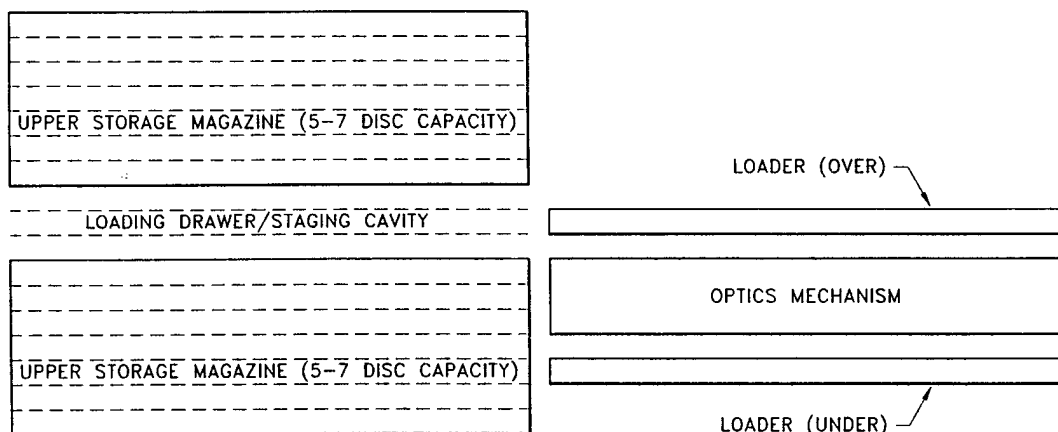




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<p>(21) International Application Number: PCT/US98/02002 (22) International Filing Date: 2 February 1998 (02.02.98) (30) Priority Data: 08/796,640 7 February 1997 (07.02.97) US (71) Applicant: MULTIDISC TECHNOLOGIES [US/US]; Suite 800, 7755 Center Avenue, Huntington Beach, CA 92647 (US). (72) Inventors: BOS, Eric, Rene; 17915 Santa Valera, Fountain Valley, CA 97280 (US). MONTELIUS, Robert, L., Jr.; 26001 LaCuesta Avenue, Laguna Hills, CA 92653 (US). (74) Agents: STETINA, Kit, M. et al.; Stetina Brunda Garred & Brucker, Suite 401, 24221 Calle de la Louisa, Laguna Hills, CA 92653 (US).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 29 October 1998 (29.10.98)</p>	

(54) Title: BI-LEVEL COMPACT DISC STORAGE, RETRIEVAL AND READER SYSTEM



(57) Abstract

A compact disc storage, retrieval and reader system for a computer. The system has an externally accessible disc loading drawer/staging cavity portal (12), an upper disc storage magazine (14) disposed directly above the portal (12) and a lower disc storage magazine (16) disposed directly below the portal (12). A vertically movable disc transport and optics reader assembly (18) is included, and provides an optics mechanism (20), an upper disc loader (22) disposed directly above the optics mechanism (20), and a lower disc loader (24) disposed directly below the optics mechanism (20). The assembly is positioned such that upward vertical movement thereof allows the upper disc loader (22) to accept discs situated in the upper magazine (14) as well as from the disc loading drawer/staging cavity portal (12), while downward vertical movement allows the lower disc loader (24) to accept discs situated in the lower magazine (16).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/02002

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :G11B 17/22
US CL :369/36

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. : 369/36, 34, 38, 192; 360/98.06

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)

APS
search terms: loader, plural, pair, two, vertical

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,001,582 A (NUMASAKI) 19 March 1991, col. 3, lines 4-57.	1-8
Y	US 5,548,567 A (SAWAI et al) 20 August 1996, col. 5, lines 36-49, Figs. 5,8 and 10.	1-8
A	US 4,839,758 A (HONJOH) 13 June 1989, col. 3, lines 1-19, Fig. 1.	1

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

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