

Guidelines on Standardization and Patent Pool Arrangements

Part 1 Introduction

In industries with innovation and technical change, such as information technology, it is important to **standardize specifications for interface of new products**. It **assures compatibility among the new products and encourages expansion of the market**. Consequently, it is popular, in these industries, that many interested parties jointly develop **specifications and standardize them**. On the other hand, in these industries, there exist a number of patent holders on the technologies which are necessary to adopt the functions and utilities in compliance with the **specifications**.

Therefore in order to produce and distribute new products with the specifications it is necessary to enter into license contracts with all the patent holders for specifications. And enormous cost to enter into the contracts with all patent holders is the major drawback to the development and distribution of new products with the specifications.

At preset, for the purpose to solve this problem, patent holders pool their patents on the technologies necessary to adopt specifications and license them as a package to others who are to produce and distribute new products with the specifications. ^(Note 1)

The Fair Trade Commission (“FTC”) has published the guidelines for patent and know-how licensing agreements under the Anti-Monopoly Act (“Patent and Know-How Licensing Guidelines”) in 1999. The effect on competition of pooling and licensing patents is basically examined in accordance with the principles explained in these Guidelines. However, in view of growing concerns to use patent pools to facilitate standardization of specifications the FTC clarified principles under the Anti-Monopoly Act (“AMA”) to examine the activity to standardize specifications and pool patents for the specifications to license them. The principles will help prevention of violating the AMA.

With regard to the means to pool patents for specifications to license them there may be a number of unforeseeable ones and in such cases effects on competition will be examined carefully in accordance with the principles mentioned below.

(Note 1) A patent pool is a certain organization to which multiple holders of patents and other rights delegate the authority to grant licenses on their own patents and other rights and from which members obtain the requisite licenses. (See Part 3-2-(2)-c in the “Patent and Know-How Licensing Guidelines”) These organizations can take a number of different forms. For some patent pools, a new body is set up and for other pools existing organizations play the role. Although the rights subject to this licensing method may include non-patent rights such as copyright this licensing method is most commonly used for patent licensing, the term “patents” in the remainder of this document includes these non-patent rights.

Part 2 Activity to standardize specifications

1 .Various activities

The activities to standardize the specifications have always been carried out by the organizations for public use such as the Japanese Industrial Standards. In industries with innovations and technical change as information technology, however, a number of competitors jointly develop and standardize specifications prior to develop new products to assure compatibility among them.

Typically these activities are ^(Note 2) ^(Note 3):

A small number of competitors confidentially develop new products and expand market share through competition and standardize specification of their products.

A large number of competitors open the activity and accept technical proposals from the participants. They develop and standardize specifications not through competition but adjustment of the proposals.

At first a small number of competitors confidentially develop core technologies for specifications. Then they open the activity and accept technical proposals on their core technologies. They develop and standardize specifications through adjustment of the proposals.

The following principles under the AMA are basically for the activity by a number of competitors to develop jointly and standardize specifications through adjustment of their technological proposals.

(Note 2) It is believed that many of these activities are considered to be effectively conducted by trade associations (such associations are "standardization associations") for reasons relating to the model of activities. Standard-setting activities conducted by such associations are additionally subject to Article 8 of the Anti-Monopoly Act.

(Note 3) In the case of (2) or (3), many programs for standard setting activities adopt a principle based on which participants are asked to declare any patent that they own in connection with the specifications and to produce a patent statement in which they agree to grant a license on the patent with reasonable and non-discriminatory conditions if necessary and to which preparation of the specifications is stopped, provided that the statement is not produced and that the preparation of the specifications is confirmed as inevitably infringing the patent owned by the participant.

2. Application of the AMA to activities to standardize specifications

Although standardization of specifications determines functions or performances of the products with specifications, it enables by accepting compatibility among the new products speedy commercialization and expansion of demand which contribute to increase consumers' convenience. As such standardization of specifications by

competitors is not assumed to pose the regal issues with the AMA.

However if the activity restrict competition in related markets or threaten to impede fair competition with restrictions as follows it poses the regal issues with the AMA.

(1) Restrict prices of new products with specifications

Competitors in the activity jointly fix prices, quota outputs, limit marketing activities etc of their new products with specifications. (Unreasonable Restraint of Trade, etc)

(2) Restrict development of alternative specifications

Competitors in the activity mutually restrict, without due cause, developing alternative specifications or adopt alternative specifications to produce and distribute products with them.^(Note 4) (Unreasonable Restraint of Trade, Dealing on Restrictive Terms etc)

(3) Unreasonably extend scope of specifications

Competitors in the activity jointly extend the scope of specifications with no necessity to assure compatibility among their products only to mutually restrict competition in developing new products. (Unreasonable Restraint of Trade, etc)

(4) Unreasonably exclude technological proposals from the competitors

Competitors concertedly, without due cause, obstruct technological proposals from the specific competitor to be adopted in development or improvement of the technologies for specifications.(Private Monopolization, Discriminatory Treatment in a Concerted Activity, etc)

