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1999

ON PATENT INFORMATION ACTIVITIES*

submitted by the

EUROPEAN PATENT OFFICE

An annual series of reports on the patent information activities
of members of the Standing Committee on Information Technologies

*

- The term “patent” covers utility models and SPCs.
- Information related to design patent activities reported by industrial property offices issuing design patents is included in the series of documents SCIT/ATR/ID.



European Patent Office

**Technical Report on
Patent Information Activities in 1999**

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I. EVOLUTION OF PATENT ACTIVITIES

In 1999, the number of European patent applications kept on growing, though the relative increase was not as strong as in the previous year. The EPO recorded 121 750 requests for European patent, 7.4% more than in 1998.

71 510 were made by designating the EPO in international applications, and 50 240 applications were filed directly under the European Patent Convention. Out of the total number of applications filed, 58.8% were made under the PCT (57% in 1998).

As a consequence of the ongoing increase in the number of PCT international applications, the number of applications entering the European phase also increased by 19% to reach 39 120 in 1999. With the European direct applications, the total number of patent applications entering the European patent procedure rose by 8,6% to 89 360 (82 250 in 1998).

This growth in filings is reflected in all but one technical units of the IPC. The number of European applications in the field of Electronics and electric communication techniques (H03, H04) increased by 22% to 9 044 applications. The units Instruments II (G04-G08, 5 657 applications; +17.4%) and Preparation for medical, dental or toilet purposes (A61K, 3 575; +16%) show the largest increases over the previous year. In the units Agriculture (A01, excl. A01N); Health (A61-A63, ex A61K); Transporting I and II (B60-B64, B65-B68), the increase was above 10%.

The unique unit for which fewer applications were filed in 1999, compared to 1998, was the unit Nucleonics (G21, 142 applications, -19%).

In 1999, more than half of the applications in the European patent procedure, were applied for in the leading 10 IPC classes (A61, H04, H01, C07, G01, G06, B60, C12, C08, F16). In these classes taken together, the number of applications increased by 11.9% over the previous year.

II. MATTERS CONCERNING THE GENERATION, REPRODUCTION, DISTRIBUTION AND USE OF PRIMARY AND SECONDARY SOURCES OF PATENT INFORMATION

II. 1. Printing and Publication of Patent Documents

II. 1.1 Patent Applications

In 1999 the EPO has published 79 761 patent applications broken down according to the 31 Technical units of the International Patent Classification (IPC Guide) as shown hereafter :

Title of Unit	Classes	Number
Agriculture	A01, ex. A01N	779
Foodstuffs; Tobacco	A21 - A24	857
Personal or domestic articles	A41 - A47	1,777
Health; Amusement	A61 - A63,	4,656
Preparation for medical, dental, or toilet purposes	A61K	2,797
Separating; Mixing	B01 - B09	2,447
Shaping I	B21 - B23	1,681
Shaping II	B24 - B30, B32	2,539
Printing	B41 - B44	1,519
Transporting I	B60 - B64	4,054
Transporting II	B65 - B68	2,792
Inorganic chemistry	C01 - C05, C30	1,391
Organic chemistry	C07, A01N	4,432
Organic macromolecular compounds	C08	2,654
Dyes; Fuels; Lubricants; Animal or vegetable oils	C09 - C11	2,045
Biochemistry; Microbiology; Sugar; Skins	C12 - C14	2,408
Metallurgy	C21 - C23, C25	1,206
Textiles or flexible materials	D01 - D07	1,097
Paper	D21, B31	586
Building	E01 - E06	2,294
Earth drilling; Mining	E21	358
Engines or pumps	F01 - F04	2,453
Engineering in general	F15 - F17	2,556
Lighting; Heating	F21 - F28	1,699
Weapons; Blasting	F41, F42, C06	334
Instruments I	G01 - G03	6,292
Instruments II	G04 - G08	4,647
Instruments III	G09 - G12	2,166
Nucleonics	G21	127
Electric techniques	H01, H02, H05	7,606
Electronics; Electric communication	H03, H04	7,512
Total		79,761

Since the opening, the EPO published the following number of patent applications (cumulative):

Year	Cumulative number of published patent applications
until end of 1988	296,853
until end of 1989	348,115
until end of 1990	404,449
until end of 1991	462,608
until end of 1992	525,560
until end of 1993	575,920
until end of 1994	630,883
until end of 1995	688,731
until end of 1996	749,760
until end of 1997	813,899
until end of 1998	887,219
until end of 1999	966,980

II. 1.2 Granted Patents

In 1999, the EPO granted 35,358 patents. Since the opening, the EPO has granted the following number of patents (cumulative):

Year	Cumulative number of granted patents
until end of 1988	102,706
until end of 1989	125,264
until end of 1990	150,020
until end of 1991	176,662
until end of 1992	207,071
until end of 1993	243,735
until end of 1994	285,735
until end of 1995	327,344
until end of 1996	367,413
until end of 1997	407,059
until end of 1998	443,777
until end of 1999	479,133

II. 2. Main Types of Announcements in the Field of Patent Information

European Patent Bulletin weekly, with information about published patent applications and granted patents

Official Journal of the EPO monthly, with publication of decisions of Boards of Appeal and announcements of general nature

II. 3. Publication Media

II. 3.1 PUBLICATIONS on CD-ROM

Conversion to MIMOSA

Due to the fact that the PATSOFT-formatted CD-ROM series were not Y2K compliant, all series had to be converted to the MIMOSA format before the first issue in 2000.

The series of the EPO except ESPACE[®] EP-A and EP-B had already been converted in 1998 to mixed-mode format.

ESPACE[®] EP-A and EP-B were converted end of November 1999 with a parallel production until the end of the year. Some users still need images of the single pages of a document in the BACON format. To respond to this need, the EPO has ensured that CD-Rs containing only the BACON images of each publication week are produced by Jouve on order from the customers. For only occasional use of BACON images, a conversion program from PDF to BACON has been developed by Jouve and can be ordered from the EPO.

ESPACE[®] WORLD has been converted to the so-called "hybrid mixed-mode" format (first page in SGML data, document pages as embedded TIFF images). The BACON header information normally included in the BACON image of each page has been included as user-defined field in the TIFF header, thus allowing to easily reconstruct the BACON format.

The CD-ROM series of the national offices are also converted to the "hybrid mixed-mode" format. The first issue of each serie in the year 2000 will be in the new format.

DVD products

ESPACE[®] ACCESS-A and ACCESS-B are regularly produced on DVD with a frequency of about two DVD's per year. The future production will comprise the archive on DVD instead of 5 CD-ROMs and the monthly update on CD-ROM. A weekly update is also available via the Internet.

Due to the amount of data, a combination of ACCESS-A and ACCESS-B on one DVD would need a double-sided or a double-layered disc. Currently this technology is not used very widely, so this product will be postponed.

A test disc for ESPACE[®] WORLD on DVD has been produced and distributed to the users. The decision about entering regular production will depend on the market response as well

as the approval of WIPO. We plan to conduct a corresponding market survey in spring of this year.

As we are rapidly approaching the regular production of 5 weekly CD-ROMs for WORLD, a DVD containing EP-A, EP-B and WORLD on one single weekly DVD has to be re-evaluated with respect to its possible life-time before needing a double-sided or double-layered DVD disc. Also the effects of an encrypted data storage on user-developed software systems have to be checked very carefully. This has delayed that project, but we still plan to have a test disc in summer of this year.

