

Guidelines on Standardization and Patent Pool Arrangements

Part 1 Introduction

In industries experiencing innovation and technical change, such as the information technology sector, it is important to standardize specifications for new product interfaces. This assures compatibility among new products and encourages market expansion. Consequently, in these industries it is common for a number of interested parties to jointly develop specifications and standardize them. But to adopt functions and utilities in compliance with the specifications, it is often necessary to deal with a number of holders of patents covering key technologies.

In other words, to produce and distribute new products with the specifications it is necessary to enter into license agreements with all relevant patent holders. The enormous cost associated with entering into contracts with all patent holders is the major drawback to the development and distribution of new products with standardized specifications.

As a means of addressing this problem, patent holders presently pool their patents on the technologies critical to the specifications and license them as a package to other parties, who produce and distribute new products based on the specifications. ^(Note 1)

The Fair Trade Commission (“FTC”) published 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 about the use patent pools to facilitate standardization of specifications, the FTC clarified principles under the Anti-Monopoly Act (“AMA”) to examine the activity of standardizing specifications and pool patents for the specifications to license them. The principles will help prevent violations of the AMA.

With regard to the means of pooling patents to license them, there may be a number of unforeseeable problems. In such cases, the effect on competition will be examined carefully in accordance with the principles described below.

(Note 1) A patent pool is an 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 Specifications Standardization Activities

1. Various activities

Activities to standardize the specifications have traditionally been carried out by public bodies such as the Japanese Industrial Standards. In the information technology sector and other industries subject to innovation and technical change, however, it is common for a number of competitors to jointly develop and standardize specifications prior to developing new products to ensure compatibility.

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

- ① A small number of competitors confidentially develop new products and expand market share through competition and standardize the specifications of their products.
- ② A large number of competitors make the activity open and accept technical proposals from the participants. They develop and standardize specifications not through competition but through the adjustment of proposals.
- ③ At first, a small number of competitors confidentially develop core technologies for specifications. They then 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 basically cover an activity in which a number of competitors jointly develop and standardize specifications by coordinating their technological proposals.

(Note 2) It is believed that many of these activities are 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 on the patent owned by the participant.

2. Application of the AMA to activities to standardize specifications

Although the standardization of specifications determines the functions or performances of the products with specifications, by accepting compatibility among

the new products it enables speedy commercialization and expansion of demand and this contributes to greater consumer convenience. As such, standardization of specifications by competitors is not assumed to pose legal issues with the AMA.

However if the activity restricts competition in related markets or threatens to impede fair competition with restrictions as follows it poses the legal 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, the development 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 the scope of specifications

Competitors in the activity jointly extend the scope of specifications when doing so is not necessary to ensure compatibility among their products, but only to mutually restrict competition in developing new products. (Unreasonable restraint of trade, etc)

(4) Unreasonably exclude technical proposals from competitors

Competitors deliberately, without due cause, prevent technical proposals by a specific competitor from being adopted in the 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 deliberately exclude specific competitors from the activity in a case in which the competitors are largely not involved in developing and distributing the products with the specifications and do not participate in the activity, and are at risk of being excluded from the market. (Private monopolization, etc)

(Note 4) When a standard-setting activity is effectively 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 encourage 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

With respect to the activity by a patent holder to grant or not grant license of patents for specifications, it is generally analyzed in accordance with the principles explained in the Patent and Know-How Licensing Guidelines.

For instance, the refusal by a patent holder to grant a license generally does not pose a problem under the AMA when the patent holder is not involved in the activities to develop the specifications.

However, if a patent holder has taken part in the activities and is endeavoring to have its patented technologies adopted by the specifications, refusing to grant a license will pose a legal problem with the AMA ^(Note 5) ^(Note 6).

When specifications are standardized, and if it becomes difficult for companies to develop and produce the products with the specifications, then the activities of patents holders do constitute private monopolization when they substantially restrict competition in related markets. Alternatively, they can constitute unfair trade practices when they threaten to impede fair competition.

This will also apply when a patent holder nominally has not involvement with the development of the specifications but in practice does endeavor to have its patented technologies adopted in the specification, for example by colluding 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

With respect to the activity of pooling and licensing patents for specifications, the participants are not necessarily the same as the participants in an activity to develop specifications and the effects on competition are also not same. As such, even in a case in which the activity to develop specifications poses no problem under the AMA, it is necessary to examine problems under the AMA associated with the

activity of pooling and licensing 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 of those patents, the activity to produce and distribute new products with the specifications is at risk of being blocked for the following reasons:

- 1) It is necessary for businesses planning to produce and distribute new products with specifications to invest substantial resources in finding out all patent holders and entering into license agreements with each.
- 2) The total amount of licensing fees the businesses have to pay to produce and distribute new products with specifications are likely to be very substantial when the licensing fees for each patent holder are summed.