(5) Exclusion of competitors from the activities

Competitors concertedly exclude the specific competitors from the activity in the case when the competitors hardly develop and distribute the products with the specifications without participating in the activity and threaten to be excluded from markets. (Private Monopolization, etc)

(Note 4) In the case that a standard-setting activity is substantially a joint research and development activity in which a limited number of competing firms confidentially develop a new product aiming to establish standards through competition, such restrictions might be necessary to promote their activities. (Refer to Part 2-2-(1)-a-8)/9) in the “Guidelines Concerning Joint Research and Development under the Anti-Monopoly Act” and Note 14)

3. Application of the AMA to enforcement of patent rights for specifications

As to the activity by a patent holder to grant or not grant license of patents for specifications is generally analyzed in accordance with the principles explained in

the Patent and Know-How Licensing Guidelines.

For instance, refusing to grant license by a patent holder generally does not pose legal problem with the AMA when the patent holder does not have concern with the activities to develop the specifications.

However, in the case that a patent holder participate in the activities and make effort to have its patented technologies adopted in specifications it will poses legal problem with the AMA ^(Note 5) ^(Note 6) to refuse granting license by the patent holder.

When specifications are standardized and for the businesses to develop and produce the products with the specifications become difficult the activity by the patents holders falls under the category of private monopolization when it substantially restrict competition in related markets or unfair trade practices when it threaten to impede fair competition.

It is also the case when a patent holder nominally does not have concern with the activity to develop the specifications but substantially make effort to have its patented technologies adopted in the specification by colluding for example with a participant in the activity

(Note 5) Article 21 of the Anti-Monopoly Act provides that the provisions of this Act shall not apply to such acts recognizable as the exercise of rights under (...) the Patent Law (...). This provision is accepted as confirming that the Anti-Monopoly Act is applicable to any act that is regarded as an "exercise of rights" pursuant to the Patent Law but is deemed to deviate from or to stand against the purpose of the Patent Law in consideration of its impact on competition. This conduct is evaluated as extending effects of enforcing patent rights through the standard setting activities to exclude competitors and conflicting with the purpose of the Patent Law. It is hence the provisions of Anti-Monopoly Act will be applied.

(Note 6) Any act such as this which is jointly conducted by multiple firms involved in the standard setting activity is regarded as unreasonable restraint of trade if competition is substantially inhibited and as unfair trade practice (Concerted Refusal to Deal) if competition is not substantially inhibited. In either case, it is a violation of the Anti-Monopoly Act.

Part 3 Problems under the AMA with activities to pool patents for specifications

1 Basic viewpoint

As to an activity to pool and license the patents for specifications, the participants are not necessarily the same with the participants to an activity to develop the specifications and effects on competition are also not same. As such even in the case that the activity to develop specifications poses no problem with AMA, it is necessarily to examine the problems under the AMA associated with an activity to pool and license patents for the specifications.

(1) It is often pointed out that when there are a large number of patents for specifications and a large number of patent holders on those patents, the activity to

produce and distribute new products with the specifications is threaten be blocked because of the following reasons.

- 1) It is necessary for businesses planting to produce and distribute new products with specifications, to invest huge amount resources to find out all the patent holders and enter into license contracts with them respectively.
- 2) Total amount of licensing fees the businesses have to pay to produce and distribute new products with specifications are likely to be huge when the licensing fees for each patent holders sum up.

Pooling patents for specifications is an effective means to grant the necessary licenses efficiently and adjust the licensing fees not to sum up to huge. Such that pooling patents works pro-competitive to promote producing and marketing the new products.

However in the case when competitors pool their patents for specifications they can limit competition by mutually restricting the use of the patents ^(Note 7) and concertedly restricting licensees' business in the downstream markets.

(Note 7) As discussed above, Article 21 of the Anti-Monopoly Act exempts "such acts recognizable as the exercise of rights" from the application of the law. Despite that, in a case in which many patent holders exploit a patent pool in order to make joint arrangements on restrictions imposed on licensees, this act is not recognized as falling under "such acts recognizable as the exercise of rights" prescribed in the article and the Anti-Monopoly Act applies.

- (2) With activities to pool patents for specifications, the problems under the AMA are assed in each case, on the basis of market conditions such as share of the products with the specifications in the related market and the position of the pool in that market, evaluating effect on competition, not only anticompetitive but pro-competitive, comprehensively.

Generally even in the case that many competitors pool their patents for specifications such an activity will have little effect on competition if market share of the products with specifications is not high and several alternative specifications are available or all the necessary patents for the specifications are available without getting license through the pool.

In particular, in the case that many competitors license their patents for specifications through the pool, imposing licensees certain restrictions except apparently anticompetitive ones such as fixing the price or quota the volume of the product, will not pose problems under the AMA when (a) a market share of the pool is no more than 20% ^(Note 9) in the related markets or (b) if market share is inappropriate to analyze the effect on competition there are at least four other

available ^(Note 10) specifications.

