

ABSTRACT

"Liquid Delivering Device"

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An electrochemically actuated liquid delivering device which is capable of releasing specific volumes of liquid at desired flow rates. The device includes a sealed electrolytic chamber which is adapted to contain an electrolyte and has at least one pair of electrodes which are at least partially in contact with the electrolyte. It also has a liquid chamber which is housed at least partially within the electrolytic chamber and is adapted to contain a liquid. It has pressure transfer means separating the electrolytic chamber from the liquid chamber and administering means which is adapted to release the liquid from the liquid chamber under the influence of pressure applied to the liquid chamber. The device is arranged so that when current is passed through the electrolyte via the electrodes, gas is generated from the electrolyte thereby increasing pressure inside the electrolytic chamber. That increase in pressure is transferred to the liquid chamber via the pressure transfer means and a determinable amount of the liquid is released from the liquid chamber via the administering means. The device has particular application in liquid drug delivery systems such as insulin infusion.

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[Fig 4]