MIMOSA V 4.0 (32bit)

In the fourth quarter of 1999 the new user interface software MIMOSA V 4.0 has been released to the public. The software offers a great number of improvements in handling and features. The requests of the users resulting from their first few months of usage are currently implemented into a version 4.1 which will be available in May 2000. One major point amongst others will be the possibility of printing the PDF documents directly from within MIMOSA.

The 16bit version MIMOSA 3.6 will still be maintained until the end of 2000, but only on a pure bug-fixing base. Any improvements or new functionality will only be implemented in the 32bit version of MIMOSA.

II. 3.2 The EPO homepage

In the past year, the information published on the EPO homepage www.european-patent-office.org was enhanced in its coverage and improved as far as the consultation is concerned.

The functionality includes search possibilities on different parts of the homepage, in particular in the European Patent Convention, the Official Journal of the EPO which is now fully searchable in three languages since January 1998 and the Directory of professional representatives.

All official communications of the President of the EPO as well as the regulations implementing the EPC are also made available on the Internet via the EPO homepage.

In this period of heavy recruitment for the EPO, the EPO homepage is also efficiently used for the publication of vacancy notices for different type of post within the EPO.

A link to the esp@cenet service is available since the official release in October 1998.

II. 3.3 ESP@CENET

The esp@cenet project was launched in 1998 as a simple retrieval system, primarily intended for the public who could benefit from patent information. Its purpose is to make available, over the Internet, the publications related to a patent application, i.e. the published patent application (A-document) in the case of EP publications. Following publications (eg published EP patents) will be retrievable using esp@cenet.

esp@cenet is divided into two different data retrieval systems, or "levels"
esp@cenet Level 1

In level 1 an Internet server is set up for each EPO Member State, containing the recently published national patent applications (in most cases covering the last 24 months). The servers are maintained by the national patent office, and the user interface is translated to the national language(s).

The EPO provides the national countries (except FR) with the publication data on CD ROM's.

A weekly procedure checks whether DOC-DB and BNS, contain new publication data for the participating countries and if so, writes this data on one or more CD ROM's.

The discs are shipped to the national offices where they are uploaded onto the respective servers.

The EPO is administrating the level 1 servers for EP and WO, and currently also for the Netherlands.

esp@cenet Level 2

Level 2 can be seen as an Internet window to the complete EPODOC and BNS collections. Users can put simple queries to EPODOC with the EPOQUE QS search engine, and load the full text and the images of the documents for viewing on their browser.

Participating member states of the EPO

In 1999 esp@cenet servers were set up for Cyprus, Greece, Liechtenstein and the Netherlands, thereby completing the esp@cenet coverage to all member states of the EPO.

Increasing the Data Coverage

Under the cooperation program, some countries have requested approval from the Administrative Council that their servers should be extended to contain publication data going back further than the two years originally provided for.

These requests will be completed during the year(s) to come.

The current data coverage is indicated in the table.

The following requests for data coverage extensions have been received: all CH published patent applications, all AT published patent applications, and NL published patent applications since 1990.

Production for Country	Earliest Publication	Latest Publication	Number of Doc's on Server
AT	199501	199911	7125
BE	199611	199911	2634
CH	199405	200001	6564
CY	199509	199810	266
DE	199802	200002	87465
DK			
EP	199802	200002	155763
ES	199606	199910	5705
FI	199406	199906	18899
FR	199707	200002	39187
GB	199606	200002	43985
GR	199711	199911	649
IE	199606	199712	538
IT	199709	199912	12358
LU	199801	199909	199
MC	199607	199803	56
NL	199405	199910	12227
PT	199606	199911	485
SE	197001	199909	220715
WO	199711	200001	138564
Note: Data from February 2000			753384

Quality Control

During 1999, several tools and procedures for monitoring the status of document loading onto the national servers have been developed. It is now possible to verify the successful loading of extracted documents, and also to estimate the number of missing documents, number of bibliographic entries missing images etc.

Also, a procedure for reloading documents on an "à la carte" basis was developed and has proven very useful in order to make sure the data collections are as complete as possible.

As regards level 2 completeness, this is directly related to the completeness of DOC-DB and BNS.

Y2K compliance

All procedures have been made Y2K compliant in view of the new Y2K data formats. Documentation conducted with the assistance of IS a Y2K business test of its major systems and procedures.

Y2K data and Y2K formats have been tested in a Y2K environment and data propagations throughout the various systems have been validated. Bibliographic and Image Y2K test data as well as data from external contractors have been checked through in the following systems:

- DOC DB
- DOCTOOL
- DCMS
- EPODOC, fulltext in EPOQUE
- BNS
- esp@cenet

Ongoing developments

The second release of esp@cenet in November 1999 impressed by a reworked search environment. Additional search fields provide a direct access to the patent information. In addition, the structure and content of the help pages of esp@cenet have been improved.

These help pages are a good source for basic knowledge about patents and the functioning of esp@cenet.

Public access to the European Patent Classification system (ECLA) will be provided by the ECLA webpages, a set of HTML webpages which present ECLA via esp@cenet. The webpages, updated weekly, also contain basic search and navigation facilities for simple access.

Advanced access to ECLA will be provided by the CLASS-STAT function, which proposes entries into the classification, after a statistical analysis in patent abstracts of provided keywords.

The ECLA system, including CLASS-STAT, is currently being tested and will become available in esp@cenet in the first half of 2000.

The WEB-REG project started in June 1999 to provide free and public access to the register of European Patents via esp@cenet. It will replace the current PIR dial-up connection to Vienna. The register information is contained in the modified EUREG database. Based on experience from a prototype webserver, the esp@cenet webserver was modified to access the EUREG database and to present the Register data similar to the current PIR presentation.

The first public release of the WEB-REG facility is expected in the first half of 2000. A further JAVA development (WEBREG-PRO) will enable the download of Register information of a collection of patent applications. By providing the data in XML format, easy integration with client databases is ensured.

The specifications for the delivery of documents via email from the shopping basket were elaborated and the BPS was adapted to this end.

II. 4. Word Processing and Office Automation

II. 4.1 General Text Processing

The EPO uses WordPerfect 6.1 as a standard text processing software office wide. Examiners working in BEST are equipped with especially formatted versions of WordPerfect allowing efficient drafting of communications with applicants and representatives.

II. 4.2 CAESAR

CAESAR (Computer Assisted Editing of Search- and Annex Reports) is an integrated system working at individual, directorate and office (mainframe) levels. Individual intelligent workstations (PCs) are used by examiners for drawing up and editing search reports. Reports are printed on local, shared printers. Inspection and acceptance of the produced documents and further processing is done at directorate level. At the Office (mainframe) level a link with the EPOQUE system allows data to be imported into CAESAR, saving retyping. Links to other mainframe databases assist in the creation and checking of the report and links to SPDB, the database of search reports, permit the storage of the CAESAR report and other search related documents and data to update the search area documentation.

The system was made available to all search examiners in 1991.

In 1999 the system was further developed and improved in order to adapt to new needs and new formal requirements.

The fact that CAESAR produces now all search related data in "digital" form is of fundamental importance for an automated exchange of these data with other 'clients' like PHOENIX, WIPO, INPI and for the on-line availability of these data.

