



ISTITUTO ITALIANO  
DI TECNOLOGIA

## TITLE

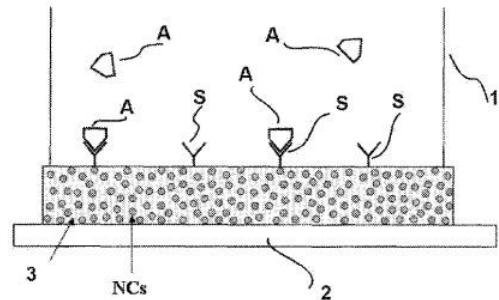
Microdevice for the identification and/or quantification of an analyte in a biological sample

## INVENTORS

Pier Paolo Pompa, Stefania Sabella, Rosaria Rinaldi, Roberto Cingolani, Franco Calabi

## DESCRIPTION

The invention relates to a method and a microdevice for identification and/or quantification, particularly in real time, of an analyte, particularly a biomolecule present in a biological sample, and it is applicable to the field of diagnostic analysis (genome and/or proteome analysis) and to the production of biochips. In the invention, the probe molecules are fixed to a support coated with a film comprising a polymer matrix containing fluorescent nanocrystals or being a photoluminescent polymer itself, in which the photoluminescence can induce a FRET phenomenon with the fluorophore.



## APPLICATIONS

The invention can be used for biomedical applications (e.g. diagnostic), but can be also applied to sensors and in chemical laboratories

## KEYWORDS

Photoluminescence, analytical analysis, biological, diagnostic, biorecognition

## BIBLIOGRAPHIC DATA

### 1) Procedimento e microdispositivo a trasduzione ottica per l'identificazione e/o quantificazione di un analita in un campione biologico

Application Number TO2006A000883

Priority Date December 14, 2006

Applicants Fondazione Istituto Italiano di Tecnologia, Consiglio Nazionale delle Ricerche-Istituto Nazionale per la Fisica della Materia

### 2) A method and a microdevice for the identification and/or quantification of an analyte in a biological sample

Application Number WO/2008/072209

Priority Date December 14, 2006

Applicants Fondazione Istituto Italiano di Tecnologia, Consiglio Nazionale delle Ricerche-Istituto Nazionale per la Fisica della Materia

## CONTACTS

Technology Transfer Office

Lorenzo Rossi

+39 010 71781 489

Lorenzo.Rossi@iit.it