

Title (en)

METHOD AND MICROSCOPE WITH A CORRECTION DEVICE FOR CORRECTING ABERRATION-INDUCED IMAGING ERRORS

Title (de)

VERFAHREN UND MIKROSKOP MIT EINER KORREKTURVORRICHTUNG ZUR KORREKTUR VON ABERRATIONSINDUZIERTEN ABBILDUNGSFEHLERN

Title (fr)

PROCÉDÉ ET MICROSCOPE COMPRENANT UN DISPOSITIF DE CORRECTION POUR CORRIGER DES DÉFAUTS D'IMAGES DUS AUX ABERRATIONS

Publication

**EP 3997505 A1 20220518 (DE)**

Application

**EP 20739894 A 20200701**

Priority

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Abstract (en)

[origin: WO2021004850A1] The invention relates to a method for correcting aberration-induced imaging errors in an optical system, which comprises an objective lens (14) and adaptive optics (18), in which method the light (5) and a specimen (20) are selected such that, as the light (5) acts on the specimen (20), a measuring signal (28) from the specimen (20) is reduced, a relative change in the measuring signal (28) depending on an intensity of the light (5). The measuring signal (28) from a focus region of the optical system in the specimen (20) is captured over a first and a later, second period (38, 37) to determine a first and a second measured value. The light (5) is focussed by the optical system in the focus region over a third period (39) overlapping with the first and/or second period. A numerical value for the relative change in the measuring signal (28) is determined from the first and the second measured values and is used as a metric to be optimised in controlling the adaptive optics (18).

IPC 8 full level

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Citation (search report)

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