The high degree of formatting of these data allows, in addition, an automatic extraction of the data for other databases like DOSYS, REFI, SERR-file etc.

III. MATTERS CONCERNING ABSTRACTING, CLASSIFYING, RECLASSIFYING AND INDEXING OF TECHNICAL INFORMATION CONTAINED IN PATENT DOCUMENTS

III. 1. Abstracting, Reviewing, Translating

In the framework of treating European applications, the examiner check abstracts submitted by the applicants on completeness and conciseness. If necessary, abstracts are corrected and improved.

Non-English abstracts of European applications are translated by a contractor into English before adding them to the central documentation databases.

III. 2. Classification

III. 2.1 Classification and Reclassification Activities

A total of 351,000 documents was classified according to the ECLA classification system in 1999, of which one third automatically by means of the computer classification/family system.

A total of 578,000 documents was reclassified according to the internal classification scheme of the EPO (ECLA).

III. 2.2 Classification Systems

For its searches, the EPO is using an internal EPO classification system (ECLA) based on the IPC. The following table gives the distribution of the subdivisions (groups, search files) over the schedules used.

	number of subdivisions
<hr/>	
schedule according to IPC. philosophy (ECLA)	
- complete (backlog reclassified)	87,742
- complete from a certain data (backlog still in another schedule, see below)	35,650
total	123,392
ICO indexing schemes	56,267
<hr/>	
<u>former IIB-NL schedule (IdT)</u>	
- for new documents	0
- backlog	11,213
total	11,213
grand total of used subdivisions	190,872

Proposals to change the internal classification system ECLA are made by the examiners and are checked by documentation experts before they are introduced into the ECLA file. The updates of ECLA are published by monthly bulletins which are sent to 70 internal and external users.

1.356 requests for ECLA revision were received in 1999, containing a total of:

- 2.122 new ECLA groups
- 243 new IPC7 groups
- 6.147 new ICO codes
- 1.157 ECLA group deletions
- 371 IdT group deletions
- 1.445 changes to ECLA titles

In 1999 a procedure was started to transfer documents classified in the IdT system to ECLA. This transfer is only done in the database, i.e. the paper documentation is not moved. The transfer is done in an administrative way, on the basis of correspondence lists made by the search examiners/classifiers.

Parts of the document collection, mainly JP and RU/SU abstracts, are not classified according to the internal classification system ECLA. Searches in these collections are carried out using the International Patent Classification.

III. 3. ICIREPAT Type and Domestic Deep Indexing Systems

The following former ICIREPAT type systems, which can be searched online, were updated:

System	IPC.	Storage medium	File content (12/99)	1999 EPO Indexing
03 AD Converters ¹⁾	H03K 13/00	magnetic disc	11,049	-2
25, 5N Laminates ¹⁾	B32B	"	54,345	414
17 Lubricants ¹⁾	C10M	"	25,372	99
7A, 7B Alloys ²⁾	C22C	"	*	*
13 Telephony ³⁾	H04H, H04Q	"	27,287	211
18 Connectors (closed) ⁴⁾	H01R, H05K (partly)	"	27,515	5

1) ICIREPAT systems with EPO as focal office, system 5N discontinued

2) ICIREPAT systems with GB as focal office

3) EPO internal systems

4) no further activity

7A/7B have been replaced by the database "ALLOYS" which contains records of alloy-compositions, i.e. there can be more than one record per patent document. On 31-12-1999 there were 79.714 records which corresponds to about 66.000 documents.

III. 4. DOCTOOL

The DOCTOOL application (DOCumentation TOOL) allows EPO examiners to add electronically information to the documents in the form of classification symbols, ICO codes, keywords and free text. It helps examiners to keep the results of in-depth analysis of documents they have studied during the search process, and thereby to enhance the contents of the EPODOC database.

The DOCTOOL application was used in 1999 by most examiners in The Hague, Berlin and by the BEST examiners in Munich. The user acceptance is high and the number of allocations assigned to documents via DOCTOOL is increasing steadily.

An overview of the increase in number of data available in EPODOC as a result of an intensive usage of DOCTOOL is given in the following table:

Type of information	Number of documents				
	1995	1996	1997	1998	1999
ICO codes	550,000	750,000	944,000	1,150,000	1,469,543
Keywords	18,000	125,000	213,000	336,000	529,382
Free text	3,000	25,000	36,000	49,000	60,596

The DOCTOOL application (DOCumentation TOOL) is extended with the CLIPON module (CLassify Incoming Patent ONline). CLIPON allows examiners to classify new patent documents on-line. The system was launched in June 1998. Examiners could either use it for the capture of classification data, or continue with the more traditional classification on paper. By the end of 1999, 28 % percent of the incoming patent documents were fully classified using the CLIPON system and 57% partly in CLIPON and partly on paper.

III. 5. Full Text Processing for Search Purposes

III. 5.1. Full Text Loading

When Min-PCT documents are available in full text format, they are loaded in EPOQUE. When no such document is available in a patent family, the representative document is "Optical Character Recognition-converted".

The USPTO, the Swiss Patent Office, the German Patent Office and the EPO supply full text data as a by-product of their publication procedure since the following dates:

CH from 1990
DE from 1987
EP from 1985/1986
US from 1971

In 1999 the following numbers of documents were loaded:

DE : 42.000
EP : 20.000

US : 140.000

Due to a problem in the processing routine for treating CH text, no document has been loaded yet.

III. 5. 2. Scope of the OCR conversion

The EPO launched an OCR call for tender in 1994 .

The contract was signed with the company JOUVE (FR) and the production started at the end of 1995.

The scope of the contract is to convert the description and claims of the following patent documents (1 document per patent family):

- CH, DE, FR, GB, EP and WO documents published as from 1970 until 1995 belonging to ALL technical fields (i.e. all IPCs). This is defined as the backfile.
- FR, GB and WO documents published from 1995. This is defined as the frontfile.
- CH, DE, FR, GB published before 1970 of selected IPC areas. This is called the "Bottom-up Approach".

The EPO is thus building a complete character coded 'PCT minimum documentation' starting from 1970 for all IPC fields and starting from specific cut-off dates (before 1970 down to 1920) for specific fields (IPC sub-classes) defined in the Bottom-up Approach.

Backfile

Nearly all CH, DE, EP, FR, GB, WO documents (1 member per family) from 1970 until 1995 have been converted.

Frontfile on-going

EPO stopped the conversion of WO at the end of 1999 because WIPO's own OCR project will supply EPO with all published WO documents in mixed-mode format for the frontfile from end 1999 on.

Bottom-up Approach

Bottom-up Approach documents (CH, DE, FR, GB) from 1970 down to field specific cut-off dates are currently being converted.

III. 5. 2. 2. Volume already converted

1.5 Mio documents have been converted until now.

About 180.000 docs (two million pages) have been converted in 1999.

III. 5. 2. 3. Quality Control

The QC is based on a standard sampling law. Sampling size and rejection rates are based on the size of the batch of converted pages.

About 26.000 pages have been individually quality checked (the quality of the text has been calculated).

The assurance level is that at least 99% of documents are of good quality (>98 % for text quality).

The OCR procedure also quality checks the BNS in terms of completeness, quality of the images and the indexing of the documents.

