

Title (en)

DEVICE AND METHOD FOR TIME-RESOLVED FLUORESCENCE MEASUREMENT FOR THE HIGH-THROUGHPUT SCREENING OF SPECIMENS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ZEITAUFGELÖSTEN FLUORESSENZMESSUNG FÜR HOCHDURCHSATZ-PROBENSCREENING

Title (fr)

DISPOSITIF ET PROCEDE DE MESURE DE FLUORESCENCE RESOLUE EN TEMPS POUR LE CRIBLAGE A HAUT DEBIT D'ECHANTILLONS

Publication

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Application

EP 14783629 A 20141010

Priority

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Abstract (en)

[origin: WO2015052331A1] The invention relates to a time-resolved fluorescence measurement device for the high-throughput screening of at least one specimen, the device operating with a light source able to produce a series of excitation pulses to excite the specimen such that the specimen emits a plurality of fluorescence photons forming a fluorescence emission, the device being characterised in that it comprises: - a single photon detection unit able to detect at least some of said fluorescence photons, the single photon detection unit generating a detection signal for each detected single photon; - a measuring unit making it possible to measure, for each detection signal, the time elapsed between the excitation pulse and the detection signal, called "arrival time", and generating a numerical datum characteristic of that arrival time; - a real-time analysis unit for the numerical data coming from said measurement unit, comprising means for detecting the passage of the specimen and computing at least one characteristic numerical property of the time distribution of the fluorescence emission of the specimen.

IPC 8 full level

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Cited by

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