

Title (en)
DEVICE AND METHOD FOR NON-INVASIVE DETECTION OF GROWTH PROCESSES AND SIMULTANEOUS MEASUREMENT OF CHEMICAL-PHYSICAL PARAMETERS

Title (de)
VORRICHTUNG UND VERFAHREN ZUR NICHT-INVASIVEN ERFASSUNG VON WACHSTUMSPROZESSEN UND SIMULTANEN MESSUNG VON CHEMISCH-PHYSIKALISCHEN PARAMETERN

Title (fr)
DISPOSITIF ET PROCÉDÉ DESTINÉS AU SUIVI NON-INVASIF DE PROCESSUS DE CROISSANCE ET À LA MESURE SIMULTANÉE DE PARAMÈTRES PHYSICO-CHIMIQUES

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Abstract (en)
[origin: WO2013071902A1] The invention relates to a device for the non-invasive detection of growth processes and simultaneous measurement of chemical and/or physical parameters, comprising the following components: a) a lighting unit (f, m), b) an optical detection unit (i, h, n, g), c) at least one growth container (b, l) containing a growth medium (d), d) at least one transparent, planar optode (c), e) a control unit (j), and f) an electronic data acquisition and evaluating unit (k). The invention relates further to a method for the non-invasive detection of growth processes and simultaneous measurement of chemical and/or physical parameters, comprising the following method steps: a) detecting the growth processes by means of imaging methods; and b) detecting the chemical and/or physical parameters by using a planar, transparent optode (c), wherein the data from a) und b) is obtained simultaneously and in parallel.

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