

Title (en)

PHOTOACOUSTIC FREE FIELD DETECTOR

Title (de)

PHOTOAKUSTISCHER FREIFELDDETEKTOR

Title (fr)

DETECTEUR PHOTOACOUSTIQUE EN CHAMP LIBRE

Publication

**EP 1902303 A1 20080326 (DE)**

Application

**EP 06754567 A 20060626**

Priority

- EP 2006006131 W 20060626
- DE 102005030151 A 20050628

Abstract (en)

[origin: DE102005030151B3] The detector has a light source for irradiating light (1) towards a measurement area, such that the irradiated light can be absorbed by the light-absorbing materials arranged in the measurement area to produce acoustic energy. The detector also includes an acoustic sensor in the form of a microphone (5). Optical mirrors (2) and acoustic mirrors (4) are orderly arranged in a position where the local maximum sound pressure is present for producing acoustic energy based on the output of the acoustic sensor. Independent claims are included for the following: (1) Photo-acoustic detection method; and Use of the photo-acoustic free-field detector.

IPC 8 full level

**G01N 21/17** (2006.01)

CPC (source: EP US)

**G01N 21/1702** (2013.01 - EP US); **G01N 2021/1704** (2013.01 - EP US); **G01N 2291/02809** (2013.01 - EP US)

Citation (search report)

See references of WO 2007000297A1

Citation (examination)

- US 5936250 A 19990810 - BALIGA SHANKAR [US], et al
- US 5550375 A 19960827 - PETERS RALF-PETER DR [DE], et al

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**DE 102005030151 B3 20061102**; EP 1902303 A1 20080326; JP 2008544291 A 20081204; JP 5022363 B2 20120912; US 2009038375 A1 20090212; WO 2007000297 A1 20070104

DOCDB simple family (application)

**DE 102005030151 A 20050628**; EP 06754567 A 20060626; EP 2006006131 W 20060626; JP 2008518692 A 20060626; US 99405606 A 20060626