

# WIPO



SCIT/ATR/PI/1999/DE

**E**

**WORLD INTELLECTUAL PROPERTY ORGANIZATION**

GENEVA

**STANDING COMMITTEE ON INFORMATION TECHNOLOGIES**

**ANNUAL TECHNICAL REPORT**

**1999**

**ON PATENT INFORMATION ACTIVITIES\***

submitted by

**GERMANY**

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.

## **I. Evolution of patent activities**

In 1999, 94 067 patent applications were registered at the German Patent and Trade Mark Office. 58 363 of these were filed directly with the GPTO and 35 704 as international applications under the Patent Co-operation Treaty (PCT). 2 920 international applications entered the national phase at the GPTO. This marks the continuation of the clearly positive development of the number of applications, observable in the past few years (see the GPTO's "Annual Report 1999").

This applies also to applications from Germany. The fact that 51 105 domestic applications were filed in 1999, i.e. 3 472 more applications than in the previous year, has proved that the German patent system is highly valued by the national industry. After all, patent applicants in Germany filed 200 applications per working day in 1999, and altogether 62 applications per 100 000 inhabitants.

## **II. Matters concerning the generation, reproduction, distribution and use of primary and secondary sources of patent information**

### **II.1. Publishing, printing, copying**

The following numbers of documents were published in 1999:

39 665 Offenlegungsschriften  
(Unexamined patent applications, A1)

15 580 Patentschriften  
(Patent specifications, C1, C2, C3, C4)

19 571 Gebrauchsmuster  
(Utility models, U1)

27 427 Translations of European patent specifications (T2, T3, T4).  
These documents are available in paper form on request. Since January 1995 the German translations of European patent specifications (T2) have been published weekly on CD-ROM.

- 436 Translations of claims of European applications (DE/EP-T1)
- 764 Translations if international applications (DE/WO-T1)
- 29 Patent specifications relating to applications filed before October 3, 1990 with the former DD-Office (first and second publications). For these documents the range of publication numbers of the former DD-Office is continued. The number is preceded by the letters "DD" in the sense of a distinctive feature.

## **II.2. Main types of announcements of the Office in the field of patent information**

### **a) Patent Gazette ("Patentblatt")**

On the basis of the German Patent Law, the GPTO announces the following in the Patent Gazette:

- First publications of patent applications
- Granted patents
- Registered utility models
- EP patent applications designated for Germany
- German translations of claims of EP patent applications
- Granted EP patents designated for Germany
- PCT applications published in German language
- German translations of PCT applications published by the GPTO
- Applications, grants and rejected applications of supplementary protection certificates (SPCs)
- Publications based on patent applications filed with the patent office of the former German Democratic Republic
- Topographies of microelectronic semiconductor devices
- Weekly published register of names of applicants and patentees

Apart from that, all major changes of the legal status and all major procedural steps of national patent and utility model applications, EP patent applications and granted EP patents which take effect in Germany are published in the Patent Gazette. In addition to the "Patentblatt" editions on paper- and CD-ROM, the private company "Bundesdruckerei GmbH" offers the Patent Gazette on the Internet on a commercial basis.

## **b) Patent Register ("Patentrolle")**

Bibliographic data, changes of the legal status and information about procedural steps of national patent applications, national and EP patents, SPCs and utility models are available in the Patent Register on the basis of both the Patent and the Utility Model Law. Certain data of EP patent applications with DE as a designated state and of WO patent applications with DE as a designated state and published in the German language are contained in the Register, too. The Patent Register is an externally accessible electronic database. (See also paragraph III.5.)

## **c) Patent and utility model documents**

On the basis of the Patent Law, the GPTO publishes the kinds of patent documents described in paragraph II.1. above.

## **d) The German patent database PATDPA**

Bibliographic data, abstracts, main claims and main drawings of German patent documents and bibliographic data, main claims and main drawings of German utility model documents are available to the public in the PATDPA database, which is produced by the GPTO and hosted by STN International. With a short delay after the entry in the Patent Register, also legal status data and certain procedural steps are contained in PATDPA. (For details see paragraph III.5.)

## **II.3. Mass storage media used (paper, microforms, optical storage)**

### **a) Conventional carriers**

Customers may subscribe to DE patent documents in the form of paper. The production of aperture cards has been terminated in 1998.

By continuing the practice of the Patent Office of the former German Democratic Republic, DD documents are submitted also on microfiche to former subscribers and exchange partners.

### **b) Current CD-ROM publication practice**

The publication of the German CD-ROM series DEPAROM as commercial products was continued. This CD-ROM series was developed in co-operation with Bundesdruckerei GmbH in 1994 and continued the publication of the earlier product ESPACE-DE, which was first issued in July 1991.

The retrieval software for DEPAROM is permanently being improved, suggestions by the customers are being taken into account. Two points of utmost importance, the development of a 32bit software and final solutions for the problems caused by the change to Year 2000, have been successfully implemented.

At present, the DEPAROM series consists of the following CD-ROM products (all except DEPAROM-CLASS are commercially distributed by Bundesdruckerei GmbH for the purpose of exchange and commercial use):

- **DEPAROM-ACT** Facsimile CD-ROM containing first publications and patent specifications (A and C documents) of the GPTO as well as the claims of European patent applications in German translation and international applications in German translation (T1); published weekly; starting with the 13th publication week of 1996, the CD-ROM also includes the full texts of first publications and patent specifications in character coded form.
- **DEPAROM-U** Facsimile CD-ROM with utility models (U1) of the GPTO; published every three weeks.
- **DEPAROM-T2** Facsimile CD-ROM with the German translations of European patent specifications (T2-T4); published weekly; the CD-ROM also includes the full text in searchable form.
- **DEPAROM-CLASS** Facsimile CD-ROM containing all patent and utility model publications with effect in Germany (DE, EP, WO), as well as all first publications of WIPO, EPO and GPTO (A1, A2, C1, T1 and U1 documents); divided into 46 sub-editions based on the units of the International Patent Classification; published at irregular intervals depending on the volume of new information, updates at least every five months.
- **DEPAROM-KOMPAKT** Index CD-ROM containing published unexamined applications (A1), patent specifications (C1-C4) and utility models (U1) of the GPTO as well as claims of European patent applications in German translation (T1), international applications in German translation (T1) and translations of European patent specifications designated for Germany (T2-T4); comprises bibliographic data and abstracts (as far as available) in searchable form; published every two months; starting with the 27th publication week in 1994.
- **DEPAROM-PROFIL** Facsimile CD-ROM containing bibliographic data and complete patent documents, tailored to the customer's specific profile (IPC symbols); published at customer-specified intervals. DEPAROM-PROFIL CD-ROMs may contain DE, EP and WO documents according to the demands of the customers.