Pooling patents for specifications is an effective means of granting the necessary licenses efficiently and adjusting the licensing fees so that they do not become excessive when summed. In this way, pooling patents encourages competition by facilitating the production and marketing of new products.

However, if competitors pool their patents for specifications they can limit competition by mutually restricting the use of the patents ^(Note 7) and by restricting licensees' business in 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 to make joint arrangements on restrictions imposed on licensees, this act is not recognized as constituting "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 assessed in each case, on the basis of market conditions such as the share of products with specifications in the related market and the position of the pool in that market. The effect on competition is comprehensively assessed, including not only anti-competitive but also pro-competitive effects.

Generally, even if many competitors pool their patents for specifications, the activity will have little effect on competition if market share of the products with specifications is not high and if several alternative specifications are available or all necessary patents for the specifications are available without obtaining a license from the pool.

In particular, if many competitors license their patents for specifications through the pool, imposing on licensees certain restrictions—with the exception of obviously anti-competitive ones such as fixing the product price or quota—will not pose problems under the AMA when (a) the market share of the pool is no

more than 20%^(Note 9) in the related markets or (b) if market share is inappropriate for analyzing the effect on competition there are at least four other available ^(Note 10) specifications.

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

(1) Technological characteristics of patents

- a. If only patents essential to the specifications are pooled.

The effects on competition of pooling patents for specifications can differ, for example between the case when all patents in the pool are essential for adopting the functions and utilities for specifications (namely, “essential patents” ^(Note11)) and other cases.

Because essential patents are mutually complementary for adopting the functions and utilities for the specifications, competition among the patented technologies is not restricted when only the essential patents are pooled and licensing conditions are fixed. To exclude completely the risk of violating the AMA, it is necessary to limit patents in the pool to essential patents only.

It is also necessary to ensure that assessment of whether each patent is essential is not arbitrary and for that purpose the assessment should be made by

an independent third party with technical expertise. Even in a case when only essential patents are pooled, the patented technologies should be excluded from the pool as soon as superior technologies providing alternative functions and utilities for specifications are developed.

(Note 11) Here, a patent that is essential for exploiting the functions and effects of the specifications refers to a patent that will be inevitably infringed upon in adopting the specifications, or a patent that will be inevitably infringed upon in practical terms, even though it is avoidable technically.

b. If patents not essential for specifications is pooled

If patents that are not essential for specifications are pooled, given the following effects on competition among the technologies associated with the specifications, the activity is likely to restrict competition and represent a legal problem under the AMA.

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

To summarize, when a patent not essential for specifications is pooled, the anticompetitive effects are not negligible. As a consequence, it is necessary to comprehensively evaluate, on the basis of market conditions, the effect on competition of pooling such patents, taking the following factors into account:

- 1) Whether or not pooling the patents is reasonably necessary or has pro-competitive effects.
- 2) Whether or not patent holders pooling their patents can license out their patent without going through the pool. 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 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. Limits 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 do not restrict competition.

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

b. Restrictions on those participating in the pool

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

For example, it is not a violation of the AMA to distribute licensing fees on the basis of the importance of each patent for adopting the function and utility for specifications or on the basis of whether or not participant is also producing and distributing products with specifications.

However, imposing on participants restrictions on the use of their pooled patents such as prohibiting them from licensing their patent without going through the pool is generally not recognized as reasonably necessary to manage the activity and is likely to have a significant impact on competition. 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 a pooling activity, a management organization grants a license, collects licensing fees and audits the licensees' business to check compliance with the conditions. Through these activities the organization gathers confidential information on licensees' business such as production volume and sales prices of their products. If participants or licensees of the pool can access this confidential information, there is a risk they will use it to commit activities in violation of the AMA, such as a production or sales quota or price fixing.

To prevent such activities in violation of the AMA and to ensure that the pooling activities achieve pro-competitive effects, it is important to limit access to confidential information on licensees' business activities gathered by the

management organization. It is also advisable to outsource the management of the pooling activities 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 a license agreement through a patent pool

With respect to restrictions imposed on licensees with license agreements 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 agreements through a pool for specifications have enormous influence on the business activities of a licensee in downstream markets and the influence reaches a large number of licensees in a uniform and extensive way. It is therefore necessary to assess the impact on competition carefully.

