Fluid management device / fluid delivery system

Tech ID: 25469 / UC Case 2011-621-0

BRIEF DESCRIPTION

Researchers at UC Irvine have developed a fluid delivery device. This delivery device simplifies the process of intravenous drug delivery to allow for an automated, efficient, and error free intravenous drug administration.

FULL DESCRIPTION

The standard method for administering intravenous drugs is by drawing medications into syringes from vials and pushing them through intravenous lines connected to patients. These methods are strongly prone to human error. Drug-related errors, which can include drug overdose, incorrect dosage, or incorrect drug, cause patient harm. 2% of patients were injured as a result of errors associated with intravenous drug delivery and another 5.5% were exposed to near misses. It is necessary to have a device that automates drug delivery to the patient in an accurate and precise manner.

Researchers at UC Irvine have developed a fluid delivery device that not only renders intravenous drug delivery an automated and safe process, but also increases the efficiency and productivity of medical provider. Having pre-filled ready-to-use cartridges eliminates the need for the medical practitioner to prepare drugs for administration in a high-stress environment. This invention allows for metered, computer aided, intravenous administration of the drug at desired concentrations. Automation of intravenous drug delivery also allows the medical practitioner to record the dosage event, eliminating the problem of duplicate or missed dosages, and keeping an electronic record of the patient's medical history. A computerized touch-screen display lends itself to a user-friendly interface for health providers to select drug type and dosage.

SUGGESTED USES

This invention is to be used for automated intravenous drug administration.

ADVANTAGES

Automation of intravenous drug delivery ensures correct dosage time and amount. The use of pre-filled cartridges increases efficiency and productivity, and reduces the incidence of human error associated with drug preparation. Furthermore, the automated fluid delivery device ensures that air is not introduced into the vein, which can cause air embolism and death. The drug dose incidences can be recorded and accessed later.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,132,228	09/15/2015	2011-621
Patent Cooperation Treaty	Published Application	WO 2012/109678	08/16/2012	2011-621

CONTACT

Richard Y. Tun
tunr@uci.edu
tel: 949-824-3586.

OTHER INFORMATION

CATEGORIZED AS

- **Biotechnology**
  - Health
- **Computer**
  - Other
- **Medical**
  - Delivery Systems
  - Therapeutics

RELATED CASES

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5270 California Avenue / Irvine,CA
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