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(54) Title: A WATER-DISPERSIBLE OXYGEN-SENSITIVE FLUORESCENT COMPLEX AND OXYGEN-SENSING FILMS FOR SMART PACKAGING

(57) Abstract: Herein disclosed is an oxygen sensor and an oxygen sensor film tag comprising the oxygen sensor. The oxygen sensor may include a multilayered polyelectrolyte film; a dye carrier including a dye which (i) emits fluorescence in response to a stimuli and (ii) exhibits fluorescence emission inversely proportional to the amount of oxygen present; wherein the dye carrier may be incorporated in the multilayered polyelectrolyte film, and wherein the dye carrier includes a particle covalently attached with the dye. A method of forming the oxygen sensor is disclosed herein.



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