# Summary Report

## Question Q 157

## The Relationship between Technical Standards and Patent Rights

As pointed out in the Working Guidelines, the Workshop held at the Montreal Congress in 1995 showed a great interest of the members of AIPPI in this subject. The main object of this topic is to find out what conflicts may arise with regard to patents when technical standards and the processes to set them up are involved[1]. AIPPI's task is to present a proposal as to how such conflicts can be avoided or be resolved in order to come to a coexistence between patents and technical standards which allows all parties involved to take advantage of both the patents and technical standards.

The Reporter General has received 18 Group Reports from the following countries (in alphabetical order): Argentina, Australia, Belgium, Brazil, Bulgaria, Ecuador, Finland, France, Hungary, Ireland, Italy, Japan, the Netherlands, Republic of Korea, Spain, Sweden, Switzerland and Venezuela.

In addition to their Group Report, the Japanese Group has submitted a detailed report on "Proposals for the Harmony between Technical Standards and Patent Rights" which gives suggestions for future legislative measures.

The Australian report emphasizes specifically the importance of this subject for AIPPI at this time. In their view, recommendations given by AIPPI would likely be considered seriously by the standard setting bodies, including governments.

The common view of the Groups is that technical standards are necessary for various reasons, but that they can cause conflicts with patent rights at the same time.

*1.1 What types of national and international standards exist in your country? By whom are these standards set up? Are there de jure and/or de facto standards?*

All countries have national standards which are set up in general by a national organization or body. In most countries these organizations are non-government or private organizations based on voluntary participation. These organizations may be controlled by government bodies (e.g. Finland). The Korean Group mentions that standards in Korea are based on a specific Act on Industrial Standardization.

There are also international standards in virtually all countries which have to be implemented or transformed into national standards.

The standards which are set up by the standardization organizations are referred to in the Group Reports as de jure standards. In some countries the standards are transformed into

[1] As defined in the Working Guidelines, the term "patent" also comprises utility models, certificates of protection and other industrial property rights with a technical character.

legal acts such as decrees or rules passed by the government. This option is mentioned by the Groups of Argentina and Hungary.

De facto standards exist in most countries. Most of those standards are linked to market power or similar circumstances. The reports of Argentina, Ireland, the Netherlands and Venezuela do not mention de facto standards, whilst the Brazilian report explicitly states that Brazilian standards are de jure standards.

Summarizing, there are national and international standards in almost all countries. The majority of the countries also recognize de facto standards as a result of certain market conditions.

*1.2 Who is the addressee of the standards and in which technical field do standards apply? Are the Groups aware of any standards which explicitly refer to patents?*

It is the common observation of the Groups that standards apply to most technical fields. Addressees are manufacturers and other members of industry.

The Australian and the Italian report point out that de facto standards can mainly be found in the field of modern technology, such as telecommunications and computer technology.

With the exception of the Belgian, the French and the Korean Groups, none of the Groups is aware of a standard which explicitly refers to patents. The Belgian Group states that certain standards make reference to patents and that this has caused the establishment of more and more patent pools to enable companies with the help of cross licenses to be in conformity with the standards. The Dutch report mentions the EC directive 93/38/EEC coordinating the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors. This directive contains an article on patents. The French Group also refers to recommendations given by the European Commission for "IPR and standardization" [COM(92)445]. According to the Korean Group, the Korean Standard KS A 0001 suggests to specify the risk of a conflict in the text of a standard if a patented technology is involved.

In short, standards apply to most technical fields. At the same time, it is exceptional that a standard explicitly refers to patents.

*1.3 What is the legal effect of standards? Are they enforceable? If so, how are they enforced? The Groups are invited to distinguish between the types of standards involved according to question 1.1 above.*

According to most Group Reports with the exception of the Australian and the Venezuelan report, standards are not directly enforceable. They have a voluntary character, unless they have been transformed into binding rules by governmental acts. The Venezuelan Group states (without giving examples) that there are legal provisions which are applicable if standards are not being followed. The Australian Group mentions criminal sanctions as possible means of enforcement in certain cases, such as pharmaceutical or safety standards.

