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(54) Title: ALL OPTICAL SYSTEM AND METHOD FOR PROVIDING EXTENDED DEPTH OF FOCUS OF IMAGING

(57) Abstract: An imaging system and method are presented. The system comprises an imaging lens unit, an imaging detector, and a birefringent element located between the imaging lens unit and the imaging detector. The system is thus configured and operable to provide in-focus imaging of objects located at both near-field and far-field ranges. Also provided is an optical device configured to be mounted on an imaging lens, being one of the following: a lens of an individual's glasses, on a contact lens, and an eye internal lens. The optical device is configured to be located between the imaging lens and the retina and comprises a birefringent element, to thereby provide in-focus imaging onto the retina of the objects located at both near-field and far-field ranges therefrom.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL07/00499

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **H04N 5/225(2006.01)**

USPC: 348/340
 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)
 U.S. : 348/340

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,144,489 (WILSON et al.) 7 November 2000, col. 3 line 1+	1-5,7,8,10-15,18-
---	US 6,288,767 (Murata et al.) 11 September 2001, col. 13 line 1 +	34,36,37,39-49
Y	US PGPUB 20060034003 (Zavlevsky et al.) 11 February 2006 Paragraph 99	----- 16,17

Further documents are listed in the continuation of Box C. See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		

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