

Status of World Intellectual Property Protection

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Efforts to increase protection of intellectual property continue worldwide; importance to nations noted

The endeavor to develop and reinforce the international protection of intellectual property have increased enormously in recent years, and have now attained an intensity that was still unimaginable up to a few years ago in this special area of economic law which, through of major importance to industry, is after all a rather narrow field. Today, it has become almost a matter of course that continuous of Ministers, and even Heads of State and Government, devote their attention to this special domain, which in turn is perhaps again proof of the social importance attaching to this field of activity in a world economy marked by ever closer integration. I will try to illustrate this by considering certain areas of the special field of the international protection of intellectual property.

I would like to start with the sphere of patent law. Prime of place, in my view, belongs here to the development of European patent law.

As you know, it was on 7 October 1977 that the Munich Convention on the Grant of European Patents, or the European Patent Convention as it is termed, entered into force for the initially seven States, for Belgium, the Federal Republic of Germany, France, Luxembourg, the Netherlands, Switzerland and the United Kingdom, Ireland, Italy, Austria and Liechtenstein followed, and since 1 October 1980, Greece and Spain have also been States Parties to this Convention. Thus, its coverage now extends to nine EC States and four non-EC States. Three EC States, however — that is, Denmark, Ireland and Portugal — have for varying reasons not so far seen

themselves in a position to ratify this Convention.

The European Patent Office in Munich, set up under the terms of the Munich Convention, has already been in the short period of its existence an unexpectably great success. When the negotiations on the Convention were taking place at the start of the 1970s, the figure assumed for the initial development phase of 12 years was up to 30,000 patent applications annually. This figure was exceeded after less than half the period just referred to, and today, 11 years after the entry into force of the Convention, the figure of 30,000 patent applications annually has already been passed. As a result, the long-term planning of the Administrative Council of the European Patent Organization already calls for arrangements to be made to cope with over 100,000 patent applications a year.

■ Worldwide Need ■

This shows the extent to which the establishing of the European Patent Office met a worldwide need to intensify the acquisition of patent protection. If this had led in some cases to a drastic fall in the number of national patent applications in Europe and thus to a reduction in the size of the domestic patent offices in the Member States of the European Patent Organization, then this is not only the necessary consequence of the setting up of the European patent system, but also the intended one which we have no reason to regret. Here we can truly say that what was at first a bold idea has, in the shortest interval of time, asserted itself in convincing fashion — so convincingly that, as you perhaps know, thought is already being given in the U.S.A. to the possibility of simply adopting

this kind of system for a greater American economic sphere. A more detailed recommendation than this the European patent system could hardly receive.

This major — and for many, surprising — success story of the establishment of the European Patent Office in Munich should not blind us to the fact that the European patent system, intended by its founding fathers not only as an instrument of centralization for the patent application and grant procedures, but also as an integrating force in turning the now 12-State Common Market into a genuine internal market, is still not complete. It was on long ago on 15 December 1978 that the Luxembourg Convention on the Community Patent was signed by the then nine EC States, who saw it as an integral part of the European patent system. The idea behind this Convention was that the patent granted by the European Patent Office — and even today, from the moment it is granted, this still designates into a bundle of domestic patents of the Member States, each with its own fate — should represent, for the area of the European Community, a unitary, supranational Community patent with a single fate in respect of all twelve Member States. Initially, however, it only proved possible for seven of the 12 Member States to ratify this Convention, and for as long as it has not entered into force, the European patent system — at

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least as far as the European Community is concerned — will remain a totem.

For years, intensive negotiations have been going on with a view to enabling this Convention to enter into force by 31 December 1992 at the latest, the target date set alone in the Single European Act for the realization of the internal market in the Community. In December 1985, it proved possible at a Government Conference under Luxembourg Presidency to adapt the Luxembourg Convention to the divergent opinions of the intervening years, to initial the revised and supplemented text, and unanimously to approve these texts in a Final Act solemnly signed by all the Member States.

As in past years, the Government of the Federal Republic of Germany, in its EC presidency during the first half of 1988, made great efforts to bring about the political breakthrough necessary to the entering into force of the Community Patent Convention by 31 December 1992 at the latest — efforts that the Greek presidency has continued with equal commitment in the past six months. At the moment, they are concentrated on bringing the Luxembourg Convention as the Community Patent into force initially — as a first step, so to speak — for 10 of the 12 Member States of the European Community, since Denmark and Ireland, for political and legal reasons that the governments of these countries cannot ignore, do not see themselves as being able to ratify the Convention in the foreseeable future.