Some Group Reports (e.g. Bulgaria, Finland, Hungary and the Netherlands) point out that indirect enforcement is possible through the requirement of compliance of the goods with the standards. This requirement is not necessarily a legal requirement but may be exercised by the market conditions.

The French and the Swiss Group also mention that standards may form part of the average technical skills in that specific technical field so that the non-compliance of goods with those standards may lead to product liability by the manufacturer.

According to most Groups standards are not directly enforceable but have a voluntary character.

*2.1 What possible conflicts do the Groups see with regard to the relationship of patents and standards?*

The majority of the Groups see problems when a patented technology is implemented in technical standards. This may be the case when a technology is necessary for technical reasons, particularly when the only known practical solution is a patented technology or when the standard requires the infringement of a patent held by an unrelated third party which was not identified in the standardization process. The Japanese Group sees it as an inherent conflict, since the interests of patentees and of standard-setting groups tend to conflict. In their view, patentees try to maximize the profits accrued from the patent, whilst the standardization organization wants the standards to be spread as widely as possible in view of invested cost and labor in the standardization process.

The French Group points out that there may be synergies on a micro-economical as well as on a macro-economical level.

The Argentinean and the Ecuadorian Group see no conflicts, since standards are not binding and a patented technology can only be used with the approval of the patent owner. According to the Finnish Group national standards do not include patents, unless the patentee has given up his rights. They rather see conflicts between patentees and standardization rules.

According to the Spanish report, Sec. 74 and 75 of the Spanish Patent Act allow the expropriation of a patent under exceptional circumstances and in the public interest.

The Swedish Group observes that the value of a patent may decrease if the patented technology is not compatible with the respective standard. Furthermore, a standard may be applied in order to determine the scope of protection of a patent.

Summarizing, problems can be found when a technology is implemented in technical standards, i.e. when the only known practical solution is a patented technology or when the standard requires the infringement of a patent held by an unrelated third party which was not identified in the standardization process.

*2.2 Which issues do the Groups find relevant with regard to confidentiality, concerning namely the relations between the parties involved in setting up a specific standard or the preservation of confidentiality? Should there be rules for the handling of in-*

*formation during the period of setting up a standard? Likewise, should there be rules for the filing of patent applications during said period? If so, what should the rules be?*

There is a general view among the Groups that the standardization process needs to be as transparent as possible and that the necessary information may not be withheld by the participants in the standardization process. Therefore, the majority of the Groups believe that specific rules are necessary to secure confidentiality among the members of the standardization bodies in order to enable them to file patent applications without prior disclosure of confidential information. In this connection, the Dutch Group points out that the EPO has ruled that the contribution to a standard is considered a publication and therefore harmful to novelty.

The Groups do not propose specific rules in their reports. They share the view that these rules have to enable the participants to discuss the issues freely without risking the loss of patent applications. The Korean Group finds that a special secrecy provision is required.

The Irish Group states that the parties should independently take necessary actions to secure protection. In the view of the Japanese Group no confidential information should be disclosed and the parties should complete the filing of necessary patent applications before they submit information to the standardization body. Regarding the disclosure, the Italian and the Dutch reports contain specific suggestions in order to avoid a disclosure which could be detrimental to novelty. The Dutch Group proposes that the patentee gives notice solely to the director of the organization and that the director then guides the standardization process. The Italian Group states that a disclosure could be avoided by the mere information given by the patentee that a relevant patent exists and that he is willing to grant licenses. In this case, no further details would have to be disclosed.

The general view of the Groups is that the standardization process needs to be as transparent as possible and that the necessary information may not be withheld in the standardization process. This requires specific rules to secure confidentiality. Alternative solutions might be that the parties to a standardization process complete the filing of necessary patent applications before they submit information to the standardization body or that the information is only disclosed to a single person or that only the mere fact of the existence of a relevant patent is disclosed.

