Title (en)

SHARPNESS METRIC FOR VISION QUALITY

Title (de)

SCHÄRFEMETRIK FÜR SEHQUALITÄT

Title (fr)

PROCEDE DE MESURE DE L'ACUITE VISUELLE POUR LA QUALITE DE VISION

Publication

EP 1501404 A4 20090304 (EN)

Application

EP 03721996 A 20030502

Priority

- US 0313716 W 20030502
- US 37721902 P 20020503

Abstract (en)

[origin: WO03092485A1] A vision metric, called the sharpness metric, indicates the subjective sharpness of a patient's vision by taking into account both the wavefront aberration and the retinal response to the image. A retinal image quality function such as the point spread function is convolved by a neural quality function, and the maximum of the convolution over the retinal plane provides the sharpness metric. The sharpness metric can be used to control eye surgery or the fabrication of a lens.

IPC 1-7

A61B 3/10

IPC 8 full level

A61B 3/103 (2006.01)

CPC (source: EP)

A61B 3/0025 (2013.01)

Citation (search report)

- [A] WO 0182791 A1 20011108 - UNIV ROCHESTER [US]
- [PX] WILLIAMS, DAVID: "Subjective image quality metrics from the wave aberration", 4TH INTERNATIONAL CONGRESS ON WAVEFRONT SENSING AND ABERRATION FREE REFRACTIVE CORRECTION, SAN FRANCISCO, FEB 14-16, 2003, XP002511608, Retrieved from the Internet <URL:http://voi.opt.uh.edu/VOI/WavefrontCongress/2003/presentations/Sunday%2003_16_03/69%20Williams%20metrics.pdf>
- [PX] APPLEGATE R A ET AL: "Visual acuity as a function of Zernike mode and level of root mean square error", OPTOMETRY AND VISION SCIENCE LIPPINCOTT WILLIAMS & WILKINS USA, vol. 80, no. 2, February 2003 (2003-02-01), pages 97 - 105, XP002511609, ISSN: 1040-5488
- See references of WO 03092485A1

Designated contracting state (EPC)

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