Developments in Patents Documentation in Europe during the Last Decade

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The professional patent searcher needs to understand the legal procedures underlying patent publications, to obtain maximum benefit from available information sources. The political upheavals in Europe since the fall of the Berlin Wall have resulted in substantial changes to national patent laws and procedures, in parallel with trends toward more regional filing methods. The response of the commercial database producers to new country coverage is discussed, together with aspects of new document types such as supplementary protection certificates for pharmaceuticals and the increasing popularity of utility model patents.

INTRODUCTION

The purpose of this paper is to provide the patent information specialist with an overview of recent changes in the European patent scene. Searchers in this area are required to handle information which reflects a complex web of political, geographical, legal, and scientific issues. The paper addresses the following topics: the political and geographic changes during the period, modifications to patent office practices and procedures, the consequent changes to patent documentation, and the effect upon the major online and CD-ROM sources of information.

POLITICAL AND GEOGRAPHIC CHANGES

The period 1988−1998 was by any standard a turbulent decade on the continent of Europe. A simple timeline illustrates some of the key events:

1989	Fall of the Berlin Wall; Ceausescu overthrown in Romania; democracy in Poland
1990	German reunification; democracy in Bulgaria and Hungary
1991	Soviet Union dissolved; start of Yugoslavia break-up
1992	Yugoslavia break-up continues; communism collapses in Albania
1993	Czechoslovakia splits into Czech Republic and Slovakia
1995	Austria, Sweden, and Finland join the European Union (EU)
1997	Cyprus, Czech Republic, Estonia, Hungary, Poland, and Slovenia on fast-track to EU entry

In 1988, there were still two superpowers in the world, although we were in the era of *perestroika* in the Soviet Union, and the Reagan presidency was drawing to its close. The next 10 years saw a radical restructuring of the European continent along new political and ethnic lines, often accompanied by a great deal of pain. The Soviet Union has disintegrated into its component republics, as has Yugoslavia and Czechoslovakia. At the same time, in Western Europe, the completion of the Single European Market and the Schengen agreement have allowed much freer movement of goods and people across that part of the continent. Many of the Eastern European states have applied for admission to the European Union, and negotiations with Estonia, the Czech Republic, Hungary, Slovenia, Poland, and Cyprus commenced in March 1998.

Turning to patent matters, both the European Patent Convention (EPC) and the Patent Cooperation Treaty (PCT) gained new members in Europe. The most recent full member of the EPC is Cyprus, which joined on April 1, 1998. There are also six so-called "extension states", which recognize a granted European patent as valid in their territories: Lithuania, Latvia, Romania, Slovenia, Macedonia, and Albania. Table 1 provides a list of which states belonged to the EU, the EPC and the PCT in 1988, and the new members during the decade.

Likewise, the PCT gained ground. All of the former Soviet states have filed declarations of continued applicability with respect to the PCT, and additional states have joined the system. The most recent accession is Croatia, completing the western European continent.

PATENT OFFICE PRACTICE AND PROCEDURE

As the continent has undergone these changes, the practices of both the existing and the newly created patent offices have had to develop in response. Additionally, some aspects have grown in importance, in particular the development of supplementary protection certificates for pharmaceuticals and agrochemicals and the growth of the utility model system.

Supplementary Protection Certificates (SPC). The SPC system is a recognition that the effective life of some patents, particularly those which protect pharmaceuticals or agrochemicals, is eroded by official requirements for extensive testing and registration prior to market launch of a patented product. The SPC restores selected patent rights to the assignee.

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Table 1. Membership of the EU and the Major Patent Conventions, 1988−1998

1988 status	AT	BE	CH	CY	DE	DK	ES	FI	FR	GB	GR	IE	IT	LI	LU	MC	NL	PT	SE	
EPC	√	√	√		√		√		√	√	√		√	√	√		√		√	13
EU		√			√	√	√		√	√	√	√	√		√		√	√		12
PCT	√	√	√		√	√		√	√	√			√	√	√	√	√		√	14

	membership 1988	new members during the decade							membership 1998
		1989	1990	1991	1992	1995	1996	1998	
EPC	13		DK	MC	IE PT		FI	CY	19
EU	12					AT FI SE			15
PCT	14	ES	GR		IE PT			CY	19

As far as Europe is concerned, the lead legislation for supplementary protection certificates originates from the European Union. Two Council Regulations[1,2] passed in 1992 (in force from Jan 2, 1993) and 1996 (in force from Feb 8, 1997) allow for the extension of patents granted in Europe which protect pharmaceuticals or plant protection products, respectively. This applies equally to national or EP patents.

It is the duty of member states to pass national legislation implementing these Regulations, and certain derogations have been invoked. As a consequence, the ability to file for an SPC has varied across Europe, according to when it has entered national law. Unlike the EPC system for obtaining the original patent, there is no centralized procedure or legislation; rights owners wishing to extend protection in more than one state are required to apply for an SPC in each state. The extension term awarded is based on a formula which takes into account the delay caused by registration procedures before the product can be marketed. The maximum extension available is 5 years.

