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(54) **DELAY MECHANISM SUITABLE FOR COMPACT AUTOMATIC INJECTION DEVICE**

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(52) **U.S. Cl.**

CPC ***A61M 5/2033*** (2013.01); ***A61M 5/326*** (2013.01); ***A61M 5/3234*** (2013.01); *A61M 2005/206* (2013.01)

(58) **Field of Classification Search**

CPC A61M 2005/206; A61M 5/2033; A61M 5/326

See application file for complete search history.

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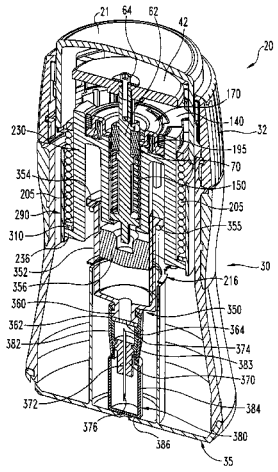
(57) **ABSTRACT**

A delay mechanism for an automatic injection device having a housing and a medication filled syringe. The delay mechanism includes a shuttle, a follower, a damping compound, at least one biasing member, and a biased plunger element. When moved in the device housing from a first location to a second location, the biased plunger element is adapted to drive the syringe piston within syringe barrel to force medication through the syringe needle for an injection. The follower, when the plunger element is so moved, is freed to move, under urging of the at least one biasing member, from a first position on the housing toward a second position to thereby move the shuttle for retracting the syringe needle into the housing after injection. The damping compound

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