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Study of the Antimonopoly Act in Relation to Standard Essential Patent Licenses among Different Industries

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Outline

Recently, due to the possibility of various devices being capable of communicating with one another through the spread of IoT and 5G development, new issues are emerging under the Antimonopoly Act relating to the licensing of standard essential patents regarding communications between the standard essential patent holders and business operators of other industries (mainly industry sectors including businesses other than communication businesses as typified by the automobile manufacturing industry).

One new issue is that whether the standard essential patent holder is able to voluntarily choose the partner of the licensing agreement in the supply chain of goods implementing the standard essential patent.

Behind this issue, two different concepts exist surrounding the meaning of opening up of access pertaining to standardized technology (“Access for all / License to all”). There are some differences in the two concepts in that the former sense means the opening up of access pertaining to standardized technology goes no further than not impeding use of the technology when simply manufacturing or selling patented goods while the latter sense means the standard essential patent holder is forced to enter into a licensing agreement with any manufacturers specified by the side of the supply chain of the patented goods.

This issue arises from the conflict between the demand in terms of the Antimonopoly Act that access to the essential infrastructure (standards) as a basis for competition should be indiscriminately determined and the demand for protection of the invention so that the means of obtaining the de facto reward should not be made narrower than necessary in order to give the patent holder a legitimate return from the perspective of promoting innovation, and consideration should be appropriately given to both perspectives.

Seen from the principle concept in patent law, the standard essential patent holder originally was under no obligation to enter into a licensing agreement with any manufacturers specified on the side of the supply chain of the patented goods. However, as suggested by the United States and South Korea’s Qualcomm cases, a problem may arise under the Antimonopoly Act due to the standard essential patent holder freely selecting the other party to the licensing agreement in the supply chain in specific circumstances. Accordingly, in some specific cases, intervention under the Antimonopoly Act may be necessary on this issue.

When considering the application of the Antimonopoly Act in relation to this issue, an examination should be conducted in accordance with the individual case specifically on whether or not an anti-competitive effect is caused by an event that could be a problem,

and if this event contributes to innovation by securing a legitimate incentive for it, a judgment should be made after taking into consideration the pro-competitive effect in order to bring about the outcome of best achieving the intended purpose of the Antimonopoly Act.

Chapter 1 Introduction

Recently, due to the possibility of various devices being capable of communicating with one another through the spread of IoT and 5G development, we recognize a new phase of the licensing of standard essential patents (SEPs) related to communication (hereinafter referring to SEPs related to communication simply as “SEP”).

In other words, traditionally, the issues on the SEP licensing and injunctive relief emerged as a dispute between communication service providers of smartphones or other similar devices, but nowadays, it is the SEP license negotiations between the SEP holder and mainly business operators of industries other than communication businesses (for example, the automobile manufacturing industry) (hereinafter referred to as “different industry”) which are likely to become a problem.

In this paper, we will describe our observation about the licensing between the SEP holder and business operators of a different industry from the perspective of the Antimonopoly Act focusing on the point whether the SEP holder is able to voluntarily select the licensee in the supply chain of goods (SEP practicing goods) equipped with communication functions that are likely to encompass a huge variety in the future, in other words, focusing on discussion regarding two different concepts known as “Access for all / License to all”.

Chapter 2 “Access for all / License to all”

1. Background of the discussions

As described in 1 above, due to the spread of IoT and 5G development, with regard to the SEP, it is assumed that large numbers of manufacturers, etc. of different industries are likely to need a license in the future.

In some different industries, it is common for suppliers which supply parts to end product manufacturers to be licensed rather than the end product manufacturer. The automobile industry is often cited as one such example. The supply chain of the

automobile industry is said to be a pyramid structure comprising contractors and primary subcontractors with the end product manufacturer at the top. As such, practical discussions are taking place on “who should be the licensee in the supply chain of SEP practicing goods”, which also includes industries where there are a large number of upstream suppliers¹.

This point also surfaced in Europe in the form of a debate on the two concepts of “Access for all” and “License to all”².

“Access for all” and “License to all” are generally understood to refer to the following kind of thinking³.

- “Access for all”

The FRAND⁴ (Fair, Reasonable and Non-Discriminatory) declaration is a mechanism which ensures that those who wish to use the SEP are able to access the standard technology rather than a mechanism which require SEP holder to license to all entities who practice the patented invention using the standardized technology.

- “License to all”

This is the idea that the SEP holder is required to grant the license to all those wishing to obtain a license regardless of their transaction phase in the supply chain.

In general, patent holders tend to want to conclude a licensing agreement with the end product manufacturer from the viewpoint of facilitating license management, etc., while the end product manufacturer tends to want the supplier with the most knowledge about individual parts to be the party of the licensing agreement⁵.

2. Specific considerations

1 Japan Patent Office “Guidance on the Licensing Negotiations for Standard Essential Patents” (July 5, 2018) II.B.2 (pp. 20-24)

2 Tatsuro Kuchinomachi, “Survey on Europe and the US on the Licensing of Standard Essential Patents and Implications for Japan” (Competition Policy Research Center, Japan Fair Trade Commission (CPDP-69-J August 2018)) pp.11-13 (2018)

3 *Supra* note 1, Japan Patent Office, “Guidance on the Licensing Negotiations for Standard Essential Patents” footnote 47 (p. 21), *supra* note 2, Kuchinomachi (pp. 11-12)

4 Although sometimes referred to as RAND, in this paper it is unified with the notation FRAND.

5 *Supra* note 1, “Guidance on the Licensing Negotiations for Standard Essential Patents”, II.B.2 (p. 21)

In this paper, with regard to “Access for all / License to all”, when organizing the discussion points and thinking under the Antimonopoly Act, the following two hypothetical examples are envisaged as typical scenes where differences between the two concepts arise.