An important point to note is that an SPC only extends the patent rights to the actual product named in the market authorization; the patent itself, with the rest of its claims, expires as normal at the end of its natural term. In some cases, it is possible to have more than one SPC linked to the same patent, when more than one marketed product is protected by the scope of the patent.

Table 2 provides further details of the dates of implementation of SPC legislation in Europe and the typical publication number formats developed by each state. Table 3 illustrates how the procedural steps for application and grant of a United Kingdom SPC for one product (cyromazine) appear in the INPADOC database. The right-hand column provides explanatory notes for each "action" field.

The Growth of Utility Models. One of the features of the new European patenting scene is the expansion of utility model (UM) systems. These have various names but essentially similar features. A utility model is a registered right which confers exclusive protection for a technical invention (as opposed to a design right, which protects the outward form of an object only). It is characterized by a shorter term than a patent and usually requires a lesser—or no—inventive step. Terms range from 3 to 15 years. The registration process is typically very rapid, frequently only months. Several of the longer-established utility model systems require that the applicant files a three-dimensional embodiment of the invention and are perhaps closer in spirit to the U.S. Design Patent. Typically they have been popular for inventions with a limited local market in the mechanical field of technology.

Table 2. Documentation Aspects of SPC Filings

Countries Granting SPCs under EU Council Regulations 1768/92 and/or 1610/96

country code	country	publication no. format	first publication date in INPADOC
AT	Austria	SZ nnnn/yy	Oct 15, 1994
BE	Belgium	yyCnnnn	Jan 4, 1993
DE	Germany	1yy 7nnnn	July 15, 1993
DK	Denmark	CR yyyy nnnnn	April 10, 1993
ES	Spain		filings allowed from 1/98
FI	Finland	nn	Jul 1, 1994[b]
FR	France[a]	yyCnnnn	Jan 21, 1994
GB	United Kingdom	SPC/GByy/nnn	Feb 3, 1993
GR	Greece		filings allowed from 1/98
IE	Ireland	SPC nn/yy	Sept 4, 1996
IT	Italy		Dec 11, 1991
LI/CH	Liechtenstein/ Switzerland	Cnnnnnn/nn	Sept 29, 1995
LU	Luxembourg	nnnnn	Feb 3, 1994
MC	Monaco		
NL	Netherlands	yynnnn	Feb 16, 1993
PT	Portugal		filings allowed from 1/98
SE	Sweden	yy90nnn	Jul 1, 1994[b]

Other Countries

BG	Bulgaria	no plans
BY	Belarus	no plans
NO	Norway	SPC NO yyyynnn
RU	Russian Federation	no plans
SK	Slovak Republic	no plans

[a] Also granted SPCs under domestic legislation of June 25, 1990 prior to enactment of EU Regulations. [b] Date of entry into force of Regulation; actual first publication date unknown.

In Western Europe, six out of the 19 EPC member states have introduced utility models since 1988.

A further 16 of the new East European states already have—or intend to start—a utility model system. Table 4 provides summary data on which countries have UM systems, including the name used within each state, the implementation date of the current law, and the term. Several states, such as Germany, have a system of progressive renewal to a substantial total term.

From the information specialist's point of view, I want to address three common myths relating to utility models. Each has implications for our view of them as useful prior art in our searching.

1. "Not many countries have them": in fact, the expansion over the decade means that 12 out of the 19 EPC states today

Table 3. Case Study of SPC in the United Kingdom: INPADOC Record for Cyromazine

patent number	GB 1587573 [GB1587573]	
document type	GB-P	
action	77.08.18 GB/AE-A application data {GB34793/77 [77GB-034793] 77.08.18}	← filed and examined under 1949 Act
action	81.04.08 GB/A patent specification	← granted with term extended to 20 years from GB filing, under 1977 Act
action	81.06.24 GB/PS [+] patent sealed	
action	89.09.13 GB/704A declaration that licence is not available as of right for an excepted use (PAR. 4A/1977)	← declaration under § 293 of Copyright, Designs & Patents Act 1988 concerning exemption from 1977 Patents Act licences of right provisions
action	93.06.16 GB/CTFF certificate filed SPC/GB93/039, 930512	← "publication date" = OJ(P) publication cover date ← date of action
action	93.07.21 GB/CTFF certificate filed SPC/GB93/039, 930701	← erroneous entry in OJ(P); should read "Certificate Granted"
action	93.08.11 GB/CTFG certificate granted SPC/GB93/039, 930701, expires:20020817	← date of erratum in OJ(P)
action	97.09.10 GB/CTFE certificate entered into force SPC/GB93/039, 970818, expires:20020817	
action	97.09.10 GB/PE20 [−] patent expired after termination of 20 years 970817	

