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United States Patent [19] Spokane

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- [54] **CHEMICALLY WIRED FRUCTOSE DEHYDROGENASE ELECTRODES**
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- [21] Appl. No.: **944,963**
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- [51] Int. Cl.⁵ **G01N 27/327**
- [52] U.S. Cl. **204/403; 204/153.12; 435/26; 435/817; 436/806**
- [58] Field of Search **204/153.12, 403; 435/817.26; 436/806**

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[57] **ABSTRACT**

An enzyme electrode is disclosed for use in voltammetric systems wherein a PQQ dehydrogenase enzyme is chemically bonded to a water soluble polyvinylpyridine osmium bipyridine polymer. The enzyme and polymer are adsorbed onto the surface of the electrode with the polymer providing direct electron transfer from enzyme to electrode and vice-versa without the aid of additional mediators or electron shuttles added to the system.

8 Claims, 2 Drawing Sheets