- (3) Even in the case when these conditions are not met, imposing restrictions on licensees is not necessarily assessed as posing problems under the AMA. Problems under the AMA are assessed in each case, on the basis of market conditions such as share of the products with the specifications in the related market and existence of alternative pools or specifications, evaluating effect on competition. This is true of all the restrictions analyzed in 3.

(Note 8) As in the case with technology transactions in general, the statutory compliance of patent pool arrangements for specifications is examined on a case-by-case basis in consideration of the magnitude of its impact on activities (transactions) by firms that are recognized as competing with one another in the product or technology market associated with the specifications.

(Note 9) Normally, the market share of a pool in the market associated with the specifications is estimated on the basis of the ratio of the products manufactured after licensing from the pool (including those manufactured and marketed by firms that put their own patents in the pool) in the market for products in compliance with the specifications and other products that produce similar functions and effects.

(Note 10) Given that technologies are internationally traded because of their low transfer costs, and that many standard-setting activities are conducted on an international scale, it is necessary to take into consideration any technologies or specifications developed outside Japan to examine whether there is any competing technology or specification.

2. Viewpoints to examine problems under the AMA in the activity to pool patents

- (1) Technological characteristics of patents

- a. The case when only essential patents for specifications are pooled.

Effects of pooling patents for specifications on competition can be different between the case when all the patents in the pool are essential to adopt the functions and utilities for specifications (that is “essential patent” ^(Note11)) and the other cases.

Because essential patents are mutually complements to adopt the functions and utilities for specifications competition among the patented technologies is not restricted when only the essential patents are pooled and licensing conditions are fixed. Such as this to exclude completely the risk of violating the AMA it is necessary to limit patents in the pooled only to essential patents.

It is also necessary to assure that essentiality of each patent is not assessed arbitrarily and for that purpose it should be assessed by the independent third party with technical expertise. Adding that even in the case when only the essential are pooled the patented technologies should be excluded from the pool

as soon as possible once the superior technologies that provide the alternative functions and utilities for specifications is developed.

(Note 11) Here, a patent that is essential for exploiting the functions and effects of the specifications refers to a patent, the right to which is inevitably infringed for the purpose of adopting the specifications, or a patent infringement of its right is inevitable in practical terms even though avoidable technically.

b. The case when the patent not essential for specifications is pooled

In the case when the patents that are not essential for specifications are pooled, with the following effects on competition among technologies for specifications such an activity is likely to restrict competition and pose legal problem under the AMA.

- 1) In the case when a number of patents on alternative technologies are pooled and licensed with the fixed conditions, because the patents on these technologies are competing in their licensing conditions each other, competition among these alternative technologies is restricted. (Case 1)
- 2) In the case when there are a number of patents on alternative technologies and some of them are pooled and licensed as a package with essential patents, the technologies with the patents not pooled are hardly adopted by the licensees of the pool and are excluded from technology market. (Case 2)

To summarize, in the case when a patent not essential for specifications is pooled, anticompetitive effects is not negligible. Such that it is necessary to evaluate, on the basis of market conditions mentioned above, comprehensively the effect on competition of pooling such patents considering the following factors.

- 1) Whether or not pooling such patents has any reasonable necessity or pro-competitive effects.
- 2) Whether or not patent holders pooling their patents can license out their patent without going through the pool concerned. And the businesses can select necessary patents and accept license only for them. ^(Note 12)

(Note 12) In the licensing system under which patent pool participants separately conclude licensing agreements within a predetermined framework and other individual licensing agreements without using this framework, known as the patent platform system, it is possible for specification users to select licensing conditions for the patents associated with specification technologies. This system is thought to reduce the risk of restraining competition in the technology market or in the product market.

(2) Restrictions with respect to participation in a pooling activity

a. Limit on participation in an activity

Limiting participation in a pooling activity only to those who meet certain conditions generally does not pose legal problems under the AMA when the conditions are recognized as reasonably necessary for the management of the activity and are not restricting competition.

Adding that generally it does not pose legal problems under the AMA that the parties developing specifications decide, in advance, to pool their patents for the specifications that they will obtain, when the patent that will be pooled is limited to essential patent and there are no other restrictions on the use their patents.

b. Restrictions on those participating in the pool

Imposing restrictions, such as imposing rules to manage the activities, on those participating in the pool generally does not pose legal problems under the AMA when the restrictions are recognized as reasonably necessary to manage the activities and are not unreasonably discriminatory to specific participants.

For example, it does not pose legal problems under the AMA to distribute the licensing fees on the basis of the importance of each patent to adopt the function and utility for specifications or whether or not participant are also producing and distributing products with specifications.