Table 4. The Spread of Utility Models

country	current law	patentability requirement	designation	term (years)
		EPC States		
Italy	1977	3D requirement	Brevetto per modelli di utilità	10
Belgium	1984	as for patent	Brevet de courte durée	6
Spain	1986	3D requirement	Modelo de utilidad	10
Greece	1987	3D requirement	Utility model certificate	7
Germany	1990	lower inventive step	Gebrauchsmuster	3 + 3 + 2 + 2
Finland	1991	3D requirement	Nyttighetsmodell	4 + 4 + 2
Ireland	1992	lower inventive step	Short term patent	10
Denmark	1992	lower inventive step	Brugsmodel	3 + 3 + 4
France	1992	as for patent	Certificat d'utilité	6
Austria	1994	lower inventive step	Gebrauchsmuster	10
Netherlands	1995	as for patent	Zesjarig octrooi	6
Portugal	1995	3D requirement	Modelo de utilidade	15
United Kingdom	no law			
Monaco	no law			
Sweden	no law			
Luxembourg	no law			
Switzerland	no law			
Liechtenstein	no law			
		Other European States		
Croatia		3D requirement		
Georgia				8
Czech Rep.	1992			4 + 3 + 3
Slovakia	1992			4 + 3 + 3
Hungary	1992	3D requirement		?
Russia	1992	3D requirement		5 + 3
Kazakhstan	1992			5 + 3
Poland	1993	3D requirement		5 + 5
Slovenia	1993			10
Moldova	1993	3D requirement		5 + 5
Romania	1993	3D requirement		5 + 5 + 5
Bulgaria	1993	3D requirement		10
Armenia	1993			10
Estonia	1994	3D requirement		4 + 4 + 4
Ukraine	1994			5 + 3
Yugoslavia	1995			10

have some form of UM system. Most of the Eastern European states already use them or have indicated that they are preparing to do so. By no means all of these documents are available for searching in online databases, and even those which are included are relatively poorly indexed.

2. "They are not allowed for chemicals": in fact, the German, Austrian, Dutch, Belgian, and Irish systems do allow chemical inventions. Many Eastern European laws are likely to be modeled on the strengthened German one, including chemical products, and there is some indication that any future European utility model will probably allow wider subject matter, including chemicals. At present, the only utility model scheme which is deep-indexed to allow for comprehensive chemical searching is the coverage of German *Gebrauchsmustern* in the Derwent World Patent Index database.

3. "They are only suitable for low-grade inventions": while it is undoubtedly true that utility models have been largely

ignored by the chemical searcher, because of their mainly mechanical subject matter, recent trends such as Product Line Extension (PLE) within the bioscience industry make utility models a much more attractive part of an IP portfolio than before. Utility models are well suited to the type of "small increment" invention which PLE generates as well as being able to protect related inventions such as packaging and labeling. There is also some indication that companies could move toward using utility models as a procedural device for obtaining interim protection, while waiting for their main patent to be granted.[3] Both developments mean that the chemical patent searcher can no longer afford to ignore the utility model documentation. In any event, the lack of examination—and the perceived or actual quality of the invention itself—is irrelevant to their consideration as prior art.

The Eurasian Patent Convention. A further development which could in time have a major impact upon patent documentation was the formation of the Eurasian Patent Office. The Agreement forming the Office was signed in Moscow on September 9, 1994. It has now been ratified and is in force for nine states: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tadjikistan, and Turkmenistan. States which have signed but not yet ratified are Georgia, the Ukraine, and Uzbekistan.

The first filings were received March 1, 1996, and the first publications nominally issued October 1, 1996. In practice, take-up has been slow so far, hampered by lack of resources at the Office in Moscow, and at the time of writing no actual publications had been issued. The operation is closely modeled on the EPO, with a single official language (Russian). There is 18-month publication (country code: EA), followed by the requirement to file a substantive examination request within 6 months. In contrast to the EPO, all member states are automatically designated. The only way to prevent a patent having force is to subsequently not pay the renewal fees for a given country. As a consequence, the designated states listing on EA documents will be effectively meaningless for analysis purposes, and it will be necessary to ensure that accurate legal status data can be obtained from each member state.

Re-registration. Re-registration is the process adopted by the new East European states whereby rights holders may transfer their patent into the nationality of the new state. This is usually subject to certain provisos such as making the application for re-registration within a time limit, paying certain fees, and/or providing translations into national languages. Table 5 summarizes the situation. In some cases, re-registration procedures have created new document types—and hence new entries in patent family databases. In others, the existing granting process in the new country accommodates them, and no distinct document type is generated.

For the Czech Republic and Slovakia, payment of the normal renewal fees on existing Czechoslovakian patents ensures that they continue in force, with the same grant number.

The former Yugoslav states require a process of re-registration and/or translation. Formal conversion is required in Croatia (resulting in a new document in the granted patent series, HR-B1) and Slovenia (which has designated former Yugoslav registrations by the document type SI-A8). There is little data available concerning the situation in Bosnia (BA) or the former Yugoslav republic of Macedonia (MK).

