

Title (en)

MULTIPLE FREQUENCY FLUORESCENCE LIFETIME IMAGING

Title (de)

MEHRFREQUENZ-FLUORESCENZLEBENSDAUER-ABBILDUNGSVERFAHREN

Title (fr)

IMAGERIE DE DUREE DE VIE DE FLUORESCENCE A DES FREQUENCES MULTIPLES

Publication

EP 1102976 A1 20010530 (EN)

Application

EP 99940294 A 19990806

Priority

- GB 9902597 W 19990806
- GB 9817225 A 19980808
- GB 9817227 A 19980808
- GB 9817229 A 19980808

Abstract (en)

[origin: WO0008444A1] A method for the measurement of a degree of fluorescence resonance energy transfer taking place between a donor and acceptor system by the steps of: irradiating a combined donor-acceptor system with a beam of intensity modulated excitation energy of a first wavelength; receiving fluorescence emissions from the donor and acceptor molecules having overlapping spectra; simultaneously determining a modulation lifetime (τ_{mod}) and a phase lifetime (τ_{ϕ}) of the combined emitted fluorescence of the donor-acceptor system; and determining a degree of acceptor ingrowth by comparison of τ_{mod} and τ_{ϕ} . The method is particularly suited to measurements of a degree of FRET in a biological system.

IPC 1-7

G01N 21/64

IPC 8 full level

C07K 14/435 (2006.01); **C07K 19/00** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01); **C12Q 1/02** (2006.01); **C12Q 1/48** (2006.01); **G01N 21/64** (2006.01); **G01N 21/78** (2006.01); **G01N 33/50** (2006.01); **G01N 33/68** (2006.01)

CPC (source: EP)

C07K 14/43595 (2013.01); **G01N 21/6408** (2013.01)

Citation (search report)

See references of WO 0008443A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0008444 A1 20000217; AU 5429199 A 20000228; AU 5429299 A 20000228; AU 5429399 A 20000228; EP 1102791 A1 20010530; EP 1102976 A1 20010530; EP 1102977 A1 20010530; JP 2002522040 A 20020723; JP 2002542453 A 20021210; WO 0008054 A1 20000217; WO 0008443 A1 20000217; WO 0008443 A9 20000525

DOCDB simple family (application)

GB 9902598 W 19990806; AU 5429199 A 19990806; AU 5429299 A 19990806; AU 5429399 A 19990806; EP 99940293 A 19990806; EP 99940294 A 19990806; EP 99940295 A 19990806; GB 9902596 W 19990806; GB 9902597 W 19990806; JP 2000563686 A 19990806; JP 2000564028 A 19990806