However, imposing the participants restrictions on the use of their pooled patents such as prohibit license their patent without going through the pool concerned is generally not recognized as reasonably necessary to manage the activity and is likely to have significant effect on competitions. Therefore imposing such restrictions poses the risk of violating the AMA

(Private Monopolization, Unreasonable Restraint of Trade, etc)

(3) Management of a pooling activity

Normally, in the operation of pooling activity, a management organization grant license, collect licensing fees and audit the licensees' business to check their compliance with the conditions. And through the activities the organization gathers confidential information on licensees' business such as production volume and sales prices of their products etc. And if participants or licensees of the pool can access such confidential information it is threaten to be used by them to commit activities of violating the AMA such as production or sales quota, price fixing etc.

Such as this, in order to prevent such activities to violate the AMA and to ensure to achieve the pro-competitive effects of the pooling activities it is important to limit access to confidential information on licensees' business activities gathered by the management organization. And it is advisable the

business to manage the pooling activities is commissioned to a third party that has no human or capital connection with participants of the pool. (Case 4)

3. Analysis of constraints on licensees in license agreement through a patent pool

With respect to various restrictions imposed on licensees with license contracts through a pool, the effect on competition is analyzed on a case-by-case basis in accordance with the principles set out in the Patent and Know-How Guidelines.

But licensing contracts through a pool for specifications has enormous influence on the business activities of a licensee in downstream markets and the influence reach to a large number licensees in a uniform and extensive way. It is hence necessary to assess the impact on competition carefully.

(1) Setting differential licensing conditions

It is not necessarily poses the legal problem with the AMA when patent holders on technologies for specification pool their patent and licenses them with differential conditions such as the scope of authorized use of those patents (in terms of technological fields, geographical regions and such like) and with differential licensing royalties. The impact on competition is examined in each case in view of the reasonable necessity for making such differentiations.

For example, deciding licensing fees on the basis of the supply and demand-situation of downstream markets or volume of the licensed products produced and marketed generally does not pose the regal problems with the AMA. ^(Note 13)

However, in licensing contracts through a pool imposing differential conditions on the specific businesses without due cause such as refuse to license the patents require extremely high licensing fees comparing to other licensees limit the scope of authorized use of the patents, has the risk of violating the AMA when such activities have direct and serious effects on the competing functions of licensee that are suffering the discrimination. (Private Monopolization, Discriminatory Treatment on Transaction terms)

Such that to prevent the violation of the AMA it is necessary to grant licenses in a non-discriminatory basis as long as there is no reasonable necessity to make differential conditions.(Case 5)

(Note 13) It is generally acceptable under the Anti-Monopoly Act to set different conditions for licensees holding no essential patent from the conditions set for those who do, provided the disparities between the two sets of conditions do not exceed the reasonable limit in a case in which licensees who hold essential patents grant licenses to other licensees through a patent pool.

(2) Restricting research and development activities

- a. In the case of licensing patents for specifications through the pool, any restriction on licensees with research and development concerning the technologies for the specifications or competing technologies independently or jointly with third parties will make it difficult to develop those technologies or specifications and have the risk of restricting the competition in product and technology market. (Private Monopolization, Unreasonable Restraint of Trade)
- b. In the case that developing specifications is regarded as substantially the joint research and development activity such that a small number of competitors confidentially develop core technologies for the specifications, it could be recognized as within reasonable restrictions to restrict research and development of technologies for the specifications or competing technologies independently or jointly with third parties. ^(Note 14)

However, even in a case such as this, once the specifications has been developed, limiting the research and development by licensees in the licensing contracts through the pool may not be deemed to have any reasonable necessity and will pose the legal problem under the AMA.(Case 6)

(Note14) According to the Guidelines Concerning Joint Research and Development, restrictions such as those listed below do not correspond to unfair trade practices in principle:

- 1) Restrictions on R&D of an individual or with a third party or parties which has the same theme as that of the joint R&D project during the implementation of the joint R&D project
- 2) Restrictions on joint R&D with a third party or parties on any theme very closely related to the theme of the joint R&D project during the implementation of the joint R&D project, where such restrictions are deemed necessary for preventing a dispute arising over the fruits of the joint R&D project or including the participants to the joint R&D project to dedicate themselves to the said project
- 3) Restrictions on joint R&D with a third party or parties on the same theme as or any theme very closely related to the theme of the joint R&D project for a reasonable period after the completion of the joint R&D project, where such restrictions are deemed necessary for preventing a dispute arising over the fruits of the joint R&D project and for including the participants to dedicate themselves to the said project

(3) Obligation to grant a license for patents on the improvements or developments of the technologies for the specifications through a pool (grant back)

- a In the case of licensing patents through a pool, imposing licensees grant a license for patents on the improvements or developments of the technologies for the specifications through the pool will restrict competition in technology market with the following effects.

