24 Relationship Between Intellectual Property Right Enforcement in the Technology Standardization Process and Competition Policy

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Standardization of technical specifications has seen progress mainly in the information industry, with the aim to accelerate product development and dissemination. Standardization also allows consumers to enjoy convenience associated with product compatibility. In recent years, the standard setting operations have often been carried out by establishing a standards organization. In such standard setting process, a member of a standards organization could engage in an opportunistic act wherein the member takes a persuasive action to have the technology that is covered by the member's intellectual property included in the standards while concealing the existence of such intellectual property, and enforces the intellectual property after the technology has been included in the standards to demand a large amount of royalties. In order to prevent such acts, members are often sought to disclose whether or not they hold any relevant intellectual property in advance under the organization's patent policy. This report explores the applicability of antitrust law to acts in violation of such patent policy by taking hints from cases observed in the United States, and also examines alternative measures for preventing opportunistic acts.

I Introduction

Technology standardization has various benefits. However, if a patent or other intellectual property exists for the technology involved in the standardization, consideration must also be given to its effect on the market. Meanwhile, the demand for the technology may increase if it is adopted as a standard or recognized as a de facto standard. Thus, in such a case, the technology must be distinguished from ordinary patented technology.

Opportunistic acts are sometimes observed where an intellectual property owner takes action in the standard setting process within a standards organization to have the technology covered by his or her right included in the standard while concealing his or her right, and enforces the right after the standard has been set. This problem has already begun to surface in the United States. Japan may also face the same problem in the future.

This report analyzes the standard setting process in standards organizations. Specifically, this report aims to examine how the hold-up problem that arises from intellectual property owners concealing their rights in the formulation of ex post facto standards in standards organizations and enforcing their rights afterwards could be prevented or regulated under competition policy.

II Status of Legal Theories in the United States —Standards Organizations and Antitrust Law—

Under antitrust law, collective standard setting activities could pose a problem in relation to Section 1 of the Sherman Antitrust Act (hereinafter referred to as the "Sherman Act") that prohibits contracts in restraint of trade, Section 2 of the Act that prohibits monopolization, attempts to monopolize, and conspiracy to monopolize and Section 5 of the Federal Trade Commission Act (hereinafter referred to as the "FTC Act") that prohibits deceptive practices and unfair methods of competition. The enforcement authorities evaluate a standard setting process of a standards organization in terms of competition policy based on Antitrust Guidelines for Collaborations among Competitors (Competitor Collaboration Guidelines) and Antitrust Guidelines for the Licensing of Intellectual Property.

The requirements for application of antitrust law to standards organizations are as follows. The first is an antitrust injury, or more specifically, (i) a causally linked injury and (ii) an antitrust injury. Under case law, an injury arising from a standardization process in a standards organization is determined by whether or not it is an injury of the type the antitrust laws were intended to prevent and which reflects the anticompetitive effects of the alleged violating act.

The second is a contract in restraint of trade. In many cases, this requirement is presumed if the act has been conducted by a standards organization. However, an independent act by a standards organization would be construed to be the same as an act by a single business operator.

The standardization itself does not necessarily restrain trade. Therefore, the determination under competition policy will be made based, in principle, on the rule of reason. Nevertheless, when a standardization process is evaluated as a naked restraint such as when it is used as a means to camouflage price fixing, the determination will be made based on the per se rule.

According to developments in case law, the stance of the courts toward a standards organization's expulsion of its member has changed from application of the per se rule to application of the rule of reason. Under the rule of reason, there is a basic idea that trade restriction does not apparently induce injury under competition policy. Under this rule, determination will be made as to whether or not there was an injury under competition policy based on whether the restraining act in question is one that promotes, or one that suppresses, competition.

The following can be said as a result of identifying in concrete terms the determination methods under the rule of reason and examining how the rule should be applied. The following process is used when applying the rule of reason. First, the plaintiff must prove that the agreement in the standards organization is anticompetitive. Then, if the plaintiff has satisfied this requirement of proof, the standards organization must prove the procompetitive effect of the agreement. If the standards organization has satisfied this requirement, the plaintiff must further prove that the anticompetitive effect exceeds the procompetitive effect.

