Title (en)

SENSORS FOR SUGARS AND OTHER METAL BINDING ANALYTES

Title (de)

SENSOREN FUR ZUCKER UND ANDERE METALL-BINDENDE ANALYTE

Title (fr)

DETECTEURS DE SUCRES ET D'AUTRES ANALYTES SE LIANT A DES METAUX

Publication

EP 0983511 A4 20011205 (EN)

Application

EP 97908968 A 19970303

Priority

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Abstract (en)

[origin: WO9733177A1] Sensors (20, 50, 70) for use in detecting the presence of sugars and other analytes (target molecules). The sensor is composed of a metal complex that binds to the target molecule and releases a proton or includes an exchangable ligand which is exchanged for the target molecule during the binding interaction between the metal complex and the target molecule. The result of the binding interaction is the release of a proton, hydroxide ion or ligand species generated during the ligand exchange. Measurement of the release of proton, hydroxide ion or other ligand species from the sensor (20, 50, 70) provides an indirect indication of target molecule concentration. The metal complexes may be attached to support structures (10, 12) to provide both anchoring and positioning of the metal ions to increase selectivity of sugar/metal complex interactions. Detection systems in which pH is used as an indication of proton or hydroxide release are disclosed, as are detection systems in which Cl<-> release is used. Methods for monitoring the concentrations of sugars and related molecules using the metal based sensors (20, 50, 70) are also disclosed.

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G01N 33/66

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- No further relevant documents disclosed
- See references of WO 9733177A1

Cited by

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