

Title (en)

COMPACT SPECTROSCOPIC ELLIPSOMETER

Title (de)

KOMPAKTES SPEKTROSKOPISCHES ELLIPSOMETER

Title (fr)

ELLIPSOMETRE SPECTROSCOPIQUE COMPACT

Publication

**EP 1301763 A2 20030416 (FR)**

Application

**EP 01954108 A 20010716**

Priority

- FR 0102305 W 20010716
- FR 0009318 A 20000717

Abstract (en)

[origin: WO0206779A2] The invention concerns a spectroscopic ellipsometer comprising: a source (2) capable of emitting a broadband ray (4), a polarizer (10) for polarizing the broadband beam (4), and for producing a polarised incident beam (12) adapted to illuminate a sample (16) according to at least a selected angle; an analyzer (24) for receiving the beam reflected (20) by the illuminated sample (16) and for producing an output beam (28) in response to said reflected beam (20); and at least a reflecting optical element (14) arranged between the source (2) and the sample (16) and/or between the sample (16) and the sensor, and capable of focusing the incident beam (12) and/or the reflected ray (20) according to a selected spot. The ellipsometer further comprises at least a first refracting element (22) arranged between the sample (16) and the sensor and/or between the source (2) and the sample (16) to collect and focus said reflected beam and/or said incident beam, thereby enabling to provide at least a refracting element (22) and a reflecting element (14) on either side of the sample (16) and hence to place the source and the sensor on the same side relative to said spot.

[origin: WO0206779A2] The invention concerns an ellipsometer comprising: a source (2) capable of emitting a broadband ray (4), a polarizer (10) for producing a polarised incident beam (12) adapted to illuminate a sample (16) according to at least a selected angle; an analyzer (24) providing an output beam (28) in response to said reflected beam (20) and at least a reflecting optical element (14) arranged between the source (2) and the sample (16) and/or between the sample (16) and the sensor, and capable of focusing the incident beam (12) and/or the reflected beam (20) according to a selected spot. The ellipsometer further comprises at least a first refracting optical element (22) arranged between the sample (16) and the sensor and/or between the source (2) and the sample (16) to collect and focus said reflected beam and/or said incident beam, thereby enabling to provide at least a refracting element (22) and a reflecting element (14) on either side of the sample (16) and hence to place the source and the sensor on the same side relative to said spot.

IPC 1-7

**G01J 4/00; G01N 21/21**

IPC 8 full level

**G01J 3/447** (2006.01); **G01J 4/04** (2006.01); **G01N 21/21** (2006.01)

CPC (source: EP KR US)

**G01J 4/04** (2013.01 - EP US); **G01N 21/21** (2013.01 - KR); **G01N 21/211** (2013.01 - EP US)

Citation (search report)

See references of WO 0206779A2

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 0206779 A2 20020124; WO 0206779 A3 20020328;** AU 7070101 A 20020130; AU 7645601 A 20020130; EP 1301763 A2 20030416; EP 1301764 A1 20030416; FR 2811761 A1 20020118; FR 2811761 B1 20021011; JP 2004504590 A 20040212; JP 2004504591 A 20040212; KR 100846474 B1 20080717; KR 20030022292 A 20030315; KR 20030026322 A 20030331; US 2004027571 A1 20040212; US 2004070760 A1 20040415; US 6819423 B2 20041116; US 7230701 B2 20070612; WO 0206780 A1 20020124

DOCDB simple family (application)

**FR 0102305 W 20010716;** AU 7070101 A 20010628; AU 7645601 A 20010716; EP 01949572 A 20010628; EP 01954108 A 20010716; FR 0009318 A 20000717; FR 0102072 W 20010628; JP 2002512640 A 20010716; JP 2002512641 A 20010628; KR 20037000770 A 20030117; KR 20037000771 A 20030117; US 33341503 A 20030911; US 33341603 A 20030116