Title (en)

METHODS AND SYSTEMS FOR ESTIMATING VISUAL FIELD SENSITIVITIES FROM RETINAL OPTICAL TEXTURE ANALYSIS (ROTA) MAPS

Title (de)

VERFAHREN UND SYSTEME ZUR SCHÄTZUNG VON SICHTFELDEMPFINDLICHKEITEN AUS KARTEN ZUR OPTISCHEN RETINALEN TEXTURANALYSE (ROTA)

Title (fr)

PROCÉDÉS ET SYSTÈMES D'ESTIMATION DE SENSIBILITÉS DE CHAMP VISUEL À PARTIR DE CARTES D'ANALYSE DE TEXTURE OPTIQUE RÉTINIENNE (ROTA)

Publication

EP 4360044 A1 20240501 (EN)

Application

EP 22755289 A 20220622

Priority

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- IB 2022000351 W 20220622

Abstract (en)

[origin: WO2022269352A1] Disclosed techniques evaluate the visual field of a patient's eye using deep learning techniques. A computer system obtains a plurality of cross-sectional scan images of a retina captured by an optical coherence tomography (OCT) device. The retina has an inner retinal layer. A retinal optical texture analysis (ROTA) map of the inner retinal layer is generated from the plurality of cross-sectional scan images. The ROTA map includes a plurality of pixels, and each pixel of the ROTA map corresponds to a respective optical texture signature value S providing information about tissue composition and optical density of the inner retinal layer at a respective retinal location. The computer system applies a machine learning model to process the ROTA map of the inner retinal layer to determine visual field sensitivity of the retina.

IPC 8 full level

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CPC (source: EP)

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