

Title (en)
ELLIPSONOMETRY DEVICE PROVIDED WITH A RESONANCE PLATFORM

Title (de)
ELLIPSONOMETRIEVORRICHTUNG MIT EINER RESONANZPLATTFORM

Title (fr)
DISPOSITIF D'ELLIPSONOMETRIE A PLATE-FORME DE RESONANCE

Publication
EP 1769229 A1 20070404 (DE)

Application
EP 05772604 A 20050718

Priority
• EP 2005007795 W 20050718
• US 59028204 P 20040721

Abstract (en)
[origin: WO2006008112A1] The invention relates to a useful improvement of an ellipsometer-type device. For this purpose, an existing ellipsometer is supplemented by a so-called resonance platform on which surface modes are excitable. Contrary to state of the art of known surface plasmons, the inventive modes are laterally localised. In addition, the resonance platform is not necessarily embodied in the form of a metal sheet. The inventive device also can be embodied in the form of an image-forming device. The inventive method consists in placing measurable samples on the platform surface and, afterwards, are exposed to light, thereby being excited in modes. The resonance position of modes is determined by the absorption behaviour of a measurable substance.

IPC 8 full level
G01N 21/21 (2006.01); **G01N 21/55** (2006.01)

CPC (source: EP US)
G01N 21/211 (2013.01 - EP US)

Citation (search report)
See references of WO 2006008112A1

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 2006008112 A1 20060126; CN 101023337 A 20070822; EP 1769229 A1 20070404; TW 200604489 A 20060201;
US 2007216901 A1 20070920

DOCDB simple family (application)
EP 2005007795 W 20050718; CN 200580024803 A 20050718; EP 05772604 A 20050718; TW 94124675 A 20050721; US 57228405 A 20050718