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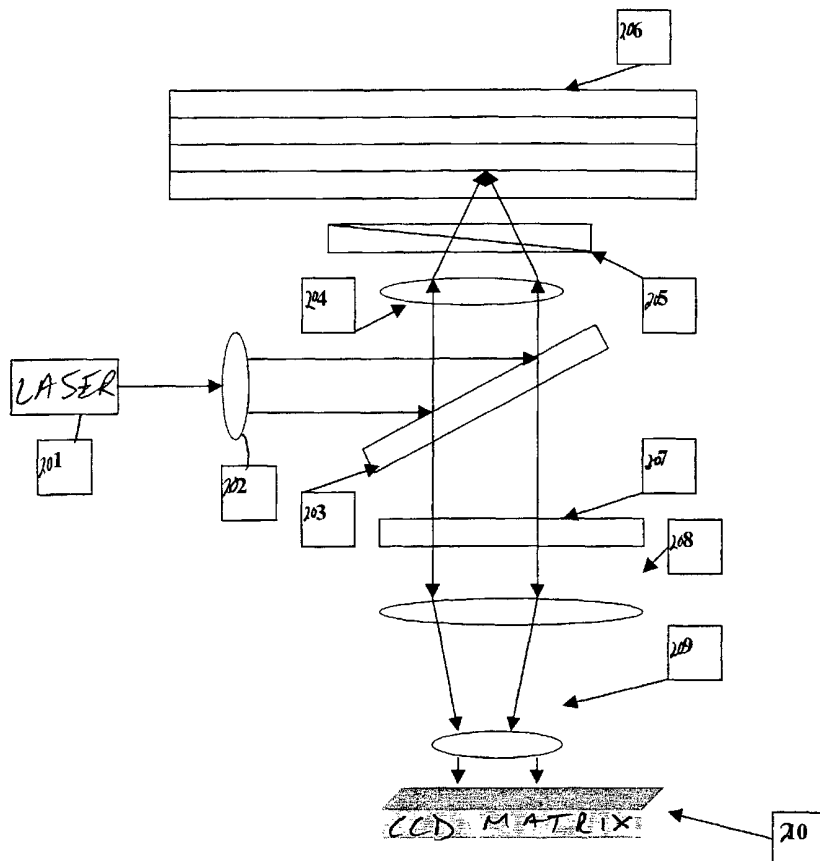
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[Continued on next page]

(54) Title: FLUORESCENT MULTILAYER DATA STORAGE SYSTEM



(57) Abstract: In an optical medium such as a fluorescent multilayer disk (206), both reading speed and storage capacity are increased in various ways. Multiple heads (103) can be provided, in which case one head reads information while another moves from one reading position to the next. An optical head can read from several tracks on a disk simultaneously by focusing the exiting light into a light strip and using a photo-sensor array (210). The information pages in each layer can be staggered from those in adjacent layers. The number of layers in a medium can be selected by maximizing capacity with respect to numerical aperture. To increase exposure time, a reading head can follow the medium for one reading operation and then return to its initial position for the next reading operation.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/42407

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G11B 3/74, 7/09, 7/22, 7/24; B32B 3/00
US CL : Please See Extra Sheet.

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. : 369/44.37, 94, 112.22, 284; 428/64.1, 64.2, 64.4; 430/139, 270.15, 270.11, 321, 945

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

--NONE--

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

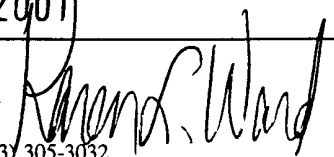
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,071,671 A (GLUSHKO et al.) 06 June 2000, Fig. 18.	1-32
X	US 6,009,065 A (GLUSHKO et al.) 28 December 1999, Fig. 2.	1-32
A	US 5,526,336 A (PARK et al.) 11 June 1996, Fig. 8.	
A	US 6,045,888 A (CHEN et al.) 04 April 2000, Fig. 4.	

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
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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