- 1) This obligation will reinforce the advantageous position of the pool in the markets associated with the specifications. By accumulating in the pool the improvements or developments, by licensees, of the technologies for the specifications the obligation will make it difficult to develop alternative technologies for the specifications or alternative specifications.
 - 2) Adding that if improvements or developments by licensees accumulated in a pool provide the alternative function and utility provided by other patented technologies in the pool, competition among these technologies is restricted.
- b. On the other hand there might be a case that patents on improvements or developments by licensees correspond to the essential for the specifications. In a case such as this, imposing the obligation on the licensees generally does not pose legal problem with the AMA if it means to oblige a licensee to pool the essential patent and license it non-exclusively through the pool, accompanying no other restrictions on the use of the essential patent and to impose the licensee non discriminatory treatment in, for example, the distribution of licensing fees compared to the others pooling their patents. (Case 7)

(4) Measures against filing a petition for invalidation of patents (Non-challenge clauses)

- a. In the case of licenses through patent pools, imposing licensees the non-challenge clause ^(Note15) will deprive licensees of the opportunity to contest the validity of any patent included in the pool if it accompanies the measure to terminate licensing contracts with the licensee for all the patents in the pool. Because such a measure has a greater impact on licensees' business activities than the measure to terminate licensing contracts with the licensee for the patent that the licensee filed the petition for invalidation.

(Note 15) With the status of incontestability, licensees are obliged to refrain from disputing the validity of patent rights for technologies they are licensed to use, for example by filing a petition for invalidation of the patents concerned.

- b. Such that imposing on licensees non-challenge clause will pose the legal problem with the AMA if it accompanies the measure to terminate licensing contracts with the licensee for all the patents in the pool. (Concerted Refusal to Deal)

On the other hand, if the measure is to terminate the licensing contracts with the licensee only for the patents that the licensee filed the petition for invalidation by, for instance, taking out the patents from the pool, imposing licensees the non-challenge clause will not deprive licensees the opportunity to contest the validity of any patent included in the pool. Such that, imposing the clause does not pose any legal

problem with the AMA. (Case 8)

(5) Non-assertion of patent rights against patent holders and other licensees (NAP)

a. In the case of licenses through patent pools, imposing licensees the non-assertion of patents (NAP) clause ^(Note 16) and prohibit exercising patent rights they are obtaining or will obtain against patent holders in the pool and any other licensees substantially lead to the accumulation of licensees' patents in the pool. This means that imposing licensees such a clause has the risk to reinforce advantageous position of the pool, restrict competition among the alternative technologies by the licensees and substantially restrict competition in technology market.

(Note 16) This includes an obligation to license the licensors or the parties designated by the licensors to use all or part of the patent rights that the licensee has or will obtain.

b. On the other hand there may be cases that licensees obtain or will obtain an essential patent associated with the specifications. In a case such as this, imposing licensees the NAP clause generally does not pose legal problem with the AMA if it means to oblige a licensee to pool the essential patent ^(Note17) and license it non-exclusively through the pool, accompanying no other restrictions on the use of the essential patent and to impose licensees non discriminatory treatment in, for example, the distribution of licensing fees compared to the others pooling their patents. (Case 9)

(Note 17) As explained in Part 3-2-(1)-a., a measure to ensure objective decision-making as to essential patents needs to be taken in Part 3-3-(3)-b and (5)-b given that an arbitrary decision would have a significant impact on competition. Possible measures for this purpose include a transfer of the decision-making function from any party involved to an independent third party.

(Case 1)

Company A, B and C are the major manufacturers of home appliance a. As a needs to be used with the peripheral equipments as a unit, the three companies standardized the interface specifications for the peripheral equipments with an aim to expand the market for a. In addition the three companies worked to pool their essential patents on the technologies for the interface specifications and have begun licensing those patents to other manufacturers. Currently, the share of the product with the specifications concerned in the market for a is over 70%.

As Company D and E jointly developed the alternative technology to realize the functions provided by the specifications as mentioned above, without obtaining the licenses from the pool concerned, these two companies produce and market a that is compatible with the specifications as indicated above. In addition, as these two companies obtained the patents for the alternative technology concerned, they are considering licensing those patents (alternative patents) to other manufacturers.

Under this circumstance, Company A, B, and C consulted with Company D and E to add the alternative patents of Company D and E to the pool concerned and license them in package with the essential patents of Company A, B, and C. Furthermore, they have decided not to license out those patents to other manufacturers without going through the pool concerned.

(Perspectives)

In this case, the share of the product with the specification developed by Company A, B and C in the market for a accounts for over 70%, and there is no alternative patent pool existing for the specification concerned.

The conducts through consultations among Company A, B, C, D and E to add the alternative patents to the pool concerned, license them in package with the essential patents of Company A, B, and C and not to license out them without going through the pool concerned will limit the free choice of technology by the manufacturers of a with the specification concerned. Adding that, in the market condition as indicated above, competition in the technology market is substantially restrained.

As such, the conduct concerned falls under the category of unfair restraint of trade, and is a violation of the AMA.

(Case 2)

Company A, B and C the major manufacturers of information communication product a have jointly developed specifications in order to achieve efficient data transmissions between their products. In addition the three companies pooled their essential patents on the technologies for the specifications concerned and license them as package to other manufacturers of product a adopting them.