(1) Setting differential licensing conditions

There is not necessarily an issue under the AMA when patent holders on technologies for specification pool their patents and license them with differential conditions, such as the scope of authorized use of the patents (in terms of technical fields, geographical regions and the like) and with differential licensing royalties. The impact on competition is examined on a case-by-case basis 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 problems under the AMA. ^(Note 13)

However, in licensing agreements through a pool imposing differential conditions on specific businesses without due cause, such as refusing to license the patents, requiring extremely high licensing fees compared with other licensees and limiting the scope of authorized use of the patents, is at risk of violating the AMA when such activities have a direct and serious impact on the competing functions of licensees that are suffering discrimination. (Private monopolization and discriminatory treatment on transaction terms)

To prevent a violation of the AMA it is necessary to grant licenses on 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 that 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 respect to 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 will run the risk of restricting competition in the product and technology market. (Private monopolization, unreasonable restraint of trade)

- b. If developing specifications is regarded as substantially a joint research and development activity such that a small number of competitors confidentially develop core technologies for the specifications, restricting research and development of technologies for the specifications or competing technologies independently or jointly with third parties could be recognized as falling within reasonable restrictions. ^(Note 14)

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

(Note14) Based on 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 the R&D of an individual or with a third party or parties with the same objective 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 with any objective very closely related to the objective of the joint R&D project during the implementation of the joint R&D project, when such restrictions are deemed necessary for preventing a dispute arising over the results of the joint R&D project or for inducing the participants in the joint R&D project to dedicate themselves to the project
- 3) Restrictions on joint R&D with a third party or parties with the same or very similar objective as that of the joint R&D project for a reasonable period after the completion of the joint R&D project, when such restrictions are deemed necessary to prevent a dispute arising over the fruits of the joint R&D project and for inducing the participants to dedicate themselves to the project

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

- a. When licensing patents through a pool, requiring licensees to grant licenses for patents on improvements or developments of the technologies for the specifications through the pool will restrict competition in the 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) If improvements or developments by licensees accumulated in a pool provide an alternative function or utility to that provided by other patented technologies in the pool, competition among these technologies is restricted.
- b. On the other hand, there may be a case in which patents on improvements or developments by licensees are essential to the specifications. In this case, imposing the obligation on the licensees generally does not pose a problem with the AMA if it means obliging a licensee to pool the essential patent and license it non-exclusively through the pool, and if it is accompanied by no other restrictions on the use of the essential patent and imposes on the licensee non-discriminatory treatment in, for example, the distribution of licensing fees compared with others pooling their patents. (Case 7)

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

- a. In the case of licensing through patent pools, imposing on licensees a non-challenge clause ^(Note15) will deprive licensees of the opportunity to contest the validity of any patent included in the pool if doing so is accompanied with a measure to terminate licensing agreements with the licensee for all the patents in the pool. This measure has a greater impact on licensees' business activities than simply terminating licensing agreements with the licensee for the patent that is the subject of the licensee's petition for invalidation.

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

- b. Imposing on licensees a non-challenge clause will create a legal issue under the AMA if it is accompanied by a measure to terminate licensing agreements with the licensee for all patents in the pool. (Concerted Refusal to Deal)

On the other hand, if the measure is to terminate licensing agreements with the licensee only for the patent subject to the invalidation claim, for instance by taking out the patents from the pool, imposing on licensees a non-challenge clause will not deprive licensees of the opportunity to contest the validity of any patent included in the pool. Imposing such a clause does not pose a legal problem under 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 on licensees a non-assertion of patents (NAP) clause ^(Note 16) and prohibiting the exercise of patent rights they are obtaining or will obtain against patent holders in the pool and any other licensees will effectively result in the accumulation of licensees' patents in the pool. This means that imposing on licensees such a clause has the risk of reinforcing the advantageous position of the pool, restricting licensees' ability to compete with alternative technologies and substantially restricting competition in the technology market.

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

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

(Note 17) As explained in Part 3-2-(1)-a., a measure to ensure objective decision-making with respect 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)

Companies A, B and C are major manufacturers of home appliance α . As α needs to be used with peripheral equipment as a unit, the three companies have standardized the interface specifications for the peripheral equipment with the aim of expanding the market for α . In addition, the three companies have 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 the market for α of products based on these specifications is over 70%.

