

Quality at the European Patent Office

Quality is at the heart of the European patent system. The EPO is deeply and very concretely committed to ensuring that it remains so and intends to be the world benchmark for patent quality

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For the European patent system and the European Patent Office (EPO), quality is not an option: it is the heart of its identity, a distinctive characteristic. European patents are granted on the basis of a uniquely thorough search and examination procedure. They offer a degree of legal certainty that is unmatched anywhere in the world. They offer guarantees of this quality that are unparalleled. This commitment to quality originates in the mandate of the EPO, as laid down in the European Patent Convention (EPC), and in the will of European governments and European society. Nevertheless, quality remains a permanent challenge and a concrete objective for the EPO, as reflected in the formal quality management system initiated in 2004.

Quality a defining characteristic

At the recent EU hearing on Patent Policy in Europe, held in Brussels on 12th July 2006, civil society and, in particular, the representatives of large and small and medium enterprises, expressed their strong support for the high quality of the European patent. The desired reduction of cost should not come at the expense of quality, they argued, as the high quality of patents is a major asset for Europe and its knowledge economy. The Commission and the Union's member states also showed that they share this vision of quality as a distinctive feature of the intellectual property system in Europe.

It is the mandate of the EPO to grant high-quality patents. The requirements for patentability set out in the EPC and applied

by the EPO are stringent. The three conditions of novelty, inventive step and technical character are interpreted in the widest sense (EPC, Article 52(1)). This implies extensive search and examination prior to the granting of patents, and requires highly skilled examiners with appropriate initial and continuing training.

Recruitment and training of examiners

Examiner recruitment is a thorough operation. First, the EPO's recruitment procedure is very competitive and demanding, and we benefit from a strong interest from skilled applicants. Second, the EPO provides common training to ensure that all examiners follow, legally and technically, a consistent approach. Particular attention is given thereafter to the individual training needs of examiners, according to both their individual background and their field of work. New technological developments and trends also require us to reassess our training policy and needs continuously.

Documentation

Skilled examiners rely on extensive and high-quality documentation. Since the state of the art considered for the purpose of novelty assessment is held to comprise "everything made available to the public" (EPC, Article 54 (2)), examiners need access to a vast stock of patents and other documents. In this area too, the EPO sets a benchmark: its virtual library for examiners now comprises over 62 million documents. The quality of this documentation is guaranteed by strict monitoring: 4.6 million documents were reviewed in 2005, resulting in 314,000 manual corrections. Espacenet makes this patent literature publicly and freely accessible.

Unlike a number of patent offices



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philosophy*

worldwide (notably the US office), the EPO takes global knowledge in all its forms as the yardstick of inventiveness. This includes traditional knowledge, an area where the EPO has partnerships with many non-European countries. These partnerships aim at incorporating traditional knowledge into the EPO data banks. It also has the side effect of making traditional knowledge available to the public in the English language and thus constitutes a very efficient way to protect and promote it. A database of traditional Chinese medicine, for example, has been integrated in the EPO stock of patent documents, ensuring that techniques derived from traditional Chinese medicine are not patentable in Europe.

Stringent conditions for patentability

The requirement of technical character for patents is also, in my view, another token of the high quality European society expects from its patents, as it helps to make the European knowledge economy a safer and more predictable environment for entrepreneurs. The so-called ethical exclusions from patentability – such as the refusal to grant patents to inventions that are contrary to *ordre public* or morality – also contribute towards making the European patent system one of the most demanding in the world.

Processes

In addition to the quality aspects outlined above – the skills of the examiners, the extent of our documentation and the high standards we apply – the EPO follows meticulously designed procedures that are continuously reviewed and updated. The examination procedure in particular involves a high number of redundancies, which is one of the Office's distinctive features. Examiners, of course, bear the primary responsibility for maintaining high-quality standards. They assess their own work against systematic checklists and the requirements for the justification of their recommendations are high, especially with regards to documentation and compliance with the EPC.