Currently, the products complying with the specifications concerned have an 80% share of a market.

At present, as the 3 companies concerned jointly developed the technology (add-on technology) to add the new functions to the specifications concerned and acquired the patents on the new technology, they are considering to encourage the licensees in the pool to adopt the add-on technology.

In addition, other than those three companies concerned, the research development venture company D and E have developed the technology (competitive technology) to realize the functions provided by add-on technology concerned and have acquired the patents. The two companies are also encouraging the licensees in the pool concerned to adopt the competitive technology.

Under this circumstance, the three companies concerned have decided to add the patents on add-on technology to the pool concerned and license them in package with essential patents. As such, it is difficult for Company D and E to find the potential licensees for the competitive technology, the two companies decided to withdraw from the business concerned.

(Perspectives)

In this case, the market share of the products with the specifications developed by Company A, B and C accounts for 80% in a market, and there is no alternative pool existing for the specifications. The decision as to what functions to add to the specifications concerned should be left to the free choice of the licensees.

The conduct by the Company A, B and C to add the patents on the add-on technology to the patent pool concerned and license them together with the essential patents as a package is considered as limiting the free choice of technology for the licensees.

At the same time, in the market condition as indicated above, the conduct concerned excludes the competitive technology developed by Company D and E from the technology market and substantially restrains competition in the technology market. Therefore, the conduct concerned falls under the category of the private monopolization, and is a violation of the AMA.

(Case 3)

Companies A and B, the major manufacturers of the Industry equipment a, and 10 other companies receive their supply of semiconductors from the semiconductor manufacturers.

Considering the great advantage of standardizing the specifications of semiconductors to assure the compatibility among the products of each manufactures, Companies A, B and the other 10 companies along with the major semiconductor manufacturer Company C decided to jointly develop the specifications for the semiconductor. In order to produce and use the semiconductor in compliance with the specifications concerned, patent a1 and a2 held by Company A, patent b1, b2, and b3 held by Company B, and the patent c1 and c2 held by Company C are essential.

Companies A, B and C decided to pool their essential patents and license them in package to other manufactures. Adding that, the three companies concerned decided not to license out their patents to other manufacturers without going through the pool concerned. Currently, the share of the products produced and marketed under the license from the pool concerned in the market of the semiconductor chip for a has reached 80%.

While semiconductor manufacture Company D was producing under the license from the pool concerned, as it has developed the new specifications that assure the compatibility with the specifications concerned, D is considering marketing its specifications to licensees in the pool concerned. However, as it cannot avoid infringing the patent a1 of Company A and b1 of Company B when producing and using the products with specifications developed by D, D asked both A and B for permission to use their patents in the products that would adopt the specification developed by D.

In response to the request, Company A and B in consultation with Company C decided not to accommodate D's request for the reason that it would be a breach of contract with respect to the patent pool. As such, it has become difficult for Company D to product the new semiconductors complying with the specifications developed by D for the manufacturers of a.

(Perspectives)

In this case, the products complying with the specifications jointly developed by A, B, and 10 other companies account for 80% of the semiconductor market for a, and there is no alternative patent pool existing for the specifications.

The conduct not to agree to the request from D with regard to the essential patents will not give rise to legal problems under the AMA, when both A and B

independently decided the conduct as an exercise of their patent rights.

However, in cases in which A and B decided in consultation with Company C not to agree to D's request, the conduct concerned excludes the new specifications developed by D from the technology market and in the market condition as indicated above substantially restrains competition in the technology market.

Therefore, the conduct concerned falls under the category of private monopolization and is a violation of the AMA.

(Case 4)

The 8 major home appliance makers jointly developed a specification concerning the compression technique to allow compatibility of digital moving pictures between the different models. In addition, the 8 makers decided to pool the patents necessary for usage of the specifications. In order to manage the patent pool concerned, the 8 makers concerned jointly funded to establish a management organization X whereby all the essential patents are licensed to X and X will grant a package license to the others adopting the specifications.

The major business activities of X are licensing the essential patents to those who adopt the specifications; collection of license fees; and distribution of license fees to the 8 makers. In addition, in order to collect license fees X audits the licensees' businesses.

However, as X is subject to secrecy obligations, it is prohibited from providing any information obtained through the auditing concerned to the 8 makers and licensees adopting the specifications. Moreover, in order to assure the effectiveness of the obligations concerned, even if that is the 8 makers concerned, they cannot take any part in the X's license business.

(Perspectives)

In this case, as 8 makers established X to manage the essential patents included in the patent pool; X collects license fees; and audits the businesses of licensees that adopt the specifications, information concerning the licensees' businesses will be concentrated in X.

However, X is subject to secrecy obligations for licensees' information obtained through auditing, and the specific measures are taken to assure the effectiveness of the obligations concerned, such that even the 8 companies concerned are not allowed to take any part in X's licensing business.

Therefore, there aren't any risks that the information regarding the licensees' business collected by X will be used to commit the AMA violation activities such as production quota or sales price restriction of the home appliances in accordance with the specifications.