Table 5. Re-Registration Procedures

original state	re-registered in	process
CS	CZ	normal renewal fees
	SK	normal renewal fees
YU	BA	allowable to 1 May 1998
	HR	notification of HR-B1
	MK	allowable to July 7, 1995
	SI	notification of SI-A8
SU	AM	allowable to Jun 30, 1995
	AZ	allowable to Dec 31, 1994
	BY	allowable to Aug 5, 1994
	EE	allowable to Dec 31, 1993
	GE	allowable to Aug 1, 1993
	KZ	allowable to Dec 1, 1993
	LT	notification of LT-A3
	LV	notification of LV-A3
	MD	notification of MD-B1
	RU	normal renewal fees
	UA	allowable - no date known

The situation in the former Soviet states is a mixture of the previous two. No conversion is required for Russian Federation patents, but it is required for Lithuania (LT-A3), Latvia (LV-A3), and Moldova (MD-B1). A similar situation probably exists in Estonia, but no explicit data has been issued. Data on the other states is not available online.

Expansion of the EPC. The European Patent Convention has also expanded during the decade, from 13 member states in 1988 to 19 by April 1, 1998. Although Cyprus was the first new full member since Finland joined in 1996, the Office has also concluded extension agreements with a further six states since 1994: Slovenia (March 1, 1994), Lithuania (July 5, 1994), Latvia (May 1, 1995), Romania (October 15, 1996), Albania (February 1, 1996), and Macedonia (November 1, 1997). Despite this, the front page data on EP-A documents did not include any extension states until January 22, 1997 (week 9704), and there was for a period a significant gap in the legal status data available in the INPADOC database. From the searcher's point of view, this should never have happened, although steps are being taken to backload the data now.

A further legal change which has knock-on implications for the searcher was the introduction of new regulations concerning the payment of designated states fees.[4] This revised policy has the effect that from mid-1997 onward, the listing of designated states on the front page of an EP-A document is much less meaningful than before. Online data derived from the same source will also be affected.

As regards the future, Green Papers (consultation documents prior to draft legislation) have been issued on the Community Utility Model[5] and the Community Patent.[6] Conclusions and agreement on the Community Patent seem as far off as ever, and it is not impossible that a Community utility model may get implemented first—a draft EU Directive was published in December 1997. With regard to the patentable subject matter of utility models, the authors of the earlier Green paper favor removing some of the restrictions in existing national legislation, which would allow for a wider range of matter, including chemical compounds, to be protected:

"*... the grounds for introducing the three-dimensional form requirement do not correspond to present needs. It would*

Table 6. Patent Term Modifications 1988−1998

country	modification[a]
Bulgaria	15 years to 1993; new term 20 years
Czech Republic	15 years to 1991; new term 20 years
Germany	former East Germany term was 18 years; increased to 20 years in line with former West Germany on reunification
Greece	all patents in force in 1996 extended to 20 years from former 15-year term; new term 20 years
Iceland	15 years from grant to 1992; new term 20 years
Ireland	all patents in force in 1992 extended to 20 years from former 16-year term; new term 20 years
Portugal	15 years from grant to 1995; new term 20 years
Poland	15 years from filing to 1993; new term 20 years
Romania	15 years from filing to 1992; new term 20 years
Russian Federation	all patents in force in 1991 extended to 20 years from former 15-year term; new term 20 years
Slovakia	15 years to 1991; new term 20 years
Yugoslavia	14 years from grant to 1990; new term 20 years

[a] All other countries in the region have granted a 20-year term from at least 1988.

not appear desirable, therefore, to include a three-dimensional form requirement in a future utility model scheme." (ref 5, p 64)

"*It would appear necessary, therefore, to include compositions of substances in the scope of utility model protection ... there should not be a blanket exclusion of substances in general on the sole ground that utility model protection would serve no useful purpose here*." (ref 5, p 66)

PATENT DOCUMENTATION CHANGES

In examining how the documentation—as reflected in the databases—has changed over the decade, it is possible to perceive three major influences: international events, regional harmonization, and domestic changes introduced by the national offices themselves

International Events: GATT/TRIPS. The TRIPS (Trade-Related Aspects of Intellectual Property) Agreement was implemented at the conclusion of the Uruguay Round of GATT (General Agreement on Tariffs and Trade). It represents one of the biggest changes in the regulation of intellectual property rights for years, and many countries, not only in Europe, have been required to amend their national laws in line with its provisions. The most common changes have been to provide for patentability of pharmaceuticals (TRIPS Article 27) for a minimum 20 year term (TRIPS Article 33). Some countries have implemented transition arrangements, such as Hungary's so-called "pipeline" patents (HU-A3 and B3 documents) and the bilateral Latvia-U.S.A. agreement on pharmaceutical patentability, leading to LV-A4 and B4 documents. Over the period, 12 states have introduced 20-year terms. Table 6 details those states which have amended their terms.

