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COMMUNICATION FROM THE COMMISSION

TO THE COUNCIL, THE EUROPEAN PARLIAMENT  
AND THE ECONOMIC AND SOCIAL COMMITTEE

**Promoting innovation through patents**

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**The follow-up to the Green Paper on the Community Patent  
and the Patent System in Europe**

## **Summary of actions and recommendations**

### Urgent actions at Community level

- Community patent: prepare a draft Regulation based on Article 235 EC.
- Patentability of computer programs: prepare a proposal for a Directive based on Article 100A EC.
- Patent agents: draw up an Interpretative Communication.
- National patent offices: launch a pilot action designed to back their efforts to promote innovation.
- "Legal protection" insurance for legal action in connection with patents: organisation of a European conference.
- Convention on the European patent: launch the procedure for Community accession.
- Better dissemination of information on patent law among inventors, researchers and SMEs: prepare a communication from the Commission.

### Medium-term actions at Community level

- Employees' inventions: launch a study, in particular of "standard" clauses and arbitration procedures.
- Patent law in the sectors which are required to have prior authorisation for market release: harmonisation of the scope of exceptions.

### Recommendations

- European Patent Office: support for proposals to reduce the fees charged.
- European Patent Office: encourage lower costs for translating the European patent.
- Member States: encourage the revision of the European Patent Convention, in particular in order to adapt it to technological developments and to take account of Community legislation and the relevant international agreements; consider Community accession to the Convention.
- Support for the ongoing training of patent agents.

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## 1. INTRODUCTION

*The Action Plan for the Single Market, adopted by the European Council of Amsterdam in June 1997, identified industrial property as a sector where action was needed to make it more effective and accessible to the user and thereby realise the full potential benefit of the internal market in the field of innovative products and services. The Community's action in the field of industrial property is designed to demonstrate its full awareness of the link between innovation, growth and employment.*

*The Green Paper on the Community patent and patent system in Europe has raised considerable expectations, both in industry and in the Member States.*

*Introducing a unitary patent to cover the entire Community has become a political priority; it falls within the framework of Community action designed to adjust and simplify the regulatory environment for enterprises operating in Europe. Such action is also necessary to maintain the competitiveness of innovative enterprises in the Community and is an instrument which should make it possible to provide greater protection for research results, thereby encouraging such research and its commercial exploitation.*

*Computer programs are an important element in the development of many economic activities and contribute directly to the establishment of the information society; the conditions governing their protection by patent should be better defined and harmonised within the Community.*

*Patent agents play an important role in advising and assisting innovative enterprises and inventors; it is necessary to ensure that this profession can benefit fully from the freedoms provided under the Treaty.*

*Several topics emerged during the consultation which are not mentioned in the Green Paper, such as the period of grace or the scope of the rights conferred by patents in certain regulated sectors. This demonstrates that the increased economic integration of the Community resulting from the internal market is making economic operators more aware of the legal environment in which they must evolve.*

*It is vital to ensure the emergence of a coherent patent system in Europe, and one way to achieve this is through better coordination between the Community and the European Patent Organisation.*

*The national patent offices play a major role for many European enterprises and they must be confirmed and encouraged in this.*

### **1.1. Green Paper on the Community Patent and the Patent System in Europe**

On 24 June 1997, the Commission presented the Green Paper on the Community patent and the patent system in Europe.<sup>1</sup> The aim of this initiative, which was part of the follow-up to the first action plan for innovation in Europe<sup>2</sup>, was to launch a broad discussion with all the interested parties on the need to take new initiatives in relation to patents and to reflect on the nature and content of any such initiatives.

The success of this approach far exceeded the Commission's expectations; from the time of its adoption, the Green Paper aroused a great deal of interest: many conferences and meetings were organised on the topic throughout the Community, many opinions were submitted to the Commission, etc., all of which demonstrates that the Green Paper responded to a real need to modernise and improve the patent system in Europe.

The general message emerging from all of these discussions is the need to put greater emphasis on the practical aspects of the patent system, which should take full account of users' needs. Patents are very important instruments for promoting innovation, creativity and employment. They must form an integral part of the economic reality of enterprises, inventors and SMEs, providing them with adequate protection at a reasonable cost and with optimum legal certainty. Above all, patents should not hinder innovation.