Input for the OCR conversion is supplied by bulk extractions from BNS. As a result of the OCR procedure, a list of 30.000 missing document have been identified in BNS as follows:

CH : 0,7%

DE :4,6%

FR :0,7%

GB : 1,8%

The EP and WO data were complete.

Just before presenting the images to the OCR engine, the contractor locates the bad quality images and the indexing errors.

About 2.200 docs out of 1,5 Mio OCRred docs (0.13 %) have scanning or indexing error on at least one page.

These documents sent back by the OCR contractor have to be rescanned, reindexed and sent again to the OCR contractor.

Feedback mechanisms have been implemented in the Document Collection Management System (DCMS) in order to automatically check missing or not converted documents and recirculate them into the OCR production flow.

IV. SEARCH FILE ESTABLISHMENT AND UPKEEP

IV. 1. Storage and File Building

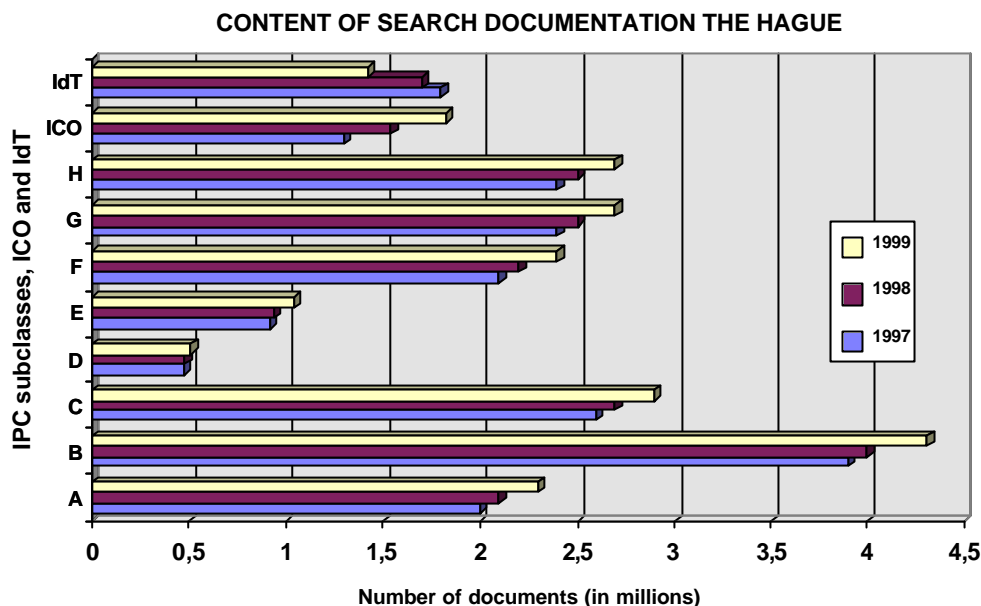
The following table gives 1999 figures about the size of the main documentation management database DOC DB and related files.

File	Service
DOC DB	entry via publication number, application number or priority number; in 1998, a total of 1,280,000 documents have been introduced, bringing the grand total to 36,700,000 records
INVE	inverted DOC DB file with entry via EPO classification symbol
BER FILE	additional filings in Berlin with entry via publication number

IV. 2. Contents of the Search Documentation

The total number of documents present in the search documentation (search files and computer files) amounts to

patent documents	26,967,730
abstracts (JP, SU/RU)	7,071,439
non patent literature	2,851,201
total	36,890,370



IV. 3. Documentation from Other Offices Considered Part of the Search File

The search documentation used of the EPO consists of the following parts:

- PCT minimum documentation according to the Patent Cooperation Treaty, Rule 34
- selected patent documentation of EPC member states not forming part of PCT

DE, FR and GB published before 1920
 NL from 1912
 BE from 1926
 LU from 1946
 SE from 1984
 DE-U from 1985

IV. 4. DATA MANAGEMENT

IV. 4. 1. Management of the patent data (DOC-DB)

DOC-DB is the master file which contains the bibliographic, priority and classification data of patents published by 71 countries in the world.

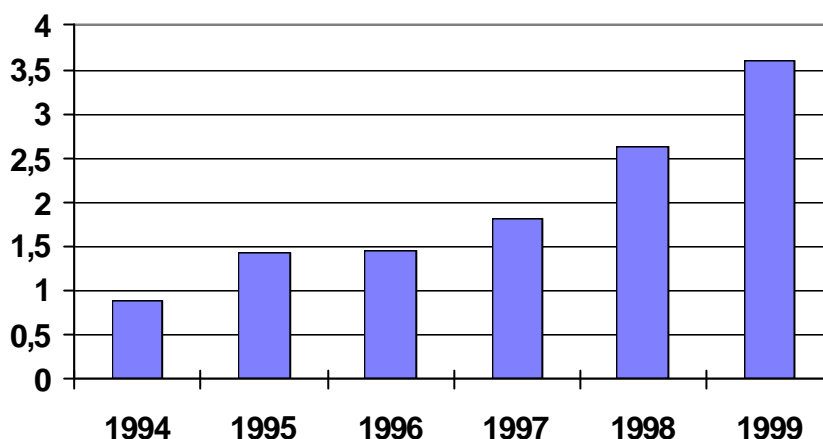
New data are obtained from patent offices on different media, eg magnetic tapes, cartridges, diskettes, or via ftp, and in different formats.

For some countries, the EPO captures the data manually. The new incoming data are checked by computer for validity and plausibility, and when necessary error messages are generated to check the data, or data are rejected and stored for later correction.

After the integration of INPADOC (Vienna) in the EPO, the Office decided to harmonise the INP-FIL database in Vienna with DOC-DB (SINBAD project) which resulted in the addition of many countries in DOC-DB. A first validity check takes place before the loading of data in

DOC-DB, and a second validity check takes place when the data are loaded in DOC-DB. Corrections are also requested by the examiners on an ad-hoc basis. In 1999, 4 million documents, corresponding with 51 million records, have been loaded in DOC-DB which required 736.000 corrections of received priority and classification data.

Total number of corrections in DOC-DB (in millions)



The applicant's names are standardised before the data are loaded in DOC-DB. The file Applicant's Name STANdardization (ANSTAND), which contains the mapping between more than 856.000 variants and 200.000 standardised names has been updated with more than 3.000 names in 1999.

IV. 4. 2. Management of the citation data

References cited in the patent applications by applicants or cited in the search reports or cited from other sources, are key information for the examiners and for the people seeking patent information. It helps them to find quickly prior art or to prepare a more targeted search strategy. The Documentation department is in charge of the check and the corrections of the cited references.

Three different systems are used to collect the reference data:

- SDMS (Search Data Management System)
- REFI (REference File)
- CDOC-EPASYS (Cited DOCuments - European Patent Application SYStem)

In 1999, the citation correction unit treated 56.800 dossiers. 181.300 possible errors were detected which required 28.000 corrections. In addition, the citation correction team captured 10.800 NPL citations data received from the USPTO and the Japanese Office in the framework of the exchange of international search reports.

In 1999, REFI has been completed with 623.000 German patent documents and 120.000 Austrian patent documents which required the loading of 2,4 million patent references and 0,4 million non-patent references.

