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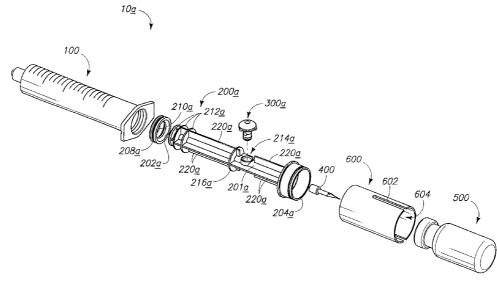
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(54) Title: SYRINGE DEVICES AND METHODS FOR MIXING AND ADMINISTERING MEDICATION



(57) Abstract: The invention includes a device having a chamber within a syringe. A fluid passageway extends through a syringe piston. A valve is associated with the passageway controlling fluid passage through the piston. The invention includes a piercing structure having a head segment and a body portion, with a channel through the body portion and through at least one surface of the head without passing through the tip. In another aspect the invention encompasses a method of preparing an agent for administration to an individual. A first component is provided within a syringe and a second component is provided within a vial. A closed valve is associated with a fluid passageway between the vial and the syringe barrel through a piston. Valve repositioning allows fluid passage and sliding of the piston joins the first and second components. Repeated sliding of the piston mixes the components to produce the medication agent.

## INTERNATIONAL SEARCH REPORT

International application No.
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| A. CLASSIFICATION OF SUBJECT MATTER IPC: A61M 5/20(2006.01)   |   |   |                                       |
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| USPC: 604/139 According to International Patent Classification (IPC) or to both national classification and IPC   |   |   |                                       |
| B. FIELDS SEARCHED  |   |   |                                       |
| Minimum documentation searched (classification system followed by classification symbols) U.S.: 604/139, 134,135,136  |   |   |                                       |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |   |   |                                       |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  |   |   |                                       |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT  |   |   |                                       |
| Category *  | Citation of document, with indication, where a  | opropriate, of the relevant passages  | Relevant to claim No.                 |
| A   | US 2,693,186 A (Riker et al.) 02 November 1954 Note: Please review the entire patent. |   | 1-84                                  |
|   | documents are listed in the continuation of Box C.                                    | See patent family annex.  "T" later document published after the  |                                       |
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