

Title (en)

METHOD AND DEVICE FOR DETERMINING THE THICKNESS OF A SEMICONDUCTOR MEMBRANE IN A MICROSTRUCTURE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERMITTLUNG DER DICKE EINER HALBLEITERMEMBRAN IN EINER MIKROSTRUKTUR

Title (fr)

PROCEDE ET DISPOSITIF POUR DETERMINER L'EPAISSEUR D'UNE MEMBRANE DE TYPE SEMICONDUCTEUR DANS UNE MICROSTRUCTURE

Publication

**EP 1802939 A1 20070704 (DE)**

Application

**EP 05810074 A 20051020**

Priority

- DE 2005001873 W 20051020
- DE 102004051113 A 20041021

Abstract (en)

[origin: WO2006042528A1] The invention relates to a method and a device for determining the thicknesses of semiconductor membranes (1) by means of electrical measurements. Energy is coupled into the membrane in a defined manner and the membrane thickness is determined from the distribution or diffusion of the energy. A change of state of the membrane is carried out by measuring the electroconductivity by means of measuring resistances (3) on the membrane. The electroconductivity varies according to the temperature and the mechanical strain of the membrane, which both depend on the thickness of the membrane.

IPC 8 full level

**G01B 21/08** (2006.01); **G01N 25/18** (2006.01)

CPC (source: EP US)

**G01B 21/085** (2013.01 - EP US); **G01N 25/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2006042528A1

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006042528 A1 20060427**; DE 102004051113 A1 20060504; DE 102004051113 B4 20061130; DE 112005002169 A5 20070712; EP 1802939 A1 20070704; US 2009174418 A1 20090709

DOCDB simple family (application)

**DE 2005001873 W 20051020**; DE 102004051113 A 20041021; DE 112005002169 T 20051020; EP 05810074 A 20051020; US 57754105 A 20051020