

Title (en)

CLOSED LOOP OPTICAL COHERENCE TOPOGRAPHY

Title (de)

OPTISCHE KOHÄRENZTOPOGRAPHIE IN GESCHLOSSENEM KREIS

Title (fr)

TOPOGRAPHIE PAR COHERENCE OPTIQUE ET A BOUCLE ASSERVIE

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Application

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Abstract (en)

[origin: WO0101849A1] The present invention provides an optical coherence topography apparatus and method for determining the topology of a surface of or within a sample, the apparatus having: a light source for providing a beam of light; a beam splitter for splitting the beam into first and second components; a sample arm for receiving the sample and characterized by a first path length; scanning means for scanning the sample with the first component of the beam; a reference arm with a reference means for receiving the second component, the reference arm characterized by a second path length; and a light detector for detecting interference patterns due to interference of a reference beam from the reference means and a sample beam from the sample; wherein one of the first and the second path lengths is controllably adjustable and the apparatus includes control means responsive to changes in the interference patterns due to differences in the first path length as the sample is scanned, by adjusting the one of the first and the second path lengths to compensate for the changes in the first path length, whereby the adjustment in the one of first and second path lengths is indicative of the changes in the first path length and thereby of the topology.

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