A uniform user interface is provided for all the CD-ROMs of the series.

### **III. Matters concerning abstracting, classifying, reclassifying and indexing of technical information contained in patent documents**

#### **III.1. Abstracting, reviewing, translating**

Patent applicants have to provide an abstract drafted according to national rules similar to WIPO Standard ST.12/A. This abstract is subject to the examination as to formalities. The abstracts are published on first publications (DE-A1 and DE-C1 documents). If no abstract was submitted by the applicant, the main claim (together with a drawing) will be published on the first page of the first publication of granted patent. Title pages of second publications contain main claims instead of abstracts. In the Patent Register the abstracts are displayed. In the database PATDPA they are searchable and displayable.

German patent documents are reviewed by Derwent Publications Limited (London). These abstracts are available through the Derwent World Patent Index databases.

The GPTO publishes, as patent documents, German translations of PCT applications filed in languages other than German after having entered the national phase (DE-T1).

On request of the applicants, the GPTO publishes as patent documents German translations, provided by the applicants, of the claims of EP patent applications filed in English or French (DE/EP-T1).

Translations of granted EP patents originally published in English or French must be provided by the holders before the patents take effect in Germany. These translations are published by the GPTO as patent documents (DE-T2, T3, T4).

#### **III.2. Classification and reclassification activities**

About 120 000 patent and utility model applications have been classified according to IPC<sup>6</sup> at the German Patent and Trade Mark Office in 1999. For the search file, the classification of about 934 000 German and foreign newly published documents or abstracts have been checked by the examiners and, if necessary, completed with classification symbols relating to the internal subdivisions of the GPTO, which are further subdivisions of the IPC. At the end of 1999 the number of the internal subdivisions was about 42 000. In December 1999 the new patents (to be printed in 2000) have been classified according to IPC<sup>7</sup>.

The reclassification of the documents affected by the IPC<sup>6</sup> revision was also continued in 1999.

About 18 500 documents in total were reclassified, about 7 630 of these belong to IPC<sup>6</sup>, about 4 350 to IPC<sup>5</sup>, about 4 990 to IPC<sup>4</sup> and about 1 580 to IPC<sup>3</sup>. An additional number of documents, which were originally classified according to the previous editions of the IPC, cannot yet be reclassified because there are not accessible on paper but stored on rollfilm.

The GPTO is continuously participating in the revision activities of the IPC.

### **III.3. Co-ordinate indexing**

The mechanized search systems of the ICIREPAT type are operational as reported in previous years. The four databases for Cosmetics, Detergents, Glass Compositions and Metallic Materials contained, at the end of 1999, a total of about 140 000 material compositions from more than 115 000 patent documents. They were accessible to each examiner within a self-guided search mode and used for about 1 100 searches in 1999.

### **III.4. Hybrid system indexing**

For all German patent applications, the use of Hybrid Classification is obligatory, i.e. classification symbols in association with indexing codes are allotted to the DE documents. The indexing codes allotted are contained and searchable in the online database PATDPA.

Indexing codes have been assigned to about 5% of the patent applications published in 1999.

### **III.5. Bibliographic data and full-text processing for search purposes**

The German Patent and Trade Mark Office is the producer of three different databases available to the public:

- a ) PATDPA
- b ) PATDD
- c ) German Industrial Property Register (called DPINFO)

The databases a ) and b ) are distributed by the host STN (Scientific and Technical Information Network); the database c ) is supplied by the GPTO.

PATDPA, available to the public since June 1986, has been reloaded on February 1, 1999. It now contains the bibliographic data of all kinds of patent documents and utility models published by the GPTO since 1968, as well as all kinds of patent documents published by the EPO and WIPO since 1978 and designated for Germany. The German serial numbers for granted European patents as well as the German translations of the European patent specifications are included since June 1992.

The records of PATDPA contain the application and publication data along with legal status information, updated by any information published in the German Patent Gazette as well as in the European Bulletin and in the PCT Gazette. The abstracts of DE patent documents are included since 1981, the patent drawings of the first page since 1983 (originally contained in the separate database PATGRAPH), and the main claims of the German translations of European Patents since June 1992 and of granted DE patents since January 1996, abstracts and main claims of European patents as well as abstracts of WIPO publications in German language, all since July 1998. The supplementary protection certificates (SPC) are included since July 1998.



Originally PATDPA included only citations of patent and non-patent literature published on a printed patent publication. Now it is continuously recording all citations ascertained during the entire procedure including opposition procedure since September 8, 1994. The language of the database is German.

By the end of 1999, PATDPA contained 3 420 000 records (2 922 000 patents and 498 000 utility models); 359 000 of the records include graphical information.

The database PATDD, introduced in June 1992, covers the patent publications based on applications which have been filed with the Patent Office of the former German Democratic Republic (GDR). It contains the bibliographic data, titles, abstracts and intellectually allotted catchwords of patent documents published by the former GDR Patent Office from 1981 until October 2, 1990 and published by the German Patent and Trade Mark Office since October 3, 1990. PATDD consists of 123 287 records.

The German Industrial Property Register (DPINFO) is externally accessible via the public package switching network of Deutsche Telekom (DATEX-P).

DPINFO comprises the following subfiles:

- a.) The Patent and Utility Model Register, Protection certificates
- b.) The Patent Register for DD-Applications and Patents
- c.) The Industrial Designs Register
- d.) The Trade Mark Register:
  - File MNA (registered national trade marks)
  - File MZU (rejected national trade marks)

The German Patent and Utility Model Register comprises the bibliographic data and legal status of patent and utility model applications filed with the German Patent and Trade Mark Office and published since 1981 as well as the bibliographic data and legal status of the European patents designated for Germany and granted since 1981. The Register includes as well the PCT applications published in German language and designated for Germany since 1981. Abstracts and citations of patent and non-patent literature of the patent applications filed with the GPTO and the declaration of the willingness of the patent applicant to grant licenses are included. The search is limited to publication number, publication date, symbols of the IPC, kind of document and declaration of the willingness for granting licenses. Since July 28, 1995, queries for file numbers of supplementary protection certificates (SPCs) for medicinal products are possible. In addition, the search for file numbers of protection certificates for plant protection products has been provided since June 23, 1997. The register contains about 2.6 million records accessible to the public.

