Title (en)
IMAGE SEGMENTATION IN DIGITAL PATHOLOGY

Title (de)
BILDSEGMENTIERUNG IN DIGITALER PATHOLOGIE

Title (fr)
SEGMENTATION D'IMAGE EN PATHOLOGIE NUMÉRIQUE

Publication
EP 3574445 A1 20191204 (EN)

Application
EP 18701181 A 20180125

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Abstract (en)
[origin: WO2018138180A1] The present invention relates to image segmentation in digital pathology. In order to improve digital pathology workflow, a device (10) is provided for detecting compartments of a biological cell. The device comprises an input unit (12) and an image processing unit (14). The input unit (12) is configured to receive at least one digital slide image for providing a first image with a first stain and a second image with a second stain of a biological specimen sample. The first stain is a stain for selectively staining nuclei in biological cells and the second stain is a stain for selectively staining a biomarker. The image processing unit (14) is configured to detect a nucleus region of the biological cell by analyzing a first stain, and to detect a cytoplasm region and a membrane region of the biological cell based on an analysis of variations in stain intensities of the second stain, and a spatial relationship with at least one adjacent biological cell.

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Citation (search report)
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