

Title (en)

INSPECTION EQUIPMENT USING SMALL-ANGLE TOPOGRAPHY IN DETERMINING AN OBJECT'S INTERNAL STRUCTURE AND COMPOSITION

Title (de)

INSPEKTIONSAUSRÜSTUNG MITTELS KLEINWINKELTOPOGRAPHIE ZUR BESTIMMUNG DER INTERNEN STRUKTUR UND ZUSAMMENSETZUNG EINES OBJEKT

Title (fr)

MATERIEL D'INSPECTION FAISANT APPEL A LA TOPOGRAPHIE A PETIT ANGLE POUR DETERMINER LA STRUCTURE ET LA COMPOSITION INTERNES D'UN OBJET

Publication

EP 0898704 A1 19990303 (EN)

Application

EP 98902696 A 19980123

Priority

- RU 97101221 A 19970124
- RU 97105594 A 19970408
- US 9801299 W 19980123

Abstract (en)

[origin: WO9833063A1] The invention relates to a device for determining the composition and internal structure of an object. The device includes a source of radiation which can penetrate the object and at least one unit for forming radiation from the radiation source into a plurality of weakly divergent beams. Each beam is positioned so it can be incident on the object. A separation device defines a first component and a second component in at least one of the beams after the at least one beam has passed through the object. The first component includes primarily radiation scattered over small angles by the object. The second component includes primarily radiation which was not scattered on passing through the object. The device also includes at least one first detector configured to register at least a portion of the radiation in the first component of the at least one beam and at least one second detector configured to register at least a portion of the radiation in the second component of the at least one beam. A processing system receives first signals from the at least one first detector and second signals from the at least one second detector. The processing system processes the first and second signals to create an image of the internal structure of the object.

IPC 1-7

G01N 23/201

IPC 8 full level

G01N 23/201 (2006.01); **G01N 23/04** (2006.01); **G01V 5/00** (2006.01)

CPC (source: EP US)

G01N 23/04 (2013.01 - EP US); **G01N 23/046** (2013.01 - EP); **G01V 5/22** (2024.01 - EP US); **G01V 5/222** (2024.01 - EP); **G01N 2223/419** (2013.01 - EP)

Citation (search report)

See references of WO 9833062A1

Designated contracting state (EPC)

AT BE DE ES FR GB GR IE IT NL SE

DOCDB simple family (publication)

WO 9833063 A1 19980730; AU 5929198 A 19980818; AU 6039798 A 19980818; CN 1216109 A 19990505; EP 0898704 A1 19990303; JP 2000512764 A 20000926; WO 9833062 A1 19980730

DOCDB simple family (application)

US 9801365 W 19980123; AU 5929198 A 19980123; AU 6039798 A 19980123; CN 98800059 A 19980123; EP 98902696 A 19980123; JP 53214098 A 19980123; US 9801299 W 19980123