

Title (en)

MAGNETO-OPTICAL IMAGING METHOD AND DEVICE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MAGNETOOPTISCHEN ABBILDUNG

Title (fr)

PROCEDE ET DISPOSITIF D IMAGERIE MAGNETO-OPTIQUE

Publication

EP 1639359 A1 20060329 (FR)

Application

EP 04767451 A 20040624

Priority

- FR 2004001602 W 20040624
- FR 0307850 A 20030627

Abstract (en)

[origin: WO2005001467A1] The invention relates to a quantitative magneto-optical imaging method and device which are used to form an image of a target material (2). According to the invention, an active material (15) is used in order to produce a Faraday rotation in a polarised light beam. Said material is placed close to the target material (2) that is to be imaged. The Faraday rotation of the active material (15) is essentially proportional to the magnetisation when it is subjected to an excitation magnetic field. Moreover, photo-detector means (7) detect the beam reflected after passing through the active material. The light from the reflected beam can then be analysed in order to deduce the amplitude and the phase of a disturbance magnetic field created by a defect in the target material (2) subjected to the excitation magnetic field.

IPC 1-7

G01N 27/90; **G01R 33/032**

IPC 8 full level

G01N 21/21 (2006.01); **G01N 27/90** (2006.01); **G01R 33/032** (2006.01)

CPC (source: EP US)

G01N 21/21 (2013.01 - EP US); **G01N 27/90** (2013.01 - EP US); **G01R 33/0322** (2013.01 - EP US)

Citation (search report)

See references of WO 2005001467A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

FR 2856791 A1 20041231; **FR 2856791 B1 20051104**; CA 2530197 A1 20050116; CA 2530197 C 20140422; EP 1639359 A1 20060329; US 2006146328 A1 20060706; US 7271900 B2 20070918; WO 2005001467 A1 20050106; WO 2005001467 A8 20050506

DOCDB simple family (application)

FR 0307850 A 20030627; CA 2530197 A 20040624; EP 04767451 A 20040624; FR 2004001602 W 20040624; US 56256005 A 20051227