V. Activities in the field of Automated search systems

The activity within the EPO internal online services has increased further during the year 1999. This year has shown, as in the preceding years, a continuing increase in the use of all the EPOQUE applications.

V. 1. EPOQUE RETRIEVAL and VIEWER - BNS

The *EPOQUE suite of applications* is the cornerstone of the automated prior art search at the EPO. It consists of three major parts:

- a *search and retrieval* tool, with growing emphasis to the user's added value input (DOCTOOL project)
- a *viewer* part providing display and browsing of the full documents for one member per patent family - including the first page abstracts and images - in dual mode with ASCII text and facsimile drawings, in the selection / elimination process,
- the electronic equivalence of the entire numerical collection - providing copies (paper and electronic facsimile) of the complete original documents for in-depth study before citation in the search report.

V. 1.1 EPOQUE RETRIEVAL

EPOQUE is a host service installed on the EPO mainframe computer enabling the search examiners to interrogate a number of databases from their workstations.

In a common environment, with a sophisticated user interface, interactive interrogation is possible of databases from three different sources:

- internal (databases loaded on the EPO mainframe)
- external (databases loaded on external commercial hosts)
- personal (databases created by the examiners themselves)

The aim is to have these three retrieval parts of EPOQUE permanently available for use, with one single way of interrogating them. The user interface that permits this includes the functionalities Internal, External, Personal, Preparation and macros, Download, Function Keys, Language and Data conversion. A simple click with the mouse or combination of keyboard strokes as well as the "drag&drop" possibility will activate whatever option the user wants to select.

V. 1.2 Internal EPOQUE databases

The internal databases can be subdivided in three main families:

- databases produced by the EPO,
 - databases produced by Trilateral partners (JPO and USPTO),
 - databases created from external commercial database producers or editors.
- In the first category, the major database EPODOC contains the bibliographic data of the EPO's patent documentation, currently over 27 Millions documents. EPODOC contains all patent applications with their ECLA classification symbols, abstracts for one member per family, titles, cited references and all added value codes originated by the examiners and uploaded via DOCTOOL.
Other databases like EUREG (European Patent Register), DOSYS (administration of applications in stock), REPA (examiner specialist in a given field) or ECLA (text of the EPO's classification scheme) provide valuable information to the search examiner in his/her daily work. EPOS is one of the databases created by the users. EPOS is a collection of synonyms or related expressions to a certain technical concept and organised per technical field.
- In the second category, produced by Trilateral partners, PAJ (Patents Abstracts of Japan) gives access to the English abstracts of first filed applications in Japan. FTERMS gives - in a restricted number of fields - the F-term classification allocated by the JPO, while FTCLA presents the corresponding classification scheme, fully searchable. In 1998, the FTERMS codes have been included in EPODOC and the stand-alone FTERMS database has been discontinued.
From the USPTO, databases such as UCLA (text of the USPTO's classification scheme) and AKFU (catchword index) are loaded as such, while the incoming US abstracts are included in EPODOC. Full text of US patents is also delivered by the USPTO on a monthly basis and loaded in the TXTUSn full text databases.
- Other full text databases have been developed which are used not only for displaying in the EPOQUE - VIEWER but also for full text searching. TXTEPn contains the full texts of the EP publications (3 different languages) and TXTUSn contains the US publications.

Other TXNnn databases contain data originating either from SGML coded documents for DE and CH documents or from the OCR process of the BACON images, with full texts of FR, GB, DE, WO, CH applications. The collection covers with full text retrieval capabilities at least the documentation published after 1970 for one member per family. In a restricted number of technical fields, OCR techniques will be used to extend the coverage before 1970.

The databases based on data delivered by external producers today are:

- . WPI (World Patent Index produced by DERWENT),
- . INSPEC (INformation Services for Physics, Electronics and Computing produced by IEE The Institute of Electrical Engineers) and
- . TDB (Technical Disclosure Bulletin produced by IBM)
- . FSTA (Food Science and Technology Abstracts produced by IFIS - International Food Information Service)
- . COMPDX (Compendex*Plus produced by Ei - Engineering Information Inc.)
- . XPESP (produced by Elsevier Science Publishers)

They give access to the abstracts of patent - and non-patent literature. TDB is the full text of all articles contained in the Technical Disclosure Bulletin. XPESP contains the full-text articles of 127 Elseviers Journals corresponding to those for which the EPO has a subscription.

As on 31.12.1999, the EPOQUE retrieval service gave access to the following list of in-house databases. The databases which have been introduced in 1998 are followed by '*'.

AKFU	USPTO catchword index
ALLOYS	Alloys, metal compositions
APC	Decisions of the boards of appeal
BERDOC	Berlin documentation
BOCA	Book catalogue
CADOBNS	Correspondence between CA documents and BNS accession numbers
CIS	Complementary Information System/linked indexing codes
CLIENT	Travel information
COMPDX	Compendex*Plus
CONV	EPO conventions and guidelines, PCT, Community Patent Convention
CXCLA	Compendex classification scheme
DOC46	Additional information on the search documentation
DOSYS	Dossier system
ECLA	EPO classification scheme
EPODOC	EPO documentation
EPOS	EPO synonyms
EUREG	EPO register
FLDNAME	Field and index names of all EPO databases
FSTA	Food Science Technology Abstracts
FTCLA	JPO F-terms and text of associated concepts
FTERM	JP applications and associated F-terms
ICLA	INSPEC classification scheme
IDT	Indeling der Techniek - old Dutch IDT classification scheme
INSPEC	INformation Service for Physics Electronics and Computing
IPCn	versions 1-6 of the IPC (n=1, 2, 3, 4, 5, 6 or 7)
KWCLA	DOCTOOL keywords
LEGLIT	DG3 selection of articles of legal publications
MICADO	Minutes of the Administrative Council Meetings

NPL	EPO Non Patent Literature
PAJ	Patents Abstracts of Japan
PEP	Peptides
PHOTO	Photography
PLD	Patent Law Documents
REFEPO	References relating to EP applications prior to their publication
REFI	Published references from search examination and grant procedures
REPA	Search fields distribution
RM03	AD converters
RM13	Telephony
RM17	Lubricants
RM18	Connectors
RM25	Laminates from 1971
RM5N	Laminates up to 1971
RM7A	Ferrous alloys
RM7B	Non ferrous alloys
SADIQ	Quantitative glass compositions
STEAM	Steam generation
TDB	IBM Technical Disclosure Bulletin
TXTCHF	Full text of Swiss French language applications
TXTCHG	Full text of Swiss German language applications
TXTCHI	Full text of Swiss Italian language applications
TXTDE1	Full text of German applications
TXTEP1	Full text of English language EP applications
TXTEPF	Full text of French language EP applications
TXTEPG	Full text of German language EP applications
TXTFR1	Full text of French applications
TXTGB1	Full text of British applications
TXTUS1	Full text of US patents up to 1994
TXTUS2	Full text of US patents from 1995
TXTWO1	Full text of English language WO applications
TXTWOFF	Full text of French language WO applications
TXTWOG	Full text of German language WO applications
UCLA	USPTO classification scheme
WPI	Derwent World Patent Index
WPICLA	Derwent EPI manual code scheme
XPESP	Full text of Elsevier Science Publications

V. 1.3. Development and maintenance of mainframe services

_As most of the world computer related matters, the major topic in 1999 was 2000. The mainframe search engine adaptations necessary to cope with Y2K years had started early 1998. After delivery from the contractors and testing in a specifically dedicated environment simulating dates after the 1st January 2000, the system has been upgraded in August 1999. Similarly and in parallel, the EPOQUE II environment serving texts and images to the Viewer, EPOQUE QS the Quick Search engine used by esp@cenet, and EXTCOM the gateway to the commercial external hosts had been checked and upgraded where appropriate, finalising all EPOQUE Y2K work end of August 1999.

