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(54) Title: SYSTEM AND METHOD FOR IMAGING WITH EXTENDED DEPTH OF FOCUS AND INCOHERENT LIGHT

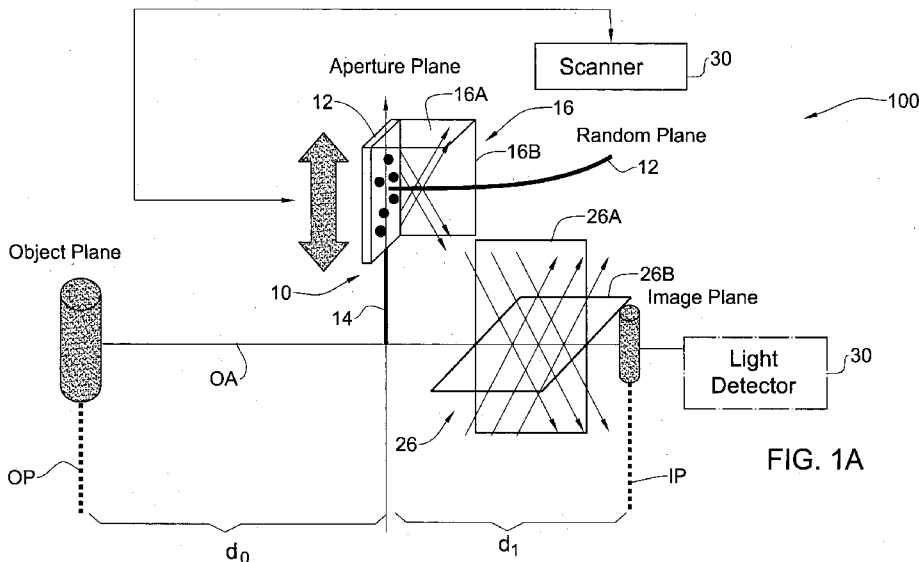


FIG. 1A

(57) Abstract: An optical arrangement is provided for use in imaging with a large depth of focus. The optical arrangement comprises an aperture (10) and a replication unit (16,26). The replication unit (16,26) is configured for producing a plurality of replicas of an input optical field passed through the aperture unit (10) such that the replicas include at least two replicas that are of substantially the same phase distribution and are created at different regions of the aperture unit plane.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G02B 9/00**(2006.01);**G02B 26/08**(2006.01);**G02B 27/46**(2006.01)
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USPC: 359/738,739,196,559

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. : 359/738, 739, 196, 559

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

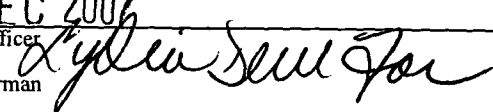
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2006/0034003 A1 (ZALEVSKY) 16 February 2006, see entire document.	1-12
A	US 2005/0094290 A1 (BEN-ELIEZER et al) 05 May 2005, see entire document.	1-12
A	US 6,847,472 B2 (MASUDA) 25 January 2005, see entire document.	1-12

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

* Special categories of cited documents:		"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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