In principle, when applying the rule of reason to standards organizations or other business associations, courts and enforcement authorities have used two basic analysis methods.

The first analysis method is the quick look rule of reason. This is a determination method that does not require a detailed market analysis. It is applied when the restraining act in question has apparently induced a rise in the price and a decline in the production volume. According to this approach, inhibition of competition is presumed and the burden of proof shifts to the defendant.

Therefore, the defendant would have to claim and prove that the act has a procompetitive effect. When this claim and proof are recognized as justification, the court will make the ordinary determination under the rule of reason.

It is construed under case law that cases to which this quick look rule of reason should be applied are those where the restraining act has an obviously anticompetitive effect and an observer with even a rudimentary understanding of economics could conclude that the act has an anticompetitive effect on customers and markets.

The second analysis method is the full rule of reason. This approach requires detailed market analysis. As mentioned above, even when the quick look rule of reason is adopted, if the defendant successfully proves justification, the full rule of reason would be adopted. When a standard setting process in a standards organization is to be determined under this method, the plaintiff must prove that the restraining act is likely to injure competition by creating or enhancing the defendant’s market power or that the act had an actual detrimental effect on competition by causing a rise in the price or a decline in the production volume.

In the case of making a determination through this approach, it is necessary to first demarcate the relevant market. A market in the context of a standard setting process could include not only the market of the product sold to customers, but also the market of sales licensing and technology licensing, and what is called the innovation market.

In many court decisions, the defendant is construed to be exempted from application of antitrust law when the plaintiff fails to prove the defendant’s market power in the relevant market. In these decisions, the courts seem to construe proof of the market power to be a requirement for application of the rule of reason. This means that there is a safe harbor rule to exempt the accused from liabilities under antitrust law when the accused party’s market power in the relevant market is small.

The anticompetitive effects associated with standard setting can be classified into the following categories: (i) the problem of standards organizations and membership; (ii) selection and adoption of a standard; and (iii) the problem of destruction of the standard setting process.

With regard to (i), courts seem to examine such problem from the angle of whether or not the standards organization or the standard itself has market power and whether or not such market power has great relevance to effective competition for the members. This approach coincides with the approach taken for joint ventures or concerted actions between competitors, which are not necessarily related to standardization.

With regard to (ii), there is a possibility that the manufacturer of the product that was not adopted as a standard or the patent owner of the technology that was not adopted as a standard will allege the standards organization’s act to be an elimination of competitors and a violation of antitrust law. Likewise, after the adoption of a standard, a standards organization may grant certification on whether or not a certain product complies with the standard. There are cases where a sticker is adhered to a certified product being sold in order to indicate clearly the certification of compliance with the standard. In this case, there is a possibility that a business operator that could not acquire the certification will make the same allegation as above. In such cases, courts have made a determination from the angle of whether or not the standard has been set through enforcement of the standards organization’s market power and whether or not the standard has been set with an anticompetitive intention or purpose.

With regard to (iii), a member of a standards organization sometimes enforces intellectual property in an opportunistic manner that cannot be justified by the existence of a competitive advantage. In some such cases, it is not necessarily clear whether the act should be recognized as intellectual property enforcement. Therefore, such act, in principle, will also be determined under the rule of reason.

III Examination of U.S. Cases

Many standards organizations have come to set rules on the disclosure of patents and other intellectual property from the viewpoint of preventing opportunistic activities by members, as mentioned in the previous chapter. Such rules are often referred to as a patent policy.

A patent policy seeks for its members to grant a license either royalty-free or under reasonable and non-discriminatory (RAND) terms when the relevant technology has been adopted as a standard. Under the patent policy, a person who becomes a member of a standards organization and who wishes to have the technology that is covered by his or her intellectual property included in the standard would be required to disclose information on the technology. Thus, the patent policy is expected to prevent opportunistic activities such as concealing one's intellectual property and enforcing the intellectual property rights after the standard has been set to demand a high amount of royalty. There are three notable cases in which violation of a patent policy became an issue: the *Dell* case, the *Unocal* case, and the *Rambus* case.

