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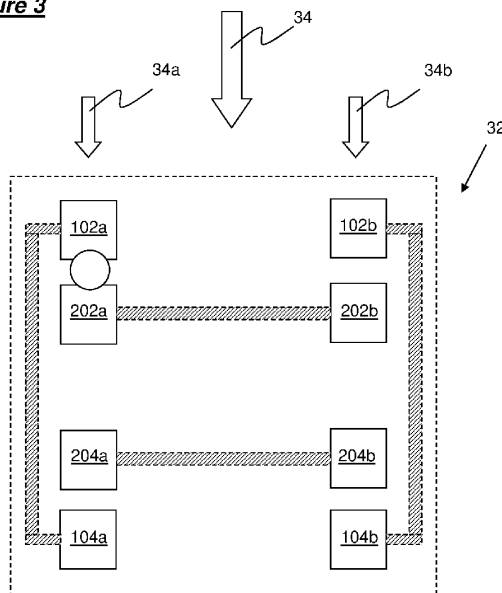
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(54) Title: BIOLOGICAL MEASUREMENT APPARATUS

Figure 3



(57) **Abstract:** A biological measurement apparatus (10) is disclosed that comprises a fluid passageway (34) for a fluid medium and any biological particles therein, a first stimulus electrode (102a) and a first sensing electrode (202a) providing a first measurement capacitor, operative through a first part of the fluid passageway (34), and a second stimulus electrode (102b) and a second sensing electrode (202b) providing a second measurement capacitor, operative through a second part of the fluid passageway (34). The first sensing electrode (202a) is electrically connected to the second sensing electrode (202b), which electrical connection is insulated from the flow passageway. A stimulation apparatus (12) is electrically coupled to the stimulus electrodes (102a, 102b) and simultaneously applies first and second electric stimulus signals to the first and second stimulus electrodes (102a, 102b) respectively, the first and second electric stimulus signals having the same form and opposite polarity, and a sensing circuit (13) has an input coupled to the

[Continued on next page]

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electrical connection between the first and second sensing electrodes (202a, 202b).