■ Conditions ■

It is not possible to predict at present when these conditions will produce a successful breakthrough. They have been hampered and complicated by the fact that first the French and then later the Spanish Governments have chosen to make the entry into force of the Community Patent Convention conditional on a settlement of the still unresolved political questions in the field of Community trademark law.

We are hoping that perhaps before the end of the current Spanish presidency of the EC, and by the

latest under the French presidency, which will follow in the second half of this year, it will be possible to achieve the necessary political breakthrough in the Council of the European Community. I would not rule out, however, that this will only prove possible in the European Council — that is, in the body institutionalized by the Single European Act, and comprising the Heads of State and Government of the 12 Community Member States.

Substantive norms of patent law are at present the subject of negotiations within the World Intellectual Property Organization, called WIPO, in Geneva. These negotiations might lead in the foreseeable future to an agreement on the harmonization of such provisions. The last meeting of experts on this topic took place in mid-December 1988 in Geneva. The next and, if possible, final meeting has been planned for the end of April 1989, again in Geneva. Whether in these negotiations agreement can be reached on a new international convention on substantive patent law within the framework provided by the Paris Convention for the Protection of Intellectual Property, cannot be said with certainty at the present moment in time.

Worthy of note in this connection is that within the context of the bilateral cooperation between the European Patent Organization, the U.S.A. and Japan, an attempt is being made to elaborate a common position of this group of States on certain questions of substantive patent law — a position that can then be put forward jointly at the harmonization discussions at the WIPO in Geneva. These bilateral talks, however, have only just started and are not aimed at achieving, independent of WIPO, a special treaty relating only to the bilateral cooperation.

■ Trademark Law ■

In mentioning the link, which has been established at the political level between the patent law and the trademark law of the Community, I have already alluded at this second important area in the international development of the protection of intellectual property

— that is, the attempt to harmonize the trademark law of the Member States of the European Community, and in addition to create a unitary supra-national trademark law for the whole area of the Community.

As regards the harmonization of the domestic trademark law of the Member States, the decisive political breakthrough was achieved on 21 December 1988 when the Internal Market Council of the Community adopted the First Directive to approximate the Trade Mark Law of the Member States. The Council had prepared the way for this under German Presidency when, on 22 June 1988, it agreed on what is known as the Common Position at the Council on the Directive under the new rules of the Single European Act. The European Parliament approved the Council's Common Position without making any proposals for amendment. The Directive obliges the Member States to adapt their substantive trademark law to the European standard set out in the Directive, especially with regard to patentability, absolute and relative grounds for refusal of registration, and the scope and limits of protection. This they must do within three years, and at the latest by 31 December 1991.

Far more complicated is the situation as regards attempts to establish a unitary supra-national trademark law for the whole area of the Community that — similar to what is proposed in the patent law field for the relationship of European patent to Community patent — should take its place alongside the domestic law of the Member States. The substantive discussions on the proposal by the EC Commission for a Regulation, to be issued by the Council of the European Community, on a unitary, supra-national trademark law in the Community have, it is true, largely been concluded. Still unresolved, however, are the questions that are always politically highly sensitive in such cases — the location of the future Community Trade Marks Office and the official languages that this Office will have.

The Federal Government, as

most of you will know, continues to pursue its own bid for Munich as the site of the Trade Marks Office and also advocates the adoption of the three language arrangement (English, French, German) which has proved such a success at the European Patent Office. In addition to the Federal Government, however, the governments of nine other Community Member States also made a bid to provide the site of the Trade Marks Office, and on the language issue, the proposals range from a single official language as proposed by the EC Commission — although it did not initially say which language — to the all-language arrangement generally applying to the institutions of the European Community. This would mean a total of nine official languages.