In the *Dell* case, the matter at issue was an allegation that Dell, which was a member of the Video Electronics Standards Association (hereinafter referred to as "VESA"), failed to disclose its acquisition of patents relevant to the standard setting at a standard setting committee. More specifically, VESA's standard became commercially successful immediately after its approval, and Dell informed certain VESA members who were manufacturing computers using the new design standard that their implementation of the VL-bus was a violation of Dell's exclusive rights.

The FTC asserted that these acts were in violation of Section 5 of the FTC Act, but since Dell agreed not to enforce its patent relating to VESA's standard, this case was concluded by a consent agreement. Although this case did not see a conclusive legal resolution as Dell entered into a consent agreement, it indicated the possibility of occurrence of cases where enforcement by an intellectual property owner in a standards organization would be considered as an opportunistic act.

In the *Unocal* case, the California Air Resources Board (hereinafter referred to as "CARB") initiated a procedure to decide on a standard governing the composition of low emissions, reformulated gasoline (hereinafter referred to as "RFG"). The point at issue was an allegation that, similar to the *Dell* case, CARB's member Unocal failed to disclose or misrepresented the relevant information. Although this case also involved other points of dispute, it can be regarded as a case similar to the *Dell* case.

The facts of the *Rambus* case are similar to those of the earlier two cases. Rambus is a company in the dynamic random access memory (DRAM) industry. Since a need for standardization arose due to technical problems in the industry, a standard setting organization called the JEDEC Solid State Technology Association (hereinafter referred to as "JEDEC") was established. Rambus participated in JEDEC.

JEDEC had a patent policy, which required its members to disclose any patents they possessed for technology relevant to the proposed standards. Although the committee, which set the standards, made an inquiry to Rambus on this point, Rambus did not make a specific comment, and later withdrew from JEDEC.

In the end, JEDEC adopted the proposed standards. Rambus had continued the procedure to acquire patents concerning the technology relevant to the JEDEC standards and had succeeded in acquiring many such patents. Rambus concluded licensing agreements with DRAM manufacturers and sued those who did not agree to the licensing on allegations of patent infringement.

Although the series of acts carried out by Rambus presented an issue, the FTC issued an opinion to reverse the initial decision that found no violation of antitrust law in Rambus' conduct. It concluded that Rambus' deceptive act was an exclusionary act that constituted a violation of Section 2 of the Sherman Act, and that Rambus unlawfully monopolized the relevant markets in violation of Section 5 of the FTC Act.

IV Developments of Academic Theories in the United States

When information disclosure is being

sought under the patent policy of a standard setting organization, opinions are divided over whether or not this disclosure should be construed as an obligation.

An article by Janice Mueller indicates that patentees participating in a standard setting organization have a duty to disclose the existence of any issued and pending patents during the period of such participation. Based on this, Mueller advocates that, in the case of a trade association (in other words, not a public but a private standard setting organization), a compulsory license should be required from a person who has breached this duty. Mueller states that when the nondisclosure was intentional, the doctrine of patent misuse, which denies the patentee's claims for an injunction and damages, should be applied.

In contrast, an article by Mark Lemley indicates a doubtful view on imposing a duty of information disclosure under the patent policy of a standard setting organization, based on an empirical study on such patent policies. In this empirical study, Lemley has made an examination based on an empirical investigation of the internal rules, such as patent policies, of as many as 43 standard setting organizations in the United States. On the basis of this examination, Lemley points out that it can be difficult to introduce a compulsory factor in seeking patentees to observe the duty of disclosure, since the details of information disclosure rules under the patent policies are actually not uniform and the scope of information to be disclosed is diverse. He states that it is particularly difficult in practice to impose a duty of disclosure merely for being a member.

Another article that similarly indicates a doubtful view on obligating members of standard setting organizations to disclose information is an article by David Balto. David Balto considers that the introduction of a disclosure obligating system with binding force could present a question of a trade-off to business operators considering participation in a standard setting organization. However, he also indicates that the establishment of such a disclosure system in itself could be procompetitive.

Mueller, who tries to address this issue through imposition of a duty of disclosure, advocates that the duty of disclosure should be obligated and that legal measures should be taken against persons who breach this duty.