_In the framework of the EPOQUE Net migration under Java which is further described below, EPOQUE new functions are provided for a quick access to various pieces of information necessary for the EPOQUE Net Viewer. In the same context, the external host gateway needs to be adapted to cope with the Internet communication protocol.

_EPOQUE QS, the search engine used by esp@cenet has seen three improvements, allowing query with truncation, producing ECLA statistics after a search in EPODOC and extending its access to the EUREG database in such a way that it can be used by esp@cenet to provide for the public Register access.

_Maintenance including corrections to encountered problems is an ongoing task. Analysis, reproducibility of problems, validation of the corrections and upgrade of the mainframe applications are part of the daily work.

_During 1999, the EPOQUE engine re-engineering study has started. It covers mainly three topics: pushing away the current limits of the search and the databases, adapting the search in order to remove the need for transfers of results and allowing query combinations between fields of different databases (making use of a virtual database) and, thirdly, use the benefit of the first two points to re-organise the mainframe tasks in a more modern logical 3 tier environment.

V. 1.3.3. Development and maintenance of the EPOQUE- BNS tools

The EPOQUE-BNS suite of application was adapted to comply to the Y2K dates and has been installed to the OS/2 workstations early in October 1999.

The whole 1999 has been under the sign of JAVA. The EPOQUE migration to this technology started in 1998 by a study. The first phase has been the design and development of "Proof Of Concept" modules. Detailed specifications have been written with a first goal: build a single unique Viewer.

Since then developments, by both external contractors and EPOQUE team members, are ongoing, while at the same time, the whole 3-tier architecture was designed, tested and tuned, encountered problems were reported and tackled rapidly.

According to the plans, the examiner community will have the primeur of using the EPOQUE Net Viewer in April 2000.

Development and maintenance of the databases

The databases tasks is an ongoing task which permanently checks incoming data and error reports, evaluate the source of the problems and when necessary provide adaptations to the loading and updating software. These programs are thoroughly checked using maquettes and when green light is given, the database can be released to the user community..

The Y2K work was no different except that all databases had to be verified in a short period of time. Two aspects had to be taken into account: the existing data in the databases and the front-file data coming after 1st January 2000 with their Y2K format.

Also in 1999, the NPL database was re-designed based on a new master file incorporating class information and matching information with other NPL databases like, INSPEC, COMPDX, FSTA, TDB and XPESP.

A complete new database has also been built which will in principle be available in Internal in the first quarter of 2000 : BIOSIS. Test data and their description by the provider have been used to write specifications.

V. 1. 4. Usage of the Electronic documentation (Internal on-line services usage)

Number of users

The total increase in number of users for EPOQUE search access for 1999 as compared to 1998 is 15.7 %, with 10.8 % for The Hague, 19,4 % for Munich, 5.2 % for Berlin and 22.3 % for the National Offices.

EPOQUE Retrieval

In 1999, two databases were discontinued : RM7A and RM7B replaced by the ALLOYS database. IPC7 containing the IPC classification scheme -version 7 has been added. From 1998 to 1999, the increase of active online hours is of 41.4 %. (active online hours = number of hours the users have the mainframe search engine calculating).

Apart from a general trend of higher usage each year for all users and the appearance of new users, the increase of connection time is mainly due to the access of the full-text databases and the increasing use of EPOQDOC - 126 112 active search hours for 1999 or 48 % of all search activity is done in EPOQDOC alone. 9.2 % of all search activity is done in the full text databases

EPOQUE - Average number of users per month							
	The Hague	Berlin	Munich	Vienna	National Offices	External Offices	Total
1995	1.017	101	285	15	248		1.666
1996	987	98	388	9	436	8	1.926
1997	1.044	116	592	7	625	15	2.399
1998	1.122	115	772	5	698	13	2.725
1999	1.243	121	922	3	854	10	3.153

EPOQUE Retrieval - Connection time (in hours)							
	The Hague	Berlin	Munich	Vienna	National Offices	External Offices	Total
1995	76.270	6.669	8.233	281	4.552		96.005
1996	84.789	7.918	15.108	107	8.022	315	116.259
1997	105.657	10.551	19.803	71	16.305	444	152.831
1998	126.112	11.740	23.146	51	24.486	270	185.805
1999	177.846	15.731	31.754	16	37.055	257	262.659



EPOQUE and BNS display of documents

Still a large number of records are displayed using the search engine services. In 1999, 57 millions records have been displayed either in Internal or using the standard functions like FAMI or ECLA representing an increase of 33.5 %. However, the main display takes place in the EPOQUE and BNS Viewers.

The total number of displayed documents in the EPOQUE Viewer was over 68.8 Millions documents, an increase of 57.5 % compared with 1998. Globally, 111 documents per user, per working day, have been viewed. For the Hague examiners only, this number is 185 documents per user, per working days.

V. 1. 5. External Databases Usage DG1 The Hague

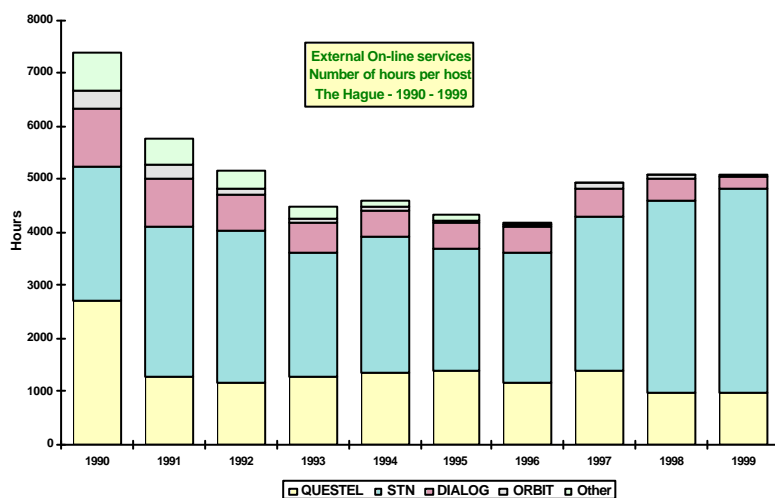
Hosts and Databases

In 1999, the use of the external databases has been limited to mainly 3 commercial hosts, DIALOG Corporation, QUESTEL.ORBIT, STN.

Usage and costs

In 1999, the total number of hours spent on the external commercial hosts reached 5.086 hours, a stable figure compared to 1998 (only 0.2% increase). Overall costs for The Hague have grown by 2%.

The number of dossiers searched on these hosts has decreased and while the previous five years had shown a constant ratio of 14% of dossiers searched online, the ratio for 1999 is 12%.



(“Other” also includes the usage of ESA in previous years.)

