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Lippert et al.

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(54) **LIGHT MICROSCOPE AND MICROSCOPY METHOD FOR EXAMINING A MICROSCOPIC SPECIMEN**

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See application file for complete search history.

(57)

ABSTRACT

Examination of a microscopic specimen is described. Height information for a respective plurality of lateral regions of the specimen is obtained from each of multiple specimen recordings, in which the height information of each specimen recording is limited to a respective height measurement range and the height measurement ranges of different specimen recordings are different. An overall image is calculated from the specimen recordings, in which overall image height information of the different specimen recordings is combined. Specimen recordings are recorded at such heights that: the height measurement ranges of different specimen recordings overlap each other, common lateral regions are identified in two respective specimen recordings for which lateral regions height information could be obtained in both specimen recordings, and a link of the height information of different specimen recordings is determined on the basis of the height information of different specimen recordings for at least one common lateral region.

20 Claims, 6 Drawing Sheets