The Register for DD-Applications and Patents comprises about 134 500 applications and patents filed with the Patent Office of the former German Democratic Republic (GDR) since January 1, 1980, as well as patents in force on January 1, 1991 and based on applications filed before January 1, 1980 with the Patent Office of the former GDR. The register includes bibliographic data as well as abstracts of applications published for the first time since January 1, 1981. In addition the query for the file number of SPCs has been available since April 1998.

The German Industrial Designs Register (see also Annual Technical Report on Industrial Design Activities of the GPTO, 1999) comprises 73.506 industrial design registrations covering 740.853 different design models based on applications filed since July 1, 1988, the date on which the new German Designs Law entered into force. The register allows a search for registration numbers and displays the bibliographic data including title and class. Figurative elements are not stored in the electronic register and consequently may not be displayed online. (Figurative elements are represented in the official German Industrial Design Gazette). Since the introduction of version III of the DPINFO information system on August 10, 1995, it has been possible to search in the Industrial Designs Register for names of applicants and applicants' numbers. Former and actual names of applicants and representatives have been indicated since 1998. Furthermore the obtained list of applicants now includes a sign indicating common applicants.

The German Trade Mark Register: (see also Annual Technical Report on Trademark Activities of the GPTO, 1999)

- File MNA - National Trade Marks Registered:

Since the introduction of version III of the DPINFO information system, it is also possible to access national registered trade marks. The new German Trade Mark Law has already been taken into account here. Queries for file numbers or for the texts of trade marks are possible as well as for other search criteria such as classes of goods or dates. The register contains 626.322 national registered trade marks. Since September 4, 1997, a full display of all information relating to a trade mark has been available, including all collateral procedures (oppositions, divisions, etc.). Since July 01, 1998 filed trade marks are displayed as well. The system contained 72.430 filed trade marks in the end of 1999.

- File MZU - National Trade Mark Applications Rejected:

This new partial database has been provided to the public since October 24, 1997. It consists of the national trade marks rejected due to the lack of eligibility of protection. These trade mark applications are not stored under a certain file number but under an internal serial number. As additional search criteria, "text of sign", "main class" as well as "further class" are admissible. This database contains 72.003 rejected trade mark applications.

The further development of the DPINFO information system is being continued. Many ideas and suggestions for improvement are being put into effect.

The following developments are planned for 2000:

- Internet access to DPINFO (via the homepage of the GPTO), starting on February 17, 2000. The internet version will allow the display of trade mark images (only File MNA)
- Introduction of an English user interface of DPINFO on the Internet

#### IV. Search file establishment and upkeep

The search file used by the patent examiners at the headquarters of the GPTO in Munich is arranged according to the IPC and to additional internal subdivisions of the IPC (DEKLA-groups) created by the examiners (see paragraph III.2). It contains a total of 26 million patent documents (Japanese abstracts included) and 2.3 million documents of non-patent literature, with an increase of about 934 000 patent documents in 1999. 2.3 million documents of this file are stored on rollfilm. The paper file is decentrally stored in the examiners` rooms or in rooms nearby. 150 000 changes of the files were performed, especially in connection with the creation of additional internal subdivisions.

Details of the search file holdings and accessions may be seen from the following table as registered in our electronic search file administration system, the so-called "Sub 2".

<b>Typ of Doc.</b>	<b>Holdings 1999</b>	<b>Accessions 1999</b>
DE-A	4 598 281	39 630
DE-C1	143 677	4 557
DE-U	1 213 943	20 115
AT	471 902	1 895
BE	248 027	----
CH	785 782	614
DD	326 529	----
FR	2 406 217	14 711
GB	2 161 784	11 583
US	6 244 403	127 315
EP-A	1 051 186	47 927
WO	614 072	75 847
DE-Sec.-Filing	included	106 360
Foreign Sec.-Filing	included	101 207
<b>Subtotal</b>	<b>20 265 803</b>	<b>551 761</b>
JP-Abstracts	4 236 852	351 388
<b>Sum 1</b>	<b>24 502 655</b>	<b>903 149</b>
<i>Second Publications:</i>		
DE-B, -C2, -T1	1 478 366	12 247
EP-B	64 585	----
DE-T2 (EP-B)	2 014	2 970
<b>Sum 2</b>	<b>1 544 965</b>	<b>15 217</b>
<b>Total</b>	<b>26 047 620</b>	<b>933 583</b>

For the transition from the conventional search file on paper to an electronic search file, see [paragraph V.1.](#)

