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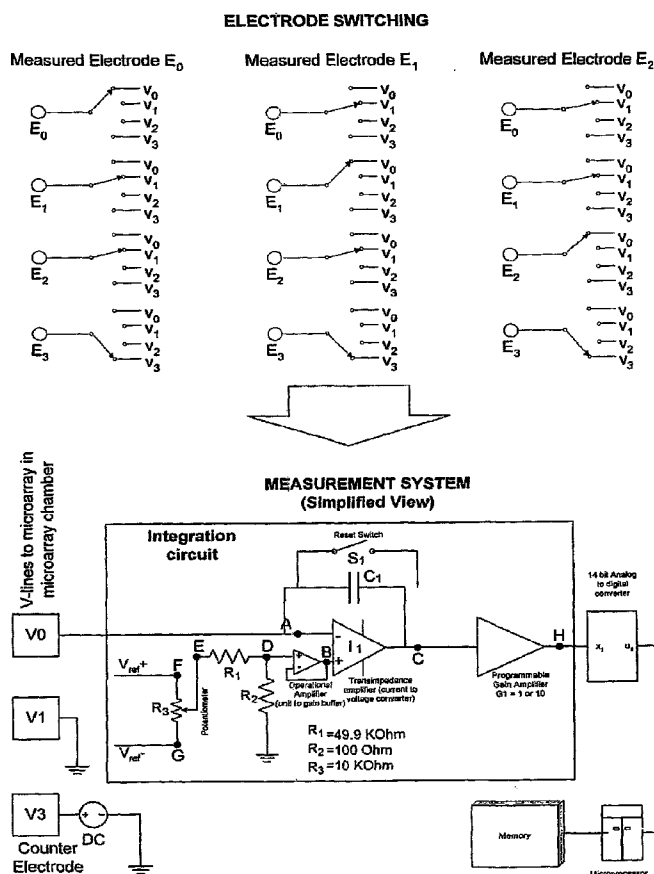
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(54) Title: PROCESS AND APPARATUS FOR MEASURING BINDING EVENTS ON A MICROARRAY OF ELECTRODES



(57) Abstract: There is disclosed a process and apparatus for reading electrical current of electrodes on a microarray of electrodes. Those electrodes having binding events are detected by a difference in electrical current flow. Enzymes on targets catalyze the conversion of substrate to product, which is detectable by electrochemical reduction at each electrode on the microarray of electrodes. The apparatus has an integration circuit that provides a voltage output that is measured and recorded over time and used to calculate an average current flow. A potentiometer equalizes voltage at electrodes undergoing measurement compared to grounded electrodes.



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