Guide on the Industrial Property Activities of Enterprises in Developing Countries



World Intellectual Property Organization

GUIDE ON THE INDUSTRIAL PROPERTY ACTIVITIES OF ENTERPRISES IN DEVELOPING COUNTRIES

Revised and Expanded Edition



WORLD INTELLECTUAL PROPERTY ORGANIZATION

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FOREWORD

This revised edition of the *Guide on the Industrial Property Activities of Enterprises in Developing Countries* has been prepared by the International Bureau of the World Intellectual Property Organization (WIPO). It is an extensive update of the earlier version, published by WIPO in 1983. All parts and sections of this edition of the Guide have been revised and some new sections have been added to reflect the most recent developments in the field of industrial property rights as well as experience with respect to their management and use by enterprises.

The purpose of this Guide is to assist enterprises in taking full advantage of the industrial property system, in particular as regards the management of their intellectual property rights, including patents and trademarks, industrial designs and other objects of industrial property, by providing a basis for the effective evaluation and organization of their industrial property activities. While the Guide has been elaborated taking into account the particular needs of enterprises in developing countries, enterprises in industrialized countries may also find it useful.

The Guide covers the full range of industrial property activities of interest to all enterprises, from the most basic enterprises to the most technologically advanced, thereby permitting enterprises to select and apply progressively the activities most suitable to their needs. It describes in broad terms activities relating to the acquisition, maintenance, enforcement and defense of industrial property rights and to the use of information emanating from the industrial property system, thus enabling the Guide to be adapted to the specific conditions prevailing in individual enterprises.

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Arpad Bogsch Director General World Intellectual Property Organization

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I. BACKGROUND

1. A strong and well-functioning industrial property system is an essential factor in the economic and technological development of all countries. Such a system naturally presupposes an adequate legal and administrative infrastructure in each developing country or within the framework of regional institutions established with the cooperation of developing countries.¹ For developing countries to benefit from the industrial property system, however, use must be made of it by domestic enterprises whose activities strengthen the national economy and the technological base. Domestic enterprises frequently lack experience in this regard and do not always take advantage of the protection and incentives offered by the industrial property system of their country. It is consequently important that enterprises in developing countries establish and organize their industrial property activities in an efficient manner in order to take full advantage of the benefits offered and thus contribute to the development of their countries.

II. PURPOSE OF THE GUIDE

2. The purpose of this Guide is to give advice and provide a practical source of information on the activities of enterprises in developing countries relating to the acquisition, maintenance, enforcement and defense of industrial property rights and to the use of information resulting from the industrial property system.² The successful utilization of the industrial property system by enterprises in developing countries stimulates their creative activity and strengthens their positions in national and international markets. Both of these factors are essential to development.

3. The economic and technological impact of industrial property on enterprises is of very great importance. The protection of industrial property increases the efficiency with which innovative and inventive activity can be managed and exploited. It encourages the creative initiative of employees and gives enterprises the incentive to invest in research, development and marketing without undue fear that the results of their investments will be appropriated by competitors. Industrial property supports the growth of an innovation movement; innovation, in turn, is essential if an enterprise wishes to develop a strong

¹ Such an infrastructure, of course, reflects the general policy of governments in this matter. The issues addressed in this Guide are particularly relevant to enterprises in free-market economies. They are therefore highly relevant for enterprises which operate in the context of economies in the process of moving towards a market-oriented system, and for enterprises working, or coming into existence, in the context of the general privatization of national economies.

² Although the focus of this Guide is on enterprises in developing countries, much of the information provided is of wider applicability. Enterprises in countries in the intermediate stages of development and developing enterprises in industrialized countries might therefore also find it a practical and useful tool.

industrial base; without a strong industrial base, there can be little growth and development.

4. It is important for an enterprise to establish a meaningful economic relationship between the time and money spent on intellectual property protection and the advantages and possibilities which the intellectual property protection system, in the various countries, offers to the enterprise concerned. A policy or strategy for seeking and maintaining protection for intellectual property rights has to be defined for each enterprise, as a constituent of its particular business policy.

5. In this connection, the organization of intellectual property work, both in-house and outside, is looked at, as are the human resources to be assigned to such work, depending on the type of business conducted by an enterprise.

6. Industrial property documents, particularly patent documents, have long been a source of valuable technical, legal and commercial information. Recently, new technologies for the storage, retrieval and dissemination of industrial property documents containing such information have become more widely available, including online facilities and CD-ROM media. This Guide provides a first insight into the possibilities for an enterprise to benefit from such information.

III. INDUSTRIAL PROPERTY ACTIVITIES

A. Types of Enterprise

7. This Guide covers various types of enterprise in developing countries, e.g., privately owned or State-controlled industrial undertakings, cooperatives, research bodies, commercial establishments, public utilities, etc. It is not to be expected that all enterprises, because of their size or the nature of their activities, will be concerned either immediately or at all with the full range of industrial property activities covered. Nevertheless, it is important that the management of enterprises familiarize themselves with the various types of activity and that a basic foundation of knowledge be laid so that, when the need arises as enterprises develop, the activities can be organized quickly and efficiently without opportunities being missed.

B. Inventions

8. The first aspect of industrial property to be considered here concerns inventions. There are, broadly speaking, six main types of activity with respect to inventions: securing protection for inventions; avoiding infringement of patents owned by others; surveying the patent activities of competitors; acquiring and selling technology through patent licensing or know-how contracts; dealing with employees' inventions; searching patents to gain technical information (including bibliographic data).

9. In all countries in which inventions are protected, they are protected by patents.³ In several countries inventions may also be protected by other titles of protection, such as utility model patents, utility certificates or petty patents. The main differences between an ordinary patent and the other titles of protection generally concern the type of invention which may be protected, the substantive conditions and the procedure for obtaining the title, the amount of the fees payable for obtaining or maintaining the title, and the term of protection.

10. For the sake of convenience, the rest of this subchapter refers in most cases only to patents but those references should be taken also to include, where applicable, other titles of protection for inventions.

³ In a growing number of countries, new plant varieties, which may be considered a special type of invention, may be protected by special titles generally called plant breeders' certificates. These titles offer legal protection akin to that of patents for invention.

(a) Securing Protection for Inventions

11. When an invention⁴ is made in an enterprise, it is logical that the enterprise might wish to make use of existing possibilities of securing protection for it. This wish is particularly understandable if the enterprise--as is normally the case--has invested considerable money, time and manpower in the inventive process. The grant of protection rewards the enterprise for its efforts by bestowing upon it a limited exclusive right of exploitation, which encourages the industrial application of the invention. At the same time, possibilities of protection encourage further investment of money and effort in research and development, thus increasing the country's technological infrastructure and innovative capacity.

12. The types of activity related to the securing of protection for inventions include identifying the inventions made in an enterprise, evaluating whether and, if so, where (in which countries) protection should be obtained, preparing the necessary documentation, processing the application or applications for protection and ensuring that protection, once obtained, is preserved.

13. Inventions are normally made in an effort to solve a particular problem. Often, however, an inventor does not think of calling his invention to the attention of his enterprise because he does not realize that it is patentable. It is therefore advisable that the employees of an enterprise be informed about the value of protecting inventions; moreover, the enterprise should know of the projects on which their employees are working so that inventions can be identified at an early stage. In this regard, a simple, straightforward invention disclosure form could be produced by the enterprise and be made readily available to employees. The form should request information concerning, inter alia, the date on which the invention was conceived, the purpose and advantages of the invention, a description of the invention and whether it has been fabricated and tested, as well as a commitment not to divulge the invention until legal protection has been secured.

14. An enterprise could also find it valuable to produce informational material about patents which could be distributed to newly recruited employees to make them aware of the enterprise's industrial property activities and the services the enterprise could perform for them as potential inventors. Alternatively--or additionally--an enterprise could give periodic talks to its employees on the subject to encourage them to submit invention disclosures at an early date.

⁴ An invention may be defined as "an idea of an inventor which permits in practice the solution to a specific problem in the field of technology" (see WIPO Model Law for Developing Countries on Inventions, Section 112).

(b) Patent Policy

15. Once an invention has been identified, there begins the process of determining whether or not a patent application should be filed. Many enterprises have established patent committees to evaluate this question. A patent committee should include technical and marketing staff as well as staff dealing with industrial property matters. Criteria should be established which will assist the patent committee in making its recommendation. These criteria include the commercial or other importance of the invention to the enterprise, its market potential, whether the invention is of broad or narrow applicability, whether the invention should be kept as a trade secret if, for example, it is not readily discoverable, and other criteria depending on the particular enterprise.

16. An enterprise which wants to derive full benefit from patents as a means of safeguarding its competitive position will need a patent filing and maintenance policy. Considering that a patent portfolio is an instrument of business policy, not only technical and legal, but also economic aspects have to be evaluated for the decision to file patent applications and to maintain the granted patents. In other words, it is not only important that the protected subject matter be marketable and patentable, but also that the expenses incurred for patenting seem justified in comparison with the returns expected. The amounts spent on patent protection can be related to the research and development (R&D) expenditure or the total sales volume, of which they would normally represent a small percentage. A useful approach is to regard patenting costs as a necessary part of the R&D costs.

17. Of paramount importance, of course, in the decision whether or not to seek a patent for an invention is an evaluation of whether the invention would qualify for protection. In order to do so, an invention, according to the laws of practically all countries granting patents, must be new, must involve an inventive step and must be industrially applicable. An invention is new if it is not anticipated by prior art; prior art generally consists of everything disclosed to the public anywhere in the world prior to the filing or priority date of the application claiming the invention.⁵ An invention involves an inventive step (also sometimes called "non-obviousness") if, having regard to the prior art relevant to the patent application claiming the invention, it would not have been obvious--at the filing date or the priority date of the application--to a person having ordinary skill in the art. A person having ordinary skill in the art is considered to be someone who has specialized in the field in question, without necessarily being the best expert in the country in that field. An invention is industrially applicable if it can be made or used in industry--industry being

⁵ It should be noted that, in some countries, the legislation places territorial limits on the concept of prior art. In such cases, prior art generally consists of either (1) everything disclosed to the public only in the country concerned or (2) everything disclosed to the public, anywhere in the world, by publication in tangible form or, in the country, by oral disclosure, by use or in any other way.

defined in its broadest sense, including agricultural and extractive industries.⁶ (See WIPO Model Law for Developing Countries on Inventions, Sections 113 to 116.)

(i) Domestic Filing

18. Since domestic filing is done in the applicant's own language, there are no translation costs. This is an advantage over most foreign filings. Many enterprises, therefore, have found it advisable to file domestic applications quite generously. Such an approach mainly serves two purposes:

- patent protection on the home market covers R&D results even if they are not yet intended for the market;
- inventors will obtain the satisfaction of knowing that their work is highly valued, which is an incentive for further creative efforts.
- (ii) Foreign Filing

19. The bulk of the cost for patents is attributable to foreign filings, and this is the area where a conscious, appropriate filing policy--also called "patent strategy"--is particularly needed. The most important points to be considered in respect of filing for patents abroad are:

- technical value of the invention,
- expected patentability and validity of the patent,
- forecasts of the market demands,
- competitors and their countries of manufacture,
- possible licensees,
- advertising function of the patent (indicating creativity, progressiveness, goodwill, etc.),
- preparedness to defend and enforce patents.

20. Regarding the first points, it is evident that the expenses for foreign filing are acceptable if the invention can be expected to meet all requirements for patentability and to satisfy a demand on the market. This might apply only to a fraction of domestic filings.

⁶ In this regard, Article I (3) of the Paris Convention for the Protection of Industrial Property provides as follows:

⁻ Industrial property shall be understood in the broadest sense and shall apply not only to industry and commerce proper, but likewise to agricultural and extractive industries and to all manufactured or natural products, for example, wines, grain, tobacco leaf, fruit, cattle, minerals, mineral waters, beer, flowers, and flour.

21. If those basic conditions can be met, the next step is to decide where foreign applications should actually be filed.

22. At first sight, it might seem that the countries with the largest markets or largest population should be preferred. This can be called a "market-oriented" filing strategy.

23. However, if the invention belongs to what is known as "high technology," e.g. in the field of microelectronics or genetic engineering, only a limited number of enterprises will be able to manufacture such products. Under such circumstances, market-oriented filing might not be the best strategy. It might be highly advisable to file in the countries where the competitors have their manufacturing operations. In the event of an infringement, the patent holder can take legal steps for the seizure of the infringing goods at origin, regardless of the country for which they are intended. This can be called a "manufacture-oriented" filing strategy.

24. In some cases, both strategies designate the same country which will then have a large highly-developed industry and a large market as well. The situation might also be different for different technologies. However, many big countries would not meet the conditions for manufacture-oriented filing, and many small countries, while not constituting a notable market, have an effective industry. Of course, the expenses to be incurred have also to be considered.