Individual examiners are, therefore, the prime actors in the operational quality control processes. However, any decision on the granting of a patent is checked further by an examining division, with a second examiner, who reviews formal aspects, and a chairman, who checks the substance of the patent application. After this second review, a third check on selected files is carried out by directors. In addition, the Quality Management Directorate is currently

developing a fourth level of quality control, which I shall detail below. Each of these levels of quality checking precedes a decision. Any of them can result in a request for further search and examination.

Practices and procedures are under continual scrutiny, and they are reviewed on the basis of, for example: feedback from the examination process, in particular from the quality control measures; the jurisprudence of the boards of appeal and other developments in the interpretation of patent law; and feedback from users.

With the changing European and global technological environment, patents in sensitive areas require special attention, supplementing our normal procedures. This is the case with biotechnology, business methods that show significant technical character, and computer-implemented inventions. For such sensitive cases, the EPO is assisted by a network of experts who are consulted on a case-by-case basis. Issue management groups have also been set up within the Office. They systematically review every application in their area of concern, providing an additional level of quality control.

Possibilities of review

The first line of defence against low-quality patents is thus provided by the examiners and the grant procedure and processes. The second line consists of the opposition and appeal procedures. The fact that these are not heavily used proves the quality of the first line. Fewer than 7% of patents granted by the Office are challenged in an opposition or appeal proceeding (two-thirds of these contested patents are amended or rejected). Recourse to the third line of defence, revocation proceedings in national court, is very little used, as it should be. At 1%, the litigation rate for the EPO is on par with that of the world's top patent offices.

The transparency of the patent grant procedure and the multiple possibilities for third parties to challenge its outcome are further guarantees of the quality of the European patent. Applications are published from the 19th month of the procedure, which enables third parties to present comments and facilitates public debates on inventions and patentability in the early stages of the patenting process.

Principles of EPO Quality Policy

The objectives of the EPO are to support innovation, competitiveness and economic growth in Europe. Defining what quality means for us therefore entails identifying the

key factors in the fulfilment of these goals. It is on this basis that the four principles of the Quality Policy were specified:

- The first principle of the Quality Policy is legal certainty. A primary goal of the patent system is to provide certainty to inventors, investors and enterprises with regards to the protection and the use of inventions. The task of the EPO is to grant patents and to ensure that the rights granted by the patent are commensurate with the contribution made to technology.
- Service is the second principle. The EPO is at the service of European society. It has to be reliable and flexible on the basis of a balanced understanding of that society's needs and values. The fact that the Office now provides applicants with an early opinion on patentability is a good illustration of its commitment to this principle. Its commitment to reducing the delays in the patenting procedure is another.
- Third, the openness policy of the Office has at least three advantages. The transparency of the patent grant procedure facilitates comments by third parties early in the process (the public file inspection procedure allows anyone to submit comments on an application to the relevant examiner from the 19th month of the process). The indication of what applications have already been filed also provides a powerful tool for economical intelligence, and the publication of patents is a strong catalyst for research and innovation.
- Fourth, the Office strives for continuous improvement, in a permanent commitment to enhance quality, on the basis of our five cardinal virtues: thoroughness, consistency, transparency, fairness and timeliness.

Let me now turn to the details of the EPO's effort to secure and reinforce the high level of quality already attained.

Formal quality management in the EPO

Quality at a given time, and even a history of quality like that of the EPO, is not a guarantee of future quality. On the contrary, the whole point of a quality system is to ensure that quality is sustained with certainty beyond the unavoidable changes of the environment and of the organisation. As this requires continual reassessment and adjustment, there is no other way to secure quality than aiming at constantly raising its level. Therefore, the

principle of continuous improvement is central to our quality policy, which in turn involves ensuring the Office's responsiveness to change.

The environment in which the EPO operates has seen some very obvious changes in recent years. The main new development posing a challenge is the growth in our workload, with nearly 194,000 filings in 2005, amounting to an increase of 148% in 10 years. Other such factors include the emergence of new types of inventions in fields such as biotechnology or telecommunications and IT, the evolving legal background, the ongoing debate on EPO cooperation with national patent offices and changes in the filing behaviour of applicants.

This is why in 2004 I initiated the implementation of a formal Quality Management System, with a natural focus on quality in the examination area (ie, search, examination and opposition), and, as part of the reorganisation of the EPO in 2005, the creation of a Principal Directorate for Quality Management, and the integration of the internal audit department under my direct supervision.