In empirical terms, however, as clarified by Lemley's study, this problem has its root in the fact that the details of the duty to disclose information under the patent policy are unclear. As an actual problem, convincing answers have yet to be derived for difficult questions including the scope of the duty of disclosure, the necessary timing for making the disclosure, and how much disclosure needs to be made in order to perform this duty.

An approach of focusing on the licensing terms and restraining the inflation of patent value ex post facto has been proposed. This approach can be characterized by the attempt to solve the issue by establishing a system for licensing negotiations by standards organizations.

Nevertheless, this approach also assumes that there is a clear ex ante disclosure duty. If this ex ante disclosure duty has not been fully performed, it will not lead to fundamental resolution.

Furthermore, the views developed in the United States are divided between those supporting and those denying the application of antitrust law for regulating enforcement by intellectual property owners in standards organizations.

The article by Teece & Sherry considers the applicability of antitrust law from a standpoint whereby even if a patentee were to distort the standard setting process, the act could create social benefits in line with cost reduction of the standards. It derives a conclusion from an economic perspective whereby a socially efficient method is not necessarily adopted when determining whether or not certain technology of a company holding patents should be adopted as a standard. The article mentions the following as its specific reasons. First, in a standards organization, the number of members who will use the patent (potential licensees) is larger than that of patentees, so it is highly likely that rules advantageous for the members who will use the patent would be set in place. Second, the actual participants in a standards organization are often engineers and they are likely to be biased toward intellectual property. Third, royalties are treated by manufacturers and consumers as private costs. Thus, based on these assumptions, the article asserts that antitrust law should be applied cautiously.

Such views that focus on social costs are criticized from a standpoint that focuses on the demand for standards. Mark R. Patterson states in his article that makes critical discussions using the article by Teece & Sherry, that the royalty to be paid to the patentee for the technology included in the standards should be decided based on its technical contribution and demand. This suggests a view that a reward should not be granted even for the increased value and the demand attributable to the network externality associated with the establishment of the standards. According to Patterson's view, the applicability of antitrust law would be examined from a stance whereby demand for a royalty could be prevented for the portion of the invention that has not technically contributed to the standards.

V Suggestions for Japanese Law

In Japan, there are not many instances where a standardization-related act has been disputed under anti-monopoly law, and all of such disputed cases are related to patent pools. However, these types of disputes are likely to surface in the future.

The Anti-Monopoly Act, Article 2, paragraph 5, provides that such business activities, by which any entrepreneur excludes or controls the business activities of other entrepreneurs, that cause a substantial restraint of competition in any particular field of trade, shall be referred to as "private monopolization" activities, and prohibits private monopolization under the first sentence of Article 3.

The cases in which the enforcement of intellectual property rights constitutes private monopolization are when a person in possession of patents for which licenses are indispensable for carrying out business activities, rejects the grant of licenses to third parties.

Conventionally, the regulation principle for this problem has cast doubt on the legality of high price setting, irrespective of the possession or non-possession of intellectual property. The reason for this is as follows. A solitary price increase by a monopolistic company is an outstanding example of the lack of competition and, because of this, administrative intervention in such price increase involves notably adverse effects. From this viewpoint, the act that has caused such a situation and the direct effects and influences thereof have conventionally been made subject to the determination of illegality.

In relation to the purpose of this report, such a question would be important as an argument for the applicability of the regulation on opportunistic conduct where an intellectual property owner in a standards organization takes a persuasive action to have his or her rights included in the standard, and enforces the patent rights when such rights have actually been included in the standard or when the standard has spread so as to require high levels of license fees or to reject a license to those who do not agree to paying such license fees.

The examination of the applicability of anti-monopoly law against opportunistic conduct needs to be distinguished from cases of ordinary licensing rejection against single business operators. The problem is that a person is not only prevented from being able to be competitive when the licensing has been rejected, but he or she is unable to trade because a lock-in effect has been generated by the relevant standards.

U.S. academic theories are developing in the direction of proposing an institutional design to have the standards organizations receive a license under RAND terms by negotiating directly with intellectual property owners.

However, this approach also has its problems. There are criticisms that, essentially, a standards organization is not suitable for coordinating rights and that it is not clear whether this approach can prevent an intellectual property owner from demanding a higher level of royalties than those under RAND terms after the standard has been set.