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ABSTRACT

This guide to materials on optical disks is designed to aid an individual in pursuing the study of optical disk technology through a review of the literature in the collections of the Library of Congress. A brief explanation of the scope of the topic introduces the references, which are listed in the following categories: (1) introductions to optical disk technology; (2) subject headings; (3) basic texts; (4) additional titles; (5) directories and guides; (6) bibliographies; (7) conference proceedings; (8) reports on the Library of Congress Optical Disk Pilot Project; (9) abstracting and indexing services; (10) journals; (11) selected representative articles; (12) indexes to reports; (13) selected technical reports; (14) selected vertical file materials; and (15) associations that can provide additional information. (CGD)

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## OPTICAL DISK TECHNOLOGY

Brief Guide to Materials in the Library of Congress  
Compiled by Joanna Evans & Constance Carter

TB 87-12

November 1987

**SCOPE:** Optical disks are assuming a significant role in information storage and retrieval in the 1980's. Additionally, they have some potential for the preservation of knowledge for generations to come. From write-once disks and read-only memory to erasable disks, the technology is now being applied more widely in libraries, businesses, and educational institutions. Because optical disk storage systems hold the promise of providing high-density storage inexpensively, managers are investigating this technology as an economical means for storing and preserving records. Optical disk systems permit mass storage of images--both analog and digital--which can be coupled with the organizing and retrieving power of a computer. A single disk, for instance, could contain the text of a publication as massive as the Encyclopaedia Britannica.

This compilation lists sources to aid an individual in pursuing the study of optical disk technology through a review of the literature in the collections of the Library of Congress. Not intended to be a comprehensive bibliography, this Tracer Bullet is designed--as the name of the series implies--to put the reader "on target."

### INTRODUCTIONS TO THE TOPIC

All about optical disks. Datapro 70, v. 2, Apr. 1987: 70D6-001LH-101--70D6--001LH-111. Computer shelf\*

For latest update, see Datapro 70 notebooks in Science Reading Room.

Manns, Basil, and Tamara Swora. Books to bits: digital imaging at the Library of Congress. Journal of information and image management, v. 19, Oct. 1986: 26-32. TR835.J67

Optical videodisk and optical digital storage disk systems. In Handbook of information technology and office systems. Edited by A. E. Cawkell. Amsterdam, New York, North-Holland; sole distributors for the U.S.A. and Canada, Elsevier Science Pub. Co., 1986. p. 126-131. QA76.H2784 1986\*

\*Available in the reference collection, Science Reading Room

7-2052624

SUBJECT HEADINGS used by the Library of Congress, under which books on optical disk technology can be located in most card, book, and online catalogs, include the following:

OPTICAL DISKS (Highly relevant)  
 OPTICAL STORAGE DEVICES (Highly relevant)  
 OPTICAL STORAGE DEVICE INDUSTRY (Highly relevant)  
 VIDEO DISCS (Highly relevant)  
 CD-ROM (Relevant)  
 COMPACT DISCS (Relevant)  
 COMPUTER STORAGE DEVICES (Relevant)  
 LASER RECORDING (Relevant)  
 OPTICAL DATA PROCESSING (Relevant)

BASIC TEXTS

- Barrett, Raymond. Further developments in optical disc technology and applications. Boston Spa, Wetherby, West Yorkshire, British Library; distributed by Publications Section, British Library Lending Division, c1984. 35 p. (Library and information research report, 27) TA1635.B37 1984
- Bouwhuis, G., and others. Principles of optical disc systems. Bristol, Boston, A. Hilger, c1985. 277 p. TK7895.M4P75 1985
- Essential guide to CD-ROM. Edited by Judith Paris Roth. Westport, Conn., Meckler Pub., c1986. 189 p. + ca. 8800 program files on 1 computer laser optical disk (4 3/4 in.)  
TK7895.M4E77 1986 Rare Bk Spec Format  
 System requirements for disk in pocket: RTI series 500 CD-ROM DataDrive.  
 Bibliography: p. 167-173.
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- McQueen, Judy, and Richard W. Boss. Videodisc and optical digital disk technologies and their applications in libraries: 1986 update. Chicago, American Library Association, c1986. 155 p. Z681.3.V53M36 1986
- Saffady, William. Optical disks for data and document storage. Westport, Conn., Meckler Pub., c1986. 94 p. TK7895.M4S243 1986  
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ADDITIONAL TITLES