## **V. Activities in the field of computerized and other mechanized search systems**

### **V.1. In-house systems: The DEPATIS Patent Information System**

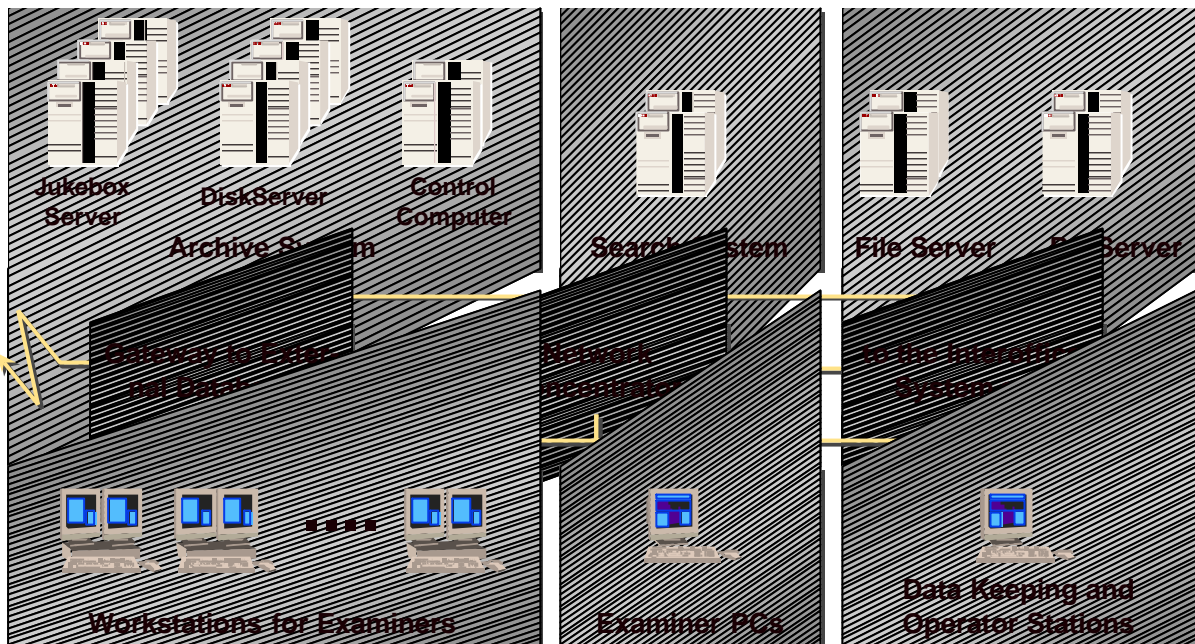
At present, the GPTO administers more than 39 million documents for the examining work of patent examiners or for providing information to the public, which is one of the statutory tasks of the GPTO. The enormous amount of information is growing each year by 1 million documents. In order to keep it in a form that can be handled with reasonable effort a patent information system, named DEPATIS, was planned at the end of the 80s. To reduce the risks, this big project was implemented in several stages. In the years 1989 to 1994 the feasibility from the technical and operational point of view was tested in a pilot project, followed by the first stage of the production system - the basic stage - in the years 1995 to 1998.

Since operation started at the end of 1998, the system has been at the disposal of 120 examiners for full use. These examiners can perform their searches entirely with the system. For this purpose, two examiners share a work station and an examiner PC - the best way to pay off the very high acquisition cost of the work stations. The other 430 examiners, too, benefit already from the new system. They rapidly print out necessary documents with high-performance printers installed next to their offices. Access has been equally provided for the public with the installation of twelve work stations at the public search room of the GPTO in Munich.

The core of DEPATIS is the archive with a capacity of approx. 16 terabytes. In this archive, about 19 million patent documents of the countries most important for examination are stored in form of facsimile data in low resolution (150 dpi) for screen display and high resolution (300 dpi) for printing and zooming. The data for high resolution are stored on optical disks (WORM), for low resolution on magnetic disks. Especially with consideration to the high requirements as to response times, the archive system has a modular structure; if necessary, its performance can rapidly be adapted to new requirements. These measures were necessary to provide the required short flipping rate of less than 0.5 sec for the change from one facsimile page to the next.

In addition, the full text database allows searching the patent documents of the GPTO published since 1987. Together with other data files such as technical dictionaries, IPC indexes, catchword indexes and external databases and due to the specially developed standardized query language for accessing all these data stocks, an integrated access to all patent documents relevant for examination is available. The results of different

searches can thus be summarized without changing the media, multiple citations can be eliminated and the documents displayed on the screen without delay.



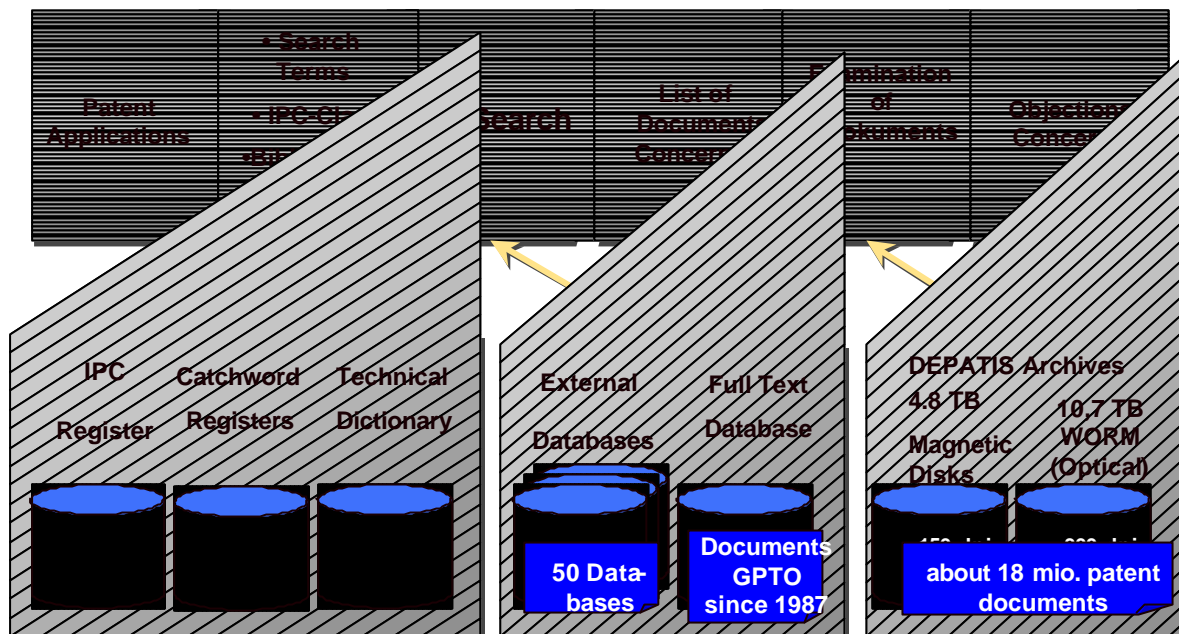
DEPATIS has an open client-server architecture. The server components such as

- the archive system containing the document data,
  - the search system with tools for efficient full text search
  - and the file server with the user-specific data
- are linked to the clients via a high-speed net on the basis of optical fibres.

Clients are

- the 60 workstations of the basic stage (with 2 size A 4 screens each for the display of two complete document pages),
- the approx. 490 examiner PCs,
- the twelve workstations at the public search room of the GPTO,
- several data collection and operator stations.

The implementation in stages was decisive for the success of the DEPATIS project. Interim objectives were set up and monitored continually, a necessary measure for planning and ensuring the transparency of such a large and complex project. Moreover, due to the implementation in stages, the technical progress could be taken into account for the respective subsequent stages. Thus the latest hardware components could be integrated in the servers as well as in the clients with the start of the operating stage in 1998.