2.3 *Are there any issues with regard to the territorial aspect (scope of protection and application of the standard)? What differences do the Groups see with regard to patents of members of the standardization organization and of non-members?*

Most Groups do not see specific problems in connection with the territorial aspect of patents.

The French report mentions 4 different types of territorial problems: (1) patents exist in a country in which a standard is implemented from another country where there is no patent; (2) a regional or international standard is transformed into a national standard with certain differences; (3) international conflicts require a different treatment in various countries due to the local characteristics; (4) certain national standards may be used to constitute an obstruction for international commerce. The latter category should not be discussed in the scope of Q157, since this does not seem to be a problem related specifically to patents.

The Dutch Group points out that a patent owner will be reluctant to grant a license to a party from a country where he himself is not able to market his products and that standardization organizations will avoid technology from outside their respective territories. In the view of the Dutch Group this can only be resolved by way of world-wide standards.

Whereas the Australian Group sees a fundamental difference between independent parties and members of the standardization organization, the other Groups do not see such a difference.

The majority of the Groups do not see specific problems in connection with the territorial aspect of patents. Nor do they find a difference between members of the standardization organization and independent members.

*2.4 Are there rules for patent pools or the discrimination of non-members which might constitute a conflict?*

The Groups have not identified any specific rules for patent pools. The Dutch Group finds that patent pools may have their own rules and that small and medium sized enterprises may be in a weaker position as opposed to larger companies. The Swiss Group mentions that patent pools may have certain advantages for potential licensees, since all licenses can be obtained at one address without dealing with every single patentee separately.

The misuse of patent rights or the discrimination of outsiders can be controlled and sanctioned by applying anti-trust rules or anti-competition provisions (France, Hungary, Italy, the Netherlands and Switzerland).

The general view of the Groups is that there are no specific rules for patent pools but that in cases of misuse of patent rights anti-trust rules or anti-competition provisions may apply.

*3.1 How and by whom should the relevant or "essential" IP rights be determined? Should the members of the respective organization be required to reveal their relevant IP rights? What should be the consequences if a member does not reveal an IP right? How does this affect the disclosure of new inventions or technologies?*

Among the Groups there are three views as to who should determine the essential patents. The Groups of Argentina, Australia, Brazil, Bulgaria, Hungary and the Netherlands state that the standardization organization should be responsible for determining the essential patents. On the contrary, the Groups of France, Ireland, Italy, Sweden and Switzerland consider this the task of the patent owners. Finally, the Groups of Finland, Japan and Venezuela propose that third parties make the determination. The Finnish Group suggests an impartial organization which can, in their view, also be the standardization body. The Japanese Group is in favour of neutral third party experts and the Venezuelan Group suggests the Patent Office of the respective country. The Australian Group only mentions the option of appointing a third party for that specific purpose.

All Groups - with the exception of the Korean Group - share the view that the patentees have to reveal the patents which might be involved in the standardization process. The Japanese and the Dutch Groups suggest that this should be done by way of a patent statement which would have to be submitted prior to the standardization process. The

Swiss Group points out that - for practical reasons - it will be almost impossible for the standardization organization to constantly monitor the patent portfolios of its members. According to the Korean report, the members of a standardization organization do not have to reveal their patents to the public.

The Swedish Group points out that the question when the patent should be revealed is relevant and that it must be avoided that members keep the patent secret so that the standardization organization runs the risk of being confronted with an unknown patent after the standardization process has been completed.

Some Groups (France, Italy, Japan, the Netherlands and Switzerland) mention the consequences of a late revelation of patents or no revelation at all. Unless the patent owner is willing to grant a license, the respective patent cannot be used and the standard needs to be modified. The French Group suggests compulsory licenses if a modification is not possible. Also the Dutch Group states that, in the case of late revelation, the patentee cannot withhold licenses if he has given a patent statement earlier. The Italian Group suggests rather strong sanctions which could ultimately lead to a ban of the respective member from the standardization organization. According to the French Group a member should only be excluded in cases of abuse of the patent rights.