V. 2. Administrative Management Systems

V. 2.1 EPASYS/PIPS

Overview

EPASYS and PIPS are the central systems for the automation of the European and the PCT patent applications and demands (PCT chapter I: ISA; PCT chapter II: IPEA). These systems have been developed as independent systems: EPASYS in 1976 and PIPS in 1991. They manage all data and procedural steps through the whole life cycle of a patent application.

The following table gives an overview about the quantities which are handled by both systems:

	EPASYS	PIPS
Number of applications/demands stored	1,300,000	173,000
Growth per year	70,000	20,000

Revised Plans

After almost 20 years the EPO has decided originally to rewrite both systems between 1996 and 1999 in an integrated fashion to

- assure continuity of the systems and improve services, the current ones being close to the end of its life cycle.
- provide a greater service coverage for EP and PCT cases and post grant renewals (anticipating on possible Community Patents)
- better ability to support other system (e.g. the system for storage of dossiers - PHOENIX)

Next to this functional requirements it has been decided to reconsider also the technical platforms. In this respect, following an in depth study, it has been decided to rewrite the systems with the Data Base Management System DB/2 in CICS/COBOL and to follow a client/server architecture.

Recently the scope of the project has been considerable extended:

The project EPASYS/R has to

- provide full support for the e-commerce project epoline
- provide a full integration on the desk top level with the electronic dossier project PHOENIX
- link to an independent project for storing the EPO client data (Client Data Services - CDS)

- provide platform independency for client/server applications (JAVA instead of C++). The extension in scope has led to a change of plan. The target date for the EPASYS/R project is set by end 2001. The integration of PIPS into the new system will be handled thereafter in an independent project.

Status

- 1998 EPASYS/R delivered the first component: POST GRANT (Management and Administration of the Post Grant Fees which the EPO receives from its Member States).
- 1999 Completion of the heavy maintenance for the Y2000 compatibility
- 2000 4. Quarter: delivery of the second component Term & Fee Control. Term & Fee Control is the core process of EPASYS.

V. 2.2 PIR (Patent Information Register)

There have been no changes to the Patent Information Register in 1999, pending the transfer to a Web-Register via EPOLINE. All data duplication activities and tests with the EPOLINE access were "invisible" to the register users.

In 2000, some users will be involved in testing, and subsequent introduction can be expected.

V. 2.3 DATIMTEX (Data Image and Text)

The system DATIMTEX processes, stores and delivers the content of all EP applications and specifications which are ready for A or B document publication (the bulk of data capture and all printing is carried out by external contractors). Weekly batches of information are produced containing the bibliographic data, the abstracts, descriptions, claims, drawings and search reports and any images of these documents. As from 1991 all EP and Euro-PCT documents have been fully electronically published on the basis of WIPO standard ST.32 (SGML Standard Generalised Markup Language) together with WIPO standard ST.33 for image data. From 1987 to 1991 only the text data was captured.

The SGML text databases contain at present 1 million documents which represents 42 GB of data. Image data is at present held on tape cartridges but, for data from 1991 onwards, these can be 'merged' with the text data in order to create true 'mixed-mode' data which allows, for example, the creation of MIMOSA CD-ROMs.

The text and image data are further substantially used in search and examination (e.g. CASEX), the creation of internal databases (e.g. EPOQUE), external commercial databases, and the production of other publication media (e.g. CD-ROMs: ESPACE, MIMOSA). The bibliographic data is also used for the production of the EP Bulletin and as input to the "Common Software" (Spirit Version 2) which allows other patent offices to create their own databases of patent information. In addition, it is hoped to transfer more and more of this data online to exchange partners - starting with bibliographic data in SGML format.

The process of electronic publication, which was started already in 1977, made a major step forward with the implementation of ST.32 (SGML) in 1985 as the coding language for electronic documents. This approach has been further consolidated over the years and

allows, if required, the implementation of future processing methodologies (such as that used in Internet/Intranet systems) and easier online data transfer.

V. 2.4 SDMS (Search Data Management System)

The Search Data Management system validates, stores and distributes the electronic data of Search Reports. All ongoing sub-projects are in some way related to these mentioned functions:

- validation
automated validation or computer-supported user validation regarding the correctness and completeness of data of search reports that are the basis for the proper functioning of many other systems
- storage
storage in the Search Process Database (SPDB) of the electronic data of search reports and cited references of all stages of the patent granting as input for the distribution function
- distribution
 - (1) to the delivering systems like CAESAR and CASEX for which SDMS serves as a main-frame backup
 - (2) to the requiring systems like EPOQUE, EPASYS, ADMPMI, ELPAC (publication)
 - (3) to third parties like WIPO, INPI, other Patent Offices (US and JP), the applicants, commercial database provider

V. 3. EASY Project

Development of a prototype of an on-line filing module

During 1999 the EP-EASY software has been integrated into the developments of EPO's e-business initiative *epoline*[®]. As a first step a prototype of an on-line filing module (called SET-EASY) which can be used to transfer the electronic file (application form including attached specification) from the applicant/representative to the patent office, has been developed. In collaboration with the European Patent Institute (EPI) a limited test has been conducted during 1999 by 5-10 applicants/representatives with this on-line filing prototype.

Integration of EASY in the *epoline*[®] development

As a next step in this integration process, and based on the experience gained with the SET-EASY prototype, the on-line filing module of *epoline*[®] (OLF) has been developed. The process of online filing over the Internet is divided into the following steps:

1. Completion of bibliographic data using EP-EASY.
2. Attachment of already existing electronic files (made with a word processor or scanned) containing technical specifications.
3. Submission and filing of application from EASY (encryption and online dispatch) - the required filing format is PDF.
4. During the online session, application is digitally signed and encrypted then sent to receiving office.
5. Finally, an electronic receipt is returned to the sender.

The on-line filing system will be carefully tested internally and externally prior to the operational release which is scheduled for the second half of 2000.

Development of other modules of EASY

During 1999, the EPO has further supported the development of other modules of EASY including:

EPO	EP-EASY	Entry in regional phase(F1200)
WIPO	PCT-EASY	Application form (RO101)
	PCT-EASY	Demand form (RO401)
INPI	FR-EASY	Application form
PRH	FI-EASY	Application form
IGE	CH-EASY	Trademark application form

V. 4. STRAND Project

The STRAND search facility is currently used by around 140 examiners from EPO-DG1, EPO-DG2 and including some from EPC member states. In order to be able to cope with the ongoing growth in number of users, number of searches and sequences within the database, the STRAND DEC4100 server, which allows multi-processors, has been updated with additional CPU's.

On 1-12-99 the STRAND sequence databases comprised more than 6,500,000 sequences, from which more than 400,000 have been submitted with patent applications at the EPO, corresponding to a doubling compared to 1998.

V. 5. PHOENIX Project

The system called "PHOENIX" was developed to completely remove all paper files and replace them with electronic versions containing all data normally found in or on the paper folders and containing electronic images of the documents themselves. The system manages all incoming documents, sends messages automatically to the relevant users and allows the users to view documents, update different databases and issue letters.

PHOENIX allows users anywhere in the organization to inspect any file at any time. Hence, files cannot be misplaced, files do not need to be taken out of circulation (e.g. for file inspection) and users in two different locations can work on the same file.