After completion of the basic stage, the following stages of DEPATIS are now being prepared. It is envisaged to install more workstations for examiners as well as further workstations in the public search room of the GPTO in Munich and at the Technical Information Centre in Berlin.

With the implementation of DEPATIS the GPTO successfully initiated a challenging infrastructure project. Especially due to DEPATIS the GPTO succeeded in taking an important part in the international co-operation of the major examining patent offices and is well prepared to meet the requirements of an exchange of information taking place increasingly by electronic means.

### DEPATIS and "Patentamt-Online" Operation

Operation of the DEPATIS patent information system and the Internet-based "Patentamt-Online" service is assigned to the Division 2.4 "DEPATIS Operation" within the scope of Department 2.

This division is mainly responsible for preparing the data of the documents received at the GPTO for integration into the electronic archive. The documents received amount to roughly 600,000 per year. Division 2.4 is also in charge of updating the system while taking into account the ever-increasing volume of data, the rising numbers of users and the fast change in information technology. The planning will take into account the experience and suggestions made by users, who receive support in regular user groups provided by this division. Furthermore, since the vast amount of the paper search file can hardly be handled any longer, Division 2.4 is to organize the replacement of paper documents by electronically accessible documents. When this process is concluded the examiners will no longer work with paper documents. Specific parts of the paper search file have already been discarded. Another task of this division is the preparation of the training for users at the GPTO, above all, examiners.

## V.2. External databases

For state-of-the-art searches and the examination of patent applications, the GPTO uses the services of the following external hosts:

DATA STAR:	}	The Dialog Corporation (Mountain View, California, USA)
DIALOG:		
DIMDI:		Deutsches Institut für Medizinische Dokumentation und Information (Köln, Germany)
EPIDOS:		European Patent Office (Vienna, Austria)
FIZ Technik:		Fachinformationszentrum Technik (Frankfurt a.M., Germany)
LEXIS-NEXIS:		Reed Elsevier Inc. (Springboro, Ohio, USA)
ORBIT:	}	Questel•Orbit, France Telecom Group (Nanterre, France)
QUESTEL:		
STN:		STN International, c/o FIZ Karlsruhe (Karlsruhe, Germany).

In 1999, the examiners of the GPTO accessed these hosts for a total of about 6800 connect hours and used more than 300 different databases. Details about these online search activities, such as the distribution of the total connect time to the different hosts and to the most important databases, may be seen from the following table.

The online search in external databases is a very effective and valuable supplement to the search in the in-house databases of the DEPATIS system (see paragraph V.1.) and to the traditional search in the paper file.

In addition to the databases with technological and scientific information provided by the hosts listed above, the German Patent and Trade Mark Office has access to the legal information databases of the Juris host (Saarbrücken, Germany).

## Connect hours in external databases in 1999:

	STN	EPIDOS	ORBIT	QUESTE L	FIZ Tech.	Others	Total
PATDPA	2177.4	-	-	-	-	-	2177.4
WPI (Derwent)	1283.5	133.3	182.7	94.7	-	-	1694.2
EPOQUE	-	975.7	-	-	-	-	975.7
CAS-Files	492.2	-	10.3	0.2	-	-	502.8
USPATFULL	339.6	-	-	-	-	-	339.6
PATOS	245.3	-	-	-	0.3	-	245.5
JAPIO	97.5	61.0	23.1	12.1	-	-	193.7
INPADOC	16.2	174.9	0.3	1.4	-	-	192.8
INSPEC	72.1	-	0.9	-	7.3	-	80.3
IFIPAT/CLAIMS	53.5	-	6.2	0.1	-	-	59.9
MEDLINE	32.2	-	-	0.1	-	-	32.3
BIOSIS	30.9	-	-	-	-	-	30.9
PATDD	22.8	-	-	-	-	-	22.8
EUROPATFULL	18.9	-	-	-	-	-	18.9
DOMA	-	-	-	-	8.4	-	8.4
ZDE	-	-	-	-	6.3	-	6.3
Others	118.1	1.9	26.5	34.4	22.8	4.3	208.0
<b>Total</b>	<b>5000.3</b>	<b>1346.8</b>	<b>250.1</b>	<b>143.1</b>	<b>45.1</b>	<b>4.3</b>	<b>6789.7</b>

### V.3. Administrative management systems

The patent procedure administration system (Sub1) has been in operation as in the years before. Meanwhile the on-going reorganization program "DPMA2000" ("GPTO2000") has reached the end of the second phase, especially concerning patents and utility models.

#### Patent and utility model automation project:

The current manual/paper-intensive process has been optimized over the years. It produces high quality and is very effective, but too expensive because of the staff involved.



The main goals for the defined Patent and Utility Model Automation System are the following :

- a) To continue delivering high quality services, but at the lowest possible cost for the applicants. As this is not possible with a system based on paper, the GPTO will implement a system for the electronic filing, processing and exchange of both structured data and complex documents, as well as for electronic publishing and data dissemination.
- b) To be able to cope efficiently with the processing of continuously increasing amounts of patent applications while maintaining the quality of the service.
- c) To fulfil the world-wide growing requirements of external partners for the exchange of electronic data and documents.
- d) Migration from the existing mainframe infrastructure to a client-server environment, workflow engines, state-of-the-art document management technologies etc..

Presently business process re-engineering in the patents and utility models area has been finished, and specifications for the planned IT-support systems are in preparation.

During the 4<sup>th</sup> quarter of 1999, the GPTO has issued a tendering procedure for the above mentioned systems for the qualification of a potential systems integrator. The results are expected in the 2<sup>nd</sup> quarter of 2000.

#### **General services:**

It was decided to establish a controlling department which is responsible for the entire GPTO. The controlling department will use an integrated standard application software (SAP R/3).

#### **V.4. Equipment used, carriers used**

In the area of patent and utility model administration, the hardware basis has been extended and modernized in order to meet higher standards. Planning is concerned with the development and adaptation of a number of programs for the central administration mainframe computer, depending on the results of the DPMA2000 project (see preceding paragraph). The network is based on TCP/IP protocol.

By the end of 1999, about 2 000 PCs were in use for different tasks, including PCs and DEPATIS workstations for search purposes for the patent examiners.