(c) Filing and Prosecution of Patent Applications

25. Once the decision is made to seek patent protection for inventions, patent applications must be prepared and filed. Patent applications are filed with industrial property offices and consist generally of a request, a description of the invention, one or more claims defining the invention, one or more drawings (where necessary) and an abstract. Four types of application must be considered: national, foreign, regional and international (where the enterprise is located in a country which is party to the PCT). Filing an application in the home country first is the usual practice. Whether protection in other countries is to be sought and, if so, in which of them it is to be sought, must be determined on the basis of various factors, including the importance of the invention and where it is likely to be worked, the commercial interests of the enterprise and the national patent laws concerned. The enterprise in which an invention has been made will normally prepare at least a draft and, if no external industrial property agent is employed, also the final text of an application for filing in its own country. For the purposes of applications in other countries, particularly where those countries have a language which differs from that of the country of first filing, the aforementioned texts are normally prepared by agents who represent the enterprise in the other countries. In this connection, one of the enterprise's activities is to instruct and monitor those foreign agents.

26. Where the enterprise is in a country party to the Paris Convention for the Protection of Industrial Property, and where it has filed an application in that country, it benefits from a twelve-month priority period for filing patent applications in other countries also party

to the Convention. The priority period provides the very important advantage that all applications filed in the other countries within that period are deemed to have been filed on the priority date, which may be decisive in the examination of the novelty of an invention. Thus, enterprises have a year to determine in which countries they wish to obtain protection. The twelve-month priority period thereby gives enterprises a further opportunity to evaluate both the patentability and marketability of an invention before having to choose in which other countries protection should be sought.

(i) International Applications - The PCT

27. Where the enterprise is in a country party to the Patent Cooperation Treaty (PCT), the possibility exists of filing international applications.⁷ Under the PCT, a single application, filed in one language with a national or regional industrial property office acting as receiving Office and designating the Contracting States in which patent protection is sought, has the same effect as if separate national applications had been filed in each of the Contracting States designated in the application. Through the PCT, patent applicants gain additional time to decide, and are thereby in a better position to evaluate, in which foreign countries they should seek protection; in addition, the payment of national fees and the furnishing of translations is postponed until approximately 20 months after the priority date.

28. Under the PCT, all PCT applications are the subject of an international search. It is also possible, where the national law so permits, to submit an invention that is the subject of a national patent application to an international-type search before filing a PCT application. International searches of PCT applications and international-type searches of national applications are both carried out by an International Searching Authority; the objective is to discover the relevant prior art. An International Searching Authority must endeavor to search to the extent that its facilities permit and is, in any event, obliged to consult the PCT minimum documentation (see Rule 34 of the *Regulations under the PCT*). The resulting report established by the International Searching Authority is consequently of great assistance to an enterprise in determining whether and, in the affirmative, where to seek patent protection for an invention.

29. Furthermore, where an enterprise is in a country bound by Chapter II of the PCT, it has the option of requesting that its application be subjected to an international preliminary examination. The objective of international preliminary examination is to formulate a preliminary and non-binding opinion as to whether the invention in question appears to be novel, involves an inventive step and is industrially applicable. Another important effect of international preliminary examination is that the grant procedure is normally delayed until the expiration of 30 months from the priority date. During this

⁷ For an analysis of the international application procedure, see the *PCT Applicants Guide*, WIPO, Geneva.

time, the enterprise has the opportunity to amend its application, to correct certain defects or to withdraw it if the invention appears to be non-patentable.

(ii) Regional Applications

30. At present, three regional patent offices are in operation, two in Africa and one in Europe. The two regional offices in Africa are the African Intellectual Property Organization (OAPI), with 14 French-speaking member States, and the African Regional Industrial Property Organization (ARIPO), with 14 English-speaking member States. Both issue patents and register industrial designs; OAPI also registers trademarks.

31. In Europe, the European Patent Office (EPO) has been accepting and processing European patent applications since 1978. The European Patent Convention has at present 17 member States, including all member countries of the European Union.

32. A European patent application has to be filed in one of the official languages of the EPO (English, French or German), and the member States in which protection is sought have to be designated. An applicant may claim priority under the Paris Convention. Furthermore, the EPO can be designated as a whole in a PCT application.

33. The EPO conducts a search and a substantive examination, all in the working languages of the application; only the claims have to be translated into the other two official languages as soon as the EPO states its intention to grant the patent once all requirements of the European Patent Convention are met.

34. Once the European Patent has been granted, it becomes a "bundle" of national patents effective in the corresponding designated countries. Only at this stage are translations into the official languages of the designated States required. The standardized and unified prosecution and the postponement of translations can save considerable amounts of money if numerous countries have been designated.

(d) Patent Rights in Dispute

35. Once a patent has been granted, the enterprise owning the patent will be interested in ensuring that the patent is not infringed. This is an activity whose complexity increases with the number of countries in which protection is obtained. It is accomplished through the examination of the relevant literature, patent gazettes, abstracts, etc., and through observing closely the activities of competitors.

36. Where an enterprise that owns patented inventions finds that its patent rights are being infringed or that infringement of such rights is likely to occur ("imminent infringement"), the legal remedy of infringement proceedings is available (see in this regard, Chapter XII of the WIPO Model Law for Developing Countries on Inventions). But before starting a lawsuit, an attempt should be made to settle the matter through

negotiation, a method which, although usually entailing considerable work for the enterprise, is more economical by far than legal proceedings. In cases of alleged infringement, therefore, competitors may sometimes be able to achieve an acceptable settlement through negotiation and avoid the necessity of engaging in relatively expensive infringement proceedings. Before infringement proceedings are instituted, moreover, an enterprise should carefully evaluate the strengths and weaknesses of the respective positions. This evaluation should cover not only the--delicate--question of whether a patent is infringed,⁸ but also the sometimes no less difficult question of the amount of damages to be claimed. In calculating damages, a number of factors may be considered under the applicable legislation, including determination of the amount of financial loss suffered by the owner of the patent, determination of the amount of profits gained by the infringer, breadth of the patent, importance of the patent for the particular product being manufactured, level of reasonable royalty for the patent in the particular field of technology, etc. In addition to instituting court proceedings for infringement, there is the possibility of seeking relief through arbitration; in this connection, the WIPO Arbitration Center, which is specialized in intellectual property cases, offers particularly advantageous services.

37. Under the laws of a number of countries, opposition proceedings, which are usually administrative in nature and may be decided by the industrial property office, may also be instituted. In its patent activities, an enterprise in a developing country may find itself in the role either of defending its own patent application or patent or of opposing another's application or patent which is in conflict with its patent or prior application. This situation may exist either in the country where the enterprise is established or in another country. Where the law of a country does not provide for the substantive examination of a patent application (i.e., an examination of whether the invention complies with the requirements of patentability), opposition proceedings may play a particularly significant role.

38. When a patent application is published or laid open to public inspection, other persons may also submit observations or documents concerning the invention's compliance with the substantive requirements of patentability. Although the person submitting such observations would not become a party to the procedure, the information may be used by the industrial property office to decide whether the patent should be granted or refused.

39. Even after a patent has been granted to a competitor, an enterprise may find it necessary, where the facts so justify, to challenge the validity of the patent. In some countries, in accordance with the modern trend, the law provides for an administrative

⁸ It should be noted that, in infringement proceedings, the alleged infringer often defends his position by claiming that the invention in question is not patentable and, therefore, that the patent on which the action for infringement is based is invalid. Consequently, where a patentee was unable to verify fully before filing his patent application that the invention satisfied the requirements for patent protection, and where the substantive question of patentability was not examined by the industrial property office during the patent grant procedure, the patentee should undertake a patent search, or should arrange to have such a search undertaken, in order to establish the validity of his patent before commencing the infringement action.

system of patent reexamination or post-grant opposition. Under such systems, which avoid the delays often occasioned by pre-grant opposition procedures, patents are open to challenge by members of the public for varying periods of time after their grant on the basis of prior patents, publications and other information which was not previously considered by the industrial property office in reaching its decision to grant the patent.

40. Another remedy which may be available to an enterprise is invalidation. Where a patent for an invention owned by a competitor in which an enterprise has a direct interest does not satisfy the specific fundamental requirements of the law (novelty, inventive step, industrial applicability, etc.), the enterprise normally has the right to institute judicial proceedings to invalidate the patent. An invalidated patent is regarded as being null and void as from the date of its grant. (See WIPO Model Law for Developing Countries on Inventions, Sections 158 and 159). Since invalidation proceedings can entail considerable costs for an enterprise, however, they should not be undertaken inconsiderately and need to be prepared very thoroughly.

41. In countries whose legislation requires a patented invention to be exploited within a given time limit, an enterprise may be able to apply for a compulsory license to exploit the invention where the patent owner has failed to do so.

(e) Employee Inventive Activity

42. The importance of the inventive activity of employees in enterprises in developing countries cannot be overstated and should be encouraged to the utmost. Where employees engage in making inventions, several questions have to be resolved, in particular who (the employer or the employee) owns the invention and the resulting rights, whether the employees should receive special remuneration and, if so, how much.

43. In some countries, the question of employees' inventions is regulated in the patent law or in a special law on the subject while, in others, the question is regulated by contract and by case law. In most cases, however, certain basic principles apply.

44. There are, in general, three types of employees' inventions: "service" inventions, which are made under an employment contract for the performance of research work; "dependent" inventions, which are made in the field of activity of the employer by an employee who is under no contractual obligation to exercise inventive activity but who uses data or means available to him through his employment; and "free" inventions, which are made outside the scope of an employment contract without the use of data or means available through employment or which are outside the field of activity of the employer.

45. In the latter case, the right to a free invention and to the patent therefore belong to the employee inventor. Nevertheless, many enterprises oblige their employees to inform them of any free inventions they make so that the enterprises may make an offer of a license for the inventions if the inventions fall within the enterprises' fields of activity.

46. Under the laws of many countries, service inventions belong to the enterprise, unless special contractual provisions stipulate otherwise. The employee inventor may have no right to special remuneration since the amount of ordinary remuneration is, in principle, set in accordance with the inventive activity. Sometimes it is provided (see WIPO Model Law for Developing Countries on Inventions, Section 120) that the employee inventor be entitled to special remuneration if the invention has an economic value greater than that which was foreseen or on the basis of which the ordinary remuneration was fixed. In such case, it is for the enterprise and the employee inventor to determine the amount of remuneration by common accord; when they cannot agree, the courts are usually granted jurisdiction to settle the matter. The factors that are taken into account are the employee's salary and his position in the enterprise, the enterprise's share in the realization of the invention, the economic value of the invention and the benefit derived therefrom by the enterprise.⁹

47. It is not uncommon for enterprises to enter into agreements relating to inventions and trade secrets with their employees who perform research work. The contracts stipulate the rights of each party with regard to any inventions which may be made at a later time within the employment context and provide that the employees agree not to disclose trade secrets and other proprietary information of the enterprise either during their employment or afterwards.

48. In the case of dependent inventions, two approaches are common. Under the first, the right to the invention and the patent directly vest in the enterprise, unless there are contractual provisions to the contrary; under the second, they belong to the employee inventor except where the enterprise declares its interest in the invention, in which case the right is regarded as belonging to it. In both cases, the employee is entitled to special remuneration, which is fixed in the manner described in paragraph 46, above. It should be noted that some countries do not distinguish between dependent and service inventions and treat both types in a similar way.

49. The tasks of an enterprise in connection with employees' inventions normally include identifying inventions made by employees, checking those inventions to determine whether they are of interest to the enterprise, preparing patent applications and determining, where appropriate, the remuneration due to the employee inventor. To facilitate those tasks, an enterprise may be well advised to establish a policy on employee inventive activity and to issue internal regulations.

50. In addition, many enterprises have found it useful to institute various incentive or recognition programs for employee inventors. These programs provide for inventors to

⁹ With respect to the legal administration of service inventions, it should further be noted that, under some laws, particularly those that provide for a first-to-invent system of protection, the right to a service invention vests initially in the employee inventor. However, the enterprise has the right to use the invention from the moment that it comes into existence. Moreover, it may be provided, as for example in Germany, that special remuneration be granted for all service inventions on the grounds that an invention protected by a patent confers upon an employer an exclusive right and consequently a preferential position in competition.

receive monetary awards, promotions, medals or publicity, etc., as a result of their successful inventive activity. Such programs are worthwhile from an employee relations viewpoint and demonstrate the importance of inventive activity to the enterprise and to society. In some countries, incentive programs are undertaken by inventors' associations or by the government.

51. Enterprises may gain great benefit not only when their employees make inventions but also when they suggest solutions to technological or managerial problems facing the enterprise which do not necessarily fulfill the conditions of patentability (because they are not new to the public in general but only new to the enterprise). A system of incentives can be established to encourage employees to make suggestions for improving manufacturing, administrative, accounting, advertising or other management methods. Such a system may even be embodied in legislation. The administration of such a system, including the examination of solutions proposed and the grant, for example, of incentive certificates and other rewards to employee proposers represents an important activity for an enterprise.