It is the common view of the Groups that the patentees have to reveal those patents which might be involved in the standardization process. One suggestion is that a patent statement is submitted before the process begins. Consequently, the standard needs to be modified if a relevant patent is identified late or not at all during the process.

*3.2 Can the owner of an IP right which has been determined as relevant be forced to let it be used for standardization? If so, should this be done by way of licensing? Can the owner deny the use of the IP right?*

There is a general view among the Groups that the owner of a relevant patent can, in principle, not be forced to grant licenses to other members of the organization or to outsiders. Only in a few exceptional cases should compulsory licenses be admissible according to the conditions of Art. 31 TRIPS or the respective national laws. The Swedish Group explicitly rules out the option of compulsory licenses in these cases. The French Group also mentions Art. 81 and 82 of the Rome Treaty which prohibit the abuse of a dominant market position. The Swiss Group suggests an international treaty concerning the relationship between standards and patents. Such a treaty would have to provide that a patent which is necessary for implementing a technical standard has to be licensed by the owner under fair and reasonable conditions. This license would be compulsory. The Spanish Group again refers to the provisions in the Spanish Patent Act which allow an expropriation (Sec. 74, 75) or the grant of compulsory licenses in the public interest (Sec. 90).

The Groups' general view is that - without contractual or legal provisions - the owner of a relevant patent cannot be forced to grant licenses to other members of the standardization organization or to third parties. An alternative proposal by the Swiss Group is an international multilateral treaty. By way of such a treaty compulsory licenses could be implemented under fair and reasonable conditions.

*3.3 What should be the consequences of such a denial for the standardization process? Can the membership or the participation in the standardization process be made subject to an undertaking to grant licenses or to make the technology protected by IP rights otherwise available?*

The Groups almost unanimously (with the exception of Spain due to the special situation explained above) express the opinion that, in the case of a denial of a license, the standard cannot make use of the respective patent. It will have to be amended or the standardization process has to be stopped. The majority of the Groups agree that membership or participation in the standardization process can be made subject to an undertaking to grant licenses. The Hungarian Group explicitly rules out such a solution. The Korean Group observes that there is no connection between the membership and an obligation to allow the use of a patent.

The Swiss Group refers to their proposal of an international treaty which would avoid this problem entirely.

The Groups almost unanimously state further that a standard cannot make use of a patented technology if the patentee refuses to grant a license. It is the view of the majority of the Groups that the membership or participation in the standardization organization can be made subject to the undertaking to grant licenses.

*3.4 In which way and by whom should conflicts between a member and the organization or between members be resolved? The Groups are invited to give their comments on the pros and cons of internal proceedings on the one hand and of national court proceedings on the other hand, as far as particular conflicts with regard to standards and patents are concerned.*

The majority of the Groups are in favour of internal arbitration proceedings prior to involving national courts.

The Argentinean Group prefers national courts in cases of a conflict between the organization itself and its member. In the view of the Dutch Group court proceedings should be used for conflicts with third parties who are not members of the organization.

The Italian Group sees no special problems. In their view, the standardization organization should be free to set up its own rules.

The Australian Group believes that any solution is possible, depending on the part of industry involved.

According to the Swiss report internal arbitration proceedings would cause problems due to the fact that not all members would accept these proceedings. Furthermore, the exclusion of a member would be counterproductive, since it seems more reasonable to try to keep the respective member of the organization involved in the standardization process.

The Belgian Group prefers internal means other than arbitration, since the arbitration would delay the standardization process.

Those Groups who are in favour of arbitration mainly name as advantages the possibility of involving specialists in the respective technical field (Argentina, France) and lower costs and greater efficiency (Brazil, Venezuela). The Groups of Finland, Hungary and Japan raise the question of enforcement of internal arbitration decisions. According to the Dutch report, such decisions would only be binding inter partes.