Companies D and E have jointly developed an alternative technology to realize the functions provided by the above specifications, and without obtaining licenses from the pool, these two companies produce and market a version of α that is compatible with the specifications. In addition, as these two companies have obtained patents for the alternative technology, they are considering licensing these patents (alternative patents) to other manufacturers.

In response, Companies A, B, and C consult with Companies D and E and ask them to add the alternative patents to the pool and license them as a package with the essential patents of Companies A, B, and C. Companies D and E decide not to license out those patents to other manufacturers without going through the pool.

(Perspectives)

In this case, the product built based on the specifications developed by Companies A, B and C accounts for more than 70% of the market for α and no alternative patent pool exists for the specifications.

The consultation among Companies A, B, C, D and E to add the alternative patents to the pool, license them as a package with the essential patents of Companies A, B, and C and not to license them without going through the pool concerned will limit the free choice of technology available to manufacturers of α based on the specifications. In addition, given the market conditions described above, competition in the technology market will be substantially restrained.

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

(Case 2)

Companies A, B and C are major manufacturers of information communication product α and have jointly developed specifications to achieve efficient data transmissions among their products. In addition, the three companies have pooled their essential patents covering the technologies associated with the specifications and have licensed them in a package to other manufacturers of product α .

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

Now, the three companies have jointly developed the technology (add-on technology) to add new functions to the specifications and have acquired patents for the new technology. They are considering encouraging the licensees in the pool to adopt the add-on technology.

Apart than those three companies concerned, R&D Venture Companies D and E have developed and patented a (competing) technology to realize the functions provided by the add-on technology. The two companies are also encouraging licensees in the pool to adopt the competitive technology.

In response, Companies A, B and C have decided to add the patents on the add-on technology to the pool and license them as a package with essential patents. As such, it is difficult for Companies D and E to find potential licensees for the competitive technology, and the two companies decide to withdraw from the business.

(Perspectives)

In this case, the share of the products with specifications developed by Companies A, B and C accounts for 80% of the market for α , and no alternative pool exists for the specifications. The decision as to what functions to add to the specifications should be left to the licensees.

The conduct by Companies A, B and C of adding patents for the add-on technology to the patent pool and licensing them together with the essential patents as a package is deemed to limit the licensees' ability to freely choose their technology.

At the same time, given the market conditions described above, the conduct excludes the competitive technology developed by Companies D and E from the technology market and substantially restricts competition in the technology market. Therefore, the conduct constitutes private monopolization, and is a violation of the AMA.

(Case 3)

Companies A and B, major manufacturers of industry equipment α , and ten other companies are supplied with semiconductors by semiconductor manufacturers.

Considering the great advantage of standardizing the specifications of semiconductors to ensure compatibility among the products of each manufacturer, Companies A, B and the other ten companies along with major semiconductor manufacturer Company C decide to jointly develop specifications for the semiconductor. To produce and use the semiconductor in compliance with the specifications, patents a1 and a2 held by Company A, patents b1, b2, and b3 held by Company B, and patents c1 and c2 held by Company C are essential.

Companies A, B and C decided to pool their essential patents and license them as a package to other manufactures. In addition, the three companies decide not to license out their patents to other manufacturers without going through the pool. Currently, the share of the products manufactured and marketed under the license from the pool in the market for semiconductor chips for α has reached 80%.

While semiconductor manufacturer D was producing under license from the pool, it has developed new specifications that are compatible with the original specifications. D is now considering marketing its own specifications to licensees in the pool. However, as it cannot avoid infringing on patent a1 of Company A and b1 of Company B when producing and using the products with specifications developed by D, D asks both A and B for permission to use their patents in products that adopt the specification developed by D.

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

(Perspectives)

In this case, the products complying with the specifications jointly developed by A, B, and ten other companies account for 80% of the semiconductor market for α , and no alternative patent pool exists for the specifications.

The decide to refuse the request from D with regard to the essential patents will not give rise to legal problems under the AMA, if both A and B independently adopt this course of action as an exercise of their patent rights.

However, in cases in which A and B decide in consultation with Company C not to agree to D's request, the act excludes the new specifications developed by D from the technology market and given the market conditions described above substantially restrains competition in the technology market.

Consequently, the conduct constitutes private monopolization and is a violation of the AMA.

(Case 4)

Eight major home appliance manufacturers jointly develop a specification concerning a compression technique to enable compatibility of digital moving images among the different models. The eight manufacturers decide to pool the patents necessary for the specifications. To manage the patent pool, the eight manufacturers jointly fund new management organization X, whereby all essential patents are licensed to X and X will grant a package license to others adopting the specifications.

