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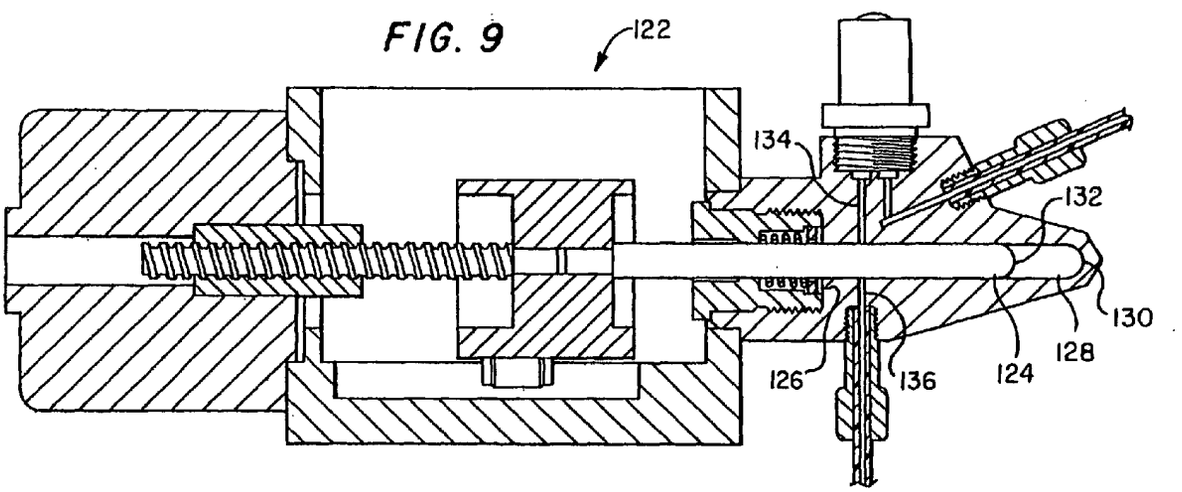
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(54) **Syringe with bubble flushing**

(57) A bubble flushing aspirating and dispensing syringe having precision and volumetric accuracy, particularly for use in an automated, continuous and random access analytical system, is disclosed. The syringe comprises a piston (124) within a bore (128), the bore having seal means at a first end and a closed end (130) at a second end, wherein the piston forms an annulus (138) with the bore wall and seal means, and is capable of reciprocating therein. Fluid inlet (134) and fluid outlet (136) means are in communication with the annulus (138) and bore, the fluid inlet and fluid outlet means being located between the seal means and the bore closed end. A fluid source is in communication with the inlet means and a fluid conduit is in communication with the outlet means and an open-ended release tip. A drive means is connected to the piston for reciprocating the piston within the bore. As a result, fluid from the inlet, when connected to a fluid supply, flows through the annulus (138) around the sides of the piston and out through the fluid outlet to the open-ended tip, thereby creating a cross-flow pattern in the annulus (138) around the piston as it reciprocates in the bore to flush bubbles through the outlet.

FIG. 9



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EUROPEAN SEARCH REPORT

Application Number
EP 04 01 0902

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	27 July 2004	Hodson, M

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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