

Title (en)
METHODS OF MEASURING OXYGEN CONCENTRATION.

Title (de)
MESSVERFAHREN FÜR DIE SAUERSTOFFKONZENTRATION.

Title (fr)
PROCEDES DE MESURE DE LA CONCENTRATION EN OXYGENE.

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Application
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Priority
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Abstract (en)
[origin: WO8700023A1] Methods of and luminescent substances for measuring oxygen concentration of a test fluid (18). A test fluid (18) is contacted with a plastic film (16) containing a luminescent substance, the luminescent emission intensity of which is quenched in the presence of oxygen. The film (16) is subjected to irradiation (14) by light that is strongly absorbed by the luminescent substance, and a measure of the time dependence of luminescent emission intensity I(t) is obtained. Three modes of measuring quenching, and thus the oxygen concentration, from I(t) are described. These modes are insensitive to variation in plastic thickness, concentration of the luminescent substance, and decomposition of the luminescent substance, and take into account the non exponential decay of the emission, thereby extending the range over which the film (16) is sensitive. The luminescent substances include metallo derivatives of partially or fully fluorinated porphyrins which are photostable due to the fluorination of the porphyrin ring.

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• No relevant documents have been disclosed.
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