International Events: German Reunification. The reunification of Germany caused extensive revision of patenting procedures. Under the Extension Act of May 1992, the effect of patents in force in the former East German *Länder* was extended to the former West Germany and *vice versa*. This has caused complications in interpreting the legal status data, especially for non-German users. A further twist is the payment of renewal fees. Under the enlarged Federal patent legislation, a patent cannot be declared lapsed until a final notice of nonpayment of renewal fees has been served on the owner. However, since many of the former East German VEB (industrial conglomerates) have ceased to exist, it is often impossible to locate a responsible person on whom to serve the notice of nonpayment—hence the patent stays technically in force. This affects several thousand East German (DD) patents. The difficulty for the searcher is alleviated somewhat by the existence of the PATDD database on STN, but even this is not regarded as totally authoritative.

Regional Harmonization. Several states have amended their national laws in order to bring their domestic patent-granting procedures into line with EPO practice, usually because they either have ratified—or hope to ratify—the Convention. This has implications for the document types appearing from these countries. Denmark, Sweden, and Finland have all amended their previous three-stage publication process to a two-step publication, in line with EP practice. Bulgaria has also opted for a new two-step publication procedure. Norway has converted to post-grant opposition, with the resultant introduction of a new number series, in the 300 000-B1 range.

Domestic Changes. Various national offices in Europe have introduced change which affects the information specialist. In the United Kingdom, a system of accelerated examination was introduced from July 1995. It is now possible for a GB-A to publish within 5 months of filing and grant almost immediately after the statutory 6-month period from publication of the unexamined document, i.e. from priority filing to grant in 11 months. It remains to be seen whether this will result in a revival in the importance of national GB documents for current awareness purposes.

Both Germany (in 1989) and Italy (in 1991) have changed their application numbering systems. The operation of both systems has been discussed elsewhere, but it is worth noting that both have caused problems for patent database producers, and there are still examples of incomplete or incorrect algorithmic processing of these data present in the online systems.

Finally, Table 7 addresses the situation concerning translation of granted European patents. If the applicant fails to provide these documents to the national offices within the time frame allowed, it can result in the patent being deemed never having entered into force in one or more states. It is therefore important for the information specialist to be able to monitor this process. Since 1988, five more states (Germany, Denmark, Finland, Ireland, and Portugal) have invoked their right under the Convention to insist upon this step. Table 7 shows that only Monaco and Luxembourg do not require translations at the present day. In addition, some states (Austria, Germany, Greece, Ireland, and Spain) take the step of renumbering translations into separate national series, effectively creating new family members in the databases.

The cost-effectiveness of this process is being hotly debated in Europe at present. The EPO's preferred solution is for translations only of the claims (as already done) and possibly an extended abstract at grant, The remainder of the specification would only be translated if there were further proceedings, such as oppositions, relating to the patent. Table 8 shows that there is still some way to go before complete data of this type is available online, under the present regime. In the example used, 13 states required deposit of transla-

Table 7. Translation Requirements for Granted European Patents

country code	country	published from	renumbered ?	INPADOC KD code[a]	gazette or front-page code
AT	Austria	May 1, 1979	Y	AT-E	AT E nnnnn B
BE	Belgium	Oct 7, 1977	N	no data	BE-T1 or T2
DE	Germany	Jun 1, 1992	Y	DE-T2	DE 6 yy nnnnn T2
DK	Denmark	Jan 1, 1990	N	not allocated	DK/EP nnnnnnn T3
ES	Spain	Oct 1, 1986	Y	ES-T3	ES 2nnnnnn T3
FI	Finland	Mar 1, 1996	N	no data	no data
FR	France	Oct 7, 1977	N	not allocated	FR/EP nnnnnnn B
GB	United Kingdom	Sep 1, 1987	N	not allocated	GB/EP nnnnnnn B
GR	Greece	Oct 1, 1986	Y		GR 3nnnnnn T3
IE	Ireland	Aug 1, 1992	Y	not allocated	IE E nnnnn
IT	Italy	Dec 1, 1978	N	not allocated	IT-T3
LI/CH	Liechtenstein/Switzerland	Apr 1, 1980/Oct 7, 1977	?	?	?
LU	Luxembourg			no translation required under current legislation	
MC	Monaco			no translation required under current legislation	
NL	Netherlands	Oct 7, 1977	N		NL/EP nnnnnn B
PT	Portugal	Jan 1, 1992	N	not allocated	PT/EP nnnnnn B
SE	Sweden	May 1, 1978	N	not allocated	SE/EP nnnnnnn -T3

[a] The entry "not allocated" indicates that INPADOC does not use a specific KD code to indicate the deposit of a translation. The entry "no data" indicates that INPADOC does not currently receive data from the national office concerned.