However, PHOENIX does not automate the business itself. This is still done by skilled people. What PHOENIX does is make the power of modern computers available to get things done with increased efficiency. This is made possible because the Office no longer has to create 100.000 new paper files every year which have to be managed, stored, moved about and, finally, kept securely for the next 25 years.

V. 6. EPOLINE Project

What is *epoline*®?

epoline[®] aims to improve both the efficiency of the European Patent Office (EPO) and its service to the intellectual property community by providing a secure and integrated environment for electronic communication between the EPO and the applicants, their representatives and the national patent offices of the European Patent Convention (EPC) contracting states. The five priorities for the initial development under *epoline*[®] are:

- Online Filing
- Online File Inspection
- Search Report Dispatch
- Fee Payment and Management of Deposit Account
- Electronic Exchange of Priority Documents

Benefits of *epoline*[®]

For the applicants, their representatives and the interested public at large, *epoline*[®] will provide several benefits:

- instant feedback and confirmation
- quicker delivery of search and examination results
- immediate access to status information, from anywhere at any time
- reduction in clerical work
- reduction in paper handling costs (e.g. postage, archiving, etc)
- public visibility of the patenting process
- transparency of the procedure

epoline[®] is a single point of contact for various electronic systems that support the Patent Granting Procedure. These systems will be implemented in phases with more and improved products and services being added as they become available.

VI. ADMINISTRATION OF THE INDUSTRIAL PROPERTY OFFICE LIBRARY AND SERVICES

A complete list of all products, publications, data and services available at the EPO can be obtained from the information desks at one of the EPO sites (The Hague, Munich, Berlin, Vienna).

VII. MATTERS CONCERNING MUTUAL EXCHANGE OF PATENT DOCUMENTATION AND INFORMATION

VII. 1. International Cooperation in the Exchange of Bibliographic Information

All bibliographic data from the newly published documents are exchanged with the National Offices of the EPO Member States on a regular basis.

VII. 2. Medium Allowed for Filing Applications

All applications must be filed in paper form (however, see also V.3 "EASY Project").

VIII. DEVELOPMENT COOPERATION ACTIVITIES OF THE EPO

VIII. 1. Introduction

The Directorate for International Technical Cooperation of the European Patent Office carries out projects to help developing and transition countries to improve local standards of patent protection. It seeks furthermore to build up and modernise their industrial property systems with, in particular, the view of compliance with the TRIPS requirements. The aim of this cooperation with the countries of central Europe, Asia, Latin America, Africa and the Arab world is to encourage investment and the transfer of technology in countries where economic and trade relations with the European Union and other European countries are significant. It focuses in particular on training, expert advice and assistance in automation and documentation. The Directorate for International Technical Cooperation also carries out projects in the framework of EC cooperation projects.

VIII. 2. Training: International Academy and CEIPI

In 1999, 26 training courses were organised involving approx. 360 trainees. Some of these training courses have been organised jointly with WIPO and member states of the EPO.

Under a "Euro-CEIPI" agreement with the EPO, approx. 400 prospective patent attorneys took part in courses held in various cities throughout the EPC contracting states.

VIII. 3. Automation

Since 1995, the EPO has developed the "Common Software", a software specially designed for the management of the patent and trademark procedures of industrial property offices; the Common Software is jointly owned by the European Union and the European Patent Office.

In 1999, the Common Software has been installed in the Eurasian Patent Office and in the Finnish Patent Office.



The Greek Patent Office has started a similar project based on the Common Software and which will be carried out on-site.

A new project, POLITE, was started in 1999. Its objective is to propose to small offices technical solutions for administration of procedures. A pilot project has been launched in ARIPO; this project will be carried out in cooperation with WIPO and with the member states of the EPO.

VIII. 4. Projects in central and eastern Europe: RIPP 3

Seminars for more than 500 IP professionals from eastern Europe have been organized this year using funds from RIPP (PHARE, funded) and EPO, as well as language courses for staff of 6 national offices. A further ten issues of PRECES CD-ROMs (CD-ROMs containing patent applications of Central and Eastern European countries) and two issues of ACCESS-PRECES were produced. The PRECES production/retrieval software was converted to Mimosa and two new agreements of cooperation were signed in October. TRACES, the trademark CD-ROM, was relaunched with a new production software. Books on industrial property were delivered to 10 RIPP countries in the summer and videos and brochures on industrial property were produced for selected countries in the national language.

In October the 14th RIPP Coordination Meeting was held in Sinaia in Romania.

VIII. 5. Cooperation with the CIS states: ICON

Under the ICON programme, the EPO organised several seminars in particular on management and financial issues for senior management of CIS PTOs in Almaty.

In May, the EPO received a high-level delegation from ROSPATENT which included the Director-General, Alexander Kortchaguine. The delegation received presentations on many aspects of the European patent grant procedure, administration and automation issues, both in Munich and in The Hague, and had the opportunity to discuss various aspects of mutual co-operation with the President.

The EPO participated, in an observer capacity, at the annual Administrative Council meeting of the Eurasian Patent Office held in Cholpon Ata, Kirgizstan.

VIII. 6. Technical cooperation with China

Under the European Union - China Intellectual Property Rights Cooperation Programme, the EPO established Programme Management Office in Beijing, submitted to the Programme Steering Board the first annual work plan outlining the tasks for an estimated expenditure of 1,3 mio EURO.

Bilateral cooperation with the State Intellectual Property Office of the People's Republic of China aimed at supporting the undergoing patent law revision process, the training of examination staff and the automation of the patent grant procedure. Following the successful transfer of the EPOQUE technology to SIPO, cooperation focused on supporting SIPO in keeping its systems compatible with those at EPO.

At the invitation of the State Intellectual Property Office of China, the EPO-SIPO Joint Committee held its tenth meeting in Beijing on 18 November 1999. The heads of Offices signed the "Agreed Minutes of the 10th Joint Committee Discussion on the Technical Cooperation Plan of the Year 2000".

VIII. 7. Other cooperation projects in Asia

Within its bilateral co-operation with Asia, the EPO assisted some of the ASEAN patent offices (Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) with the improvement of their patent granting system. New bilateral co-operation plans for 2000-2001 were agreed in 1999 to further assist in this strengthening of the patent system in these countries. The EPO has found a strong partner in the Office for the Harmonization in the Internal Market (Trade Marks and Designs) in implementing projects. In the case of the EC-Vietnam project, an Intellectual Property programme funded by the European Commission, this partnership proved very successful. The same constellation is foreseen for the implementation of other EC-funded projects such as the EC-India and EC-South East Asia project of the European Commission.

VIII. 8. EPO activities in Africa, Arab countries and Latin America

In 1999 the EPO's technical cooperation activities with Africa, Arab countries and Latin America consisted, on the one hand, of activities carried out with WIPO and, on the other hand, of activities carried out under bilateral programmes. All activities have been co-ordinated with the EPO's member states and, where indicated, actions were carried out jointly.

The highlights of the programmes were: in Africa, the organisation, jointly with the UK Patent Office and ARIPO, of a regional conference in Zimbabwe and in Latin America, the organisation of a regional PCT seminar, together with WIPO, the Spanish Patent Office and the Uruguayan authorities.

Under the bilateral programme with Mexico, particular attention was paid to cooperation in examination, in specific fields of technology and in CD-ROM publications.

EC-funded projects are expected to start shortly for Argentina and Chile, to be implemented jointly by the EPO and OHIM.