Summarizing, the majority of the Groups prefer internal arbitration to national court proceedings. However, such decisions would only be binding inter partes.

*4.1 Who determines the conditions of a license agreement? What are reasonable royalties? How and by whom can the non-discriminatory character of conditions be defined? Is there any impact, and if yes, which impact does Art. 31 TRIPS have on this type of license?*

The majority of the Groups want to leave the decision about the conditions to the parties of a license agreement. They emphasize that this agreement is still a mutual agreement, even if the patent holder is forced to grant licenses. The French Group states that the patent owner should remain in control over the conditions. They also suggest that the standardization organization could determine and publish the conditions for those patents which they want to implement in the standard. Also the Italian Group finds that the directive bodies of the standardization organization should be able to set at least guidelines for the conditions. A majority of the Swiss Group is in favour of a standard license agreement which would contain all essential conditions. The Ecuadorian report states that the National Bureau of Industrial Property may amend the conditions under certain circumstances. The Korean Group mentions that the director of the standardization organization decides about the implementation of a patented technology into the standard after examining the license conditions offered by the patent owner.

With regard to reasonable royalties not all Groups have expressed an opinion. The Australian Group finds that the royalties should be based on the royalties typically paid in that respective field of industry. The Brazilian Group observes that, according to case-law, 5% of the profits received by the licensee are reasonable. The Hungarian Group states that reasonable royalties may be less than normal as a compensation for the fact that the patented technology forms part of the standard. Other Groups (Japan, the Netherlands, Switzerland) refer to various factors which have to be taken into account, such as the market, the value of the product and the patent and the scope of protection. A majority of the Dutch Group is in favour of a maximum royalty. According to the Italian report, the royalty should be low enough to leave a sufficient profit for the licensee. The Belgian Group expresses concerns that the royalties may result in eliminating a company from the market if they try to comply with the standards.

It is the general view of the Groups that Art. 31 TRIPS has no specific impact on these kinds of licenses which occur in the context of a standardization process.

According to the majority of the Groups, the decision about the conditions of a license agreement should be left to the parties of the agreement so that the patent holder remains in control of the conditions. With regard to the amount of royalties, the views are split. Royalties may be similar to the ones typically paid in that respective field of technology. They may also be slightly lower due to the fact that the patented technology forms part of

the standard. The Groups generally agree that Art. 31 TRIPS has no specific impact on these kinds of licenses.

*4.2 Do the Groups see general principles for license conditions? The Groups are invited to submit factual comments on the licensing policy involved in standards, i.e. in comparison to the policies for amicable license agreements.*

In general, the Groups cannot identify principles for the license conditions which would be different from other license agreements.

The Finnish Group expresses concerns that ordinary terms might not always be appropriate due to the special situation of the license.

The Hungarian Group states that the license should be irrevocable and that it should not be limited unduly.

The Dutch Group observes that smaller enterprises need to be protected, which could be done with the help of a standard agreement.

The Swiss Group finds a "most-favoured-nation clause" necessary.

The French Group points out that the question is rather to find principles for setting up the conditions which the members want the organization to present to third parties who are not members of the organization.

It is the general view of the Groups that principles for the license conditions which would be different from other license agreements cannot be identified.

*4.3 What are the consequences if an agreement cannot be reached between the patent holder and the licensee? How should royalties finally be determined?*

In their reports the Groups have mentioned various consequences focusing on different aspects. It appears, however, from the reports that this does not mean that there are diverging opinions among the Groups. The various aspects can rather be combined in a common statement.

The first consequence mentioned by the Argentinean and the Japanese Group is that the patented technology cannot be used for the purpose of standardization. Consequently, as the French and Japanese Groups point out, the standard has to be given up.