Table 8. Example EP Translation Data from INPADOC

priority application	EP 95106702/95
applicant	Nestlé
publication number	EP 706944-B1
language of publication at grant	English
designated states at grant	16
translation required by	13 states
translation data available	7 states
translation data not available	6 states (BE, CH, GR, LI, NL, SE)

	AT	BE	CH	DE	DK	ES	FR	GB	GR	IE	IT	LI	LU	NL	PT	SE
translation required	√	√	√	√	√	√	√	×	√	×	√	√	×	√	√	√
deposit noted	√	×	×	√	√	√	√		×		√	×		×	√	×

Austria	ACT - 96.08.28 EP/REF-R [+] in Austria registered as: (AT 141878 [ATE141878] 96.09.15)
Germany	ACT - 96.10.02 EP/REF-P corresponds to: (DE 69500032 [DE69500032] 96.10.02)
Ireland	ACT - 96.10.02 EP/REG; IE/FG4D IE: European patents granted designating Ireland 69649
France	ACT - 96.10.04 EP/ET [+] FR: translation filed
Spain	ACT - 96.11.16 EP/REG; ES/FG2A ES: definitive protection 2092416T3
Italy	ACT - 96.11.18 EP/ITF [+] IT: translation for a EP patent filed Societa' Italiana Brevetti S.P.A
Denmark	ACT - 96.12.02 EP/REG; DK/T3 [+] DK: translation of EP patent
Portugal	ACT - 96.12.31 EP/SC4A [+] PT: translation is available 960930 availability of national translation

tions, but INPADOC only contains data for seven, necessitating individual enquiries at national patent offices to establish the status in the remaining six states.

SOURCES OF INFORMATION

Turning now from the internal workings of the offices to the question of the data which they generate, I want to review this under three headings: online and CD-ROM (both product types which can be produced either by patent offices or commercial information providers) and the third question of the output which emanates directly from the offices.

Online Databases. A summary of the changes to online coverage is found at Table 9. The World Patent Index database from Derwent has been concentrating on improving Asian data in recent years and has no concrete plans to enhance European coverage beyond the existing range of countries. During the period under review, the database only added three genuinely new countries from the region (Czech Republic, Slovakia, and the Russian Federation), but Irish patents were also reintroduced, although they had been covered for a brief coverage in the 1970s. New document types from existing countries were also included, mostly granted second-stage publications from Austria, Denmark, Spain, Finland, Hungary, Ireland, Norway, and Romania. A

Table 9. Summary of Changes to Online Database Coverage

country code	CAS	WPI	INPADOC	EDOC
AM				
AZ				
BA				
BY				
CZ	*b*	*b*	*b*	
EA			*a*	
EE				
GE				
HR			*b*	
KZ				
LT	*b*		*b, c*	
LV	*b*		*b, c*	
MD			*b*	*b*
MK			*c*	
RU	*b*	*b*	*b*	
SI			*b, c*	
SK	*b*	*b*	*b*	
UA				
YU			*b*	

[a] Database producer has indicated intent to cover national documents. [b] Database has started to cover national documents. [c] EP extension data.

Table 10. Expanded INPADOC Coverage 1988−1998

country code	bibliographic data	legal status—patents	legal status—SPCs	legal status—utility models	legal status—PCT entry
AL	EP extension				
AT	U		*b*	*b*	*b*
BE			*b*		*b, c*
BG	A, B, U, Y				
CH			*b*		
DE			*b*		*b*
DK	U, Y		*b*	*b*	
ES		*b*		*b*	
FI	U				
FR			*b*		*b, c*
GB			*b*		*b*
GR	A, B, U, Y	*b*			*b, c*
HU	A, B, U	*b*			
IE	A	*b*	*b*		*b, c*
IT	A, U	*b*	*b*		*b, c*
LT		*b*			*b*
LU			*b*		
MC	A	*b*			*b, c*
NL	C	*b*	*b*		*b, c*
NO	B				
PL	U, Y				
PT	U	*b*		*b*	
RO	EP extension				
SE			*b*		

[a] Status letter definitions: A = unexamined patent application, first level publication, B = examined patent application, second level publication, U = unexamined utility model application, first level publication, and Y = examined utility model application, second level publication. [b] Database has started to cover national documents. [c] By virtue of notification of EP entry into regional phase; no direct national entry allowed.

