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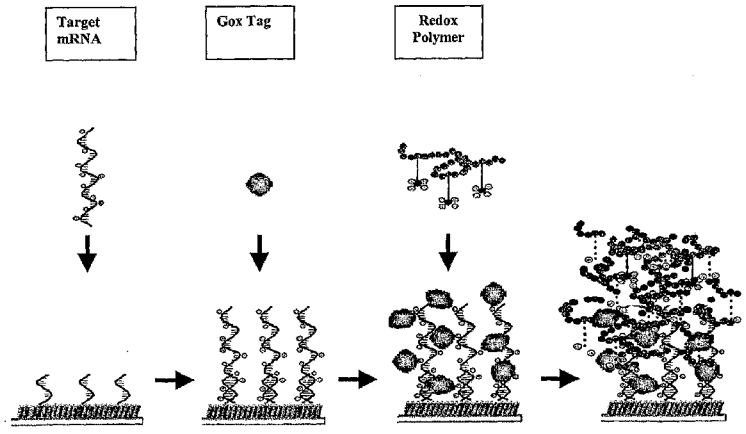
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(54) Title: METHOD AND DEVICE FOR DETECTION OF NUCLEIC ACIDS AND/OR POLYPEPTIDES



(57) Abstract: A method for the detection and/or quantification of at least one target nucleic acid or target polypeptide in a sample of nucleic acids or polypeptides comprising the steps of: a) providing a sample comprising nucleic acids or polypeptides; b) labeling the nucleic acids or polypeptides with a ligand conjugate, the ligand conjugate comprising a first element binding to the nucleic acids or polypeptides and a second element which is a capture ligand; c) contacting the nucleic acid-ligand conjugates or polypeptide-ligand conjugates with at least one capture probe, the capture probe hybridising with or binding to at least one target nucleic acid or target polypeptide; d) adding i) an oxidoreductase enzyme, wherein the oxidoreductase enzyme is recognised by the capture ligand, or ii) a complex comprising an oxidoreductase enzyme bound to a capture receptor, the capture receptor capable of binding to the capture ligand; e) adding a redox polymer, the redox polymer binding to the oxidoreductase enzyme, thereby resulting in the transfer of electrons from the enzyme via the redox polymer to an electrode surface; and f) detecting and/or quantifying the presence of the target nucleic acid(s) or target polypeptide(s).

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