# POLYDOC/COINDOC: A System for Internal Storage, Retrieval, and Dissemination of Information; COINDOC: What Can it do for You and How does it Work? (Supplementary Paper)

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Supplementary Paper

# POLYDOC/COINDOC - A SYSTEM FOR INTERNAL STORAGE, RETRIEVAL AND DISSEMINATION OF INFORMATION

## COINDOC - WHAT CAN IT DO FOR YOU AND HOW DOES IT WORK?

by

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Costly time is wasted in inefficient pursuit of information which is known to exist or that one hopes to find. COINDOC is a tool in the process of indexing storing, retrieving and distributing information from documents, and it can help solve internal information problems. POLYDOC/COINDOC is a system developed by Norwegian Centre for Informatics, NSI, as a pack of modular EDP programs ready for use on your own computer or on a service basis at NSI, Oslo.

The system is used for books, journals, reports, brochures, drawings, patents, photographs and person information, market information, product specifications etc. - in short all printed or written know-how for practical use.

The POLYDOC/COINDOC system is programmed in COBOL and is operative on UNIVAC 1108, IBM 370/155, IBM 360/30, or ICL 1904A computers and can be adapted to almost any EDP system with a COBOL compiler. The COINDOC software can be bought for a fixed price of N.kr. 35.000,- and an annual maintenance fee of N.kr. 7.000,-.

A number of companies are co-operating in solving common problems in the application of the COINDOC system, and experience is exchanged between the licensees, both on documentation problems and in the EDP technical area. Any new licensee can take part in this development and make use of the exchange facility secured in a standard POLYDOC contract.

### Information and indexing

The need for retrieval of information from documents has led to the construction of numerous classification and archive systems. New developments in computer technology have made it possible to store, retrieve and disseminate relevant selected information faster, more securely and efficiently than ever before. Cost effectiveness is the prime aim of the application of the COINDOC system to practical day-to-day documentation and information tasks. No special training is required. Easy-to-use print-outs from the computer, or direct on-line searches on your own data base by means of computer terminals give easy access to the information stored.

The use of co-ordinate indexing is basic to the system and every document is characterised by a number of key-words describing the content of the article. These key-words are related to a computer-generated number and give in short the information content, and the address to the document so that the information can be located quickly and directly. Automatic alphabet or chronologic listing of the key-words gives a "telephone directory" to an individual archive.

COINDOC documentation, identification and document reference

A print-out from the computer of the document reference gives the bibliographic data and other information necessary to the user. These references are chronologically listed according to their document identification number. The content of each reference can be for instance: title of document, author, bibliographic reference such as name of journal, volume, year, page, short abstract, name of archive, and the key-words used for characterising the information content of the document.

Input data

Data, in the COINDOC system, consist of modules of 24 characters (letters, numbers or other typographical signs). Every key-word consists of up to 23 characters and one space, while titles, references and other current text is written in the same modules of 24 characters added together by use of + (permutation control). Document identification can consist of, for instance, serial number, group classification, year and other identification symbols chosen at will.

For input all data are recorded on punched cards with a special lay-out. In order to print out indexes the so called index indicator is added according to the following conventions:

| Index indicator | Index type |
|---|---|
| A | Key word |
| B | Author |
| C | Institution/organisation |
| D | Patent |
| E | Producer/Supplier |
| F | Customer |
| G | Title of document |
| H | Journal/Publication |
| - | - |
| M | Patent concordance |
| N | Patent classification, IPC |
| P | Patent classification, Europe |
| Q | Patent classification, USA |

The list can be extended according to need, and each type of index print-out can have its own heading, as desired.

Indexing and indexing tools

The person using key words for indexing requires certain tools. The indexing sheet is made out according to the users' needs with only few restraints imposed by the COINDOC system. Each user can organise data according to his own need for each separate type of document, and the choice is reflected in the design of the indexing sheet.

A thesaurus can be an important tool for the indexer. One can choose to use a general thesaurus or develop one's own list of key-words as a spin-off from the practical use of the COINDOC system. Thus development of one's own thesaurus is an integral part of the practical use of the system.

Indexes and computer print-outs

In the COINDOC system any number of different types of index print-out can be chosen according to the search requirements. These may be for instance listings or the names of authors, companies, customers, producers or suppliers, report or patent numbers, book titles etc.

COINDOC as a modular system

COINDOC consists of 7 compatible programs, one program for each separate step in the data processing.

Program 1 takes care of the in-put from punched cards or magnetic tape to a data base or mass memory (disk or drum). The in-put data is organised in suitable manner for retrieval with a minimum of computer cost.

Program 2 prepares the print-outs. The key-words are permuted and the data stored on a sort-file.

Program 3 carries out sorting of alphanumeric characters. An organisation's own sort routine can be used if the system is run on the client's own computer.

Program 4 organises the print-out of indexes, printing headings, and arranges the data for output.

Program 5 corrects or eliminates data already stored in the data base. Files can also be arranged automatically.

Programs 6 & 7 are used when data is transferred to magnetic tape or when data is transmitted from magnetic tape to a disk or a drum.

Advanced use of the COINDOC system

The Norwegian Centre for Informatics is currently expanding the facilities of the COINDOC system in the light of developments in computer hardware. Some users are today operating on-line display terminals on their own COINDOC data bases. SDI services are also run on data bases to give selective dissemination of information within particular companies. Further and more specific information on the POLYDOC/COINDOC system can be provided directly from NSI for specific needs.