◆ Office Location ◆

As regards the location of the Trade Marks Office, the negotiations are concentrating at the moment on The Hague, London, Luxembourg, Madrid, Munich and Strasbourg. In the language question, it now looks as if at the political level a decision will have to be taken which really lies between a two language arrangement (English and French only) and the three language solution (English, French, German) called for by the Federal Government. It cannot be ruled out, however, that in the end — although this would certainly be in substance the worst solution — it will only prove possible to agree on the lowest common denominator of an all-language arrangement. The body concerned of these intense political exchanges and debates is something we cannot possibly predict at the moment.

These two areas, the harmonization of national trademark law and establishing a unitary supra-national trademark law within the Community, are not the sum total of current international endeavours to develop trademark law still further. At the moment, negotiations are going on in Geneva under the auspices of the World Intellectual Property Organization (WIPO) to adapt to European developments the

Madrid Agreement Concerning the International Registration of Marks, dating back to the last century and concluded under the Paris Convention for the Protection of Industrial Property, and to make it possible to add to the as yet limited number of States Parties to this Agreement.

The immediate concern here is to open up the Madrid Agreement at least to the Member States of the European Community, which are not yet Parties to it (such as the United Kingdom), and also to other countries (in particular the Scandinavian States or even the U.S.A. and Canada). The importance of this issue may perhaps be made clear by the fact that now even the People's Republic of China has officially announced to WIPO its intention to accede to the Madrid Marks Agreement in its current version in the course of 1989.

◆ International Registration ◆

In substance, what is being sought in adapting the Madrid Agreement to the needs of possible additional States Parties is that an international registration may be issued not only, as up to now, on a registration in the country of origin, but also on an application for registration of the mark there; that the periods for refusing protection under an international registration may be extended by the States Parties; and that in designating the countries in respect of which protection is requested fees may be demanded up to the amount of the fees for national registration. For these questions, solutions are already in sight following intensive negotiations in Geneva, and the Spanish Government, continuing the tradition of the Madrid Union founded in the capitulations, insisted on being allowed the privilege of inviting all those States interested to Madrid for a Diplomatic Conference in June of this year. That this Conference will be a success, is something that can scarcely be doubted, given the present state of negotiations. Thus, it can be assumed that in the foreseeable future, the number of States Parties and the scope of the Madrid Agreement will enlarge by no means an in-

significant expansion. This will give the international registration of trademarks a completely new quality.

Going further still, in the discussions in Geneva an attempt is being made to establish an institutional link between the Madrid Agreement and the proposed supra-national trademark law of the European Community. Efforts are being directed here towards a solution by which in the future, a trademark registered at the Community Trade Marks Office, or for which registration has been applied for there, can also be registered at the International Bureau in Geneva and thus extend beyond the bounds of the Community, and inversely, by which the international registration of a mark also has the validity in the Community of an EC trade mark registered with the future Trade Marks Office of the Community. This new arrangement, too, is intended to be the subject of a final decision at the Diplomatic Conference to which the Spanish Government is inviting interested States in June of this year in Madrid. This kind of dovetailing and interlocking of the international and European trademark systems would mean a decisive breakthrough for the worldwide brand name products industry.

The chance of establishing this proposed link between the EC trademark law and the Madrid Agreement seems to be very real at the moment. In the final analysis of course, everything will depend on whether the efforts within the European Community are successful as regards solving the customary trademark problems that are still open there, especially the site of the Trade Marks Office and the language issue. As yet, we have not found a final solution either to the politically equally sensitive question of whether, and in what form, the European Community as such — represented by the EC Commission — can participate in the Diplomatic Conference on the Madrid Agreement itself.

◆ Additional Protocol ◆

Just to complete the picture here, I will also mention that while these

proposals for the Diplomatic Conference in Madrid represent in substance a further development of the Madrid Agreement, in formal terms, the new provisions are intended to be the subject-matter of an additional protocol to the Madrid Agreement and thus — seen from the viewpoint of international law — a new international agreement. This is significant not least with regard to the question of what majorities are required when decisions are taken at the Diplomatic Conference.

A completely new aspect was lent to international developments in the protection of intellectual property by the fact that the governments of the States Parties to the GATT — the General Agreement on Tariffs and Trade to which a total of 92 States are party — decided more than two years ago in Punta del Este to make the "Trade-Related Aspects of Intellectual Property Rights" a subject of the present Uruguay round of the GATT. Starting from this initiative, intensive negotiations have since developed which, following the Mid-term Review Conference in Montreal six weeks ago, have now entered their decisive phase. What was particularly need to bear in mind here is that up to now, questions relating to the protection of intellectual property and their significance for the international economy have not been on the agenda of these discussions. In other words, this is now among the new topics of this GATT round together with such other important areas as trade-related investment measures, agriculture and service industries.