52. Somewhat akin to the relationship between an enterprise and an employee is the relationship between an enterprise and a research body commissioned by the enterprise to carry out an inventive activity. In such case, it is necessary that the contract between the enterprise and the research body stipulate clearly the ownership of any resulting invention and, in the event of the research body retaining ownership, that the enterprise be granted a license to work the invention on equitable terms.

(f) Patent Information

53. Technical literature is usually considered to consist of books, journal articles, brochures and information sheets issued by manufacturers. A very important source of information is frequently overlooked: the patent documents issued by the patent offices around the world. This is particularly relevant considering the amount of information involved which is not found in any other source. A study by the US Patent and Trademark Office estimated that 80% of all technical developments are disclosed only in patent descriptions and nowhere else.

54. Patent documents are unique compared with other technical literature. They provide three different types of interrelated information, namely:

- technical information,
- legal information and
- commercial information.

55. Patent laws demand that the inventor disclose the invention clearly and completely so that a person skilled in the art may carry out the invention. At least one mode, in some countries the best mode known to the inventor, has to be described, and wherever possible drawings to be added for better understanding. Since the description of embodiments has

to enable others to make use of the invention, it is rather detailed, on a practical level, and as a rule more precise than a general article. Furthermore, since patents have to be published in most countries within 18 months from the filing or priority date, the information contained therein is quite recent. It has to be noted, however, that the description is directed at a person skilled in the art who is familiar with the fundamentals and the general know-how of the art in question. A patent document is not a textbook for beginners but instructions addressed to experts.

56. Patent documents bear the name and address of the inventor and the applicant. This helps to identify who works on the technology in question and where; interrelations can thus be ascertained.

57. An important advantage of patent information is that patent documents are classified in a large number of classes, subclasses, groups and subgroups according to the International Patent Classification. This already allows accurate access if information about specific subjects is desired. Additionally, modern retrieval technologies (discussed below) offer catchwords or combinations of catchwords for searching a specific detail. While such technologies are also applied to other types of technical literature, the combination of patent class and catchwords is often a useful means to put precise questions quickly and easily.

58. Being also a legal title, as will be explained below, a patent document is often difficult for an engineer to read. Particularly the claims, written in a legally determined language, frequently deter engineers. To derive full benefit from patent literature as an extremely valuable and useful source of technical information, two rules should be observed.

59. If an engineer just wants to gain technical knowledge from a patent document in an analytical evaluation, he should disregard claims and other legal passages and read only the embodiments, accompanied by drawings in the description.

60. If a complete survey of a specific technical field is desired, the appropriate patent classes and keywords should be used as a basis for search; this is known as a "profile" or "technology profile." It is advisable to define such profiles in cooperation with an expert in patent searching to avoid misinterpretation of class designations and subsequent failure to refer to all relevant subclasses or subgroups. Such an expert may also assist in interpreting patent documents.

61. A patent document is more than a technical publication. The inventor has, in compliance with the requirements of the patent law, disclosed his invention for the intended purpose of obtaining an exclusive right in the subject-matter of the invention.

62. Therefore, a patent or a published patent application has a legal dimension. A patent confers on its holder the right to prevent, by any legal means, other persons from producing, marketing (e.g. selling, importing) or using the claimed invention, in the country where the patent was issued. A number of patent laws also extend the exclusive rights conferred by a process patent to the products directly obtained by that process,

regardless of whether those products are claimed as such in the patent. Other persons must therefore assume that the claimed invention is legally protected, or in the case of a published application, will probably be protected, to the benefit of the patent holder or the applicant identified in the patent document. Anybody wishing to carry out the invention in the country where the patent has been issued has to take a license from the patent holder or risk infringement proceedings.

63. The legal information conveyed by patent documents is of particular importance for the business policy of any enterprise. A search for existing or emerging patent rights of other right holders is essential in order to find out which activities contemplated in the enterprise's own manufacturing and sales programs might be blocked by competitors and to decide whether other ways should be found, a license should be taken or proceedings should be started to have the interfering patent declared invalid. Additionally, such a search can show the direction in which development could be continued without infringing valid claims under competitors' patents.

64. A patent document also gives information on the direction of a competitor's R&D activity. A continuous survey of patent activity can offer certain commercial information. If the patents issued or patent applications published in several countries (frequently known as a patent family) in a specific field of technology for a specific applicant are examined over an extended time, say several years, indications of the intensity of development efforts can be obtained. The determination to protect the results and probably also the intention to penetrate new markets can thus be deduced.

65. These are not only useful data for general management decisions but can also assist in looking for an enterprise which is able to license its technology in a given field. A resolute patenting policy, with a rising trend over the years, can be taken as a sign that the enterprise intends to stay in the technology and to invest in continued further development, and therefore might be a particularly interesting licensor. On the other hand, if the patent activity has been discontinued, this will apply also to the development activity, and the prospective licensee has to consider whether he is willing to license technology which is no longer being developed by the licensor.

66. A number of specified uses of patent literature deserve to be considered in further detail.

(i) Patent Searches to Gain Technical Information

67. An important industrial property activity of an enterprise is to conduct searches in the patent literature to obtain technical information for use by the enterprise's scientists and engineers in developing technology and new products. A review of the relevant patent literature, known as a state-of-the-art search, is often a relatively easy and inexpensive way to gain technical information, especially for enterprises without highly developed technology of their own. 68. A state-of-the-art search should be made at an early stage in the development of technology so that an enterprise can have an understanding of what other enterprises have done in the same field. It should be made clear that even if patents already exist in the home country in specific areas of technology, an enterprise should not necessarily discontinue research and development in those areas. The technology it finally develops may be quite different from that which is disclosed in an existing patent, or the patented technology may be intentionally designed around such a patent (i.e., the technology being developed may be conceived in such a way as to avoid infringing the patented technology); alternatively, the patented technology may possibly be invalidated. State-of-the-art patent searches should be made in addition to searches in the technical literature since both patents and technical literature are excellent sources of information and neither is exclusive of the other. Such types of search can be very valuable as it is expensive and wasteful to develop technology simply to find that others have already done the same thing.

69. It should be noted that, since 1975, WIPO has been operating a program to provide governmental institutions and individuals in developing countries with free-of-charge state-of-the-art searches under agreements concluded between contributing industrial property offices in developed countries and WIPO. This program is described in WIPO's publication *Patent Information Services for Developing Countries*, which includes sample forms for requesting such search services in its annex.

70. The evaluation of the patentability of an invention is a complex task. In particular, it requires a prior-art search in order to determine whether the invention is new and involves an inventive step. This task cannot normally be carried out by enterprises making inventions since it entails a search of the relevant patent documentation and non-patent literature of the leading industrialized countries. Nevertheless, a more limited evaluation appears to be useful to avoid alleged inventions which obviously lack novelty since they have been claimed in patent applications. For this purpose, an enterprise could draw up a collection of patent documents and other non-patent literature covering its own field of activities relating at least to the country where the enterprise is established and preferably also to at least one technologically advanced country which uses the same language as the developing country in question (for example, the United States of America, France or Spain).

71. In addition, it is possible to subscribe to a specialized patent abstracting service, which indexes and translates patent abstracts, and to the *PCT Gazette*, which publishes information on international applications filed under the Patent Cooperation Treaty (PCT). Where it is not feasible or cost effective for an enterprise to maintain its own patent documentation collection, the alternative is often to consult public collections housed in industrial property offices, regional or national documentation centers or university libraries. Whether or to what extent each enterprise should set up a collection of documents thus depends on various factors, including the number, type and importance of the inventions made in the enterprise, the feasibility of setting up a collection and the availability of public collections. In any case, enterprises oriented towards new technology would find it particularly useful to maintain at least a limited documentation collection. In this regard, it should be noted that modern means of computerized on-line access to

patent information exist and that consideration should be given by enterprises to consulting such facilities where available, as explained below.

While it is basically the task of an examining patent office to make a search as a 72. reference for its findings with regard to novelty and inventive merit, it is often advisable for an enterprise to conduct such a search before the decision to file is made. Taking into account the high fees payable to a patent office or to representatives, it can be economical to evaluate the relevant prior art to determine the likelihood of an invention lacking novelty and therefore not being patentable. If an enterprise chooses to undertake its own searches, it must have access to a search file, which should include the relevant classified patent documents. As the requirement of novelty, in most cases, knows no territorial limits (i.e., an invention is not new if it is anticipated by the prior art, which generally consists of everything disclosed in tangible form to the public anywhere in the world), an enterprise normally will not be able to compile a complete search file on its own. However. professional patent abstracting services exist which translate and index abstracts and supply them, frequently on microfilm, microfiche or "on line," to their subscribers. In some cases, where enterprises are located near industrial property libraries available for public use, the enterprise may be able to rely on the resources of the library in lieu of, or in addition to, its own search file. Reference should also be made here to the INPADOC database, maintained by the EPO in Vienna (Austria), which provides access to bibliographic data relating to patents (in particular, name and address of applicant, date of application and title of invention). For example, by using the INPADOC database services, it is possible to recognize and retrieve all patent documents classified in the same subdivision of the International Patent Classification (IPC) or all documents from different countries which relate to the same patent "family" (i.e., which are connected by a common priority claim under the Paris Convention). The INPADOC database is, in essence, a world index of patent documents published by more than 50 countries covering the vast majority of patent documents issued today.

73. Where enterprises do not wish to undertake, in whole or in part, their own searches, the option is usually available of engaging a searching service to perform the task. In some developing countries, the national industrial property office can help in this regard. Professional searching services also exist which can be employed to carry out both patent and trademark searches. Based on the results of the search, an enterprise can realistically evaluate what chance of success it will have in obtaining the desired protection. In determining whether or not to employ a searching service, the enterprise should consider the relative importance of undertaking searches, the cost and reliability of a searching service, the extent and number of searches required and the cost and manpower entailed in maintaining a search file and undertaking searches on its own.

(ii) Safeguarding Against Infringement of Patents Owned by Others

74. One of the most important patent activities of an enterprise is ensuring that the carrying out of a process or the manufacture or sale of goods by that enterprise does not infringe patents owned by others. In many countries, a remedy against patent infringement

is the granting of an injunction forbidding use the infringing process or the making, using or selling of the infringing product. An injunction can prove quite severe and very expensive where an enterprise is prevented from using an infringing process or making and selling an infringing product for which it has incurred heavy expenditures on research and development, on building the means of production and on developing a marketing and distribution strategy.

75. At a fairly early stage in the development of a process or product, therefore, preliminary infringement searches should be made to uncover patents owned by others that might be infringed by the process or product being developed. Sometimes it will be possible to change the process or product so that it will not result in patent infringement. An enterprise may also undertake searches of the patents that it is likely to infringe to determine whether those patents are valid. If they are not valid, the enterprise is free to use the process or manufacture and sell the product. The determination of patent validity is an important and highly technical decision, however, and must be made very carefully.

76. Another possibility where an enterprise is likely to infringe a patent is to obtain a license from the patent owner. This can usually be done more readily if the product is in the early stages of development and a major financial commitment has not yet been made. Other alternatives are to continue making the product despite the conflicting patent and to resolve the questions of infringement and validity through litigation (where the enterprise is confident that it is not, in fact, guilty of infringement), or to cease plans to make the product and to turn to another activity before too heavy an investment is made.

(iii) Monitoring the Patent Activities of Competitors

Continuous monitoring of the patent activities of competitors is a task applicable to 77. all enterprises involved in manufacturing and production, whether or not the enterprises themselves engage in research or inventive activity. For those enterprises that do make inventions, monitoring the activities of competitors enables them to keep abreast of the state of the art, which is important with regard to both the initiation and evaluation of research and development projects and the requirements for obtaining patent protection. Moreover, it assists enterprises in discovering whether the protection granted to their own inventions is being or is likely to be infringed and whether they are likely to infringe patents granted to other enterprises. Even where enterprises do not make inventions themselves, monitoring the activities of competitors is still worthwhile since it keeps them up to date on the available technology and on developments and changes in that field. This is especially important for enterprises desiring to acquire technology or know-how from outside sources.

78. Monitoring of competitors should be carried out at two levels. At the first, less sophisticated level, the relevant trade reports of competitors should be studied to obtain an indication of general trends in the field. An the second, more complex level, an ongoing examination of the relevant patent literature should be undertaken to determine exactly the competitors' patent activities. A careful review of published patents and published patent

applications in the enterprise's home country (if that country publishes patent applications), and also in the other countries where the enterprise engages in activities, is crucial in this regard. In addition, the employees of an enterprise, particularly the sales and marketing staff, should be instructed to inform the enterprise of any possibly infringing product of a competitor that comes to their knowledge.

