

Title (en)

METHOD FOR PRODUCING AND USING EDDY CURRENTS TO DETECT MAGNETIC AND ELECTRICAL PROPERTIES OF MATERIALS

Title (de)

VERFAHREN ZUR ERZEUGUNG UND ZUM EINSATZ VON WIRBELSTRÖMEN ZUR ERFASSUNG VON MAGNETISCHEN UND ELEKTRISCHEN MATERIALEIGENSCHAFTEN

Title (fr)

PROCEDE POUR LA PRODUCTION ET L'UTILISATION DE COURANTS DE FOUCAULT POUR LA DETECTION DE PROPRIETES MAGNETIQUES ET ELECTRIQUES D'UN MATERIAU

Publication

EP 0972190 A2 20000119 (DE)

Application

EP 98929213 A 19980401

Priority

- DE 9801002 W 19980401
- DE 19713418 A 19970401

Abstract (en)

[origin: DE19713418A1] The invention relates to a method for producing and using eddy currents in order to detect magnetic fields and the electrical conductivity of materials. This method provides a means for extremely high-precision measurement of the magnetic fields and electrical conductivity without any influences. According to said method, first either an electrically conductive or a permanent magnetic probe is brought close to a surface and eddy currents are produced in the probe or the sample. The magnetic fields produced by the eddy currents generate a force between the surface of the sample and the probe. This force is measured, said force being dependent on the properties of the sample concerned. The properties of the sample can then be determined by measuring the force generated.

IPC 1-7

G01N 27/90

IPC 8 full level

G01N 27/20 (2006.01); **G01N 27/72** (2006.01); **G01N 27/82** (2006.01); **G01N 27/90** (2006.01); **G01Q 60/54** (2010.01)

CPC (source: EP)

G01N 27/825 (2013.01); **G01N 27/902** (2013.01); **G01Q 60/54** (2013.01)

Citation (search report)

See references of WO 9844343A2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

DE 19713418 A1 19981008; EP 0972190 A2 20000119; WO 9844343 A2 19981008; WO 9844343 A3 19981230

DOCDB simple family (application)

DE 19713418 A 19970401; DE 9801002 W 19980401; EP 98929213 A 19980401