **IV ADMINISTRATION APPARATUS**

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[57] ABSTRACT

The subject invention is a novel apparatus for the administration of intravenous fluids. The invention is particularly well suited for accurately and efficiently administering intravenous fluids over a wide range of flow rates. Disclosed is an intravenous fluid administration apparatus having at least one flow line capable of administering fluid at high flow rates and comprising an airless, dripless, fluid monitoring chamber. A preferred embodiment comprises a main flow line which diverges into at least two flow limbs, where one flow limb is a low-flow limb and another flow limb is a high-flow limb, each having separate flow indicators, and with the flow limbs typically converging into a common tube for fluid delivery to the patient. The subject invention also discloses a novel flow meter, which is particularly well suited for measuring and indicating flow rates over a wide range, without the introduction of air bubbles into the fluid flow being measured. The novel flow meter of the subject invention comprises an elastic displaceable member in a housing, whereby the relative position of the displaceable member, as effected by the amount of force exerted on the displaceable member by the fluid being measured, indicates the flow rate of the fluid.

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[22] Filed: **Nov. 21, 1994**

[51] **Int. Cl.⁶** **A61M 5/14**

[52] **U.S. Cl.** **604/80; 604/246**

[58] **Field of Search** 604/80, 9, 30, 604/65, 81, 122, 246, 251, 253, 254, 258, 260, 407; 73/861; 116/273, 264, 274, 275

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21 Claims, 4 Drawing Sheets

