Title (en)

AUTOMATED PHOTOREFRACTIVE SCREENING

Title (de)

SELBSTTÄTIGE PHOTOREAKTIVE UNTERSUCHUNG

Title (fr)

EXAMEN PHOTOREFRACTIF AUTOMATISE

Publication

EP 1052928 A1 20001122 (EN)

Application

EP 98959444 A 19981113

Priority

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- US 17357198 A 19981015

Abstract (en)

[origin: WO9925239A1] A system and method for locating and modeling eyes in imagery for automated photorefractive screening. The invention includes a system and method for locating a patient's (16) eyes in a digital image that includes each eye as illuminated by a near-axis flash (12), including automatically finding light reflexes in the digital images as indicative of the location of each eye. Automatically finding light reflexes includes analyzing such light reflexes to determine possible pupil and sclera borders. The invention further includes automatically fitting a corresponding model to such possible pupil and sclera borders, analyzing the model of each eye to determine possible abnormalities in each eye; and outputting a possible diagnosis for each eye based on such analyzing. Other aspects of the invention include measuring retinal reflexes and corneal reflexes from the indicated eye models as an indicator of anomalies in the patient's (16) eyes, and generating a digital image of each of a patient's (16) eyes with a camera having a flash (12) positioned near to a center line of a lens of the camera (10) so as to generate images with bright, sharp light reflexes.

IPC 1-7

A61B 3/113

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

See references of WO 9925239A1

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