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(54) Title: APPARATUS AND METHOD FOR SCALABLE FLUID DELIVERY

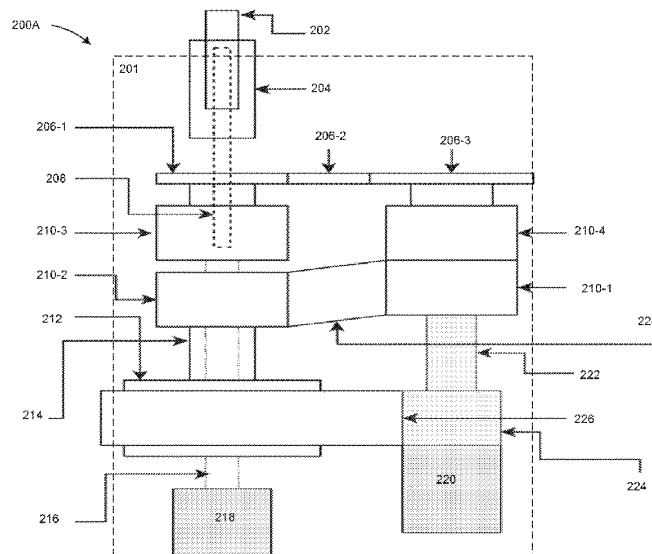


FIG. 2A

(57) Abstract: Present disclosure generally relates to devices and methods for conveying small amounts of fluids, and particularly relates to apparatus and method for scalable fluid delivery to achieve minimal motion of syringe plunger using multiple kinematic chain elements/pathways actuated by a single Motion Actuating Device (MAD). The scalable fluid delivery apparatus provides first kinematic pathway corresponding to high linear resolution mode of Piston Drive Member (PDM) and second kinematic pathway corresponding to low linear resolution mode of PDM. The first kinematic pathway includes final step of delivering fluid comprised in syringe, upon pushing plunger, and second kinematic pathway includes final step of performing forward motion or reverse motion of PDM. Forward motion, or reverse motion of PDM is for priming barrel and removable fluid delivery tube or to revert the PDM to an initial position, respectively, or to deliver the fluid.

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