# Recent patents in biosensor technology

| Patent # | Subject | Assignee | Inventor(s) | Priority application date | Publication date |
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| US 20010042683 | A biosensor for detecting the electrical current required to perform a valid test for determining analyte concentration in a fluid sample. A current detector is programmed to emit an error signal when the flow of electrical current is insufficient. | Bayer (Leverkusen, Germany) | Edelbrock AJ, Musho MK, Noell JO | 12/8/2000 | 11/22/2001 |
| DE 20104431 | A sensor electrode arrangement comprising an electrically conductive electrode region, which in operation is inserted into a test medium adjacent to primary carriers in direct proximity to an electrically activatable biological unit; useful in biosensors for amperometric and/or potentiometric drug testing. | IonGate Biosciences (Frankfurt, Germany) | — | 3/15/2001 | 10/31/2001 |
| DE 19951509 | A process for applying a lipid double layer to a substrate surface, comprising contacting with a lipid-comprising solution, an organic solvent miscible with water, and optionally water; used in the production of biosensors. | BioTul (Munich, Germany) | Raedler J | 10/26/1999 | 10/31/2001 |
| WO 200179848 | A method for reversibly binding a receptor to a sensor surface; useful for identifying or isolating specific ligands by attaching to a coupling agent that binds to an antibody on the surface, and in the construction of biosensors used to determine specific binding reactions. | Netherlands Organization for Applied Scientific Research (Delft) | Stigter ECA, van Hoevel van Wezeveld SWF, Gaspari M, van der Gaag A, van Hoevell Tot Westerflier S, Verheij ER | 5/25/2000 | 10/25/2001 |
| EP 1147739 | A monitoring system comprising a biosensing meter that includes a controller to conduct a biosensing test on a bodily fluid (e.g., coagulation time or glucose levels). The controller activates the biological sensing meter upon receipt of an activation code, guarding against fraudulent activity. | Roche Diagnostics (Indianapolis, IN; Mannheim, Germany) | Cronrath C, Essenpreis M, Gerber MT, Hansen MV | 4/18/2000 | 10/24/2001 |
| US 6303290 | A method of preparing a porous matrix comprising adding biological material to a solution of a ceramic oxide colloidal sol and dissolved sodium silicate; useful for encapsulating biomolecules that are useful in drug delivery, and as implants, bioreactors, and biosensors. | University of Pennsylvania (Philadephia) | Chen I, Liu D | 9/13/2000 | 10/16/2001 |
| WO 200175089 | A polymer matrix incorporating catalase, which is co-immobilized with an analytic enzyme that generates hydrogen peroxide; useful in biosensors and in controlled drug-delivery systems. | M-Biotech (Salt Lake City, UT) | Dal-Young J, Han IS | 4/3/2000 | 10/11/2001 |
| WO 200175149 | A biosensor with a region for retaining probe molecules that is able to bind to macromolecular biopolymers; useful for detecting proteins, peptides, and nucleic acids. | Infineon Technologies (Munich, Germany) | Thewes R, Weber W | 3/30/2000 | 10/11/2001 |
| WO 200173420 | An electrochemical biosensor measuring device with sensor chips for various reagents and differing calibration curves; useful in determining serum sugar, cholesterol, and lactic acid levels in blood. | Matsushita Denki Sangyo KK; Matsushita Electric Ind. Co. Ltd. (Osaka, Japan) | Tokuno Y | 3/30/2000 | 10/4/2001 |
| JP 2001228110 | A biosensor installed with a water analyzer, comprising a fixed microorganism film and buffer solution for pH regulation; useful for monitoring the quality of water such as river water, waste treatment water, and underground water. | Fuji Electric Co. Ltd. (Tokyo) | — | 2/15/2000 | 8/24/2001 |
| JP 2001208722 | A limiting current–type gas sensor with an electrolyte-containing material; useful as a biosensor for clinical laboratories and for measuring oxygen concentration in the atmosphere and liquids. | Toyota Chuo Kenkyusho (Aichi-gun, Japan) | — | 1/24/2000 | 8/3/2001 |

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