

Title (en)

SENSOR WITH A MICROSTRUCTURED FIBER OPTIC BASE AND BRAGG NETWORK

Title (de)

SENSOR MIT MIKROSTRUKTURIERTER FASEROPTISCHER BASIS UND BRAGG-NETZWERK

Title (fr)

CAPTEUR A BASE DE FIBRE OPTIQUE MICROSTRUCTUREE ET A RESEAU DE BRAGG

Publication

EP 2038640 A1 20090325 (FR)

Application

EP 07765393 A 20070613

Priority

- EP 2007055823 W 20070613
- FR 0605239 A 20060613

Abstract (en)

[origin: WO2007144373A1] The invention involves a sensor (100) with a Bragg network fiber including a source (105) and detection system (101) operating at a wavelength of a given study, in addition to a Bragg (6) network fiber (1) linked to said source and said system, with said fiber being a microstructured optic fiber whose sheath (5) includes channels (3) adjacent to the heart (2) of the fiber (1), capable of receiving a product to be analyzed, characterized in that the number of channels (3) adjacent to the heart (2) is between 2 and 5, and that the size of the heart (2) of the fiber (1) is adapted so that an electromagnetic field of a wave guided by the fiber is not confined in the heart (2) of the fiber (1), and the electromagnetic field extends into the channels (3).

IPC 8 full level

G01N 21/41 (2006.01)

CPC (source: EP US)

G01N 21/03 (2013.01 - EP US); **G01N 21/45** (2013.01 - EP US); **G01N 21/0303** (2013.01 - EP US); **G01N 2021/0346** (2013.01 - EP US)

Citation (search report)

See references of WO 2007144373A1

Cited by

TWI636831B

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

FR 2902190 A1 20071214; **FR 2902190 B1 20081205**; AU 2007260029 A1 20071221; CA 2655240 A1 20071221; EP 2038640 A1 20090325; US 2010290062 A1 20101118; WO 2007144373 A1 20071221

DOCDB simple family (application)

FR 0605239 A 20060613; AU 2007260029 A 20070613; CA 2655240 A 20070613; EP 07765393 A 20070613; EP 2007055823 W 20070613; US 30829707 A 20070613