

Safeguarding Europe-Wide Patent Protection: the European Patent Office

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Abstract: The European patent system, created in 1977, provides for the co-existence of a national and a centralised procedure for the grant of patents. Central grant authority for European patents is the European Patent Office in Munich, which carries out its task on the basis of the provisions laid down in the European Patent Convention. The establishment of a Europe-wide patent system has led to a significant increase in the demand for patent rights in Europe. In the framework of their co-operation, the member states of the European Patent Organisation have also created a unique patent information network for accessing the information contained in patent documents. In view of its impending eastward expansion, the European Patent Organisation is set to undertake a revision of the European patent system to ensure its flexibility in the future.

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The conclusion of the European Patent Convention on 5 October 1973 was an important milestone on the road to a unified patent in Europe. In 1997 the European Patent Office celebrated its 20th anniversary. The founding of the European Patent Organisation in 1977 and the opening of the EPO in January 1978 ushered in a period of exemplary co-operation on patents in Europe.

The establishment of a two-tier European patent system made up by the European Patent Office (EPO) and the national patent offices of the Organisation's member states is certainly among the most important and impressive achievements of European integration. The European Patent Organisation currently has 19 member states, namely all the EU countries plus Cyprus, Liechtenstein, Monaco and Switzerland. Other countries are expected to accede in due course, and already today it is possible to extend the protection conferred by European patent applications and patents to a number of central and eastern European states which are not members of the Organisation.

The EPO's development from a small-scale office with a staff of around 100 in 1977 into a many-sided European authority employing more than 4600 people offering services which are held in high esteem both within Europe and beyond its

borders proves that this Organisation has changed the landscape of industrial property protection in Europe. The worldwide development in the field of patents has, moreover, been significantly influenced by the European Patent Convention entering into force.

An Intergovernmental Organisation

The European Patent Convention (EPC) provides the legal background for the European Patent Organisation. The Organisation is made up of two bodies: the Administrative Council, where the Contracting States are represented as the supervisory body, and the European Patent Office as the executive body. Hence, the EPO is not an institution of the European Union although it closely co-operates with Brussels in all patent-related matters. The Office enjoys a large degree of administrative autonomy and is completely self-financing. Its operating and investment budgets, including a pension scheme for its employees, are funded entirely from procedural fees and from part of the annual renewal fees levied on granted European patents by the national patent authorities. The Office has its headquarters in Munich, a branch in The Hague and sub-offices in Berlin and Vienna.

The EPC also lays down the principles of the European patent in practice. It specifies the subject matter for which European patents shall be granted (patentability), determines the procedure for the grant of European patents, the

grounds for revocation by the EPO in an opposition procedure and those by national courts in revocation or infringement procedures. Furthermore, the Convention provides for professional representation before the EPO, creates the link between procedures under the Patent Cooperation Treaty and under the EPC, contains provisions for the accession of new member states and conditions for its revision.

The Advantages of the European Patent System

The main objective of the European patent system is to rationalise the granting of patents, where Europe-wide protection is requested, by applying a unitary and centralised procedure. By filing a single application in one of the three official languages – English, French, and German – an applicant can obtain patent protection in as many member and extension states as he likes. Further objectives are to harmonise and improve the quality of patents granted in Europe and to contribute to the creation of the Internal Market of the European Union and the European Economic Area.

The rationalisation effect of the European patent becomes evident if one considers that the 113 000 European applications filed in 1998, each of them designating 7.5 states on average, are the equivalent of approximately 825 000 national patent applications filed in all member states. However, the systems for granting national pat-

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ents in the Contracting States continue to exist alongside the European procedure, which shows that each EPC member state is perfectly free to choose or maintain the system best fitting its own traditions and economic needs, whereas the EPC provides for a central grant procedure on the basis of a single patent application.

The protection effect of the European patent system has also been extended to six countries outside the Organisation: Albania, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Romania, and Slovenia have concluded agreements on the extension of European patent applications and patents to their territory. More and more applicants are choosing this route to obtain patent protection in these countries in addition to the member states.