In the unanimous opinion of users, the correct functioning of the internal market requires twofold action: on the one hand, the introduction of a unitary system of patent protection and, on the other, various additional harmonisation measures to make the system more transparent and more effective.

Also, the patent system should be modified to afford greater protection to research results and thereby encourage such research and its commercial exploitation. This would also optimise public investment in research (both at Community and national level).

It is with this general concept of a patent system at the service of innovation in mind that the Commission has defined its choice of measures to be taken in this field.

### **1.2. Consultation of interested parties and other Community institutions.**

The consultation of interested parties which had commenced with the adoption of the Green Paper continued during the second half of 1997. A very large number of opinions were sent to the competent Commission departments (more than 150, totalling more than 1 200 pages); these reveal a great deal of in-depth consideration of the various topics dealt with in the Green Paper. To conclude this part of the consultation with interested parties, the Commission took the initiative, jointly with the Luxembourg Presidency of the Council, to organise a hearing open to all users

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<sup>1</sup> COM(97) 314 final, 24.6.97

<sup>2</sup> COM(96) 589 final, 20.11.96.

of the patent system (enterprises, inventors, patent agents, etc.). This was held in Luxembourg on 25 and 26 November 1997 and was attended by more than 220 persons. This hearing ended with the adoption of "conclusions" which were widely disseminated.

The Economic and Social Committee submitted a detailed opinion on the Green Paper on 25 February 1998. To a very large extent, the Committee shares the analysis outlined by the Commission in the Green Paper. In its opinion, in view of the economic consequences for competitiveness and technological and industrial development in a global market it is vital to tackle the problem of the Community patent by giving it absolute priority. It invited the Commission to submit a draft Regulation on the Community patent as soon as possible in 1999.

A meeting of experts from Member States was organised by the Commission on 26 January 1998; at this, Member States were able to present their views and their suggestions to improve the patent system in Europe. In order to introduce a unitary system of protection by patent and modernise and simplify the patent system in Europe, a large majority of Member States' representatives urged the Commission to proceed with most of the suggestions outlined in the Green Paper.

Lastly, the European Parliament adopted its opinion on 19 November 1998. The Parliament considers that consistent and effective Community legislation in the field of patents is a vital factor in promoting the competitiveness of enterprises in the European Union; for this reason it concludes that it is now no longer sufficient to harmonise the concrete provisions of national patent legislation, and that it is necessary to draw up a Community Regulation with its legal basis in Article 235 of the EC Treaty. It asks that any concept of a future Community patent system should take account of a comparative analysis of the patent systems applicable in the United States and in Japan and should consider the cost of the patent application and its management, as well as the cost of developing the industrial potential of the European Union.

Also, it should be pointed out that the Commission has worked closely and fruitfully with the European Patent Office throughout the entire consultation process.

### **1.3. The aim of this Communication**

Following this vast consultation process, the aim of this Communication is to take stock and announce the various measures and new initiatives which the Commission plans to take or to propose in the future to make the patent system attractive for promoting innovation in Europe. This Communication is directly in line with the First Action Plan for Innovation in Europe and aims to give practical shape to various lines of thought aired on that occasion.

It is important to note that the Communication is not concerned solely with patent law in the strict sense of the term, but deals with other measures which are very important in promoting innovation, such as the use of patent agents, the role of the national patent offices, insurance in the event of legal action, etc.

However, since the Green Paper dealt with a wide variety of issues, the measures planned in the different fields will naturally also vary. Legislative measures are

needed in the case of certain issues, while in the case of others the Commission's intention is more to encourage or disseminate the good practices which already exist in various sectors.

Three priority issues were identified during the consultation, on which the Commission should rapidly submit proposals; these are:

- the Community patent;
- the patentability of computer programs;
- the role of patent agents.

In the case of the other issues raised in the Communication, the Commission's role should be conceived more as one of providing support, which might extend over a longer period.