The major business activities of X are licensing the essential patents to those who adopt the specifications, collecting license fees, and distributing license fees to the eight manufacturers. In addition, to collect license fees, X audits the licensees' businesses.

As X is subject to secrecy obligations, it is prohibited from providing any information obtained through the auditing to the eight manufacturers or to the licensees adopting the specifications. Moreover, to ensure the effectiveness of the obligations, even the eight manufacturers cannot take any part in X's licensing business.

(Perspectives)

In this case, as the eight manufacturers 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 at X.

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

Therefore, there are no risks that information regarding the licensees' business collected by X will be used for activities in violation of the AMA such as production quotas or sales price restrictions applying to home appliances that follow the specifications.

(Case 5)

Leading home information equipment manufacturers A, B, and C, along with seven other companies, have jointly developed specifications compatible with an operating system (OS) developed by Companies A, B, and C to control the various functions of multimedia product α and to facilitate interconnections between different models. As such, A, B, and C decide to pool essential patents covering the technologies involved in the specifications and license the patents with the OS as a package to manufacturers of compatible models of α .

Models compatible with the OS account for over 80% of the market for α and all such products are produced under license from the patent pool as noted above. In addition, with new firms entering the market for α , some licensees have begun to market the products at low prices to earn share, and retail prices are rapidly declining.

In response, A, B, and C upgrade the OS version to handle the new functions of α and decide to revise the license agreements as a result of the version upgrade. In doing so, they decide to delay the revision of license agreements with licensees who ship α at a low price or limit the scope of new functions in which the required patents can be executed. As a result, these licensees are driven out of the market.

(Perspectives)

In this case, models compatible with the OS account for more than 80% of the market for α and no alternative patent pool exists for the specifications and the OS.

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

However the conduct of Companies A, B and C in revising the license agreements and imposing the limitations described above only on those licensees that ship the products at low prices is described to stabilize the retail prices of α . In the market conditions described above, this conduct excludes from the market manufacturers who ship at low prices and substantially restricts competition in the market for α .

As such, the conduct constitutes private monopolization and is a violation of the AMA.

(Case 6)

Home appliance manufacturers A, B, C and D are carrying out joint R&D into technology to efficiently compress data for multimedia software. They have agreed to a restriction in which during the joint R&D the technology should not be researched or developed on its own or jointly with a third-party.

Later, these four companies actively supply the technology to other manufacturers and develop, through consultations and coordination, specifications on data compression. Currently, 70% of domestic home appliance manufacturers are producing and marketing products with the specifications. Companies A, B, C and D decide to pool the essential patents on the technology for the specifications and enter into license agreements with other manufacturers adopting the specifications. The four companies have also decided to oblige the licensees not to carry out R&D into competing technologies, on their own or jointly with a third party, to maintain the superiority of their essential patents.

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

(Perspectives)

In this case, 70% of the domestic home appliance manufacturers are developing and producing products with the specifications, and no other patent pool exists.

The conduct of Companies A, B, C and D in mutually imposing certain restrictions on their R&D activities at the time of joint R&D into data compression techniques does not immediately pose legal problems under the AMA, as long as the restriction is necessary to prevent the diversion of confidential information about their technology and the restriction is within the scope of the minimum restrictions necessary to achieve that purpose.

However, when Companies A, B, C and D acquire patents on their technologies and begin to license through the pool, there are no reasonable grounds to impose such restrictions on the licensees in the pool.

In addition, given the market conditions described above, the conduct of the four companies make it difficult for Companies E and F to develop and standardize competing specifications and represent a substantial restraint on competition in the technology market. As such, the described conduct constitutes private monopolization, and is a violation of the AMA.

(Case 7)

More than a dozen telecommunications equipment manufacturers, which produce and market portable terminal devices α , have developed and disclosed specifications for data transfer among the portable terminal devices. In addition, Companies A, B, C, and D, which hold essential patents on technologies for the specifications, have decided to pool these patents and license them as a package to manufacturers that adopt the specifications. At present, more than a dozen telecommunications equipment manufacturers produce and market α with the specifications under license from the pool.

As portable terminal devices are subject to remarkable technological innovation, the five 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 to license them with other essential patents when it is determined by an impartial third party that the patents held by the licensees are essential for the exploitation of improved and applied technologies in the specifications. It was also decided that the license fees for the new patents would be allocated to the licensees under the same conditions as apply to the original four companies. There are no other restrictions on licensees with respect to the use of their patents.