The Convention establishes a central grant procedure on the basis of a single patent application. This procedure is recognised in all member states irrespective of their own national patent grant procedure. The European grant system is supported by 2600 examiners highly specialised in their respective technical fields. The search examiner has access to an impressive documentation of 35 million classified patent documents from all over the world and to about 40 000 periodicals using a sophisticated electronic search and documentation system that links all four sites of the Office. Thanks to the thorough search and examination carried out in the patent grant procedure, European patents provide a reliable basis for investment. They also play a key role in the transfer of technology in Europe.

The Stimulating Effect on Innovation

The creation of a central European grant procedure has led to a significant increase in patent activity in Europe. In the larger Contracting States, the number of applications has grown by 50% to 80%; in the smaller ones it has multiplied up to five times and, in the smallest countries, a growth factor of more than 10 was registered. The European patent system has led to a substantial increase in the number of inventions protected in Europe and to a more even distribution of patent rights over larger and smaller European countries. Transfer of technology and economic integration both within Europe and between Europe and other regions have also benefited from the new patent system.

The EPO's competence as patent grant authority is recognised even beyond the borders of Europe as the Office also plays a key role in the processing of international patent applications filed under the Pat-

ent Cooperation Treaty. As an International Search Authority (ISA) and International Preliminary Examining Authority (IPEA) the EPO handles nearly 60% of the worldwide workload under the PCT every year.

The European Patent Information Policy

In 1988 the Administrative Council of the European Patent Organisation laid down the basic principles of a European patent information policy on the basis of shared roles between the EPO and national offices of the EPC Contracting States. The EPO is to act as a central data producer and wholesaler whereas dissemination to end-users is the role of national offices as well as of the commercial sector.

The rapid development of the European patent system and the advent of new information and data storage technology in the 1980s prepared the ground for decisive improvements in the information function of patent documentation. It is generally assumed that up to 80% of modern technical knowledge is disclosed only in patent documents. To make this wealth of information more easily accessible to the public and thereby to improve the patent-based transfer of technology in Europe, the member states of the European Patent Organisation agreed in 1988 on a patent information policy. The aim of that policy is to publish the national, European, and international patent documents on CD-ROM (also recently on DVD) and databases. Under the name of EPIDOS, the EPO offers a large variety of patent information products and services to the public. With the launch of the CD-ROM series ESPACE® [1] in 1989, the Organisation was breaking new ground in patent information and has managed to set new technical and quality standards which now enjoy worldwide acceptance.

In 1997, the Organisation restructured its patent information pricing policy. It is now extremely cost-effective and Internet integration has made it even more universal. The EPO now charges less for its patent information products: since 1 July 1997 it has been offering its EPIDOS services and products at purely marginal cost. Thus for applicants, especially small- and medium-sized enterprises, the financial obstacles to accessing technical information have been reduced.

With the advent of the Internet, the European Patent Organisation has been able to further enhance its patent information services with a new element. Patent data from national, European, and international patent collections are made publicly

accessible on *esp@cenet*, the world's most comprehensive free-of-charge patent server on the Internet. *esp@cenet* gives users point-and-click access to more than 30 million patent documents with a user interface in the national language of each member state. The service has been developed with the intention of providing users with a basic source of information which prepares the ground for a comprehensive patent search conducted by commercial patent information providers, patent agents or patent offices.

Challenges for the Future

The success of the European patent, the rapidly changing political landscape in Europe and the progress in information technology are presenting the EPO with new challenges to maintain its ability to react flexibly to the needs of the user community.

The increasing use of Internet technology in the Office's documentation and automation programmes has also accelerated the development of *epoline*, an electronic business system which will allow electronic filing of patent applications. This and other projects aim at further improving the user-friendliness of the patent grant procedure at the EPO.

The fast-growing importance of patents in European integration has initiated the process of an eastward expansion of the Organisation. While Turkey, after ratification of the EPC, is set to become the Organisation's 20th member state this year, the Administrative Council has formally invited the Czech Republic, Poland, Hungary, Slovakia, Slovenia, Estonia, Romania and Bulgaria to accede to the European Patent Convention by July 2002. These states now have observer status on the Administrative Council and its Committee on Patent Law.

The impending enlargement of the Organisation has also prompted the Contracting States to embark on a comprehensive revision of the European Patent Convention, as applicants have made their expectations of the future patent system clear: European patents must cost less, they must have a unitary character and they must also provide reliable protection for new technology. The way in which these challenges will be put into practice will determine the further development of the European patent system.

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