Although negotiations have now been going on for more than two years, fundamental differences of opinion still exist between the industrial nations and the developing countries. This was once again made clear by the Mid-term Review in Montreal. Despite all the efforts made, and notwithstanding this encouraging interim balance sheet, it has still not proved possible to reconcile the differing positions of industrialized and developing countries. Whereas the industrial nations in GATT are calling for extensive provisions to protect in-

tellectual property substantive standards and minimums for their implementation both within Member States and at the border, these provisions being such as will open up an avenue to settlement of disputes by GATT and its sections, the developing nations, led by India and Brazil, have thus far only been ready to accept a GATT agreement on product piracy. In their view, the issue of substantive standards should remain the preserve of WIPO. The EC position, largely attributable to efforts made by the Federal German Government, accords in its fundamentals with the broad United States approach, but displays certain nuances intended to make it acceptable to the developing countries, too, and thus also to smooth the path to a GATT agreement on the protection of intellectual property generally.

■ GATT Situation ■

In detail, the situation that prevails in GATT following the already inconclusive Mid-term Review in Montreal is as follows:

The industrialized countries are unanimously calling for improved protection of intellectual property. They are so one as regards their demand that there should be regulations for implementing these rights via measures both at the border and in the domestic arena. Again, with variations of emphasis and content in specific points, the agreeing of new substantive standards and norms is being insisted on. Views differ as to the scope of a GATT agreement. Whereas the U.S.A. is insisting a solution in the form of a code with a restricted number of participants, the other States are largely agreed that the developing countries, too, should be involved as far as possible.

As regards substantive standards, the U.S.A. (with the backing of Japan) is calling, in particular for binding GATT minimum standards to be laid down. It is intended that they be taken from international agreements, primarily in force, insofar as such standards are already to be found there. Where they are either lacking or inadequate, it is proposed that they be established so as to corre-

pond to the most part to the norms applicable in the industrialized countries.

In addition to binding provisions ensuring the observance of intellectual property rights, the European Community is also demanding principles on substantive standards, with the general direction followed here differing in some cases from what is sought by the U.S.A. and Japan. As the nature of the EC's concerns is that the States Parties to the relevant GATT agreement should undertake to ratify the world-wide WIPO conventions in the field of industrial property protection and copyright, namely the Paris Convention for the Protection of Industrial Property of 1883 and the Revised Paris Convention of 1966, The European Community, however, is equally convinced that there is a need for principles going still further than this, although a decision on their content and the degree to which they are legally binding is only envisaged in the course of further negotiations, depending on what level of acceptance can be achieved. The European Community is here proceeding on the basis that any such GATT agreement, in which as many States as possible should be party, must on principle cover all intellectual property rights. In this respect, the EC is going further than the U.S.A. and Japan.

As against this, a number of developing countries are in favor of a narrower interpretation of the scope stated, maintain and then only prepared, at most, to discuss the enhancement of intellectual property rights and the combating of trade in counterfeit goods in particular (counterfeit, piracy, but also other infringements of intellectual property rights, e.g. copyright). Furthermore, the developing countries are almost unanimous in their strict rejection of negotiations on substantive provisions in the GATT, pointing out instead that these are not relevant to trade and come in any case within the exclusive ambit of WIPO.

The GATT negotiations also need to be seen against the background of comparable endeavours at WIPO, where a committee of experts is currently elaborating model provisions

for the reinforcement of intellectual property rights. We in the Federal Republic of Germany are particularly well placed to make a major contribution here, after the many years of discussions we have had in numerous to suppress product piracy. At the moment, work is still going on in our country to prepare a comprehensive Act for the suppression of Product Piracy, which can probably be sent to the new houses of the German parliament in March or April of this year.

• Coordinated Efforts •

At present, concerted efforts are being made to bring about an approximation of the still differing standards of the various industrial States in the course of the current GATT round, and to arrive at a result that is acceptable to all the States involved. The decisive factor here is that the Uruguay round of GATT, for which only another two years are available, must produce a successful outcome. Should the GATT round not be a success, it could — in view of unmistakable protectionist tendencies — have undesirable consequences in some industrial countries as well with regard to the freedom of world trade.