(Case 5)

Company A, B, and C, the major information home appliance maker, and 7 other companies jointly developed the specifications compatible with operating system (OS) which Company A, B, and C had developed in order to control the various functions of the multimedia product a and facilitate interconnections between the different models. As such, A, B, and C decided to pool essential patents on the technology concerning the specifications concerned and license the patents with the OS as a package to the manufacturers of models of a compatible with the OS concerned.

The share of the models compatible with the OS concerned in a market accounts for over 80% and all of the subject products are produced under the license from the patent pool as indicated above. In addition, as the new business started to enter a market one after another, some of the licensees started to market the products at a low price to earn share, and the retail prices are rapidly declining.

Under this circumstance, A, B, and C upgraded the OS version in order to respond to the new function of a and decided to revise the license contracts as a result of the version upgrade. In doing so, they have decided to delay the revision of the license contracts with the licensees who ship a at a low price or limit the scope of the new functions in which the required patents can be executed. As a result, these licensees were driven to withdraw from the market.

(Perspectives)

In this case, the share of the models compatible with OS concerned of a market accounts for over 80% and there is no alternative patent pool existing for the specifications and the OS.

Imposing limitations on licensees regarding the scope and timing of executing the patent rights in the patent license contracts does not pose legal problems concerning AMA as long as it is evaluated as an exercise of the patent rights.

However the conduct of Company A, B and C to revise the license contracts and impose limitations mentioned above only on those licensees that ship the products at low price is to stabilize the retail prices of a. Adding that in the market condition as indicated above such conducts excludes the makers shipping at the low price from the market and substantially restrains competition in the a product market.

As such, the conduct concerned falls under the category of private monopolization and is a violation of AMA.

(Case 6)

Company A, B, C and D, the home appliance maker, are carrying out joint R & D on technology to efficiently compress data for multimedia software and they have agreed to the restriction that during the joint R & D the technology concerned should not be researched and developed on its own or jointly with a third-party.

Later those 4 companies actively supply the technology concerned to other makers and have developed, through consultations and coordination with them, the specifications on the data compression. Currently, 70% of domestic home appliance makers are producing and marketing the products with the specifications. Company A, B, C and D decided to pool the essential patents on the technology for the specifications concerned and made license contracts with the other makers adopting the specifications concerned. Adding that the four companies concerned have decided to oblige the licensees not to carry out R & D on competing technology, on its own or jointly with a third party, for the purpose of maintaining the superiority of their essential patents.

Company E and F were separately developing the competing specifications of data compression and were encouraging the licensees mentioned above to participate in activities. However because of the imposed obligations concerned, the two companies concerned have given up to standardize their competing specifications and cancelled the R & D activities.

(Perspectives)

In this case, 70% of the domestic home appliance makers are developing and producing the products with the specifications, and there is no other patent pool existing.

The conduct of Company A, B, C and D to mutually impose certain restriction on their R & D activities at the time of joint R & D on data compression technique does not immediately pose legal problems under the AMA as long as the restriction is necessary to prevent the diversion of confidential information on their technology and the restriction is within the scope of the minimum necessary for that purpose.

However, when Company A, B, C and D have acquired the patents on their technologies and have begun to license through the pool, imposing such restrictions on the licensees in the pool cannot be evaluated having any reasonably necessary.

In addition, under the market conditions as indicated above, such conduct of the four companies concerned make it difficult for Company E and F to develop and standardize the competing specifications and substantially restraint on competition in the technology market. Therefore, the described conduct falls under the category of private monopolization, and is a violation of AMA.

(Case 7)

More than a dozen telecommunication equipment makers, which produce and market portable terminal devices a, have developed and disclosed the specifications for data transfer among the portable terminal devices. In addition Company A, B, C, and D that hold the essential patents on technologies for the specifications concerned decided to pool those patents and license them as a package to the makers that adopt the specifications concerned. Currently, more than a dozen telecommunication equipment makers produce and market a with the specifications concerned under license from the pool concerned.

As portable terminal devices are remarkable for their technological innovation the 5 companies concerned decided to oblige licensees, for the purpose of encouraging exploitation of the results of technological innovation, to bring their patents into the pool and license them with other essential patents in cases in which it is determined by an impartial third party that the patents held by the licensees are essential for exploitation of improved and applied technology on the specifications concerned. It is also decided that the license fees for the newly added patents would be allocated to the licensees concerned under the same conditions as the four companies concerned. Besides these restrictions there are no restrictions on licensees on the use of their patents.

(Perspectives)

In this case, there is no other specification for data transfer, and there is no other patent pool existing for the specification.

As portable terminal devices are remarkable for their technological innovation, under the market conditions as indicated above, obliging licensees to bring their patents on improved and applied technology into the patent pool poses the risk of limiting the competition in the technology market by reinforcing the advantageous position of the pool concerned and accumulating patents on technologies providing alternative functions to the patented technologies in the pool.

