

Title (en)

METHOD AND DEVICE FOR COMPLETELY CORRECTING VISUAL DEFECTS OF THE HUMAN EYE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VOLLSTÄNDIGEN KORREKTUR VON SEHFEHLERN DES MENSCHLICHEN AUGES

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT DE CORRIGER COMPLETEMENT DES DEFAUTS VISUELS DE L'OEIL HUMAIN

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Application

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Abstract (en)

[origin: WO0112114A1] The invention relates to a method and to a device for completely correcting visual defects of the human eye. The invention mentions combinations of measuring and treatment methods that allow the complete correction of defects of the human eye if applied according to the invention. Measuring methods are used that precisely detect the surface of the cornea and that also register the aberrations that occur in the beam path up to the retina. The computer-assisted evaluation of these measurement results combined with the calculation of optimally corrected lenses (for example after a cataract operation) or of optimally correcting cornea surfaces makes it possible to produce a patient-specific lens and/or to shape the retina so that it optimally corrects the aberration. To this end, the invention preferably uses a spot scanning excimer laser system and makes use of the topography of the eye.

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