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- CD ROM markets. Norwalk, Conn., International Resource Development, Inc., c1986. 201 p. (International Resource Development, Inc. Report, 697) HD9696.0673U627 1986
- A Competitive assessment of the United States disk storage industry. Washington, U.S. Dept. of Commerce, International Trade Administration, U.S. Govt. Print. Off., 1985. 55 p. HD9696.C63U514936 1985
- Hendley, A. M. The archival storage potential of microfilm, magnetic media, and optical data discs: a comparison based on a literature review. Conducted by A. M. Hendley on behalf of the British Library BNB Research Fund. Bayfordbury, Hertford, NRCd, Hatfield Polytechnic, 1983. 77 p. (NRCd publication, no. 19) (BNB Research Fund report, no. 10) Z681.3.M53H46 1983
- Optical discs for storage and access in ARL libraries. Washington, Office of Management Studies, Association of Research Libraries, 1987. 111 [i.e. 133] p. (Systems and Procedures Exchange Center. Kit #133) Pamphlet box\*  
 "Kit provides a sample of excerpts from technical and planning documents contributed by several ARL members which are planning to install or have already implemented optical disc technology."
- Optical disk technology and the library. Ottawa, National Library of Canada, 1985. 51, 55 p. (Canadian network papers, no. 9) Z681.3.067068 1985  
 Text in English and French with French text on inverted pages.  
 Contents: Pt. 1. The technology and its applications, by Roddy Duchesne.—Pt. 2. The National Library videodisc demonstration project, by Sabine S. Sonnemann.  
 Title on added t.p.: Technologie du vidéodisque et la bibliothèque.
- Saffady, William. Optical storage technology, 1987: a state of the art review. Westport, Conn., Meckler Pub., 1987. 117 p. Bibliography: p. 85-104. TA1635.S24 1987

#### DIRECTORIES AND GUIDES

- AIIM buying guide: the official registry of information and image management products and services. 1985- Silver Spring, Md., Association for Information and Image Management. HD9999.M47A39  
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- The CD-ROM sourcebook. Linda W. Helgerson, Martin G. Ennis, editors. Falls Church, Va., Diversified Data Resources, Inc., c1986. 1 v. (unpaged) Computer shelf\*  
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- Goldstein, Charles M. Computer-based information storage technologies. In Annual review of information science and technology. v. 19. White Plains, N.Y., Knowledge Industry Publications, Inc., 1984. p. 65-96.  
Z699.A1A65\*
- Kobelski, Pamela G. Optical disk storage technology: a bibliography. Monticello, Ill., Vance Bibliographies, 1983. 12 p. (Public administration series: bibliography, P-1320)  
Z5838.068K62 1983 and Pamphlet box\*
- Park, James R. A bibliography of the literature on optical storage technology. Washington, U.S. Dept. of Commerce, National Bureau of Standards; for sale by the Supt. of Docs., U.S. Govt. Print. Off., 1983. 174 p. (NBS special publication, 500-107)  
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- Swora, Tamara. Optical digital scanning and storage technology: write-once and erasable media. In Library hi tech bibliography. v. 2. Ann Arbor, Mich., Pierian Press, 1987. p. 113-121. (LHT bibliography, no. 13)  
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See particularly "Optical disk and related technologies":  
p. 194-208.

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ACM Guide to Computing Literature (1977-) QA75.5.A75a\*  
See: Optical

Applied Science & Technology Index (1913-) Z7913.I7\*  
See: Erasable Optical Memories  
Optical Storage Devices  
Read Only Optical Memories  
Write Only Optical Memories

Computer & Control Abstracts (Science Abstracts--Series C) (1966-)  
QA76.C548\*  
See: Optical Disc Storage  
Video and Audio Discs

Note: Consult reference librarian for location of abstracting and indexing services in the Science Reading Room.

Computer and Information Systems Abstracts Journal (1962-) QA76.I46\*  
See: Optical Storage

General Science Index (1978-) Z7401.G46\*  
See: Optical Storage Devices  
Image Processing

Magazine Index (1983-) Available on film/ROM reader  
See: CD-Interactive  
CD-ROM  
Optical Disks  
Optical Storage Devices  
Laser Recording  
Video Disks

Microcomputer Index (1980-) QA75.5.M5\*  
See: Optical Disk

Readers' Guide to Periodical Literature (1900-) AI3.R45  
See: CD-ROM (Compact Disc-Read Only Memory)  
Optical Storage Devices

JOURNALS that often contain articles on optical disk technology are

Byte QA76.5.B9  
CD-ROM Review N&CPR  
Datamation T175.M26  
EDN (formerly Electrical Design News) TK1.E266  
Electronics TK7800.E4384  
IEEE Spectrum TK1.I15  
International Journal of Micrographics & Video Technology Z265.I565  
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Optical Data Storage Materials  
Optical Digital Discs  
Optical Disks

Monthly Catalog of United States Government Publications (1895-)  
Z1223.A18\*

See: Headings beginning Optical Data Processing  
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Verhoeven, J. A. Th. Digital optical recording and data integrity. [Eindhoven, Neth., Optical Storage International, 198? 17 p.] Pamphlet box\*

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Bairstow, Jeffrey. CD-ROM mass storage for the mass market. High technology, v. 6, Oct. 1986: 44-51.

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#### ADDITIONAL SOURCES OF INFORMATION

Association for Information and Image Management (AIIM)  
1100 Wayne Avenue  
Silver Spring, Maryland 20910  
Telephone: (301) 587-8202

SPIE--The International Society for Optical Engineering  
(Formerly the Society of Photo-Optical Engineering)  
P.O. Box 10  
Bellingham, Washington 98227-0010  
Telephone: (206) 676-3290