Table 11. Facsimile CD-ROM Products Covering Patents in Europe

country code	country	product	start date/KD
AT	Austria	ESPACE-AT	1990/AT-B
BE	Belgium	ESPACE-BENELUX	1991/BE-A
BG	Bulgaria	ESPACE-PRECES	1993/BG-A
CZ	Czech Republic	ESPACE-PRECES	1993/CZ-A
DE	Germany	ESPACE-DE	c. 1990−93/DE-A
		DEPAROM	c. 1994/DE-A, C, U, T
DK	Denmark	ESPACE-DK	1990/DK-B
EP	EPO	ESPACE-EP	1978/EP-A, EP-B
		ESPACE-FIRST	1978/EP-A front page
ES	Spain	ESPACE-ES	1990/ES-A
FR	France	COSMOS	1992/FR-A
GB	United Kingdom	ESPACE-UK	1978/GB-A
HU	Hungary	ESPACE-PRECES	1993/HU-A
IT	Italy	ESPACE-IT	1993/IT-A
LI/CH	Liechtenstein/ Switzerland	ESPACE-CH	1990/CH-B
LU	Luxembourg	ESPACE-BENELUX	1991/LU-A
NL	Netherlands	ESPACE-BENELUX	1991/NL-A
PL	Poland	ESPACE-PRECES	1993/PL-A
PT	Portugal	ESPACE-PT	1980/PT-A, PT-B
RO	Romania	ESPACE-PRECES	1993/RO-A
RU	Russian Federation	ESPACE-RU	1994/RU-C
SI	Slovenia	ESPACE-SI	1992/SI-A
SK	Slovakia	ESPACE-PRECES	1993/SK-A

significant addition for European users was the introduction of the German utility model series, with full indexing for basics.

INPADOC has been not only expanding, focusing on SPCs and legal status data from the EPC member states, but also picking up a number of the new utility model series; this is tabulated in more detail in Table 10. Some bibliographic data has been introduced from 11 new patenting authorities, new document types from 15 authorities, SPC data from 12 countries, and additional legal status data from 13 countries in the region. All 12 of the current EPC members which have utility models are covered, with the following Kind of Document codes: AT-U, BE-AG, DE-U1, DK-U1, ES-U, FI-U0, FR-A3, GR-U, IE-B3, IT-U0, NL-C1, and PT-U.

With regard to Chemical Abstracts, new document types have been limited to all chemical basics from the Russian Federation and residents-only coverage for the Czech Republic, Lithuania, Latvia, and Slovakia. The situation concerning the Eurasian Office documents is unclear, but it seems reasonable to assume that CAS will consider covering them, since the primary feed for CAS is based on the INPADOC tapes.

The other major multicountry database, EDOC, is more difficult to obtain data for. The updating program does not seem to have been as regular as in the past, and no published information concerning addition of new countries has appeared. Sample searches indicate that some new country data is obviously being added, but it is unclear how consistent this is, or on what selection basis. There also appears to be a problem with a country code conversion algorithm, either at the host or the database producer; at least one Moldovan re-registration from a Soviet Union patent (country code MD) is listed as apparently being from Madagascar (old code MD, current code MG).

CD-ROM Databases. During the period, the EPO has continued to expand the range of ESPACE facsimile CD-ROM products, as shown by Table 11. The importance of these should not be underestimated, since, in some cases, these products are the only direct method to obtain machine-searchable national data sets. Facsimile documents can now be obtained for all EPC member states apart from Finland, Greece, and Ireland (all at prototype stage) and Sweden. From Eastern Europe, the ESPACE-PRECES series covers documents from Bulgaria, the Czech Republic, Hungary, Poland, Romania, and Slovakia. National series have been developed for the Russian Federation and Slovenia.

The French and German patent offices have unfortunately departed from the EPO's Patsoft standard by pressing their own disks, although I understand that the French COSMOS product is being trialled under MIMOSA (the EPO's mixed-mode software, progressively replacing Patsoft) and so will be compatible with future EPO products. The German DEPAROM range is unique in its inclusion of translated EP specifications.

At the end of 1997, the EPO announced the ESPACE-ACCESS-Europe disk, a new bibliographic source covering national documents from Belgium, The Netherlands, Luxembourg, Switzerland, and the United Kingdom. One interesting feature of this product is the inclusion of national classification fields, enabling users for the first time to conduct their own computer-based searches on the British classification scheme.

During late 1998, the EPO commenced delivery of GlobalPat, a CD-ROM product which covers patents from the PCT Minimum Documentation countries in mixed mode format, including a range of major European countries. A single representative family member will be stored in the

form of a front page, including drawing. This represents the first major multicountry electronic information source in the patents field for many years.

Patent Office Output. Early in 1998, the WIPO decided to remove abstracts and drawings from its printed PCT Gazette and make available this information in electronic form only. A replacement Web-based version has been available from mid-1998, and there is a companion CD-ROM cumulated gazette. The early indications from users are that these are proving to be less flexible than the original paper Gazette for everyday use. In late 1998, WILA Verlag of Germany started to produce a paper bulletin using WIPO data, in a format very similar to the original PCT Gazette, including drawings.

The EPO's Esp@cenet project was launched in October 1998, initially providing a small rolling back-file of national patent data searchable via the Web site of each of the member states' patent offices. Planned later stages are much more ambitious and include considerably enlarged back-files, enhanced access to central EPO data, and document delivery. The entire project promises to be a considerable expansion of (at least) bibliographic patent data on the Internet, targeted at small business users. However, existing corporate users have expressed reservations about the effects of such competition upon the commercial database producers engaged in deep-indexing, particularly of chemical information.