C. Trademarks

79. Another equally important aspect of industrial property to be considered here concerns trademarks. Trademark activities include selecting trademarks, obtaining and maintaining trademark protection and watching the trademark activities of competitors.

(a) Selecting Trademarks

Trademarks are visible signs which serve to identify the goods and services of an 80. enterprise and to distinguish them from those of another. The term "visible sign" is very broad in scope and includes any of the following, or combinations thereof: arbitrary or fanciful designations, names, slogans, devices, numbers, letters, pictures or symbols, labels, combinations or arrangements of colors, and shapes of containers or of the goods themselves. (See Model Law for Developing Countries on Marks, Trade Names and Acts of Unfair Competition,¹⁰ Section 1.) Trademarks help consumers decide which goods to buy and thus serve the competitive market interests of an enterprise as well as general economic interests. The use of trademarks constitutes a particularly effective means of protection for enterprises in developing countries. A trademark need not be supported by advanced technology and may be applied even to the simplest product or service. Trademark protection is also well suited for agricultural goods. The use of a trademark can generate goodwill for an enterprise and usually symbolizes a certain standard of quality and uniformity to consumers. It is thus generally advantageous for enterprises to adopt a policy of marketing their goods or services with trademarks.

81. The selection of a sign for adoption as a trademark requires great care as the trademark frequently represents the first impression that a consumer may have of a product or service. Although the choice itself may be influenced more by advertising and marketing considerations than by legal considerations, it is important to choose as a trademark a sign that will not cause any registration or infringement problems. Typically, in carrying out this choice, several signs (possible trademarks) will be considered by the enterprise. This process is sometimes known as "preliminary clearance."

¹⁰ BIRPI (predecessor to WIPO), Geneva, 1967 (hereinafter referred to as the Model Law for Developing Countries on Marks).

There are certain requirements that any sign intended as a trademark must fulfill to 82. be eligible for protection as a trademark, and signs that do not fulfill such requirements should not be selected. For example, a sign is excluded from becoming a valid trademark if it lacks distinctive character (i.e., if it consists of shapes or forms imposed by the inherent nature of the goods or services or by their industrial function, if it consists exclusively of an indication which may serve to designate the kind, quality, quantity, etc., of the goods or services, or if it has become, in the course of trade, a customary designation of the goods or services concerned). Moreover, a sign which is likely to deceive the public as to the nature, geographical origin, characteristics or suitability of the goods or services or which is in conflict with existing trademarks (i.e., which resembles either existing marks for the same or similar goods or services or well-known marks in such a way as to be likely to mislead the public) is also excluded from protection as a trademark. (See Model Law for Developing Countries on Marks, Sections 5 and 6.) All signs seriously considered for selection as trademarks must be examined to ensure that they meet the legal requirements for trademark protection. Such examination is indispensable, not only in the light of the law of the enterprise's home country, but also in the light of the laws of all countries in which use of the trademark is envisaged. In this latter respect, it should be noted that it is sometimes necessary to vary a trademark slightly from country to country to account for differences in language, culture, etc.

83. With regard to examining prospective trademarks for possible conflicts with existing trademarks for the same or similar goods or services, a search must be undertaken by the enterprise to discover any similar trademarks already registered. Where a confusingly similar trademark already registered for similar goods or services is discovered or, where applicable in accordance with the national legislation, the use of a confusingly similar non-registered trademark is known to the enterprise, it should not be selected. In carrying out the initial trademark search, a pattern of searching appropriate to the enterprise must be established. To search too widely (e.g., to search beyond the same or similar goods or services) may prove to be financially wasteful and inefficient, whereas to search too narrowly may result in potential hazards being overlooked. In establishing a pattern of searching, an enterprise should be guided by the type of product, the primary and secondary markets involved, and the activities and base of the competitors concerned.

(b) Obtaining and Maintaining Protection for Trademarks

84. Trademark protection is obtained or reinforced through registration in the trademark register of the industrial property office of each country in which protection is desired. International registration with the International Bureau of WIPO may be obtained where the enterprise has its headquarters or an establishment in a country which is party to the Madrid Agreement Concerning the International Registration of Marks. Protection accrues in some countries to the person or entity in whose name the trademark was first registered; in others, it accrues to the person or entity who was the first to use the trademark. Even where protection is afforded to the first user, registration is important as it generally facilitates the registered owner's position in any subsequent litigation. Registration should be sought in all countries where the goods or services covered by the trademark are likely

to be marketed in a significant quantity. As in the case of patents, local trademark agents are usually entrusted with obtaining protection in each foreign country. The application for registration must be accompanied by a reproduction of the trademark for which protection is sought. The other general requirements for registration are summarized above (see also *Model Law for Developing Countries on Marks*, Chapter II).

85. The registration of a trademark is always granted for a limited period of time only, usually ten years, but is renewable for further periods, without restriction in number; therefore, a trademark may remain protected indefinitely. In order to obtain the renewal of a trademark registration, the owner has to make a request to that effect and pay a renewal fee. The trademark activities of an enterprise therefore include the periodical evaluation of its existing registrations in order to decide whether they are still of interest to the enterprise and, accordingly, should be renewed. Possible reasons for not requesting a renewal are the replacement of an old trademark design by a modernized version, changes in the goods or services for which the trademark was used or discontinuance of the enterprise's activities with respect to those goods or services. Where a trademark is still of value to an enterprise, however, it is essential that the trademark should not be allowed to expire involuntarily due to failure to renew in time.

86. The securing or maintenance of trademark protection requires, in some countries, that the trademark owner use the protected mark. Use of a trademark is generally understood to mean the offering for sale of goods or services bearing the mark in the country for which it was registered. In countries whose laws require use, the time limit within which use must be commenced after registration is laid down in the national legislation and is generally around three to five years. Failure to use the trademark within this timeframe, where alleged by an interested party, usually results in the trademark being struck from the register unless its non-use can legitimately be justified.

87. A trademark may be deprived of protection if the registered owner has provoked or tolerated its transformation into a generic name or common designation for one of the goods or services for which it is protected; indeed, it would be unjustified to maintain an exclusive right in a designation which has become a generic name or a common designation but, of course, the trademark owner loses his rights only in respect of the specific product or service concerned. To prevent trademarks from becoming generic names, enterprises should continuously verify that the following actions are always taken: that protected trademarks are used in a way which sets them apart from other words, that wherever possible the trademark is accompanied by the registration symbol R (or the symbol TM for non-registered trademarks) or that the trademark is made to stand out in some other way, for example, by underlining it or enclosing it in quotation marks; that the trademark is always used as an adjective followed by the generic name of the product or service which it identifies and that the spelling of a trademark is never changed nor a new word made from it. Although enterprises might find it tempting from a marketing or advertising point of view to deviate from these rules, it is essential that they always be applied by enterprises in their correspondence and communications and, especially, in their labeling and advertising.

88. Trademarks in the form of symbols or logo types must also be carefully monitored. Enterprises should review all advertising, product brochures, labeling and publications to make sure that the trademarks are used properly and are not lost because of improper use. This review includes checking that the correct proportions are maintained in a trademark's shape and that the same colors are always used where color is specified in the trademark registration.

89. The grant of trademark protection normally confers on its owner the right to prevent others from using the trademark or any sign resembling it in such a way as to be likely to mislead the public in respect of the same or similar goods or services for which the trademark is registered or from using the trademark or similar sign without just cause in a way which is likely to be prejudicial to the interests of the owner of the trademark. Moreover, where a trademark is well known to the average consumer in a country, its owner may prevent others from using or registering that trademark or a confusingly similar sign, for identical or similar goods, even if the well-known mark is not registered or used in the country by its owner, and, in certain cases, the owner of a well-known mark may prevent others from using that mark, or a confusingly similar sign, for goods or services other than those for which the trademark is registered or used. Where a trademark is likely to be infringed or is being infringed, its owner may institute proceedings to prevent the infringement, or to enjoin the continuation of the infringement, and may also be awarded damages for the injury suffered as a result of the infringement. The detection of cases of infringement is discussed below.

90. The trademark laws of most countries also provide for the registration and use of collective marks. A collective mark is any visible sign that serves to distinguish the origin or any other common characteristic of goods or services of different enterprises which use the mark under the control of the registered owner, typically a cooperative, association of enterprises or institution of a public character. Unlike a trademark, which may be used only by the trademark owner and his licensees, a collective mark, which indicates common characteristics, may be used by any authorized enterprise, provided that that enterprise complies with the regulations governing the use of the mark (see WIPO Model Law for Developing Countries on Marks, Part III). Therefore, where an enterprise uses a collective mark, its use must be carefully monitored to ensure that it complies with the regulations; otherwise, sanctions may be imposed.

(c) Watching the Trademark Activities of Competitors

91. An important trademark activity consists in observing or watching the trademark activities of competitors to ensure that the enterprise's own trademarks are not being infringed. This may be done "in house," that is, by the enterprise itself, or the enterprise may subscribe to an outside "watching service" which, for a fee, carries out the watching for the enterprise. If the enterprise carries out the watching itself, it has to subscribe to and check the relevant national trademark gazettes, which publish a reproduction of all trademarks whose registration is applied for or has been granted as well as to study the relevant trade journals and other publications in which competitors advertise and to follow

up reports from the marketplace. This is a relatively uncomplicated activity (provided that reasonably few trademarks are involved) in respect of watching trademarks within the enterprise's own country as it can be accomplished primarily through a careful examination of the country's own trademark gazette. It becomes more complex, however, when a trademark is registered in several countries. In view of the high cost of an all-inclusive watching service or subscriptions to all the necessary trademark gazettes, as well as the considerable amount of time that may have to be devoted to perform the watching thoroughly, an enterprise normally limits its full-scale watching activities to its most important trademarks. For its other trademarks, it may be sufficient to rely on the searches carried out by the competent national industrial property offices during the course of the registration procedure of other trademarks, as well as on feedback from trade journals, advertisements and the marketplace. With regard to unregistered trademarks used by others, watching is similarly limited principally to advertising and market feedback.

92. The purpose of a professional trademark watching service is to perform the function of watching the trademark activities of competitors for cases of possible infringement. Where an enterprise is unable to obtain and examine the relevant trademark gazettes or trade journals for possible infringing marks or unlawful abuses of its own trademarks, recourse to a watching service is a valid alternative. Where only a small number of trademarks is concerned, however, the task of watching may be shared with, or even undertaken by, the enterprise's sales staff.¹¹

D. Industrial Designs

93. Generally speaking, an industrial design is the ornamental or aesthetic aspect of a useful article (see *Model Law for Developing Countries on Industrial Designs*,¹² Section 2). Industrial designs are an important factor in the marketing of goods, and enterprises in developing countries should, as a policy, seek protection for their industrial designs. This is particularly so as many valuable designs are created in developing countries, textile and pottery designs being prime examples. Enterprises should therefore identify industrial designs worthy of protection and should register them where the national law permits. Where the enterprise is in a country party to the Hague Agreement Concerning the International Deposit of Industrial Designs or where it has a real and effective industrial designs internationally, that is, with the International Bureau of WIPO. In addition to protection through registration, many countries grant protection under their copyright laws, without

¹¹ It should additionally be noted that industrial design watching services also exist to search out and identify design infringements, in particular by the counterfeiting of goods.

¹² WIPO, Geneva, 1970.

registration, to industrial designs that can be considered artistic works applied to industry. Nevertheless, registration offers certain advantages, particularly in respect of legal security.

94. Registration is usually obtained by filing an application with the industrial property office; the application normally must include, *inter alia*, a photographic or graphic representation of the design. Registration, if granted, is typically for a duration of about five years and is generally renewable for two further consecutive periods of approximately five years each (see the *Model Law for Developing Countries on Industrial Designs*, Sections 19 and 20). It confers on the registered owner the right to prevent others, in particular, from reproducing the industrial design in the manufacture of a product and from offering for sale or selling a product reproducing the protected industrial design. Enterprises must therefore carefully watch the industrial design activities of competitors in order to detect possible infringement of their protected industrial designs, as well as to analyze developments in the state of design art (see, in this regard, paragraphs 77, 78, 91 and 92, above, dealing with surveying the patent and trademark activities of competitors).

95. Determining ownership and the remuneration due for industrial designs is another activity that must be undertaken by enterprises which have an interest in industrial designs. In this regard, the principles in respect of employees' inventions may be applicable.

E. Integrated Circuits (Semiconductor Chips)

96. The increasing importance of integrated circuits in all fields of industrial activity has created a need to look for means to protect of the layout design or topography of semiconductor chips and the products incorporating such a layout. The protecting laws available, such as patent law, copyright law and others, seemed to be inadequate. Therefore, a *sui generis* system was contemplated, and the layout design or the topography of integrated circuits was considered to justify *ad hoc* legislation at the national, regional and international levels.

