Title (en)

ELECTROOPTIC PROBE FOR VECTOR MEASUREMENT OF AN ELECTROMAGNETIC FIELD

Title (de)

ELEKTROOPTISCHE SONDE ZUR VEKTORMESSUNG EINES ELEKTROMAGNETISCHEN FELDES

Title (fr)

SONDE ELECTRO-OPTIQUE DE MESURE VECTORIELLE D'UN CHAMP ELECTROMAGNETIQUE

Publication

EP 2035846 A1 20090318 (FR)

Application

EP 07789010 A 20070615

Priority

- FR 2007051445 W 20070615
- FR 0652157 A 20060616

Abstract (en)

[origin: WO2007144547A1] The invention relates to a device for measuring two components of an electromagnetic field in an analysis zone, said device comprising: a light source (7) sending a polarized light beam into a polarization-maintaining optical fibre (5), said beam being directed along one axis of the fibre; an isotropic electrooptic material (21) placed in said zone, receiving the beam from the optical fibre via a quarter-wave plate (22) having its axes oriented at an angle of 45° to the axes of the optical fibre and sending a beam into this fibre, this plate being slightly detuned as regards is characteristic or its orientation; means (13-14) for phase-shifting the beam sent into the fibre, which means are set so as to impose a phase shift (g) equal and opposite to that (q) imposed by the fibre; and means for analyzing the orientation and the ellipticity of the wave exiting the phase-shifting means.

IPC 8 full level

G01R 29/08 (2006.01); **G01R 29/14** (2006.01)

CPC (source: EP US)

G01R 29/0885 (2013.01 - EP US); **G01R 29/14** (2013.01 - EP US)

Citation (search report)

See references of WO 2007144547A1

Citation (examination)

EP 1674878 A1 20060628 - THALES SA [FR]

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 2902523 A1 20071221; **FR 2902523 B1 20080905**; CA 2655034 A1 20071221; CA 2655034 C 20160419; CN 101529261 A 20090909; CN 101529261 B 20121114; EP 2035846 A1 20090318; US 2009262349 A1 20091022; US 8264685 B2 20120911; WO 2007144547 A1 20071221

DOCDB simple family (application)

FR 0652157 A 20060616; CA 2655034 A 20070615; CN 200780022507 A 20070615; EP 07789010 A 20070615; FR 2007051445 W 20070615; US 30506607 A 20070615