## 2. THE COMMUNITY PATENT

### 2.1. The role of patents in the innovation process: towards a reversal of priorities

Most comments emphasise the need to reverse priorities. The patent system should no longer be conceived in isolation from the economic and industrial reality of which it is part. In the light of **the economic consequences and the impact on the competitiveness of enterprises**, it is vital to confront the issue of the Community patent by according it **new priority**. Before further enlargement of the Union, it is necessary to rethink the patent system and to relaunch it on foundations permitting an effective start-up. As the European Parliament stated, to overcome the problem of the current systems and to help stimulate innovation, the reformed patent system must be "simple, rapid, legally certain, accessible and not involve excessive expenditure".

The consultation highlighted the vital role played by patents as an instrument to stimulate investment in the research and technology sector. Thus, coherent and effective European legislation on patents is vital to ensure the competitiveness of enterprises in the Union. A fully integrated European market in innovation requires a European system to protect industrial property by means of a patent which is accessible, in particular to small and medium-sized innovative high-technology enterprises. A unitary system of protection by patent would guarantee full equal access to the new technologies for users and consumers in all the Member States of the Union. It would also make the conditions of competition more transparent for innovative enterprises.

### 2.2. The need for a unitary system of protection by patent.

The consultation reveals clearly that there is a **real need** for a unitary Community patent, covering the entire territory of the European Community. This will help to improve the operation of the internal market, will significantly facilitate the management of rights linked to patents and make it easier to enforce these rights. Today there is a need for a more cohesive system than that envisaged by the



Luxembourg Convention concluded in 1975 and revised in 1989. It is striking that an increasing number of enterprises consider the internal market of the Community as their "natural" market, which has consequences in terms of the legal instruments placed at their disposal. The users of the patent system are of the unanimous opinion that the Luxembourg Convention presents such major disadvantages (prohibitive costs, legal uncertainty) that it is no longer in a position to guarantee the necessary unitary protection.

It emerged clearly from the consultation that, at this stage in the completion of the internal market, the Community patent should be introduced in the form of a **Community Regulation based on Article 235 of the EC Treaty**. Such an instrument is greatly preferred to an international convention owing to its specific features (easier to include in the "acquis communautaire" in the context of enlargement, direct effect in all the Member States, etc.).

Today, in a single market where the large majority of operators will soon be using a single currency, it appears natural to consider creating a unitary patent.

The adoption of a European patent system comprising the Community patent is vital if we are to succeed in transforming research results and the new technological and scientific know-how into industrial and commercial success stories - and thereby put an end to the "European paradox" in innovation - while simultaneously stimulating private R&D investment, where the Union currently lags far behind the United States and Japan.

### **2.3. The main features of a Community patent.**

The nature of the Community patent must be unitary, it must be affordable, it must guarantee legal certainty and must coexist with existing patent systems.

The Community patent must be **unitary**. This means that it must have the same impact throughout the Community. It must be able to be issued, acquired, revoked and expire for the Community as a whole. On the other hand, this means that the consultations did not support the Commission suggestions for an "à la carte" Community patent, where it would be possible to obtain or retain uniform protection in a limited number of Member States.

The Community patent must be **affordable**, and cost about the same as a European patent covering a limited number of countries. The question of the cost of patents in Europe was largely perceived as one of the major causes of the difficulty which innovative enterprises, and particularly SMEs, had in gaining access to the patent system. Special efforts must be made to reduce these costs, wherever possible. This would have consequences, particularly for translations of the patent specifications. It emerged clearly from the consultation that the status quo regarding the European patent, whereby the owner of the patent was required to translate the entire patent into all the Community languages, was not tenable in the context of the Community patent. In practice, this would result in translation costs of about ECU 12 000; if this system were adopted, it would lead to the introduction of a Community patent with no future.

Various solutions were suggested in the Green Paper. Several representatives of industry favoured a radical solution, which consisted in using a single language for the procedure for granting the patent, without subsequent translation of the patent once it was granted. Other comments advocated less radical solutions, and some opinions recommended the use of all the official languages.