97. The first example of that type of legislation, the Semiconductor Chips Protection Act, was enacted in the United States in 1984. A great number of countries soon followed this trend, including Japan and the Member States of the European Union. To provide for an international basis of protection, a Treaty on Intellectual Property in Respect of Integrated Circuits was concluded at a diplomatic conference in Washington in 1989. The Treaty was adopted by a large majority at the conference, but it has not yet entered into force. Therefore, the protection of integrated circuits is governed by national laws, which offer protection for foreigners basically under the principle of reciprocity, and not on the principle of national treatment provided in the Washington Treaty. However, Contracting Parties to the TRIPS Agreement, concluded in 1994 under the auspices of GATT, are bound to apply most of the substantive provisions of the Washington Treaty.

98. While the various national laws have a different range of clauses, they are similar to each other with regard to a number of basic provisions. The subject-matter of protection is the three-dimensional structure (topography) of micro-electronic semiconductor products, covering also separately exploitable portions of topographies. Originality of the topography design is required, as is the case in copyright law. The protection does not cover ideas, systems, processes and so on, nor the information stored in a chip or a computer program contained therein.

99. The laws provide for exclusive reproduction and copying rights and exclusive distribution and importation rights for the right holder. They also provide for limitations on protection by expressly allowing reverse engineering and by the inclusion of special provisions regarding the "innocent infringer." The term of protection is generally ten years, and filing for registration is necessary. This filing must be accomplished not later than two years after the first commercial exploitation of the relevant integrated circuit.

100. Considering the prevailing differences in the national laws and the frequent changes in the international legal situation, the advice of an expert familiar with the requirements for protection is necessary. This applies not only to the filing for protection of a company's own development results, but also to the distribution of products incorporating semiconductor chips which might be protected in one country or the other.

F. Computer Programs

101. Over recent decades, computers and data-processing equipment have developed into some of the most important devices in automation, industrial control, banking, bookkeeping and many other fields of application. Such equipment operates under the command of computer programs which are written on the basis of a system analysis and a concept to solve the problem in question. The computer program incorporates the intellectual work done by the programmer and is of considerable commercial value. Therefore, the need for adequate protection came rapidly to the mind of the circles involved.

102. Since computer programs resemble in many aspects an industrial tool, patent protection was originally contemplated. However, this would have meant that mathematical formulae and deductions could be made the exclusive possession of the patentee. This was considered to be inappropriate; the science of mathematics should remain free from exclusive rights and usable by everybody. A consensus was reached that computer programs as such were to be excluded from patent protection, and many patent laws around the world expressly contain this exclusion.

103. It is to be noted that this does not mean that a technical solution to a technical problem would be unpatentable for the sole reason that a computer program is the decisive element of such a solution. The exclusion refers to computer programs as such, i.e. free of any elements and components used to perform a technical effect. A considerable

number of inventions utilizing computer programs are eligible for patent protection provided that the general requirements of patentability are met.

104. Nevertheless, there was still a need for the protection of computer programs as such, which are often the result of significant and expensive work. Although a *sui generis* system for the protection for software was considered at first, nowadays the prevailing approach is to protect software through copyright law.

105. Therefore, many countries, including the highly-industrialized countries now follow the copyright approach and mention computer programs expressly in their copyright laws as works eligible for protection, mostly as literary works within the meaning of the Berne Convention.

106. Besides the international protection achieved in many countries on the basis of the Berne Convention, the copyright approach also has the advantage that no application for registration is required. While some countries offer the possibility of registring software in an office, this is not a necessary prerequisite for protection. Copyright protection of programs is, therefore, inexpensive. It is, however, advisable to document the program with the date of creation in all versions as a basis of proof of entitlement to protection in case of a controversy.

107. The protection provided for software does not extend to the principles involved and the mathematical formulae incorporated in the program. In fact, the protection obtainable by copyright is protection against using or copying the program without authorization and selling the copies. Other aspects of protection may depend on the national law and jurisprudence.

G. New Technologies for Storing and Accessing Industrial Property Information

108. Industrial property information consists primarily of information on existing intellectual property rights in inventions, marks and industrial designs, as well as information on a classification system in industrial property.

109. Taking patent information as an example; formerly, two main sources of such information were available:

- the patent offices, which published patent documents and official gazettes, and
- private information services, which provided copies of abstracts of documents individually or in a desired configuration based primarily on the patent classification or catchwords.
110. The tremendous growth of patent literature throughout the world (it is estimated that more than one million patent documents are published every year) has made it very obvious that these traditional sources are not sufficient to enable a search which is economical as well as fairly complete. An urgent need arose for procedures which could handle the published patent literature, store it in media of reasonable price and restricted space and permit effective access to the stored data, preferably online.

111. A modern method particularly suitable for storing and accessing patent information is the optical disk. Examples of such media are the CD-ROM (Compact Disk Read-Only Memory), the WORM (Write Once Read Multiple) and optical disks for multiple use.

112. CD-ROM technology has entered a fairly stable phase and international standards have been established. On CD-ROMs, the information is read by a laser in an optical disk reader. The information, which can be displayed on a screen, cannot be erased or changed.

113. A number of specific applications of CD-ROMs for industrial property activities in enterprises can be identified. The following, in particular, are noteworthy:

- (a) Storage of complete published patent documents. This application uses the CD-ROM mainly as a publication medium either with text and images stored in facsimile format or in mixed mode with the text itself character coded and the images facsimile recorded or, perhaps in the future, with text and images stored in some digitized form;
- (b) In the case of patent information, storage of bibliographic data, with or without abstracts. This application provides possibilities similar to the use of the currently available online patent data bases;
- (c) In the case of trademark information, storage of bibliographic data, with or without the list of goods or services and with or without images. This application provides possibilities similar to the use of the currently available online trademark databases;
- (d) In the case of storage of related data, for example the texts of classification systems, e.g. the IPC, together with catchwords indexes. This application permits the searching of texts of classification systems using keywords from the catchword indexes or from the text of the classification itself, or the display of the classification using a classification symbol as a search term;
- (e) A combination of (b) and (d) or (c) and (a).

114. A typical CD-ROM search system consists of a personal computer (PC) with a screen, a CD-ROM drive and a printer. The drive (also referred to as "reader") can be a stand-alone unit that is attached to the computer via a cable or a built-in unit that can be inserted in place of a second floppy disk drive. An optical disk drive can also be designed

as a multi-disk-drive unit which is controlled by the PC and is designed to find the required disk from the store and to load it into the reader.

115. An inventory of currently available CD-ROM products containing industrial property information is given in the *Annex* to this Guide. It is emphasized that many industrial property offices other than those listed are considering producing CD-ROM products and it can be expected that the number of such industrial property related CD-ROM products will increase significantly in the future.

116. A number of patent databases are accessible through host services. The following databases are noteworthy:

- (a) INPADOC. This database contains bibliographic data of patent documents from over 50 countries; it is maintained by the European Patent Office Principal Directorate (EPIDOS) in Vienna and available online through DIALOG, ORBIT, STN and PATOLIS.
- (b) WORLD PATENT INDEX. This database contains bibliographic data, abstracts and subject classification codes in English of patent documents from more than 30 countries; it is maintained by DERWENT (a UK-based private company) and is available online through DIALOG, ORBIT and QUESTEL. It is particularly suited for technical searches.
- (c) JAPIO. Searches in Japanese patent documents can be made in this database containing bibliographic data and abstracts in English of published unexamined Japanese patent applications. It is maintained by the Japan Patent Information Organization (JAPIO) and is available through ORBIT.
- (d) CIBEPAT. This contains the published documents of Spanish patent and utility model applications and grants, PCT and European patent applications designating Spain and the published patent applications of some 18 Latin American countries. The database can be accessed directly through the Spanish Patent and Trademark Office.

A comprehensive list of databases and host computers relating to patents and trademarks is published by WIPO in its Handbook on Industrial Property Information and Documentation.

H. Licensing Agreements

117. One of the most important activities of enterprises in connection with industrial property concerns the conclusion of license agreements in the framework of industrial expansion or marketing projects. Most transfer of technology agreements, joint ventures, franchise arrangements and other strategic alliances include some sort of license or authorization to use protected inventions, designs or distinctive signs. Confidential know-how and trade secrets are often also included in such agreements.

118. The licensing activities of an enterprise consist primarily in (i) finding partners who desire to utilize the enterprise's product or technology and negotiating licenses with them, (ii) finding goods or technology owned by others which will be of use to the enterprise and negotiating licenses to obtain rights regarding the goods or technology, and (iii) finding partners who desire to exchange technology with the enterprise and negotiating the cross-licensing of the technology. In addition, however, it should be stressed that after a license is negotiated, the agreement must be implemented to ensure that the subject of the license is transferred appropriately and that the proper royalties are paid or received. The administration of license contracts is an important industrial property activity which, within an organizational framework, should be coordinated with the negotiation of the contract itself.

(a) Acquiring and Selling Technology Through Patent License or Know-How Contracts

119. The acquisition of patented technology and related know-how (i.e., technical information, data or knowledge resulting from experience or skills applicable in practice) by means of patent license and/or know-how contracts is especially important to enterprises in developing countries. Such acquisition permits the development of a technological base by complementing and expanding local technological capacities. It is rarely possible for an enterprise to generate all the technology or know-how that it needs; the enterprise therefore normally acquires from outside sources (either domestic or foreign) that technology or know-how which it cannot create on its own. The acquisition of technology and/or know-how by means of licensing is effective in that it usually permits the receiving enterprise (the licensee) to have immediate access to an organized body of knowledge or technology directly related and immediately applicable to its operations.¹³

120. Unless the parties to a license contract have substantially equal technical and market bases, it is generally not feasible to transfer patented technology alone without also transferring the related know-how permitting that technology to be put into practice.

¹³ For an analysis of the subject of licensing, see the WIPO Licensing Guide for Developing Countries, WIPO, Geneva, 1992. See also the WIPO Guide to the Regulation of Legal Questions Arising from Joint Inventive Activity Between Partners from Different Countries, WIPO, Geneva, 1984.

License contracts for the transfer of technology therefore usually include know-how aspects; on the other hand, contracts are sometimes limited to the transfer of know-how only.¹⁴

121. Many patent license contracts also cover the use of know-how is to be provided by the licensor. Although patent laws require that a patent application disclose the invention in a manner sufficiently clear, detailed and complete to permit a person having ordinary skill in the art to carry out the invention, patent laws do not require additional means to facilitate the carrying out of the invention to be disclosed. Such additional means may consist of the use of technical information and expertise acquired through long experimentation with the invention.

122. Often, an enterprise wishing to acquire patented technology may not have in its employ staff who are sufficiently skilled in the relevant art. The expertise of the licensor in training the necessary staff of the licensee may therefore prove necessary or useful.

123. Further, even if such skilled workers are available, many problems must be faced before manufacture can take place. Expertise will most likely be useful in working out and implementing the plans for, and determining the costs of, the factory and its layout and the installation of appropriate machines, in the drawing-up of lists of component parts and maintenance schedules, in preparing flow charts and devising assembly routines, in conducting test procedures, in scheduling production and controlling the quality of the manufactured product, and in giving advice on packaging and, eventually, on sales promotion and channels of distribution.

124. The sum of all the information and training provided by the licensor is generally known as "know-how." As noted above, such know-how is a very valuable asset for the licensor and could be a necessary ingredient of the license contract to enable the licensee to actually work with the patented invention. Since know-how has no statutory protection of its own, it is extremely vulnerable. Though it is proprietary information and the confidentiality is supported by rules of unfair competition law, such rules are not, in contrast to patent law, effective absolutely, but only against a person who has breached secrecy. Once the information is made public, anybody can use it. The know-how agreements therefore, contain very precise clauses on confidentiality.

125. Several questions must be considered in connection with the transfer of technology and/or know-how. It is essential to find the right partner who is not only up to date in respect of the technology to be transferred and can supply technology appropriate to the needs of the enterprise, but who is also capable and willing to transfer it. Therefore, as a first step, an enterprise in a developing country which is interested in acquiring a particular technology should investigate which are the enterprises that are the holders of the best available and most appropriate technology in the specific field of technology.

¹⁴ In addition to know-how, knowledge of the reasons why certain technical information is required may also have to be transferred. Such knowledge could be called "know-why."

Enterprises may wish to undertake this search themselves. However, where they do not or cannot, private firms, organizations and, in some countries, public authorities exist to help enterprises locate the most appropriate technology. Those authorities, as well as a number of international organizations, including organizations in the United Nations system, publish information on offers and requests for technology or on the state of the art in the technological fields concerned by their activities.

126. In carrying out a technology search, information given in patent documents, in particular through the INPADOC database, can be very useful. Patent documents permit the identification of those enterprises that have filed patent applications relating to the technology in question and show in which countries valid industrial property rights exist. In addition, technical literature, industrial classifications and trade literature should be consulted. An excellent source for locating relevant literature is the list of periodicals included in the PCT minimum documentation. This list is available from the International Bureau of WIPO.