The Federal Government and the European Community have therefore gone into these negotiations guided in particular by the thought that the GATT round should rest on the one hand be burdened with over-ambitious aims, yet at the same time, will needs to achieve a minimum degree of progress in respect of the trade-related aspects of intellectual property rights if there is to be a constant partner at least of the western industrial States. Only in this fashion — only by keeping in mind these differing aims in arriving at a sensible middle course — will it be possible in our firm view to guarantee the success of the GATT Uruguay round. And just such a success must be the supreme objective of all negotiations in the special field of the protection of intellectual property, too.

A completely new development in the field of intellectual property protection has taken place with re-

gard to the protection of the super graphics of microelectronic semiconductor products, known as integrated circuits.

Here it was the U.S.A. that took many people by surprise by moving outside the traditional framework provided by the worldwide Conventions for the protection of intellectual property — the Paris Convention for the Protection of Industrial Property and the Berne Convention — and passing the Semiconductor Chip Protection Act on 8 November 1984. This introduced for the first time a copyright-like protection for the mask works contained in semiconductor chips against their unauthorized copying and against dissemination of the chip containing such a copy. This protection, however, is limited to a period which, particularly in the copyright field, is exceptionally short, 10 years.

This initiative, which the Europeans came a little bit late a bolt out of the blue, quickly led to the World Intellectual Property Organization turning its attention to this particular area in order that consultations might be started within the framework of the Paris Convention for the Protection of Industrial Property and the Berne Convention on the Protection of Literary and Artistic Works. The aim here was to conclude a special international agreement for the protection of integrated circuits.

• Good Progress •

These consultations have made such good progress in the meantime that the United States government will host a Diplomatic Conference in Washington in May of this year so that just such an international agreement can be concluded. Going by the latest position reached in the discussions in the WIPO working group, one may assume the probability of the Washington negotiations being brought to a successful close. It also seems likely that this new international treaty for the protection of intellectual property will be signed not only by the vast majority of industrial nations, but also by most of the third-world countries, as they are called.

At the end of 1984, the EC Commission in Brussels also began to devote its attention to this topic. A development prompted not least by an initiative taken by a number of Member States of the European Community. The significant point here was that the European found themselves facing the question of how and in what form they should react to the new situation created by the American Semiconductor Chip Protection Act if they wished to maintain protection for their chips in the United States. The American Act, in derogation of the basic principle of national treatment, contains a reciprocity clause and makes protection in the U.S.A. of chips produced by foreign firms dependent on the granting of corresponding protection for American chips in the State where the foreign firm in question has its seat.

The Europeans only had a very short period of time in which to arrive at such a statutory provision, as the American Act laid down an exclusion period of three years from its entry into force for the granting of reciprocity, and at that time, it may be no more than that, as has since happened, this period would be extended to a further three years by a supplementary Act, just a few months after the U.S.A. Japan introduced similar protection via the Act Concerning the Circuit Layout of Semiconductor Integrated Circuits of 1985, doing so without making protection for foreign applicants for registration dependent on a guarantee of reciprocity. Such a guarantee is against tradition in the protection of intellectual property.

Under the enormous pressure of time created by the American reciprocity rule, the EC Commission, on 21 December 1985, put forward a proposal for a directive to protect integrated circuits, which (involving very unusual for Brussels) was approved by the Council of the European Community barely one year later on 16 December 1986. This then left the Member States only 18½ months for the implementation of this directive in their domestic law if they wanted, before expiry of the exclusion period stipulated in the American

Act, to ensure protection of their integrated circuits in the U.S.A. by making appropriate national provision.

The Federal Republic of Germany actually succeeded within this period (that is, in less than nine months) in passing the Act to protect the Topographies of Micro-electronic Semiconductor Products. Even for the German parliament, that is quite something! Never before had the process of legislation been conducted so quickly in this special area.