The Commission will propose a solution to the problem of translations, attempting to reconcile the following objectives: to facilitate access to the patent system by all users, to ensure the dissemination of the relevant technical information at the most appropriate time and to maintain the cost of the Community patent at a reasonable level. In this context, the proposal made by the European Parliament offers certain advantages and will be examined very closely; this involves keeping the linguistic diversity at the level of the filing of the patent application and the granting of the patent, while the European Patent Office would guarantee an effective search and examination procedure. The Commission will ensure that, on certain points, its proposal guarantees that the "acquis" of the European system is retained (for example, regarding the procedural languages) and that, on other points, it represents a real improvement compared to the current situation. The solution to the problem of translations must also take account of a vital function of the patent, which is to guarantee exclusive rights enforceable against third parties; thus, the legal effects of an infringement could only be invoked against another operator from the moment that such an operator had an official translation of the patent. Furthermore, translations (of whatever nature) will be stored centrally with the European Patent Office.

The Community patent must **guarantee legal certainty**. The system adopted in the Luxembourg Convention was considered a major risk and a source of legal uncertainty: under this, any national court to which a counterclaim for revocation was made could revoke the Community patent with effect throughout the Community territory. This approach cannot be continued. The solution to this problem is to ensure that the system covering infringement proceedings, as well as questions of validity, is uniform and predictable throughout the Community. Decisions must be taken within a reasonable period of time. It should be possible to obtain provisional injunctions, valid across the entire Community, at a reasonable cost.

In this context, the number of national courts competent to deal with these issues should be reduced as much as possible; the best solution would be to entrust competence with regard to Community patents to a single Court of First Instance per Member State. The Economic and Social Committee made some interesting suggestions, namely, first, to rule that the judge deciding on the infringement should also decide on the validity and, secondly, to confer limited scope on this decision (either "inter partes", or with suspensive effect), to avoid the emergence of irreparable damage in the event of a wrong decision. These suggestions should certainly be studied in greater depth.

For its part, the European Parliament recommends that the national courts should be competent to take a decision in infringement or revocation proceedings; two national courts should rule on the substance, with the Court of Justice of the European Communities acting as a court of appeal; at as early a stage as possible, the judicial arrangements for the Community patent should permit a form of

harmonisation of case law at Community level through the intervention of the Court of Justice. Moreover, this should form an integral part of the legal systems laid down by the EC Treaty. Lastly, it should be noted that the majority of users are not in favour of the European Patent Office playing any role in the legal system applicable to the Community patent (infringement or revocation).

As the Parliament requested, the Community patent should, at least for a transitional period, **coexist with the national patents and the European patent**, to which further improvements should be made (see point 4 below). As the central administration responsible for granting patents, the European Patent Office should continue to administer the European patent. In view of its long and high-level experience in managing the European patent, it is desirable that the European Patent Office should become the technical operator for the future Community patent. However, such delegation of responsibilities to a non-Community body raises certain institutional issues which will have to be resolved in due course. Thus, careful attention will have to be paid to the content of the legal provisions to be laid down to "formalise" these powers to administer the European patent conferred on the European Patent Office.

To leave the economic operators free to reevaluate the scope of their invention during its development, and so that they do not have to incur excessive costs, it appears reasonable to allow the person filing the application for the Community patent to be able to **change the application** (up to the deadline for issue) to an application for a European patent which, once granted, would give rise to a number of national patents. However, the possibility of transforming a Community patent which has already been granted into a European patent appears incompatible with the requirements of the internal market. The possibility of transforming an application for a European patent into an application for a Community patent is only conceivable in the case of a patent which designates all the Member States of the Community.

With regard to **fees**, the renewal fees for the Community patent will have to be substantially lower than those for European patents designating all the Member States of the Community. In the context of a truly unitary patent there is no need for designation fees, since the patent will automatically cover the entire Community territory. As part of its executive powers, the Commission will adopt the fees for the future Community patent. Changes in fees must take account of the specific needs of enterprises, particularly of SMEs.

The question of the **right of prior use** must be harmonised at Community level. An appropriate definition must be found to determine the limits within which a third party who has begun to use an invention in good faith, or who has made serious preparations for its commercial use, may continue to use it despite the Community patent being issued to a third party.

Lastly, the discussions on a draft Regulation on the Community patent should also serve as an opportunity to find a solution to the problem of **inventions made or used in space**. In the absence of a specific legal provision on this question in Europe, European industry is currently at a disadvantage. As the Economic and

The Committee pointed out in its opinion on the Communication from the Commission on "the European Union and Space"<sup>3</sup>, it is vital, given the substantial European involvement in the International Space Station and the absence of specific European legislation defining the protection of commercial rights in the case of value added technologies applied or developed in orbit, that such legislation be introduced for patents and licences, as has been done in the United States, and is currently being prepared in Japan and Russia. For its part, the European Parliament considers that the Community patent should guarantee the protection of inventions made or used in spaceships and satellites, protection which is not provided in the framework of existing European legal systems.

