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(54) Title: ELECTRODE ARRAY DEVICE HAVING AN ADSORBED POROUS REACTION LAYER HAVING A LINKER MOIETY

(57) Abstract: There is disclosed an electrode array device having an adsorbed porous reaction layer having a linker attacher thereto for improved synthesis quality. The array comprises a plurality of electrodes on a substrate, wherein the electrodes are electronically connected to a computer control system. The array has an adsorbed porous reaction layer having a linker attached thereto on the plurality of electrodes, wherein the adsorbed porous reaction layer comprises a chemical species having at least one hydroxyl group. In the preferred embodiment, the reaction layer is sucrose having an ionic linker comprised of DNA. In another preferred embodiment, the reaction layer is sucrose, fructose, and glucose having an ionic linker comprised of DNA.