No other Member State of the Community managed to do this with the same speed, and thus to keep in the deadline set down. The other Member States, however, then benefited from the subsequent statutory extension of the period laid down in the American Act, which only expires on 8 November 1989, and this still gives these States a chance to ensure protection for their semiconductor chips in the U.S.A. It must be said, however, that some Community Member States have so far not even returned on the domestic legislative procedure necessary to implement the EC Directive. Taking a general view, one can only express the hope that the example given by the American legislation — a bad example in my view — will not create a precedent in the field of protection for intellectual property, which up to now has been governed by the principle of national treatment. This would have to be seen as a decidedly retrograde step in a more than one hundred-year international tradition.

■ Copyright ■

Only very briefly have upon developments in the domain of international-copyright. Outstanding events have been the accession at long last of the U.S.A. to the Berne Convention for the Protection of Literary and Artistic Works — a step taken after decades of international efforts and years of declarations of intent — and the proposal made by the EC Commission in Brussels for a Broadcasting Directive, which also contains copyright rules for the feeding into-cable net-

works of audiovisual works. Another important event that should be mentioned is the publication of the EC Commission Green Paper, "Copyright and the Challenge of Technology."

The accession of the U.S.A. to the Berne Convention represents a decisive breakthrough in asserting the principle of national treatment and substantive minimum standards for the protection of copyright owners. As such, it is also a major step to cutting back the importance of the Universal Copyright Convention, the "subsidiary solution" agreed on in 1902 as a smallest common denominator, as it were. The most important thing now will be to watch carefully to see that the Berne Convention is applied and enforced in the U.S.A. in a fashion that corresponds to the traditional standard of existing — especially European — States Parties, and also meets the requirements of this Convention in respect of the moral rights of authors.

The EC Commission's proposal for an EC Broadcasting Directive has been revised with extensive success by the majority of EC Member States, at least insofar as it concerns making provision for copyright issues in the further distribution of radio and television programs. While the proposal preserved the central role of private economy, it did also seek to introduce a statutory license in the event of negotiations of a private law nature between the interested parties breaking down, in its *Ancillary Proposal*, the Commission, on the basis of a proposal made by the European Parliament, has now suggested that only compulsory arbitral proceedings be provided for. The majority of Member States, however, have thus far rejected any mandatory provision concerning the feeding of programs into cable networks, and similarly withheld their consent to the German solution of allowing individual copyright claims to be asserted only by collecting societies, or the so-called Scandinavian solution of declaring contracts between collecting societies and cable firms to be generally binding. The objection in these two solutions was that they can

also be seen to contain a compulsory element. In view of this resistance, it would not seem possible to roll-out the complete removal of the copyright chapter from the proposed EC Broadcasting Directive, with the result that the copyright issues will be the exclusive domain of private economy.

The EC Commission Green Book will have a decisive influence on both the European and international discussion of new, fundamental questions of copyright arising out of modern technological developments. The center of attention here will be issues relating to piracy, the copying of audiovisual works for private purposes, the firing out of sound and video recordings, the protection of computer programs, and legal questions concerning the use of data banks. One of the most interesting points will be waiting to see in what direction this debate finally moves. First discussions with the EC Commission have already shown that the initial Green Book approach — a predominantly economic one designed to assist the creation of the Community's internal market — can perhaps at least be balanced by giving greater prominence to the rights of individual authors.

■ Biotechnology ■

Let me now conclude by mentioning once again the field of patent law. It did this because in the international sphere of the protection of intellectual property, a completely new topic has now emerged of current and urgent relevance. This concerns the question of the extent and limits of possible access to patent protection for biotechnological inventions and the results of genetic engineering research.

In the Member States of the European Patent Organization, plant varieties and animal species together with most biological processes for the production of plants and animals are excluded from patent protection. Similarly not patentable are methods for the surgical or therapeutic treatment of the human or an animal body, and diagnostic methods practiced on the human or an animal body. Also significant in

this consensus is finally the fact that in the Member States of the European Patent Organisation, inventions whose publication or use would violate "public policy" or morality are similarly excluded from patent protection.

This particularly applies to genetic engineering manipulations carried out in relation to, or directly on, human beings. Access to patent protection is, however, enjoyed by microbiological processes and products such as microorganisms, as also by genetic engineering processes for the breeding of plants and animals.