#### **V.5. Existing online thesauri**

The fulltext of IPC<sup>5</sup>, IPC<sup>6</sup> and of IPC<sup>7</sup> including the internal subdivisions can be searched online within the Office.

The German/English version of the German Keyword and Catchword Index (the so-called "Stich- und Schlagwörterverzeichnis") to IPC<sup>7</sup> is also available within the Office as online database. These data have also been prepared for the CD-ROM "IPC:CLASS" (Version 4.1, available in May 2000).

In connection with the IPC revision new catchwords were added and the backfile was checked and corrected. Above all, in many cases the redundancy in the formulation of the text of the sub-catchwords was eliminated. The visibility at a glance was improved.

## **VI. Administration of the industrial property office library and services available to the public**

### **VI.1. The library**

The catalogue of the library, the acquisition of monographs and periodicals and the lending out of these media to the examiners or the public are administered by electronic data processing.

The following details relate to the library stock and its characteristic data in the year 1999.

The total stock of bound volumes now comprises 1 085 790 volumes; the number of patent documents (without multiple copies) including paper copies, microforms and CD-ROM has reached 40 603 540 documents.

#### Use of library:

There were 1 940 internal users and 63 361 users from among the public; 345 194 bibliographic units were lent out (self-service not regarded).

At present 74 different CD-ROM series concerning patent documents (30) and secondary patent information (44) are available for the public by self-service in the public search room of the GPTO.

#### The library budget:

Acquisition budget and cover binding	DEM 2 150 766
International exchange of patent documents	DEM 4 304 000
Staff employed	123

### **VI.2. Interlibrary lending, resource sharing, networks of patent libraries in the country**

Besides the two patent depository libraries of the German Patent and Trade Mark Office in Munich and Berlin, there were 19 regional patent information centres (patent libraries) with six branch agencies in the territory of the Federal Republic in 1999. These 25 centres are maintained by the individual states ("Bundesländer") of the Federal Republic of Germany.

The relationship between the GPTO and the regional patent information centres is determined by an agreement concluded in 1994. The patent information centres receive patent documents from the GPTO on CD-ROM (DEPAROM). With the CD-ROM product DEPAROM-CLASS the visitors of a patent information centre are able to search in specific technical fields based on the International Patent Classification.

Since 1999 patent and utility model applications can also be filed with certain patent information centres. At present nine patent information centres have been designated by the Federal Ministry of Justice to receive patent and utility model applications.

### **VI.3. Information services available to the public**

- a) The General Information Service at the GPTO has the task to answer the questions of interested persons from the public concerning the application procedures of the various industrial property rights, the course of the procedures, costs, right of appeal, priorities, term of validity, etc. First free-of-charge consultations with a patent attorney are being arranged for inventors upon appointment by telephone as well. In our Call Centre 600 calls were received daily on the average. The staff members of the General Information Service answered 58 483 inquiries in writing. In addition to the inquiries in writing and by telephone, on the average 110 visitors per day sought advice from the General Information Service.
- b) In autumn 1998 the DEPATIS patent information system (see paragraph V.1.) was introduced in the public search room of the GPTO. At the end of 1999 12 workstations were available, 42 stations are planned for public use. This system will continually replace the conventional files of patent documents in paper form and CD-ROM.
- c) The databases of the German Industrial Property Register (see paragraph III.5) are available to the public in the search room.
- d) With the assistance of an operator of the GPTO, searches in the German patent database PATDPA can be carried out by the public in the public search room against payment. Access to the European Patent Register and to the EPIDOS INPADOC files PFS and PRS is available also against payment.

#### **VI.4. The German Patent and Trade Mark Office on the Internet**

Since November 1996, the GPTO has presented itself on the Internet. Increasing access rates reveal the attractiveness of the service. Compared to the previous year access figures have tripled. Since 1999, the short Internet address [www.dpma.de](http://www.dpma.de) provides easy access.

A general part lists the possible ways of contacting the GPTO: addresses, ground plans and telephone numbers. Various e-mail addresses allow directly contacting the GPTO. The information area provides information on the various types of industrial property rights for new users. Several leaflets are now available on-line. The FAQ area gives answers to the questions most frequently asked. The current press releases of the GPTO can be visualized.

The download area provides forms, factsheets and orders/regulations for downloading. Applicants may obtain the necessary application forms directly via the Internet. In addition to the forms, the corresponding factsheets are available for assistance. The fact that 1,500 documents on average are being downloaded daily shows that the users like to access the latest versions. An update page provides specific information on the changes in the datastock.

In the search area the GPTO WebPages can be searched by means of a search engine. DEPANet, the patent server of the German Patent and Trade Mark Office within the framework of [esp@cenet](mailto:esp@cenet), can also be accessed via our WebPages.

Further links refer to the websites of other patent offices.

#### **DEPANet - Patent Server of the German Patent and Trade Mark Office within the scope of [esp@cenet](mailto:esp@cenet)**

DEPANet is the official Internet-based information service of the German Patent and Trade Mark Office, existing since 20<sup>th</sup> October 1998. It offers free of charge patent specifications and patent applications published (C1, A1) in the preceding 24 months on the Internet at: <http://www.dpma.de/depanet>, <http://www.depanet.de> and, in the future, also at <http://de.espacenet.com>.

DEPANet is embedded in [esp@cenet](mailto:esp@cenet), the information service of the European Patent Office (EPO).

The structure of the [esp@cenet](mailto:esp@cenet) patent information system consists of two levels. At level 1, "the national level", each EPO member state can provide national data. At level 2, "the European level", the EPO offers a world-wide database corresponding to the EPOQUE data stock with its more than 30 million documents.

The database can be searched via a search interface with several search fields. Based on the bibliographical data of a document it is possible to search for the publication number, the application number, the priority number, the publication date, the applicant's

name, the inventor's name, the classification symbol (IPC) and the text in the title. Of each page of the documents found, a facsimile image can be displayed. From the initial page of DEPANet access is possible to databases of other national offices, to one database for EPO data, one for WO data and one for Japanese abstracts as well as a database with world-wide publications. For more detailed information users may refer to the pages of "Patentamt Online".

The daily access figures to WebPages of the German server (DEPANet) have increased from roughly 4,000 pages in December 1998 to around 5,500 on the average in 1999. The transmittal of data amounts to roughly 160 MB per day.