However, among patents held by the licensees on improved and applied technologies, there might be essential patents for exploitation of those technologies on the specifications concerned. As such, for the purpose of encouraging exploitation of the results of technological innovation by the licensees, by imposing the restrictions as indicated above on the licensees will not be evaluated as restricting the competition in the technology market, and does not generally give rise to legal problems under the AMA.

(Case 8)

For the purpose of maintaining compatibility among different models, more than a dozen telecommunication equipment makers that produce and market the telecommunication equipment standardized the specifications of the compact IC to control a. In addition, as Company A, B, C, and D, the leading members at the time of standardization, hold the essential patents on the technology for the specifications concerned, they have decided to pool their patents and license them as a package to the other makers. Currently 70% of IC for a consists of products under license from these 4 companies concerned

Company E was producing IC for its own a under the license from the patent pool. Recently it has developed, on its own, the technology to drastically improve the processing speed and is rapidly expanding the share in the market of a.

Facing the plunging share of its products Company A sought an injunction against the new technology developed by Company E with the reason that Company E had made unauthorized use of its essential patents to develop the new technology.

In response, E called for a plea for invalidation of patents as A' patents are subject to such invalidation as patent revision.

Under these circumstances Company B, C, and D notified Company E that they would revoke the package license unless Company E withdraws its a plea for invalidation, for the reason that the contracts made through the patent pool are based on the premise of a package license of the patents held by 4 companies concerned. As such, E turned down the request and gave up the production and marketing of products adopting the new technology.

(Perspectives)

In this case, 70% of IC for a is the products under the license from Company A, B, C, and D, and there is no other patent pool existing.

Licensors' imposing the restrictions on the licensees to contest for validity of the patents poses such risks as continuing existence of the patent rights on the technology that is normally allowed for free use and limiting R & D based on the technology concerned to restrict the competition in the product and technology markets.

In this regard, the conduct of Company A, whose patent rights are called for an invalidation, to terminate the license contract and fight for validity of the rights concerned is not considered as making it difficult for the Company A to fight for the validity of the patents concerned. As such, the conduct does not pose any legal problems under the AMA.

However, under the market conditions as indicated above, the conduct of

Company B, C, and D to terminate the license contract with Company E with regards to the essential patents held by them for the reason that the contract is made under a package license including the essential patents held by A makes it difficult for Company E to contest for the validity of the patents concerned, and poses the risk of impeding the fair competition in product and technology markets. Therefore, the conduct concerned falls under the category of unfair trade practices (joint refusal to deal), and is a violation of the AMA.

(Case 9)

Currently, more than 30 electric appliance makers are producing and marketing the home appliance a, and 40% of the market is shared by Company A, B and C.

In response to the users' frequent requests for the model changes, Company A, B, C together with Company D, the major software maker, developed OS to control functions of a. In addition, the 4 companies concerned developed together with other companies the specifications to assure the compatibility with the OS concerned. And Company A, B, C decided to pool their essential patents on the technology for the specifications and license them to other electric appliance makers.

Nonetheless, not all of the parties that hold the essential patents are participating in the pool, and there might be cases in which the licensees turned out to hold the essential patents that are not included in the pool concerned. As such, Company A, B, C decided to impose the following obligations at time of when licensing their patents through the patent pool:

- (1) In cases in which a licensee understand that the making products complying with the specifications concerned by other licensees infringe its own patent right, instead of claiming its right to the licensees, it should notify the pool administrators to that effect.
- (2) The administrator shall ask the third-party selected under an agreement with the licensee concerned to judge whether or not the patents concerned are the essential patents for the specifications.
- (3) When judged as the essential patents, licensee concerned shall bring those patents into the pool and license those patents through the pool as likewise other essential patents.
- (4) As to the newly added essential patents, the licensee fees will be distributed to the licensee concerned under the same conditions with Company A, B, C.
- (5) The licensee concerned is not subject to any other restrictions on the use of the patents concerned than to bring the patents into the pool.

Currently 80% of products in a market are the ones complying with the specifications concerned.

(Perspectives)

In this case, the market share of the products with the specifications in market of a has reached to 80%, and there is no other patent pool existing.

Given the market condition mentioned above, obliging the licensee not to exercise its patent rights poses the risk of limiting the competition in the technology

market by reinforcing the advantageous position of the pool concerned and accumulating patents on technologies providing alternative functions to the patented technologies in the pool.

However, in this case, (1) the licensees are obliged not to exercise its patent rights only when the an impartial third party judges that the patents concerned are the essential patents and the subject patents will be brought into the pool and licensed to the licensees under the same conditions as with other essential patents (2) without imposing any other additional restrictions on the free use of the patents concerned (3) nor distributing the license fees in a discriminatory manner the case concerned cannot be recognized as an unfair restriction on the use of the licensee's patents.

Therefore, the concerned restriction cannot be found as restricting the competition of in the technology market, nor does it poses the legal problems concerning under the AMA.