127. Another important means of locating appropriate technology is through personal and professional contacts and by "word of mouth." It is thus important for researchers and industrial property specialists in developing countries to establish and maintain contacts among themselves and with their counterparts in industrialized countries in order to learn about available technology and keep abreast of the state of the art. This can most readily be done through membership in the various professional and trade associations. (See also paragraphs 67 - 78, concerning patent searches to obtain technical information.)

(b) Securing the Use of Trademarks Through License Contracts

128. Trademark licensing often plays an important role in an enterprise's industrial property activities. An enterprise may wish to secure the use of a trademark owned by another for either all or part of the goods or services for which the trademark is registered, or may wish to grant another enterprise the right to use its own trademark. Trademark licensing permits a licensee-enterprise to capitalize on the generally pre-established reputation of a trademark owned by the licensor and often permits the licensor-enterprise to gain additional markets for the goods or services for which its mark is registered.

129. Careful attention must be paid by an enterprise to the negotiation and administration of a license contract. As these activities are interrelated, it is advisable that they both be carried out by the same staff. A trademark license contract should stipulate whether the license granted is exclusive or non-exclusive, specify the royalty to be paid and provide for effective quality control over the goods or services in question. Quality control is often achieved by the licensor and licensee agreeing to detailed specifications concerning the goods or services for which the use of the mark is licensed; those specifications are usually incorporated in the contract and must be enforced by both parties. Furthermore, a trademark licensee must avoid the inclusion of clauses which impose upon its use restrictions that are not derived from the rights conferred by the registration of the trademark or that are unnecessary for safeguarding those rights. For example, clauses whose effect would be to prohibit the licensee from buying or selling goods or rendering services under different trademarks or from buying or selling goods or rendering services which have nothing to do with the goods or services for which the license is being granted should be avoided. To ensure that clauses such as these are not included, the legislation of certain countries, as in the case of patent licensing, requires the examination and registration of license contracts. (See the *Model Law for Developing Countries on Marks*, Chapter VI.)

(c) The License Agreement

130. While in principle a license contract can be concluded by a hand shake, as in other transactions concerning property, it is necessary, in practice, to draft a written agreement which takes into account the various substantive and formal aspects. Two types of legal act or transaction are involved.

131. Firstly, there is the authorization by the holder of the intellectual property right to another person to perform one or more of the acts covered by the exclusive right. That authorization is referred to as a "license." The right-holder giving the license is referred to as the "licensor." The person who receives the authorization is referred to as the "license."

132. Secondly, the license is usually subject to certain agreed terms and conditions, including promises of future performance made by the licensor or the licensee or both as, for example, the commitment by the licensor to defend an infringement action brought by third persons against the licensee where the commitment by the licensee to pay the licensor remuneration is dependent upon the degree of exploitation of the license.

133. Thus, within the limits of the intellectual property laws, which specify the exclusive rights of the right-holder and the acts covered by those rights, and subject to the general rules of the law of contracts and the law applicable to other commercial and business transactions, the provisions of a license contract will establish the legal framework within which the licensee is authorized to perform one or more acts of industrial or commercial exploitation of products that incorporate a patented invention or a registered design or to use a mark in connection with certain goods or services.

134. Essentially, the legal framework for the license is the result of a bargain between the licensor and the licensee. The bargain will only be effective to the extent that the two parties respect it and the courts are willing, subject to the limits of the intellectual property laws, the general rules of contract and the laws applicable to other commercial and business transactions, to enforce that bargain when either of the parties is injured by the unjustified conduct of the other or to protect their interests against the unwarranted interference of third parties.

135. In the course of the negotiations for the transfer of technology, the acquiring enterprise should carefully examine all the terms which the prospective licensor wishes to have included in the license contract. The points to be watched in this connection include the identification of the technology and/or know-how required and the evaluation and selection of the technology and/or know-how available, taking into consideration its suitability to the receiver's capabilities, the receiver's market position and the cost involved, and the investigation and determination of how the technology and/or know-how can be adapted to the acquirer's local needs. (With regard to the negotiation of license contracts, see Part III of the WIPO Licensing Guide for Developing Countries.)

136. In order to prevent the inclusion of clauses in license contracts which, at least prima facie, are not in the interest of the licensee or the national economy, the laws of some countries provide for the examination and registration of license contracts (provisions in this regard are contained in both the WIPO Model Law for Developing Countries on Inventions, Sections 301 to 307, and the Model Law for English-Speaking African Countries on Patents, Sections 44 to 46).

137. Although enterprises in developing countries may in most cases assume the role of acquirers of technology, this role does not exclude them from actively engaging in the transfer of technology to other enterprises. Enterprises may be particularly qualified to serve as technology suppliers if they have developed technology which offers special advantages for use in developing countries, for example, technology which, depending upon the level of development of the country, is favorable to the creation of manpower employment. Where the activities of an enterprise in a developing country qualify for such active technology transfer, the enterprise has to deal with all the above-mentioned tasks, with the only difference being that the role is reversed since the enterprise does not acquire, but rather sells, technology.

138. A license contract should contain all facts, definitions and provisions which determine the intention and will of the parties, particularly:

- the identification of the parties and, if applicable, of entities which also benefit from granted rights;
- the objective of the parties in concluding the contract;
- identification of the subject matter licensed;
- the scope of the contract, stating which acts may be performed under the license and in which countries (this is essential if only some of the protected acts are licensed);
- the obligations of the parties after the termination of the license agreement, in particular any confidentiality clauses.

139. In the case of patents and know-how licenses, it is also essential to define the technical subject matter, the product or process concerned, and the extent to which know-how is to be provided, if any. In this connection, the licensor may guarantee that the know-how transmitted is suitable for attaining the objective of the contract.

140. Another important issue is access to technology improvements, either originating from the licensor or the licensee, and which party will have the right to obtain patents for such improvements.

141. The question of remuneration or other consideration for the use of the licensed rights is one of the most important issues in a license agreement. In most cases, monetary remuneration is stipulated which may take different forms. A lump sum payment is an amount of money calculated beforehand to be paid once or in installments. Royalties, on the other hand, are recurring payments calculated subsequently, the amount of which is determined as a function of economic exploitation of the licensed right or the know-how. The amount is based on the results of exploitation, i.e. production units, sales units, or profits arising from the making or selling of the product. Fees are compensation for services and assistance rendered by technical or professional experts, fixed at a specified amount or calculated per person and their period of service.

(d) Unfair Competition

142. Acts of unfair competition are those which are contrary to honest practices, whether or not specifically prohibited by law. They include, in particular, statements or allegations which, in the course of trade, are liable to mislead the public as to the nature, characteristics, suitability for their purpose, etc., of the goods or services in question, acts which are liable to create confusion with the establishment, goods or services of a competitor, or false allegations which, in the course of trade, are liable to discredit the goods or services of a competitor (see Article 10bis of the Paris Convention for the Protection of Industrial Property and the Model Law for Developing Countries on Marks, Sections 50 to 53). The committing of acts of unfair competition is subject to heavy fines in a number of countries.

143. Acts of unfair competition may occur, *inter alia*, with regard to the marking, advertising, labeling and marketing of goods or services. Those responsible for an enterprise's marketing and advertising are sometimes not fully knowledgeable about the applicable law and practices on unfair competition. It is consequently a significant industrial property activity to provide advice in such matters, particularly as national interest in regulating unfair competition is growing in certain developing countries. This activity involves examining an enterprise's own advertisements and labeling proposals and reviewing its own marketing schemes in order to avoid committing acts of unfair competition, as well as monitoring the activities of competing enterprises in order to oppose any acts of unfair competition directed against it.

IV. ESTABLISHING AN INDUSTRIAL PROPERTY DEPARTMENT OR ENGAGING OUTSIDE SERVICES

144. In organizing their industrial property activities, enterprises in developing countries should decide whether or to what extent they wish to establish industrial property departments within the enterprise as also whether or to what extent they wish to engage outside services to perform those activities. It should be noted that, even where enterprises wish to establish extensive industrial property departments, they will often have to rely on external services, i.e. the services of attorneys and agents specialized in industrial property, for certain activities, such as for filing foreign applications or for matters involving litigation.

145. Industrial property activities require qualified and well-trained staff to carry them out successfully. In some developing countries, staff with the requisite qualifications and experience for employment in industrial property departments may not be available at present or may not be available in sufficient numbers; furthermore, even where available, the limited extent of industrial property activities in some enterprises may not justify employing staff in that capacity. Therefore, before organizing an industrial property department, it should be determined whether such a department would be more convenient, more effective or more economical on a realistic costing basis than the alternative of outside services.

146. In general, it may be said that an enterprise's present or potential industrial property activities should be substantial in order to justify the establishment of a full-scale industrial property department. The size of the enterprise, the number of patent, trademark or design applications filed or expected to be filed each year, the enterprise's market situation and extent of its licensing activities, the quality of available outside services and the potential of an industrial property department to generate inventive and innovative activity are all important factors to be considered.

147. The decision to establish an industrial property department is thus not one which should be taken hastily. Even where a positive decision is taken, it would seem advisable, at the outset, for an enterprise to make use of outside services while gradually developing its own internal department on a solid basis. Indeed, the outside service could be of great assistance in this regard. For example, in its initial stages of development, an industrial property department could, with the advice of an outside service, identify inventions made in the enterprise, technology to be acquired and trademarks to be registered and could participate in deciding where applications should be filed, but the application procedure could be handled by the outside service. The outside service could also assist in the selection of appropriate documentation for the industrial property department's collection and provide advice on monitoring the activities of competitors.

148. On the other hand, it should be noted that a decision to rely on outside services does not relieve an enterprise of its industrial property functions. Staff from the enterprise's legal, technical and marketing departments will have to serve in a liaison capacity with the outside service and will have to maintain an awareness of the importance of industrial property to the enterprise.

A. Industrial Property Experts in Private Practice

149. A professional industrial property expert offers services to clients in intellectual property matters. The term "industrial property expert" is meant to include, for the purposes of this Guide, patent attorneys or agents, patent practitioners, trademark attorneys or agents, and lawyers.

150. Despite the title, a patent attorney is in many cases also an expert in other fields of intellectual property protection, for instance in trademark and design matters or, at least, has an expert for these matters working in the same law firm. It is, as a rule, not necessary to give work in different categories of intellectual property protection to different law firms. On the contrary, working together with only one law firm, particularly in the home country, will enhance the overall effectiveness of the intellectual property activities of an enterprise, as the law firm can evaluate the total needs of the enterprise in the field of intellectual property and give suitable advice and recommendations.

151. While lawyers in private practice are legally entitled to deal with intellectual property matters, their services are usually needed for handling intellectual property litigation matters, especially in the case of actions for infringement, regardless of whether the enterprise they are representing is the plaintiff or the defendant. Litigation requires special skills and expertise. Therefore, even where an enterprise has its own industrial property and legal departments, it may find it more effective to employ outside lawyers to take charge of court proceedings. In some countries, moreover, legislation may contain restrictions as to the persons who may represent clients in court proceedings and this could make the employment of qualified outside lawyers a necessity.

152. The role of a professional intellectual property expert is that of a mentor to the enterprise in intellectual property matters, one who secures optimal utilization of the possibilities offered by the intellectual property system both of the country concerned and worldwide, and avoids, as much as possible, damage due to the actions of other parties. To be able to perform this role satisfactorily, the expert should be entrusted with the relevant activities and should be treated like a member of the enterprise with regard to the facts and circumstances, including confidential ones, which have an influence on intellectual property protection matters and which, therefore, he ought to know.

153. An industrial property attorney or lawyer can require that any exchange of information and opinions with his client should fall under what is known as "attorney's privilege" and is not disclosed to any other party. This is particularly important in court proceedings where quite frequently comprehensive deposits and disclosure of data and information by the patentee are ordered by the judge, at the request of the other party, in order to determine the true scope of the rights to which the patentee is entitled.

B. Scope of Enterprise Activity in Connection with Industrial Property

154. In principle, anyone can file industrial property applications and prosecute them without relying on outside services. Industrial property offices frequently give assistance with regard to the legal or administrative requirements for filing applications, and the examining staff, from their experience with individual inventors and applicants, offer some help during the prosecution. Therefore, a small or medium-sized enterprise could contemplate simply dealing with its patents, trademarks and so on, itself, for instance by an employee who is deemed to be capable of mastering this complicated work. This is the type of intellectual property work which is done in larger enterprises by in-house staff in an industrial property "team."

155. However, it is doubtful whether such an employee, in contrast to the experts working in an industrial property team, can perform intellectual property work to his enterprise's best advantage. Infringement proceedings, oppositions or validity problems will probably exceed his capacity, and outside services by a professional expert would become necessary.

