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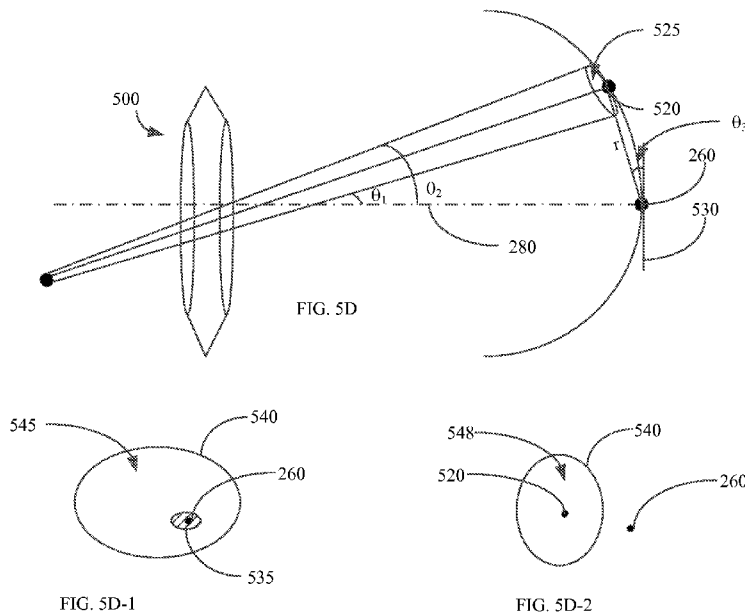
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[Continued on next page]

(54) Title: DUAL-OPTIC INTRAOCULAR LENS THAT IMPROVES OVERALL VISION WHERE THERE IS A LOCAL LOSS OF RETINAL FUNCTION



(57) Abstract: Systems and methods are provided for improving overall vision in patients suffering from a loss of vision in a portion of the retina (e.g., loss of central vision) by providing a dual optic intraocular lens which redirects and/or focuses light incident on the eye at oblique angles onto a peripheral retinal location. The intraocular lens can include a redirection element (e.g., a prism, a diffractive element, or an optical component with a decentered GRIN profile) configured to direct incident light along a deflected optical axis and to focus an image at a location on the peripheral retina. Optical properties of the intraocular lens can be configured to improve or reduce peripheral errors at the location on the peripheral retina. One or more surfaces of the intraocular lens can be a toric surface, a higher order aspheric surface, an aspheric Zernike surface or a Biconic Zernike surface to reduce optical errors in an image produced at a peripheral retinal location by light incident at oblique angles.





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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
A61F  
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2013/028992 A1 (AMO GRONINGEN BV [NL]; LI KACCIE Y [NL]; CANOVAS VIDAL CARMEN [NL]; WE) 28 February 2013 (2013-02-28)	1-26
Y	figures 3-7,8,9,11 paragraphs [0005], [0008], [0035], [0036], [0048] - [0050], [0054] - [0058], [0062], [0065] claim 1 ----- -/--	14-26

Further documents are listed in the continuation of Box C.

See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2013/105855 A1 (PROCORNEA HOLDING BV [NL]) 18 July 2013 (2013-07-18)	1-26
Y	figures 6,7,9-11,14,19,20,22a page 7, line 24 page 8, lines 18-21 page 9, lines 3-5, 11-19 page 10, lines 3-6,24-33 page 12, lines 1-2 page 13, line 28 page 14, line 11	14-26
A	----- US 5 354 334 A (FEDOROV SVYATOSLAV N [RU] ET AL) 11 October 1994 (1994-10-11) figure 3 claim 5	13
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Information on patent family members

International application No

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