## **VII. Matters concerning mutual exchange of patent documentation and information**

### **VII.1. International or regional co-operation in the exchange of machine-readable information**

The German Patent and Trade Mark Office continues to submit regularly to EPO (The Hague) and EPIDOS-INPADOC (Vienna) magnetic tapes with publication data on the basis of mutual exchange agreements.

### **VII.2. Medium used for exchange of priority documents**

The German Patent and Trade Mark Office receives priority documents in paper form.

### **VII.3. International exchange of patent literature**

The GPTO endeavours to meet the requirements necessary for the exchange of patent documents between the GPTO and its foreign exchange partners by electronic means exclusively, from the year 2000. The international exchange of patent literature was extended to countries in Eastern Europe and Asia in the last years. German patent and utility model documents were sent, mainly on CD-ROM (documents in paper form are the exception), to 50 foreign patent offices; the patent gazette, trade mark gazette, annual reports, etc., were sent to 62 recipients. In 1999 the GPTO needed foreign documents in paper form of US, EP, GB, FR for the classified collections and frequently used numerical collections.

Within the framework of the international exchange, the patent offices receiving the DEPAROM CD-ROMs may, if interested, download the bibliographic data and/or facsimile data and/or fulltext data. The GPTO is prepared to supply a secret software code required in order to do so. The data thus obtained may be used for internal purposes of the offices as provided for in WIPO Document PCIPI/EXEC/XV/8 Annex VII.

#### **VII.4. Medium allowed for filing applications**

In co-operation with Bundesdruckerei GmbH the GPTO distributed the version 1.2 of DEPAEASY software. This software is, above all, used to capture the text parts of patent applications (i.e. description and claims) in electronic form and store them on disks. The data on the disk are utilized in the publication process for producing documents in order to avoid the time-consuming and error-prone OCR conversion of text manuscripts. The software and further information are available at <http://www.patentblatt.de/depaeasy/index.htm> on the Internet.

The MIPEX project initiated by the European Union may be one of the possible ways to improve the situation for electronic applications. Together with the MIPEX partners the plans for pilots for online-filing will be realized in the year 2000.

Concerning the bibliographic data to be communicated to the office by the applicant when filing the application, the German Patent Office observes with great interest the developments within the EASY project initiated by the EPO, the USPTO and WIPO and the epline program of the EPO.

### **VIII. Other relevant matters concerning education and training in, and promotion of, the use of patent information, including technical assistance to developing countries**

#### **VIII.1. Training courses for national participants**

In December 1999 a two days' training course for staff members of the regional patent information centres was held in the field of "European and PCT applications".

## **VIII.2. International Co-operation**

In 1999, globalization was also reflected by the enhanced activities of the German Patent and Trade Mark Office in the European and international area. The office took part in particular in the negotiations on the Patent Law Treaty, the Standing Committee on Information Technologies and the Ad Hoc Advisory Group on Proposed Amendments of the PCT Regulations. On the European level, representatives of the German Patent and Trade Mark Office participated not only in the meetings of the Administrative Council but also in numerous other European bodies, e.g. in the Working parties on Technical Information and Statistics, in the Committee on Patent Law and in the Budget and Finance Committee.

The German Patent and Trade Mark Office and some other national patent offices participated as observers in the MIPEX I project. At the end of 1998, negotiations with the European Commission took place on continuing the MIPEX I project, in a follow-up phase: MIPEX II. The success of MIPEX I and the developments at the European Patent Office (EPO) and the World Intellectual Property Organization (WIPO) induced the German Patent and Trade Mark Office and three other national patent offices (Netherlands, Finland, Switzerland) to use the potential of the MIPEX II contract for further national and international projects. In addition, Baltimore Technologies is party to the contract, providing its security and digital signature products, and contributing its know-how. The MIPEX II contract was concluded for the period from 1999 to 2000. It will allow to fit the national interests of patent offices in the international scope and to participate in drafting standards and solutions, guaranteeing national interests, but also safeguarding the compatibility of solutions between the patent offices. The work programme of MIPEX II includes altogether eleven work packages. Besides project management, the preparation of the business plan and market analyses – which is particularly interesting for the EU – most of the work packages are concerned with technical results:

- online filing of industrial property rights
- electronic renewal of applications
- databases and information services
- network infrastructure and security
- encryption, digital signature, time-stamping.

This list shows that the MIPEX II project studies, carries out and tests the overall conditions for e-commerce within industrial property protection. By the end of 2000, pilots are planned to be available, allowing to

- exchange information among all parties of the IP community
- file IP applications
- renew IP rights electronically
- search within IP databases online

As early as in the summer of 1999, the requirements were drawn up for the filing format for online filing within MIPEX II which will be independent for all types of IP rights. Independently of the EPO development, it will accept electronic applications in SGML format on the basis of DTD in the future. The DTDs for the respective national documents specify the corresponding required format and form an open standard for



generating electronic documents, and at the same time, an interface for electronic information processing in the offices. In this procedure the layout of the document is not taken into account, but its contents. In order to provide users with a control instrument for testing their filing formats and for allowing patent offices to check the supplied formats, a common filing software is being developed within MIPEX II. The IT security rules to be adopted by MIPEX II will become relevant for the first filing pilots within the year 2000, and the same applies to a public key infrastructure based on the products of Baltimore Technologies (UNICERT and MailSecure). The online transmission procedure will focus on sending and receiving encrypted e-mails with the documents in SGML format as attachments.

In addition, numerous lectures and training activities were organized for foreign experts, e.g. from El Salvador, Latvia, China, Russia, the Republic of Korea, Romania, Ukraine and Nepal, who were particularly interested in the patent and trade mark examination procedures as well as in patent information. Additionally, as in the previous years, a three weeks' seminar was held for civil servants from developing countries. Moreover, a seminar on Streamlining Search and Examination Procedures was organized by the GPTO jointly with the EPO and WIPO. It was attended by twenty examiners from different African, Asian and Latin American countries. Other visitors came from Finland and France. Among the visitors of the GPTO were also a delegation from the Office for Harmonization in the internal market (OHIM) (Alicante) and three Japanese delegations, among them the Deputy Commissioner of the Japanese Patent Office.