156. In fact, it is often advantageous to use such outside services regularly from the beginning. For instance, in the drafting of a patent application, a patent claim unnecessarily restricted in scope could cause severe damage to the business and a later rewording of the claim may not be feasible.

157. It is advisable for any enterprise to use the services of intellectual property experts for intellectual property work. Each enterprise must, however, decide in what way this should be done depending on the extent of its research and development, and commercial, activities. Three basic models can be distinguished in this respect.

(a) Minor Research and Development Activity

158. The first model applies to enterprises which manufacture or practice methods in line with the state of the art and do not intend to develop their technology continuously. Many enterprises, even in developed countries, follow such a business policy, and inventions and subsequent patent applications occur only occasionally.

159. While filing patent applications might not be of primary importance for such enterprises, they would be well advised to register their trademarks and industrial designs, in order to maintain their position on the market. These enterprises should also carry out what is known as product clearing. The patents issued to competitors have to be studied before manufacture and sale is commenced to make sure that the envisaged technology is, in fact, freely usable. Should product clearing reveal the existence of patents of competitors that would be infringed, the enterprise might choose to take the necessary licenses under such patents. Actually, a considerable number of enterprises do business under such licenses where the state of the art technology has been developed by another company and is protected by patents. The enterprise will then have to negotiate and conclude a license agreement, sometimes including know-how.

160. Therefore, even where an enterprise relies on state-of-the-art technology, it may still encounter situations where it will be appropriate or even necessary to make use of the possibilities of the intellectual property system. In most cases, the enterprise will need professional assistance and should entrust an outside intellectual property expert with the necessary activities in the field of intellectual property protection.

161. Considering the limited extent of intellectual property work, communications between the enterprise and the outside expert will probably be channelled through a member of the top management of the enterprise. It is very important that a clear scheme of competences and responsibilities be instituted. In particular, it has to be clear who in the enterprise may give instructions to the outside expert.

(b) Medium Research and Development Activity

162. The second model refers to enterprises which regularly perform product development in order to maintain their market share. Such enterprises will have, for instance, research and development teams which will produce a number of inventions every year.

163. While the aspects concerning trademarks, designs and licensing agreements are similar to those described above, two significant differences can be identified. The inventions emerging from the R&D team should be protected by patents or utility models, at least in their home country, and if the enterprise wants to serve foreign markets or has competitors abroad, it should also consider foreign filings. Since the products of the enterprise are changed from time to time due to continued development, product clearing has to be repeated.

164. Monitoring the patent and trademark activities of competitors is also advisable. The regular study of published patent literature will give suggestions to the R&D team on how to proceed further whilst avoiding the danger of infringing other companies' patents. The need to file oppositions against such patents, or an invalidation suit, might also arise. On the other hand, the enterprise's own patents might come under attack from competitors, and in specific situations infringement suits might be instituted by one side or the other.

165. An enterprise engaged in product development may therefore have to be active in almost all sectors of intellectual property protection. It could decide to allocate a percentage of its research and development budget to intellectual property work in order to obtain the full benefit of the system.

166. Such enterprises might have in-house staff who are sufficiently familiar with intellectual property matters, and might therefore not need professional services. Such services could be provided by an in-house patent team trained in these matters. However, if the total number of inventions a year is small, an in-house patent team might not be economical and outside services may be a better option.

167. In any case, the enterprise should at least establish a liaison office with its outside service. The liaison office has a range of duties which may become a full-time job depending on the volume of intellectual property activities. It will, among other tasks, have to handle correspondence, transmit notifications and actions from the patent offices to the persons concerned in the enterprise, identify inventions made within the enterprise and forward the relevant documents to the outside service, distribute and sometimes also select patent literature to be distributed to the R&D team, and keep the relevant files and records.

168. Liaison staff should have a technical background, since patents are technical documents, and should be familiar with the fundamentals of intellectual property law, types of proceedings, administration rules and fee schedules. Their task would not normally comprise the drafting of the final version of patent or registration applications or the prosecution of cases before the industrial property office or the courts. That would fall within the area of responsibility of the outside services.

(c) Major Research and Development Activity

169. If the research and development team of an enterprise produces a considerable number of technological developments and inventions every year, the enterprise could find it advantageous to establish an in-house patent team. This could be done in a gradual manner, still retaining the outside services in part, for instance for unexpected surges in workload. This third model therefore concerns enterprises which perform regular research and development on a significant scale, sufficient to stay in the forefront of the relevant technological field, and which permanently aim at increasing their market share, locally or abroad. Such enterprises will face issues similar to those of the preceding category, but with greater intensity and impact on their business policy.

170. The involvement of such enterprises in intellectual property matters renders it, as a rule, highly advisable to establish an in-house patent team. Such a team offers a number of important advantages.

171. The patent team will consist of employees of the enterprises and can therefore maintain the necessary contact with the research and development team. The patent team should not wait for inventions to be brought to its attention, but should approach the research and development staff, ask them about any new ideas found and discuss their patentability potential, and take the results as the basis for the patent work. With such frequent and regular contacts, the two teams will develop an atmosphere of mutual trust and respect, which avoids misunderstandings and dissatisfaction.

172. The patent staff, being readily available, can explain the patent language to an engineer and thus show him more precisely the implications and pitfalls. In cooperation, the patent team can further define profiles of tactical interest and compile the relevant publications for transmittal to the research and development team.

173. An enterprise with a research and development team will probably have increased activities not only in the field of intellectual property rights, but also in licensing. A typical asset of this type of enterprise will be a patent portfolio, frequently accompanied by know-how of interest to prospective licensees--not only manufacturing companies, but also research and development centers, either State-owned or privately sponsored. It is also possible that cross-license agreements will be concluded with other companies also conducting research and development work in a specific technology. When the partner is a large company, the patent owned by the enterprise can serve to establish a balance of economic power between the partners in respect of the scope of the agreement which has to be negotiated very carefully.

(d) Engagement of Lawyers

174. Enterprises in developing countries may find it suitable, if not indispensable, to engage lawyers in private practice to handle matters of industrial property litigation (see paragraph 151, above).

V. THE ROLE OF AN INDUSTRIAL PROPERTY DEPARTMENT IN AN ENTERPRISE

175. As mentioned in the preceding paragraphs, enterprises with significant industrial property activities are well advised to establish their own industrial property departments, which give them day-to-day control over those activities. It is obvious that the work of an industrial property department needs to be coordinated with that of other departments in the enterprise. An industrial property department should have a close working relationship, in particular, with the technical, marketing and general legal departments. In addition, it should, where applicable, maintain contacts with the production, sales, personnel, accounting and finance departments. Moreover, the industrial property department should be made aware at an early stage of all information containing matters of interest to it (e.g., information on new technological or commercial trends).

176. There is no universally accepted formula for determining to what part of an enterprise an industrial property department should report. In some enterprises, the industrial property department is part of the legal department; in others, it reports to the technical department; and in still others, it reports to a general administrator. It is recommended, however, that serious consideration be given to having the industrial property department report to the portion of the enterprise which is clearly familiar with the products being marketed and with plans for future products. Thus, it is often useful to have the industrial property department report to high level commercial or executive management officials.

A. Relationship with the Technical Department

177. Close contact and cooperation between the industrial property department and the technical department or R&D team of an enterprise is important in respect of an enterprise's patent and industrial design activities. The industrial property department should be fully aware of the activities carried out by the technical department. It should be prepared to advise on the suitability of inventive activity and to suggest lines of research where gaps in technology appear during the examination of a problem. In addition, it should participate in an ongoing exchange of information with the technical department concerning research and development in the relevant technical fields (see paragraphs 170 and 171, above).

178. One of the prime purposes of an industrial property department is to obtain protection for the inventions or industrial designs made by the technical department. The industrial property department must consequently have a clear understanding of the activities of the latter; mutual exchange of information between the two departments is essential in this regard. In order to facilitate its own task and the industrial property department's task, the technical department should maintain careful documentation of its work. In order to foster the necessary contact between both departments, they should be housed in close proximity.

B. Relationship with the Marketing Department

179. The proper performance of an enterprise's trademark and patent activities and the avoidance of acts of unfair competition require cooperation between the industrial property department and the marketing department.

180. As was discussed above, the selection of a sign serving as a trademark is an advertising or marketing activity. Before the trademark is selected, however, the industrial property department should be given an opportunity to carry out a preliminary trademark search and examination to rule out trademarks which might raise registration or infringement difficulties. The industrial property department should accordingly be included in or informed of the discussions in respect of the countries in which the product concerned is to be marketed under the proposed trademark in order to determine where trademark registration should be sought. Coordination is also advisable between the industrial property and marketing departments in determining where patent protection for a new invention should be sought, particularly where the invention is a product or an element of a product to be sold abroad.

181. As use of a trademark is often a requirement for its continued protection, there should be an exchange of information between the industrial property and marketing departments on this matter. The industrial property department should be consulted to make sure that the trademark is being used properly. Similarly, as a patented invention may, in some countries, risk being the subject of a compulsory license if it is not worked within a certain time limit, the marketing department should be aware of the enterprise's patent portfolio to help prevent this risk.

182. The departments should also work together in monitoring the trademark and patent activities of competitors. As the marketing department may have more access to market feedback than the industrial property department, the former should be on the lookout for cases of possible infringement of the enterprise's own trademarks or patents, and all possible infringements should be reported immediately to the industrial property department.

183. Trademarks must be known in order to be effective, and advertising is an effective means of introducing trademarks and acquainting consumers with them. Although advertising and publicity are not industrial property activities *per se*, the industrial property department should be consulted regularly by the marketing department with regard to advertising and publicity matters.

184. All advertisements, product brochures, printed publications, product labels, published articles, speeches and similar external communications should be reviewed by the industrial property department to ensure that the trademarks concerned are properly used (e.g., always accompanied by a descriptive noun to prevent the trademark's transformation into a generic name). In addition, the industrial property department should examine

advertisements and publicity to verify that they are free from problems of unfair competition (see paragraphs 142 and 143, above) and that they do not prematurely disclose an invention, thereby destroying its novelty.

C. Relationship with the General Legal Department

185. There should be close contacts and coordination between the industrial property department and the general legal department.

186. Agreements negotiated or drafted by the industrial property department should be reviewed by the general legal department, particularly with respect to antitrust or cartel laws, tax laws and occasionally customs or other general legal considerations. Moreover, even before the negotiations begin, there should be common planning between the industrial property and general legal departments to determine the course that those negotiations should take. In addition, consultation with the general legal department may be necessary when litigation is likely, depending upon the particular relationship between and relative expertise of the industrial property and general legal departments.

D. Relationship with Other Departments

187. Depending on the size and organizational arrangement of the enterprise, the industrial property department should have contact with various other departments in carrying out its activities. For example, it should maintain contact with the personnel department concerning employment contracts, with the production and sales departments concerning activities by competitors, with the accounting departments concerning license royalty records and with the finance department concerning the evaluation of potential licenses. In short, the industrial property department is one which should have wide contacts within the enterprise and, since it handles information in the course of its functions, can often serve as a valuable conduit of information throughout the enterprise.

E. Relationship with the Industrial Property Office

188. The traditional function of an industrial property office was to process patent or registration applications filed with it, and to register the granted rights, whether substantively examined or not. It was, therefore, often compared with a land registry.

189. The modern concept of an industrial property office is much more dynamic and comprehensive and includes a number of tasks necessary for the promotion of national industry and the provision of support to the business activities of enterprises. Those new tasks include, among others:

- distributing industrial property information in an easily accessible format,
- assisting the public in using the available sources of such information,
- offering help for applicants, particularly those unfamiliar with the legal and administrative requirements, and
- assessing trends in technology development, with a view to indicating which direction developments will possibly take in the future.

190. While differing industrial property offices undertake such tasks to differing degrees, often depending on the availability of human and financial resources, it is generally agreed that such activities are of great benefit for the national industry and should be increased. Enterprises should, for their part, encourage such activities and make use of the programs offered wherever required. The department in charge of industrial property in the enterprise should maintain permanent contacts with the national industrial property office.

F. Other Relationships

191. An industrial property department in an enterprise must also keep abreast of local and foreign developments in order to follow and take part in ongoing national and international legal, technical and administrative developments in the field of industrial property and its relationship with other fields of law. Industrial property legislation is generally rather complex and is closely linked to other areas of legislation. A well-functioning industrial property department thus requires from its members a broad understanding of the role of industrial property in the development of industry and commerce.

VI. STAFF

192. The success of an enterprise's industrial property activities depends to a great extent on employing the qualified staff, both professional and clerical, required to carry out the activities.