The main added value of a formal quality management system lies in the systematisation of our approach to quality. The role of the European patent system is to provide certainty and predictability for the European economy. Faced with the challenging environment of global innovation, it is only natural that the EPO should endeavour to make the quality of its work certain and predictable, further enhancing the general reputation it already enjoys.

The Office's efforts to formalise its quality system have already borne fruit in a number of significant areas.

Customer satisfaction

The first recent development connected with the reorganisation of the Office is an enhanced attention to the needs and expectations of its users. That service is one of the four principles of the quality policy already indicates the Office's intention to open itself still further to European society.

This service reorientation is reflected in the activities of the new Metric and Standards Directorate, which has taken over the task of redesigning the Users' Satisfaction Survey with a view to exploiting its results more systemically. The incorporation of this unit within the Principal Directorate for Quality Management will ensure that the EPO pays still closer attention to customer satisfaction when assessing the quality of its products

and updating its processes and procedures accordingly.

The handling of complaints has also been integrated into the Office's general quality management system. Complaints received by the Office were invariably taken up by the persons directly concerned; now they are processed and analysed by the department which oversees the quality policy.

The opening of the Office to society is clearly apparent in the work of the Communication Department, which was set up in 2004 to unify and enhance the ways in which the Office presents itself. Significantly improved attendance at press conferences and briefings, wider dissemination of our publications, clarification of our message and image, coordinated communication with the European Commission – these are just some examples of our renewed relations with the press, the public, policymakers, industry and society at large.

Systematising the improvement loop

Another significant part of the quality effort relates to the systematisation and the strengthening of the so-called improvement loop. Throughout the Office, as in the user satisfaction surveys and the processing of complaints, every issue, doubt or suggestion that arises is analysed and integrated into the process of quality enhancement. Thus the Office is able to spot early signs of problematic situations.

An example of the reinforced improvement loop is the creation of an additional level of operational quality control within the technical clusters. Randomly sampled patent applications are to be surveyed and checked against electronic check-lists. This will provide us with statistically relevant information on a continual basis for each technical field on the most common flaws in the patent granting procedure, and will thus allow for immediate targeted actions to be taken for improvement. As these checks will also measure the effectiveness of the actions taken, resources can be applied in a targeted, efficient and economic way.

Internal audit

Another important aspect of the new quality management system is the reinforcement of our internal audit system, which now has a dedicated unit for auditing search and grant products, and which reports directly to me. It is therefore entirely separate from the examining area. Its primary role is to provide confidence in the quality of the Office's

work. This is done by closely scrutinising a limited number of randomly sampled files, which are checked against legal, procedural and technical standards. Moreover, the criticisms and suggestions of the internal audit department are an additional input into the improvement loop described above.

European patent quality system

The EPO acts as a coordinator and an examining authority for the grant of European patents. It does by its nature collaborate with the national patent offices, which eventually grant national patents and also receive a major (though diminishing) share of first filings.

The quality of European patents therefore depends not only on the work of the EPO, but also on the contributions of the national patent offices and their cooperation with the Office. This is why the member states of the EPC wish to implement a European quality system, to provide a foundation for participating offices to achieve continuous improvement to the quality of their products and services, and to enable them to participate in any utilisation of their searches by the Office.

The EPO, with its long experience and strong track record for quality, has drafted a mandate for a working group to make proposals on this matter. This is being done on the basis of the experiences of the EPO and national patent offices, and paying due regard to the need to adapt the proposed quality system to the particular circumstances of a given office.

Conclusion

The quality of the European patent system, complying with the high standards demanded by European society, relies on the EPO's procedures for granting patents and controlling their quality. This is backed by the transparency of the Office's work, its attention to feedback from applicants, and its strengthened quality control and internal auditing.

On this basis, and to continue fulfilling its wider mission to provide certainty for industry in Europe, the EPO intends to remain the world benchmark for quality. In these efforts however, the Office's main asset – and the ultimate assurance of quality – remains the unstinting commitment of its entire staff.