Title (en)

AN APPARATUS AND METHOD EMPLOYING INCOHERENT LIGHT EMITTING SEMICONDUCTOR DEVICES AS PARTICLE DETECTION LIGHT SOURCES IN A FLOW CYTOMETER

Title (de)

VORRICHTUNG UND VERFAHREN MIT VERWENDUNG VON NICHT-KOHÄRENTES LICHT EMITTIERENDEN HALBLEITERVORRICHTUNGEN ALS LICHTQUELLEN FÜR DIE TEILCHENDETEKTION IN EINEM DURCHFLUSSZYTOMETER

Title (fr)

APPAREIL ET PROCEDE DANS LESQUELS SONT UTILISES DES DISPOSITIFS SEMICONDUCTEURS EMETTEURS DE LUMIERE INCOHERENTE COMME SOURCES DE LUMIERE DE DETECTION DE PARTICULES DANS UN CYTOMETRE DE FLUX

Publication

EP 1222451 A1 20020717 (EN)

Application

EP 00973643 A 20001019

Priority

- US 0028820 W 20001019
- US 16049899 P 19991020

Abstract (en)

[origin: WO0129538A1] An apparatus and method for examining particles in a flow cytometer (100), employing incoherent light sources (124), such as light emitting diodes, and optionally one or more coherent light sources (122), such as lasers. The light emitting diodes (124) and lasers (122) operate as excitation light sources, and detectors (134, 138) detect the excited fluorescence from the particles. A controller evaluates the detected light to ascertain characteristics of the particles, such as particles size, density and granularity. The controller can control the LEDs (124) to operate in a pulsed manner, which can be synchronized with the detection of the laser-excited fluorescence or light scatter. In addition, a substantially opaque panel having one or more slits can be positioned at the image plane upon which an image of the particles is projected, so that the slits will allow only a portion of the image to pass to the detector.

IPC 1-7

G01N 21/64

IPC 8 full level

G01N 21/64 (2006.01); **G01N 15/14** (2006.01)

CPC (source: EP)

G01N 15/147 (2013.01); G01N 15/1434 (2013.01); G01N 15/149 (2024.01); G01N 2015/1447 (2013.01); G01N 2015/1493 (2013.01)

Citation (search report)

See references of WO 0129538A1

Designated contracting state (EPC)

AT BE CH CY DE FR GB IT LI

DOCDB simple family (publication)

WO 0129538 A1 20010426; EP 1222451 A1 20020717; JP 2003512616 A 20030402

DOCDB simple family (application)

US 0028820 W 20001019; EP 00973643 A 20001019; JP 2001532080 A 20001019