

[54] IONIC RECOGNITION AND SELECTIVE RESPONSE IN SELF ASSEMBLING MONOLAYER MEMBRANES ON ELECTRODES

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[57] ABSTRACT

According to the invention organic monolayer films are applied to an electrically conductive substrate, resulting in an electrode which can be used in electrochemical processes. The said film serves as ultrathin membrane and allows certain selected species to approach the substrate and be detected. The film comprises active species which are selective towards specific species contained in mixture with others and a blocking surface sealing component. It is also possible to use one compound serving both purposes. The components of the film are attached to the substrate by a variety of means: adsorption, chemisorption, electro-chemical deposition.

11 Claims, 3 Drawing Sheets