A number of national offices already hold patent application data in machine-readable form, supplemented by internal registers of official actions and progress through prosecution. However, this is rarely made available to the public via remote dial-in access. The EPO Register is an exception, and this file contains unique data such as the extension states and the validated designation lists. As technology develops, there seems to be no technical reason repositories produced by countries such as Belgium, Spain, the United Kingdom, and The Netherlands should not be made publicly available as a kind of electronic file wrapper service, without running the risk of compromising the security of genuinely confidential data also held on patent office computers.

Finally, the information specialist can benefit greatly from the various national office Web sites, as a means of keeping track of events. Most EPC member states, with the exception of Ireland and The Netherlands, have at least a home page (see Tables 12 and 13), including the latest member, Cyprus. Many Eastern European states also have a Web presence or are planning one.

CONCLUDING REMARKS

The changes of the last 10 years in Europe have illustrated once more that the information specialist—and the patents information specialist in particular—is not dead. Their unique contribution to effective information use within organizations must be based upon an profound understanding of the data which they are handling. They need to be aware of what is happening at each point in the information trail—from source, at the patent offices themselves, how the database producers are responding, how the hosts are making the data available, and even the nature of the medium (online, optical disks, Internet) for distributing the data.

I do not believe that there is any indication on the horizon that technology will replace the need for informed and skilled searchers when providing patent information.

Table 12. European Patent Offices: Live Web Sites

country code	country	URL (preceded by http://)
AD	Andorra	www.ompa.ad
AT	Austria	www.patent.bmwa.gv.at/
BE	Belgium	www.european-patent-office.org/patlib/country/belgium/
BG	Bulgaria	www.online.bg/bpo/
CH	Switzerland	www.ige.ch/
CY	Cyprus	www.pio.gov.cy/rcor/html/about.html
CZ	Czech Rep.	www.upv.cz/
DE	Germany	www.deutsches-patentamt.de/
DK	Denmark	www.dkpto.dk/
EP	EPO	www.european-patent-office.org/
ES	Spain	www.oepm.es/
FI	Finland	www.prh.fi/engl.html
FR	France	www.inpi.fr
GB	United Kingdom	www.patent.gov.uk
GE	Georgia	ns.global-erty.net/saqpatenti/
GR	Greece	www.european-patent-office.org/patlib/country/greece/index.htm
HR	Croatia	pubwww.srce.hr/patent/english/index.html
HU	Hungary	www.hpo.hu/
IS	Iceland	www.els.stjr.is/
IT	Italy	www.european-patent-office.org/it/index.htm
LI	Liechtenstein	www.european-patent-office.org/patlib/patlb411.htm
LT	Lithuania	vytautas.is.lt/vpb/engl/
LU	Luxembourg	www.etat.lu/EC/
MC	Monaco	www.european-patent-office.org/patlib/country/monaco/index.htm
MD	Moldova	www.cri.md/Agentii/AGEPI/index.htm
MK	Macedonia	www.ippo.gov.mk/
NL	Netherlands	bie.minez.nl
PL	Poland	saturn.ci.uw.edu.pl/up/
PT	Portugal	www.inpi.pt/
RO	Romania	www.osim.ro/eng/welcome.htm
SE	Sweden	www.prv.se/prveng/front.htm
SI	Slovenia	www.sipo.mzt.si/
SK	Slovakia	www.indprop.gov.sk/
WO	WIPO	www.wipo.org/

Table 13. European Patent Offices: Pending Web Sites

AL	Albania	no plans known
AM	Armenia	due "soon"
AZ	Azerbaijan	no plans known
BA	Bosnia-Herzegovina	no plans known
BY	Belarus	no plans known
EE	Estonia	vs.ee/~kertu/p/patent.html (**no DNS entry on last check)
IE	Ireland	no plans known
KZ	Kazakhstan	due 1998
LV	Latvia	due 1997
MT	Malta	no plans known
NO	Norway	odin.dep.no/html/nofovalt/offpub/statskalenderen/1996/2201.htm (** no DNS entry on last check)
RU	Russian Federation	due 1998
SM	San Marino	no plans known
UA	Ukraine	no plans known
VA	Vatican City	no plans known
YU	Yugoslavia	no plans known

The point has seldom been better made than by Dr. Tony Kent, former director of the UK Chemical Information Service and a pioneer of text retrieval software in Europe, who died in 1997. He wrote: "I will no doubt be accused of elitism if I expressed my long-held view that the processes of information management and retrieval can never be simplified to a point where they may be conducted by half-wits (which is why incidentally it is a waste of time and effort to sweat blood building pretty user interfaces and the like). *Finding useful information is an intelligent process*

requiring intelligent people because at the end of the day only the intelligent can recognize what is useful."

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