

Title (en)

METHODS AND APPARATUS FOR ATOMIC FORCE MICROSCOPY

Title (de)

VERFAHREN UND VORRICHTUNG FÜR RASTERKRAFTMIKROSKOPIE

Title (fr)

PROCEDES ET APPAREIL DE MICROSCOPIE A FORCE ATOMIQUE

Publication

EP 1269168 A1 20030102 (EN)

Application

EP 01917266 A 20010330

Priority

- GB 0101470 W 20010330
- GB 0007747 A 20000330

Abstract (en)

[origin: WO0175427A1] A probe module for atomic force microscopy has a substrate (33) and a deflectable cantilever probe (4) projecting from it. In the head of the atomic force microscope the probe is mounted with its axis perpendicular to the sample surface, e.g. so as to carry out shear force microscopy or transverse dynamic force microscopy. The cantilever probe (4) has a reflective surface (43) which is directed back up along the probe so that movement of the probe tip can be tracked using a light beam arrangement which in itself may be conventional. By this means, AFM procedures in perpendicular modes can be carried out using AFM heads requiring little modification from the conventional near-parallel mode arrangement. The probe may also be used in tapping mode to investigate sidewall features on a sample surface.

IPC 1-7

G01N 27/00; **G01B 7/34**

IPC 8 full level

G01Q 20/02 (2010.01); **G01Q 60/24** (2010.01)

CPC (source: EP KR)

G01Q 20/02 (2013.01 - EP KR); **G01Q 60/24** (2013.01 - KR); **G01Q 60/38** (2013.01 - EP)

Citation (search report)

See references of WO 0175427A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 0175427 A1 20011011; AU 4435001 A 20011015; CA 2404604 A1 20011011; EP 1269168 A1 20030102; GB 0007747 D0 20000517; JP 2003529761 A 20031007; KR 20030015220 A 20030220

DOCDB simple family (application)

GB 0101470 W 20010330; AU 4435001 A 20010330; CA 2404604 A 20010330; EP 01917266 A 20010330; GB 0007747 A 20000330; JP 2001572856 A 20010330; KR 20027012839 A 20020927