

Title (en)  
TOMOGRAPHIC IMAGING BY AN INTERFEROMETRIC IMMERSION MICROSCOPE

Title (de)  
TOMOGRAFISCHE BILDGEBUNG MIT INTERFEROMETRISCHEM IMMERSIONSMIKROSKOP

Title (fr)  
IMAGERIE TOMOGRAPHIQUE PAR MICROSCOPE INTERFÉROMÉTRIQUE À IMMERSION

Publication  
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Application  
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Abstract (en)  
[origin: WO2007017589A1] The invention relates to a device for tomographically imaging an image object comprising a light source whose coherence length is substantially equal to the thickness of the image object slice and an interferometric imaging system which consists of at least one objective lens, reference mirror, and light beam separating means. Said invention is characterised in that the interferometric system is arranged in such a way that the objective lens defines a first focus setting plane at the level of the analysable object layer and a second focus setting plane defines it at the level of the reference mirror, said interferometric system comprises at least one type of compensating medium positioned between said second focus setting plane and separating means, the thickness and optical index of the compensating medium are selected in such a way that the optical path of a light beam emitted from the light source between the first focus setting plane and separating means is substantially equal to the optical path of a light beam between the second focus setting plane and separating means and the dispersion between the first focus setting plane and separating means is substantially equal to the dispersion between the second focus setting plane and separating means.

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