(Perspectives)

In this case, there are no other specifications for data transfer, and no other patent pool exists for the specification.

As portable terminal devices experience remarkable technological innovation, under the market conditions described above, obliging licensees to bring their patents on improved and applied technology into the patent pool creates a risk of restricting competition in the technology market by reinforcing the advantageous position of the pool and accumulating within the pool patents on technologies that offer alternative functions to the patented technologies.

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

(Case 8)

To maintain compatibility among different models, more than a dozen telecommunications equipment manufacturers that produce and market telecommunications equipment α standardized the specifications of the compact integrated circuit (IC) to control α . In addition, as Companies A, B, C, and D, the leading members at the time of standardization, hold essential patents on the technology for the specifications, they have decided to pool their patents and license them as a package to other manufacturers. At present, 70% of the IC for α consists of products under license from these four companies

Company E was producing an IC for its own α under license from the patent pool. Recently it has developed, on its own, technology that dramatically improves processing speed and is rapidly expanding its share of the market for α .

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

In response, E sought a ruling to invalidate A's patents, on the grounds of patent revision.

Under these circumstances, Companies B, C, and D notified Company E that they would revoke the package license unless Company E withdrew its invalidation claim, giving the reason that agreements made through the patent pool are based on the premise of a package license of the patents held by the four companies involved. In response, E dropped its claim and ceased producing and marketing products with the new technology.

(Perspectives)

In this case, 70% of the IC for α are manufactured under license from Companies A, B, C, and D, and no other patent pool exists.

If licensors impose restrictions on the licensees preventing them from contesting the validity of the patents, this creates such risks as the continuing existence of patent rights on technology normally allowed to be used freely and limited R&D based on the technology to restrict competition in the product and technology markets.

In this respect, the conduct of Company A, whose patent rights were the subject of an invalidation claim, in terminating the license contract and attempting to validate its rights is not considered to make it difficult for Company E to contest the validity of the patents. As such, the conduct does not create any legal problems under the AMA.

However, given the market conditions described above, the conduct of Company

B, C, and D in terminating the license contract with Company E with respect to the essential patents they hold on the grounds that the contract is made under a package license including essential patents held by A does make it difficult for Company E to contest the validity of the patents in question, and could impede fair competition in the product and technology markets. As a result, the conduct described here constitutes unfair trade practice (joint refusal to deal), and is a violation of the AMA.

(Case 9)

Currently, more than 30 electrical equipment manufacturers are producing and marketing home appliance α , and 40% of the market is shared among Companies A, B and C.

In response to frequent requests from users for model changes, Companies A, B and C, together with Company D, a major software maker, develop an operating system to control the functions of α . In addition, the four companies develop together with other companies specifications to ensure compatibility with the operating system in question. Companies A, B and C elect to pool essential patents covering the technologies incorporated in the specifications and to license them to other electrical equipment manufacturers.

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

- (1) When a licensee finds that the manufacture of products that comply with the specifications by other licensees infringe on its own patent right, instead of claiming its right against the licensees, it should notify the pool administrators to that effect.
- (2) The administrator shall ask a third-party selected under an agreement with the licensee to judge whether or not the patents concerned are essential to the specifications.
- (3) If the patents are found to be essential, the licensee shall bring those patents into the pool and license those patents through the pool as with other essential patents.
- (4) For newly added essential patents, licensee fees will be distributed to the licensee under the same conditions as they are for Companies A, B and C.
- (5) The licensee is not subject to any restrictions on the use of the patents concerned other than to bring them into the pool.

Currently 80% of products in the α market comply with the specifications.

(Perspectives)

In this case, the market share of products complying with the specifications in market for α has reached 80%, and no other patent pool exists.

Given these market condition, obliging the licensee not to exercise its patent

rights poses a risk of limiting competition in the technology market by reinforcing the advantageous position of the pool and accumulating patents on technologies providing alternative functions to the patented technologies in the pool.

In this case, however, (1) the licensees are obliged not to exercise their patent rights only when the an impartial third party judges that the patents concerned are essential patents and they will be brought into the pool and licensed to the licensees under the same conditions as those that apply to 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. Consequently, the case cannot be considered unfair restriction on the use of the licensee's patents.

Therefore, the restriction in question is not deemed to restrict competition in the technology market, nor does it present a legal problem under the AMA.