Mention should also be given to the First Informal Meeting of Heads of Patent Offices in Certain Developed Nations in Tokyo. The presidents, among them Mr. Haugg, discussed questions related to industrial property protection raised by globalization, such as patent protection for future technologies, international harmonization of patent systems and effective enforcement of rights. Furthermore, President Haugg visited the Industrial Property Office of the Czech Republic in Prague as well as the Polish and the Romanian Offices. In addition, the Deputy Director-General of the Romanian Office gathered information on the electronic DEPATIS patent information system (see paragraph V.1.) and the GPTO administration during a visit in Munich.

### **Project “Financial Co-operation with the People’s Republic of China - Patent Information System“ (started in 1997):**

This project, which is financed by the German Reconstruction Loan Corporation (Kreditanstalt für Wiederaufbau – KfW), is based on a so-called Twinning Agreement between the two Offices of 1995. Training of foreign partner experts regularly includes the Federal Patent Court in order to introduce them to its structure and the co-operation with the German Patent and Trade Mark Office. This project will contribute to maintain the excellent relationships with the State Intellectual Property Office of the People’s Republic of China (SIPO).

In 1999 experts from GPTO instructed their Chinese counterparts in the field of “Biotechnology” and “Chemistry”. Furthermore the President of the GPTO, Mr. Haugg, and his delegation visited the SIPO in May 1999 to discuss future training measures.

### **Project “Modernization of the intellectual property system in the Republic of Croatia“ (from 1997):**

The project funded by the German Agency for Rechnical CO-operation (GTZ) started officially in January 1997. In 1999 four training measures in the fields of “Documents and Data Flow Concerning Industrial Property Granting Procedure”, Collective Administration and the Supervision of Copyright Collecting Societies Practice at the GPTO”; “Full Examination Procedure of Several Cases of Patent Application” and “Cancellation Procedure in the Field of Trademarks” could be realized in Munich.

A very notable event was the visit of the President of the State Intellectual Property Organization of the Republic of Croatia (SIPO), Mr. Kopicic and his deputy, Mrs. Bulbanko-Ziger in November 1999.

In addition to these measures several experts from GPTO supported SIPO in commenting the drafts of “Layout Design Law”, “Copyright Law”, “Trademark Law”, “Industrial Designs Law”, “Patent Law” as well as “Substantive Examination of Patent Applications”, in Zagreb. These draft laws commented by experts of the GPTO passed the Croatian parliament in June 1999 and entered into force January 1<sup>st</sup>, 2000.

### **Project “Strengthening of the intellectual property system in the Kingdom of Thailand“ (from 1997):**

This project is also GTZ-funded. Nine training measures for experts from the Department of Intellectual Property were held in Munich in the fields “German Patent Information System – DEPATIS”, “Utility Model Registration and Administration”, “Search and Substantive Examination in the Field of Physics, Mechanics, Electronics, Biotechnology and Chemistry” and “Examination Procedures on Trademark with Actual Thai Cases”.

The short time missions of the GPTO were extended in 1999. Altogether eight measures took place in Thailand. Technical and legal experts from the GPTO covered the fields of “Suggestions and Guidelines for Drafting Utility Model Ministerial Regulations”, “Information Services”, ”Profile of Patent Attorney Profession”, "Drawing up a Draft Law on Collective Administration of Copyright and Neighbouring Rights", “Consultancy on Management of Patent and Trademark Division” and “Nice and Madrid Agreement”. Besides, the President of the GPTO together with the President of the Federal Patent Court and a representative of the Association of Patent Attorneys attended the International Symposium on Exchange of View Related to IP cases.

### **Project “Modernization of the intellectual property system in the Republic of Turkey“ (from 1995):**

This GTZ-funded project - initiated in 1995 - was successfully continued. Five training measures for experts from the Turkish Patent Institute were held in Munich in the fields of “German Patent Information System – DEPATIS”, ”Law” and ”Trademark”. In November the President of the Turkish Patent Institute TPE visited the GPTO.

In addition, technical and legal experts from the GPTO stayed in Ankara at the Turkish Patent Institute on eight expert missions covering the fields of “Library”, “Information Services”, “Qualification on Madrid Agreement” , “Rights of employees inventors” and “Trademark”. In June 1999 the International Conference on Industrial Property Protection in Turkey and the World at 5<sup>th</sup> year of Turkish Patent Institute in Istanbul was attended by the Head of the Patent Department.

### **VIII.3. Search assistance for developing countries**

In 1999, the German Patent and Trade Mark Office has performed 84 state-of-the-art searches for developing countries within the framework of WIPO's search assistance programs. The search requests had been received from the following countries:

Chile:	18
Kenya	15
Botswana:	51
	====
	84

### **VIII.4. Promotional Activities**

In 1999 the German Patent and Trade Mark Office was represented at the following fairs with a stand:

Industrie-Messe, Hanover  
27. Int. Messe für Erfindungen, Neue Techniken und Produkte, Geneva  
Laser 1999, Munich  
Internationale Funkausstellung, Berlin  
Biotechnica '99, Hanover  
Systems, Munich  
IENA, Nuremberg  
Comtec, Dresden  
Intertech Bodensee, Dornbirn (AT)

### **VIII.5. Studies to identify trends in the new technology, e.g. by the use of patent statistics, preparation of monographs, etc.**

Studies relating to technological trends are performed continuously in the German Patent and Trade Mark Office. The GPTO's Annual Report regularly publishes statistical patent analyses concerning various special topics as well as brief monographs on selected technical areas (see chapter "Patents - Statistics and Analyses" in the GPTO's Annual Report).

Because of the particular significance of patent data as indicators for

- research and development activity
- economic and technological structures and developments
- international economic and technological relations

the German Patent and Trade Mark Office has a Section "Statistics", which is in particular concerned with the investigation of these functions.

The following statistical and economic patent analysis elaborated here was published in 1999:

- Die neuen Bundesländer im Patentgeschehen der Bundesrepublik Deutschland, in: Boch, Rudolf (Hrsg.), Patentschutz und Innovation in Geschichte und Gegenwart, Frankfurt/Main 1999

Talks and lectures on the results of investigations, e.g. on the technological development in selected technical areas and the use of patent data as indicators for research and development activities, were given on national and international conferences.

The sector "Statistics" is involved in research projects of German research institutes, e.g. in the fields of investigation of regional innovative potential and of joining patent data and data for research and development activity.