There are also various proposals as to the final determination of royalties. Some Groups (Australia, Italy, Venezuela) are in favour of arbitration. The Groups of Hungary and Switzerland suggest court proceedings. The Brazilian Group states that the royalties will be assessed by the Brazilian Patent and Trademark Office. The Dutch Group expresses the opinion that, in the case of a de jure standard, a maximum royalty should be fixed by the governmental and/or legal authorities who are responsible for the standards.

The French Group points out that, in the case of absence of external references or guidelines, the patent owner may lose as well if there is a mutual blockade.

It is the general view of the Groups that a patented technology cannot be used for the purposes of standardization if no agreement is reached on the license conditions. There is no common view among the Groups as to how the royalties should finally be determined.

*4.4 What is the legal quality of the undertaking to grant licenses (e.g. third party beneficiary)? Are the rights of a member or of a third party to challenge the validity of the patent affected in any way by this undertaking? Does the patent holder retain the right to enforce the patent against third parties or the member and, if so, under which conditions?*

Only some of the Groups have mentioned the legal quality of the undertaking to grant licenses. These are the Groups of Australia, Finland, France, Hungary, Ireland, Italy, Japan, the Netherlands and Switzerland. According to the Japanese Group, the legal quality is uncertain. The French Group states that the licenses require solidarity and a collective responsibility of the various patent holders.

Most of the Groups listed above refer to contract law and contractual obligations (Australia, Finland, Hungary, Italy). The Finnish Group sees the undertaking as a promise to all members of the standardization organization, the legal quality being subject to national law. The Hungarian Group qualifies the undertaking as a unilateral irrevocable declaration. The Swiss Group states that the undertaking may be interpreted under Swiss law as a third-party-beneficiary contract.

There is a unanimous view among the Groups (with the exception of Brazil and Ecuador who have not answered this part of Q157) that the right to challenge the validity of the patent should not be limited in any way. Only the Irish Group points out that the license agreement may or may not allow challenge of the validity.

The Groups also almost unanimously (with the exception of Brazil, Ecuador and Hungary) express the view that the patent holder should retain the right to enforce his patent against any infringing party. Only the Hungarian Group finds that the patent owner does not have the right to enforce the patent against third parties or members of the standardization organization. In their view he can claim adequate royalties instead.

The Dutch Group suggests that a separate organization comprising licensors and licensees should be established, which could create a standard license agreement.

The Groups unanimously express the view that the right to challenge the validity of the patent should not be limited. They also almost unanimously state that the patent holder should retain the right to enforce the patent against any infringers.

## 5. Additional comments

The Finnish Group prefers private agreements to legislative measures. However, certain legal rules (including compulsory licenses) should allow the intervention into certain practices.

In the view of the Hungarian Group the identification of essential patents inevitable. For this purpose, the early disclosure and identification of such patents should be facilitated.

The Venezuelan Group mentions that a new IP law in the country may affect various aspects.

The French and the Italian Groups suggest further studies. The French Group proposes studies with regard to the feasibility of license policies of standardization organizations which would be sufficiently transparent and with regard to conditions under which compulsory licenses could resolve conflicts.

The Japanese Group presents an array of proposals to resolve the issues in connection with balancing the patent owner's rights and the wider use of standards. These proposals comprise (1) the establishment of unified formalities in standardization activities, (2) the creation of patent pools and (3) legal provisions for the adjustment of conflicting interests.

The Swiss Group proposes an international treaty for those cases in which standards are declared binding. Under such a treaty, the owners of patents which are necessary for complying with the standard, would be required to grant non-exclusive licenses to all interested parties (members and third parties) with fair, reasonable and non-discriminatory conditions. The interpretation of these terms would be left to the competent courts.

Summarizing the additional proposals, one could think of the establishment of unified formalities in standardization activities, the creation of patent pools and legal provisions for the adjustment of conflicting interests. Another proposal envisages an international treaty which sets out the obligation for patent holders to grant licenses and the conditions of these license agreements.