For non-patentable plant varieties, it is possible in the Member States of the International Union for the Protection of Plant Varieties (UPOV) to apply for a special industrial property right known as a plant variety protection right. The States Parties to this convention have undertaken in particular to prescribe dual protection via variety protection and a patent. Variety protection covers the commercial breeding material of a particular variety or propagating material for such a purpose. Not covered by variety protection, however, are the processed and product (the fully-grown plants) and the production and circulation of manufactured end-consumer goods. The scope of the variety protection right is further limited by the fact that use by another breeder of the propagative material of a protected variety in order to breed a new variety is permitted, and that a separate variety right for the new variety can also be obtained (what is termed, the "father breeder reservation").

What this means, then, is that in Europe, patent protection is available for large areas of biotechnological and genetic engineering research where the generally applicable patenting requirements are met. Access to patent protection is particularly enjoyed by:

— "technical" processes for the breeding of plants, plant varieties, animals, and animal breeds (including the immediate product of the process);

— microbiological processes and their products (e.g. microorganisms).

— Inventions of "new" plants and plant species (where they do not constitute a plant variety, in which case variety protection applies).

— Special results of genetic engineering research, such as genes (as defined here), sequences and expression capacity, isolated and modified DNA sequences, transfer and vector systems, and plasmids.

In the U.S.A., on the other hand, patent protection is also possible for plant varieties and animal breeds, as the American Patent Act does not contain any explicit provisions or exceptions. The United States Patent and Trade Mark Office (USPTO) has given express notice that it will also accept applications for applications for multi-cellular living matter and, where the usual patenting requirements are met, grant a patent. As you will all know, since this was even reported as in the daily press, the USPTO granted on 12 April 1988 the first patent for "transgenic animal cells" with a special carcinogenic quality. It recognized a patent claim relating to a mouse that had undergone mutation via genetic engineering.

■ WIPO Suggestions ■

Faced with these circumstances, the WIPO in Geneva has also turned its attention to this area and put forward suggestions with a view to harmonizing the rules for patent grants in the field of biotechnology and genetic engineering. What is here being sought is, first and foremost, a practicable demarcation between patent and plant variety protection, a stipulation of the scope of protection of process patents, demarcation of micro- and macro-organisms, and the establishing of exceptions from the scope of protection, particularly the question of the need for statutory licences for further breeders. Parallel to this, the UPOV, in April 1988, also commenced work on a revision of the UPOV Convention, the aim here being to reinforce still further the rights enjoyed by plant breeders.

All these endeavours have not as yet produced conclusive results.

The backdrop against which they are taking place is the question — economically important to industry and politically sensitive — of how we can achieve an appropriate balance between the protection of the inventor on the one hand and the interests of the general public on the other in a field that is of decisive importance for the development of technical and its economy. An unambiguous decision involving the unconditioned patentability of biotechnological and genetic engineering inventions has as yet been taken only in the U.S.A. Yet even there, there is now some controversy as to the ethical justification for this kind of unlimited patent protection.

What the further development in Europe is likely to be is something we cannot predict at present. It is worthy of note, however, that the EC Commission put forward in October 1988 a proposal for a Directive for the Protection of Biotechnological Inventions. This envisages making such inventions largely susceptible to patent protection, while at a kind of corrective to protect the public interest also providing certain conditions for statutory licences, so that the title conferred by the patent would generally be reduced to a claim for remuneration. Consultations on this proposed directive have not yet started. They will certainly take up a considerable amount of time and, given the politically contentious nature of the topic, produce some very intensive discussion. No less important in this connection will be the question of what direction is going to be followed by the European Patent Office in its decisions, which will have as a basis the European Patent Convention — an instrument with which in turn the domestic law of the Member States is largely in harmony.

Going in alone in national terms is hardly likely to be an option. This is really ruled out in Europe by the simple fact that the majority of European states are now members of the European Patent Organisation. Thus, it will be all the more important — in this completely new field, too, with its as yet unexplored future perspectives — to work out

provisions of international, if at all possible worldwide, validity.

I have attempted in this paper to provide you with a survey of the current state of development in the protection of intellectual property around the world, and at the same

time, make clear just how much has been going on in this area for some years and will probably continue into the years ahead — a highly specialized area admittedly, but one that retains its great importance for industry. We can say with certainty

that the protection of intellectual property will continue to play a central role worldwide, not only as regards cooperation between the industrialized nations, but also between industrialized nations and developing countries.