

Title (en)

METHOD OF OPTICAL TELEDETECTION OF COMPOUNDS IN A MEDIUM

Title (de)

VERFAHREN ZUR OPTISCHEN FERNDERTEKTION VON VERBINDUNGEN IN EINEM MEDIUM

Title (fr)

PROCEDE DE TELEDETECTION OPTIQUE DE COMPOSES DANS UN MILIEU

Publication

**EP 2150786 A2 20100210 (FR)**

Application

**EP 08805847 A 20080526**

Priority

- FR 2008050903 W 20080526
- FR 0755300 A 20070529

Abstract (en)

[origin: WO2008152286A2] The invention relates to a method of optical teledetection of compounds in a medium in which: - a detection measurement is carried out by emitting into the medium, short pulses of light at least 3 nm wide, and detecting a part of the light backscattered by the medium by means of a detection unit with temporal resolution, - a reference measurement in which the light emitted or the light backscattered is filtered by virtue of addressable filtering means, simulating the optical spectrum of the light at the working wavelengths of at least one given compound to be searched for, - a comparison of a detection measurement and of a reference measurement, so as to deduce therefrom the possible presence of the compound or compounds searched for in the medium, - the addressable filtering means are modified dynamically, and a series of reference measurements and a series of corresponding comparisons are performed for a series of various compounds liable to be present in the medium, as well as a device adapted for implementing such a method.

IPC 8 full level

**G01J 3/457** (2006.01)

CPC (source: EP US)

**F21S 41/675** (2017.12 - EP US); **G01J 3/42** (2013.01 - EP US); **G01J 3/457** (2013.01 - EP US); **G01N 21/31** (2013.01 - EP US); **G01N 21/538** (2013.01 - EP US); **G01S 7/4802** (2013.01 - EP US); **G01S 17/95** (2013.01 - EP US); **G01N 2021/1795** (2013.01 - EP US); **G01N 2021/4709** (2013.01 - EP US); **Y02A 90/10** (2017.12 - EP US)

Citation (search report)

See references of WO 2008152286A2

Citation (examination)

- US 2004145737 A1 20040729 - HOCKER G BENJAMIN [US]
- ALDEN M; EDNER H; SVANBERG S: "Coherent anti-Stokes Raman Spectroscopy (CARS) applied in combustion probing", PHYSICA SCRIPTA, vol. 27, no. 1, 1 January 1983 (1983-01-01), Sweden, pages 29 - 38, XP008173035, ISSN: 0031-8949

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