Title (en)

MICROSTRUCTURED MEASURING CHIP FOR OPTICALLY MEASURING PROPERTIES OF ARTIFICIAL OR BIOLOGICAL MEMBRANES, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

MIKROSTRUKTURIERTER MESSCHIP ZUR OPTISCHEN MESSUNG VON EIGENSCHAFTEN KÜNSTLICHER ODER BIOLOGISCHER MEMBRANEN UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

PUCE DE MESURE MICROSTRUCTURÉE POUR LA MESURE OPTIQUE DE PROPRIÉTÉS DE MEMBRANES BIOLOGIQUES OU ARTIFICIELLES ET PROCÉDÉ DE FABRICATION DE CETTE PUCE

Publication

EP 2593772 A1 20130522 (DE)

Application

EP 11719758 A 20110310

Priority

- DE 102010036344 A 20100712
- DE 2011075041 W 20110310

Abstract (en)

[origin: WO2012006995A1] The invention relates to a microstructured measuring chip (1) for optically measuring properties of artificial or biological membranes (40), comprising a lower translucent substrate (10) and at least one non-translucent main layer (20) which lies on said substrate and which has recesses (30) that are designed as measuring chambers with an upper opening (25) and one or more inner lateral walls (26). The aim of the invention is to improve the measuring chip (1) such that biological systems can be measured with greater measuring accuracy and higher throughput. This is achieved in that the lateral wall or the lateral walls (26) of the measuring chambers (30) have recesses and/or elevations (28). The invention further relates to a support (200) for the measuring chip (1) and to a method for producing the measuring chip (1) from a silicon wafer (300).

IPC 8 full level

G01N 21/64 (2006.01)

CPC (source: EP US)

B01L 3/5085 (2013.01 - EP US); **G01N 21/6452** (2013.01 - EP US); **G01N 21/6486** (2013.01 - US); **G01N 33/4833** (2013.01 - US); B01L 2300/0829 (2013.01 - EP US); B01L 2300/0858 (2013.01 - EP US); B01L 2300/168 (2013.01 - EP US); Y10T 156/1062 (2015.01 - EP US)

Citation (search report)

See references of WO 2012006995A1

Citation (examination)

- DE 102007016699 A1 20081009 - SYNENTEC GMBH [DE]
- US 2005266582 A1 20051201 - MODLIN DOUGLAS N [US], et al
- ANA-MARIA POPA ET AL: "Fabrication of nanopore arrays and ultrathin silicon nitride membranes by block-copolymer-assisted lithography", NANOTECHNOLOGY, IOP, BRISTOL, GB, vol. 20, no. 48, 2 December 2009 (2009-12-02), pages 485303, XP020168639, ISSN: 0957-4484

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012006995 A1 20120119; DE 102011051723 A1 20120301; EP 2593772 A1 20130522; JP 2013540986 A 20131107; US 2014134711 A1 20140515; WO 2012025110 A1 20120301

DOCDB simple family (application)

DE 2011075041 W 20110310; DE 102011051723 A 20110711; DE 2011075156 W 20110705; EP 11719758 A 20110310; JP 2013520971 A 20110310; US 201113809720 A 20110310