#### **2.4. Action planned by the Commission.**

As early as possible in 1999, the Commission will present a draft Regulation based on Article 235 of the EC Treaty aimed at creating a Community patent according to the guidelines outlined in point 2.3.

### **3. COMPLEMENTARY HARMONISATION OF NATIONAL LEGISLATION**

#### **3.1. The need for complementary harmonisation of patent law.**

Community action in the field of industrial property is generally perceived as providing substantial value added compared to individual action by Member States, by making it possible to ensure market transparency, equal conditions of competition and the proper operation of the internal market. It emerged from the consultation that new actions were eagerly awaited in several specific fields of industrial property.

#### **3.2. Computer programs**

##### *3.2.1. The difficulties caused by the current situation.*

The consultation launched by the Green Paper clearly revealed that the current legal environment covering inventions involving computer programs did not provide sufficient transparency and therefore needed to be clarified.

While computer programs are protected by patent in the United States and in Japan, in Europe we used a legal artifice: the programs per se are not patentable<sup>4</sup>, while a technical invention which used a program is. There are significant disadvantages, such as differences in court judgments, inherent in such a practice which lacks transparency in terms of the text of the Munich Convention. Thus, opinions differ between the EPO and certain German courts on the one hand, and the British courts on the other; this means that the same invention is protected in some Member States

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<sup>3</sup> Communication from the Commission to the Council and the European Parliament "The European Union and Space: fostering applications, markets and industrial competitiveness", COM(96) 617 final.

<sup>4</sup> Article 52, paragraph 2, c) EPC.

and not in others, a situation which is **damaging** to the proper operation of the internal market.

This situation means that, although the Munich Convention and the national laws of Member States do not permit the patentability of computer programs as such, there are about 13 000 European patents covering software! It would also appear that, owing to extensive ignorance of the current legal situation in Europe, about 75% of these patents are held by very large non-European companies. European industry is very interested in this type of protection; however, most SMEs in the programming sector are not aware that, by filing patent applications in a certain way, patent protection can be obtained for this type of invention. With investments of almost \$ 40 000 million annually in developing information technology and software programs, the economic importance of this sector is obvious.

According to the practice developed by the EPO, an invention is patentable if it makes "a technical contribution" to the state of the art; however, this approach has certain limitations: thus, accounting/financial programs for the purchase and sale of currencies are of great economic value, but since they do not make any "technical contribution", they are not currently patentable in Europe, whereas they are in the United States and Japan.

An important consequence of the difference of protection is the scope of the conferred rights and the means of enforcement: in the United States, the holder of a patent covering a program may directly attack the distributor of counterfeit programs distributed via a medium ("direct infringement"), whereas in Europe, since the protection is limited to the technical invention which uses the program, the distributor of a diskette is only the accomplice, but not the author of the infringement ("contributory infringement"); the sole author of the infringement is the user who uses the program on the diskette and only he can be sued. The harmonisation of legislation on this question must ensure that rights are **implemented effectively** throughout the Community.

In the United States, following developments at the end of the 80s, it became possible to lodge claims covering a program as such ("program product claim"). This change had a very positive impact on the development of the software industry; thus, Microsoft now holds about 400 American patents for software programs, and about 12 000 patent applications covering software are filed annually (or 6% of total applications, compared with less than 2% in Europe). In Japan, about 20 000 patent applications covering computer programs are filed each year, and the guidelines adopted in 1997 by the Japanese Patent Office follow the more liberal practice in force in the United States.

Furthermore, the current situation in Europe means that the majority of enterprises active in the software field lack information and knowledge of the possibilities provided by the patent system. Alongside the legal changes mentioned above, an **information campaign** should be launched aimed at providing more information to enterprises in this sector regarding the existence of the patent system, its role and the economic advantages to be derived from it, particularly in terms of the penetration of foreign markets and the possibility of obtaining licences. The national patent offices and the European patent offices could play a very useful role in this field.