A. Professional Staff

193. With regard to patent activities, the minimum requirements for at least the professional head in enterprises with fully operational industrial property departments should be possession of qualifications, preferably both in science and in law, or the equivalent. In other words, the professional head should have knowledge of a relevant technical field, such as engineering, chemistry, electronics or physics, and the ability to interpret and apply the relevant national and international legislation (e.g., the legislation, treaties and case law on patents, utility models or certificates and industrial designs, the code of civil procedure and, in the case of licensing, the legislation and case law on transfer of technology, contracts and commerce).

194. The carrying out of trademark activities requires an understanding of and the ability to interpret and apply the relevant national legislation, treaties and case law on trademarks and unfair competition. In addition, familiarity with prevailing advertising and marketing principles is beneficial. Similar qualifications are required for activities relating to industrial designs and protection against unfair competition.

195. For the sake of convenience and because of the many common procedures involved (for example, patent, trademark and industrial design applications usually have to be filed with the same government office), it is appropriate to combine all industrial property activities in one department. Ideally, therefore, the members of that department should be qualified to deal with all subjects of industrial property. Where the workload is sufficiently great, specialization may be justified, but the head of the department should still be qualified to deal at least with patents and trademarks and with their relationships with other areas of law and industry. Naturally, the specific pattern of each enterprise should determine whether the emphasis of the industrial property department is placed more on patents, more on trademarks or more on industrial designs.

196. The above paragraphs concern fully operational industrial property departments. As an initial step in the staffing and creation of such a department, enterprises could consider establishing an industrial property team consisting of members of the technical, marketing, legal and other relevant departments. The members of the team could undertake industrial property activities while being relieved of some of their normal tasks. The team would work under the coordination and leadership of a qualified professional, who could be a senior administrator in the enterprise. 197. The members of any industrial property department, be it fully operational or not, should participate in appropriate professional patent, trademark and licensing organizations or associations to increase their skills and to establish contacts and good relationships with their counterparts in other enterprises, in the liberal profession and in governmental institutions. In order to ensure that qualified staff is available to carry out industrial property activities, enterprises should consider the possibility of establishing internal training programs and should make use of programs provided by national authorities and institutions. The training possibilities offered within the framework of the WIPO Permanent Program for Development Cooperation Related to Industrial Property are an example. Enterprises should also encourage the creation of additional and more extensive training programs at all levels.

198. In addition to their own training, the members of an industrial property department have the task of making other members of the enterprise aware of the importance of industrial property as a tool for technological development. The need to identify inventive activity and to protect the enterprise's trademarks should be emphasized.

199. If an enterprise wants to avail itself of modern intellectual property information technologies described above (see paragraphs 108 - 116), it is also advisable to employ a person trained in, or at least familiar with, the technologies involved. This applies particularly to the use of online information services and also to the use of information available on CD-ROMs.

B. Clerical Staff

200. Several types of clerical staff have to be engaged to carry out industrial property activities. Although the clerical functions differ, the staff performing them may be the same. The staff should include:

- secretaries, to prepare correspondence and type applications;
- possibly a specially trained draftsman, to make the drawings which accompany applications;
- clerks, to maintain the records of protected inventions and registered trademarks as well as of applications for protection and to ensure, for example, that the necessary fees are paid on time (the importance of this task cannot be overemphasized);
- a librarian or library clerk, to maintain the collection of industrial property literature and search files.

VII. OFFICE SPACE, EQUIPMENT AND RESOURCES REQUIRED

A. Office Space

201. When determining the requirements for office space of an industrial property department, due account should be taken of the meticulous nature of the work to be performed and of the need to store files and documents. Keeping files or documents on microfilm, microfiche or cards may, although requiring an investment in time and money, substantially reduce the requirements for office space. As microfilm or microfiche may be damaged when subjected to a high degree of humidity, however, air conditioning may be necessary in offices using those types of information storage.

B. Keeping Records

202. Clerical record-keeping is of great importance in patent and trademark activities. Industrial property departments should be fully aware and have complete files of their national and foreign patent and trademark portfolios and their pending applications, as well as of their applications under preparation. It is important, for example, to keep track of the following information: the fees that must be paid and their due dates, the priorities that may be claimed and the termination of the priority periods, the status of all applications that have been or will be filed with industrial property offices and the status of all appeals or litigation proceedings in which the department is involved. In addition, careful records must be kept concerning the administration of all license agreements to which the enterprise is party.

203. Enterprises should aim at record-keeping systems which are easy to learn and use, straightforward, adaptable and uncomplicated. The use of mechanized record-keeping systems is becoming increasingly common; recourse to simple mechanized systems could be explored by enterprises in developing countries but such systems should not be considered indispensable. With the development of personal computers and standard commercial software programs, many enterprises have introduced PC-based record-keeping systems.

C. Industrial Property Information

204. For purposes of accessing industrial property information services provided by the new information technologies, appropriate hardware must be used.

D. Documentation

205. Adequate minimum documentation is essential to the proper carrying out of industrial property activities. An industrial property department thus should have access to the following:

With regard to patent activities:

- Patent documents in the enterprise's field of activity from (i) the enterprise's own country and (ii) at least one technologically advanced country with the same language as that of the enterprise's own country or with the foreign language most easily accessible in that country, filed in accordance with the International Patent Classification (IPC);
- Patent abstracts in the enterprise's field of activity from other countries insofar as reasonably available, filed in accordance with the International Patent Classification (IPC);
- The PCT Gazette and the Official Journal of the European Patent Office;

With regard to trademark activities:

- The trademark gazette of the enterprise's own country;
- The trademark gazettes of the other countries in which the enterprise is particularly active;
- A search file to be established from the material contained in the gazettes referred to above, listing all trademarks
 - (i) relating to the same or a similar class of goods or services in accordance with the International Classification of Goods and Services for the Purposes of the Registration of Marks, established by the Nice Agreement, or
 - (ii) which are similar to the enterprise's own marks (for marks containing figurative elements, filed in accordance with the International Classification of the Figurative Elements of Marks, established by the Vienna Agreement);

With regard to industrial design activities:

- As for patent activities, filed in accordance with the International Classification for Industrial Designs, established by the Locarno Agreement;

In general:

- The applicable legislation and case law of the enterprise's own country and other countries or regions where protection is regularly sought, including treaties;
- Legal journals in the field of industrial property, such as *Industrial Property* and Copyright, published by WIPO.

206. Where there is a publicly available industrial property documentation collection, an industrial property department should make use of that collection in lieu of or in addition to establishing its own minimum documentation collection. Where no such publicly available collection exists, however, it will be necessary for an industrial property department to establish its own more complete collection. In such cases, it should be kept in mind that the industrial property department should only keep documentation relating specifically to industrial property. General legal documentation should be kept by the general legal department and general technological documentation by the technical department. Where documentation is kept on microfilm, microfiche or CD-ROM, an adequate number of suitable microfilm, microfiche or CD-ROM readers should also be available. It may also be advisable to have access to a laser or other suitable printer.

E. Photocopying

207. Industrial property departments are often required to prepare and submit multiple copies of documents. Adequate photocopying equipment is therefore important.

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ANNEX

CD-ROM DATABASES IN THE FIELD OF INDUSTRIAL PROPERTY

1. Basic ESPACE Products: Databases of the European Patent Office

ESPACE-EP-A	Facsimile database of the European patent applications, updated weekly	1978-
ESPACE-EP-B	Facsimile database of the European granted patents, updated weekly	1980-
ESPACE-FIRST	Facsimile database of first pages of European and PCT patent applications, updated bi-monthly	1988-
ESPACE-WORL	D Facsimile database of the international (PCT) patent applications, updated fortnightly (published jointly with WIPO)	1988-
2. Facsimile I	Databases of National Patent Collections	
2. Facsimile I ESPACE-AT	Databases of National Patent Collections Austrian patent documents	1990-
 Facsimile I ESPACE-AT ESPACE-BX 	Databases of National Patent Collections Austrian patent documents Patent documents of the Benelux countries (Belgium, Luxemburg, The Netherlands)	1990-
 Facsimile I ESPACE-AT ESPACE-BX ESPACE-DE 	Databases of National Patent Collections Austrian patent documents Patent documents of the Benelux countries (Belgium, Luxemburg, The Netherlands) German patent applications and patent documents	1990- 1980-
2. Facsimile I ESPACE-AT ESPACE-BX ESPACE-DE	Databases of National Patent Collections Austrian patent documents Patent documents of the Benelux countries (Belgium, Luxemburg, The Netherlands) German patent applications and patent documents	1990- 1980-
2. Facsimile I ESPACE-AT ESPACE-BX ESPACE-DE ESPACE-DK ESPACE-ES	Databases of National Patent Collections Austrian patent documents Patent documents of the Benelux countries (Belgium, Luxemburg, The Netherlands) German patent applications and patent documents Danish patent documents	1990- 1980- 1990-

ESPACE-IT	Italian patent documents	1994
ESPACE-ME	Mexican patent documents	1991-
ESPACE-PRECE	S Patent documents from selected Eastern European countries (Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic)	1992-
ESPACE-UK	UK patent documents	1990-
DOPALES-PRIM	IERAS First pages of Latin-American patent documents (published jointly by the EPO, WIPO and the Spanish Patent and Trademark Office)	1991-
US Images	US patent documents (published by MicroPatent)	
COSMOS	French patent documents (published by INPI, France)	1994-
USAPAT	Facsimile database of US patent documents (3 discs/week) (published by the USPTO)	1994-
PATENT IMAGI	ES Facsimile database of US patent documents (published by MicroPatent)	1975-

3. Other facsimile databases

JPO CD-ROM

Facsimile database of Japanese non-examined	
patent and utility model applications	1993-

JPO CD-ROM B	& Y Facsimile database of Japanese examined patent and utility model applications	1994-
PATENTVIEW	Facsimile database of US patent documents (published by Derwent (earlier Research Publicatio	ns))
4. Bibliograpl	hic Databases	
BANAPA	Bibliographic database of Mexican patents and industrial designs	1980-
BREF	Bibliographic database of French patent applications (with abstracts and drawings)	1989-
CASSIS/BIB	Database of basic bibliographic data of US patents	1969-
CASSIS/CLASS	Database of classification data of US patents	1790-
CD-CIBEPAT	Bibliographic data of Spanish, and Argentinean, Colombian, Mexican and other Latin-American patents (with abstracts)	1 9 69-
CNPAT/ABST	Bibliographic database of Chinese patent and utility model applications (in Chinese)	1985-
CNPAT/ACCESS	Bibliographic database of Chinese patent and utility model applications (in English)	1985-
CD-NAMESEAR	CH Bibliographic database of the Canadian, US and UK trademarks (with images)	

ESPACE-ACCES	S-A Bibliographic database of the European and international (PCT) potent applications	
	(with abstracts), updated quarterly	1978-
ESPACE-ACCES	S-B Bibliographic database of the European granted patents (with claims), updated quarterly	1978-
ESPACE-Bulletin	L	
	The computer readable patent gazette of the European Patent Office, updated bi-monthly	1978-
ESPACE-LEGAI		
	The full-text of the European Patent Convention and the bibliographic database of the Board of Appeals Decisions, updated twice per year	1978-
HUNDATHECA		
	Bibliographic database of Hungarian patent	
	documents (applications, patents)	1920-
JOPAL	Journal of Patent Associated Literature, bibliographic database of articles published in key journals (published by WIPO)	1981-
MAROUESA		
	Bibliographic database of the UK trademarks (with images)	
OG-PLUS		
	US Patent Gazette on CD-ROM (with abstracts and images)	1993
PATOS		
	Bibliographic database of German patent applications (with claims)	1980
RUSSIAN PATE	NTS ON CD-ROM (ENGLISH ABSTRACTS) Database of bibliographic data of Russian	
	patents with searchable English Abstracts	
	facsimile form)	1994-

ROMARIN	I
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Bibliographic database of the International Trademark register of WIPO (with black and white on color images)

US Patent Search

Bibliographic database of the US patents (with abstracts and claims)

1975-

5. Full-Text Databases

ESPACE-LEGAL

	The full-text of the European Patent Convention and the bibliographic database of the Board of Appeals Decisions, updated twice per year	1978-
IPC:CLASS		
	All editions (1st to 6th) of the International Patent Classification in English and French and the most recent editions in other languages	
IPLEX		
	Computer readable collection of industrial property laws and treaties (published by WIPO)	
RUSSIAN PATE	NTS ON CD-ROM	
	Database of full-text of Russian patents (in Russian) with searchable English Abstracts (with tables and drawings stored in	
	facsimile form)	1994-
US Fulltext		
	Database of full-text of US patents (the text is coded in full text, in contrary to the facsimile databases where the text is stored as an image); new discs in each month (published by MicroPatent)	1990-

WIPO publishes regularly a complete inventory with more details. For more information contact:

Bertelsmann, Munich Derwent Direct, London European Patent Office, Vienna Sub-Office, Vienna MicroPatent, Cambridge, USA Silver Platter, London WIPO, Geneva

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