Reciprocating Thumb Operated, Double Plunger Syringes for Single Handed Use

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Technology description

A new syringe design that permits both injection and aspiration with one hand, yet maintains fine motor control and the strength necessary to generate high pressures and vacuums.

Background

Syringes are essential instruments for injection, aspiration and fluid transfer in the fields of medicine, industry, laboratory science and research. Standard syringes are sufficient for single-handed injection; however, standard syringes are challenging to use for single-handed aspiration. For this reason, aspiration with a standard syringe usually requires two hands. Several attempts have been made to develop a syringe allowing for more effective, efficient single-handed aspiration. Thus far, all syringe designs have resulted in various levels of intraoperative instability. Therefore, a market need exists for a syringe designed to counteract the risks, unpredictability and instability of standard syringes during aspiration procedures.

Technology Description

University of New Mexico researchers have developed a new syringe design that permits both injection and aspiration with one hand, yet maintains fine motor control and the strength necessary to generate high pressures and vacuums.
About STC.UNM
As the technology-transfer and economic-development organization for the University of New Mexico, STC.UNM protects and commercializes technologies developed at the University of New Mexico (UNM) by filing patents and copyrights and transferring the technologies to the marketplace.

Advantages

Increased fine control of the syringe – complete one-handed operation
Outstanding needle control with less syringe rotation
Precise anatomical localization

Fuller, faster, more powerful aspiration
Lower risk of procedure failure and contamination

Institution

The University of New Mexico

Inventors

Wilmer Sibbitt