

Title (en)

METHOD AND DEVICE FOR DETECTING SPATIAL STRUCTURE CHARACTERISTICS OF A CRYSTAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERFASSUNG VON MERKMALEN DER RAUMSTRUKTUR EINES KRISTALLS

Title (fr)

PROCEDE ET DISPOSITIF POUR LA DETECTION DE CARACTERISTIQUES DE LA STRUCTURE SPATIALE D'UN CRISTAL

Publication

EP 1149283 A1 20011031 (DE)

Application

EP 99959623 A 19991215

Priority

- CH 248098 A 19981215
- IB 9902047 W 19991215

Abstract (en)

[origin: WO0036406A1] In order to detect the characteristics of the spatial structure of an electroconductive crystal (1), especially a semiconductor, a measuring current is supplied to said crystal and charge distribution is measured at a point (3) different from the current input (4) of the crystal. Information on the spatial structure characteristics is obtained from the relationship between measured charge distribution and standard distribution. In order to produce a defined temporary modification of the spatial structure, the crystal can be subjected to acoustic vibration, especially to the influence of ultrasonic waves (24), which is then measured. The appropriate device for said purpose comprises an electrically conductive crystal structure (1) with source electrodes (4) for supplying a current to the crystal, drain electrodes (3) for removing a current from the crystal and electronic evaluation circuits (20) for obtaining information on the spatial structure of the crystal on the basis of the measured current.

IPC 1-7

G01N 27/20

IPC 8 full level

G01N 29/00 (2006.01); **A61B 8/00** (2006.01); **G01N 27/00** (2006.01); **G01N 27/20** (2006.01); **G06K 9/00** (2006.01); **H01L 21/66** (2006.01)

CPC (source: EP KR)

G01N 27/00 (2013.01 - KR); **G01N 27/20** (2013.01 - EP); **G01N 29/04** (2013.01 - KR); **G01N 33/0095** (2024.05 - KR); **H01L 22/24** (2013.01 - KR); **G01N 2291/02863** (2013.01 - EP)

Citation (search report)

See references of WO 0036406A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 0036406 A1 20000622; AU 1675000 A 20000703; CA 2355144 A1 20000622; EP 1149283 A1 20011031; JP 2002532714 A 20021002; KR 20010101248 A 20011114

DOCDB simple family (application)

IB 9902047 W 19991215; AU 1675000 A 19991215; CA 2355144 A 19991215; EP 99959623 A 19991215; JP 2000588595 A 19991215; KR 20017007528 A 20010615