Incidentally, in each of the examples, the SEP is assumed to be the subject of a FRAND declaration.

(1) Case study 1

In cases where a SEP holder (X) is asked by a certain communication unit manufacturer (Y) to enter into a licensing agreement in relation to the SEP practiced in the communication unit, the fact that the SEP holder (X) does not enter into a licensing agreement with the communication unit manufacturer (Y) because it intends to enter into a licensing agreement with the end product manufacturer that will be using the communication unit in the future may become a violation of the Antimonopoly Act.

(2) Case study 2

The manufacturer of the end product equipped with communication functions (Z) is asked by the SEP holder (X) to enter into a licensing agreement in relation to the SEP practiced in the end product.

In cases where the end product manufacturer (Z) states to the SEP holder (X) that it wishes the negotiation to be handled with the manufacturer of a part, etc. incorporated into the end product, and refuses to enter into a licensing agreement or negotiations, the fact of the SEP holder (X) seeking an injunction against the end product manufacturer (Z) on the grounds of a patent infringement may become a violation of the Antimonopoly Act. In addition, is there any concerns from the Antimonopoly viewpoint if the SEP holder (X) claims compensation of damages from the end product manufacturer (Z)?

3. Overview of the discussions relating to the SEP

1. Basic thinking relating to the SEP

We will overview the basic thinking relating to the SEP before examining the 2 cases abovementioned.

SEP is a patent pertaining to the standards formulated by international standard setting

organizations (SSO)⁶ and since in particular, in areas where interconnectivity is important, such as communications, it provides greater convenience for general consumers and promotes competition between standardized products, thereby facilitating efficiency. Therefore, as long as access to the standards is open, standardization itself is thought to have a pro-competitive effect⁷.

On the other hand, the standard technologies become infrastructures whose use is inevitable, and as the value of the SEP also becomes higher than the value of a normal patent through standardization, there is the risk of the raising of prices and exclusion of competitors through exercise of the SEP. Also, since a related special investment is usually made prior to the licensing agreement in anticipation of standardization in many cases, it is said that licensees are likely forced to accept disadvantageous terms and conditions entering into a SEP licensing agreement (hold-up problem⁸)⁹.

Due to the above concerns, the FRAND conditions, in other words, fair, reasonable and non-discriminatory conditions on which the SEP licensing is based (open access to the standards through the FRAND conditions) has great significance in order to guarantee fair and free competition with regard to standardized products¹⁰.

6 Prominent ones include the International Telecommunication Union (ITU), the International Organization for Standardization (ISO), and the International Electrotechnical Commission (IEC).

7 Noboru Kawahama, “Competition Law Approaches to the Problem of Standards Essential Patents”, p. 8 (RIETI Discussion Paper Series 15-J-043) (2015), Masako Wakui, “Legal System Surrounding the Technology Standards – Inter-company Cooperation and Competition, Crossing of Antitrust Law and Patent Law”, pp. 2-9, (Shojihoumu 2010)

8 In the United States, in order to speak up about the hold-up problem, several companies submitted a document addressed to Makan Delrahim, Assistant Attorney General for the Antitrust Division of the DOJ (January 24, 2018).

<http://www.ccianet.org/wp-content/uploads/2018/01/Industry-Letter-to-DOJ-AAG.pdf>

On the other hand, in a manner that refutes this, Former Secretary David Kappos of the United States Patent Office (USPTO) and Mr. Paul Michel, CAFC Chief Justice expressed a cautious opinion to Makan Delrahim, Assistant Attorney General for the Antitrust Division that an examination based on the evidence should be conducted (evidence-based approach (February 13, 2018)).

<https://cpip.gmu.edu/wp-content/uploads/sites/31/2018/02/Letter-to-DOJ-Supporting-Evidence-Based-Approach-to-Antitrust-Enforcement-of-IP.pdf>

9 Nobuo Nishimura et al., “Responses to the Hold-up Problem in the Standardization Activities and Competition Law” (Competition Policy Research Center, Japan Fair Trade Commission (CR03-12)) pp. 8-9 (2012)

10 *Supra* note 7, Kawahama (p. 9), The license under FRAND conditions also has the effect of preventing the risk of market control formation that may be caused by the standardization activities.

However, it should be noted here that when determining the suitability of specific license negotiations and contracts related to the SEP from the perspective of competition law, there may be a conflict between the need to make it easier for potential competitors to enter the market (for example, they may be able to enter the market through cheaper costs (royalties)) which leads to vigorous competition based on the standards, and the need to ensure a system that grants a legitimate incentive for invention allowing the SEP rights to be exercised legitimately which brings about innovation¹¹.

Since innovation creates better standards which can lead to the further use of the standards technology and increasing social welfare, it is considered to have a kind of pro-competitive effect. Therefore, when thinking about the suitability of specific licensing negotiations or an agreement relating to the SEP from the perspective of competition law, the following approach should be desirable; first, considering whether or not there is an anti-competitive effect caused by an event that may become a specific problem, and then balancing the pro-competitive effect with the abovementioned anti-competitive effect if the event contributes to the benefit of innovation promoted by a legitimate incentive for invention. Through these steps, a judgment which satisfy the intended objective of competition law to the greatest possible extent should be made on the basis of individual and specific circumstances.

2. Court cases related to SEP

(1) Developments in Japan

A. Restrictions on the right to seek an injunction

With regard to the exercise of an injunction claim based on a SEP for which a FRAND declaration has been made, the general interpretation is that it is subject to certain restrictions legally based on abuse of rights (Article 1, paragraph (3) of the Civil Code) in Japan.

Specifically, the judgment and decision of the Intellectual Property High Court on May 16, 2014 (Apple v. Samsung grand panel case of the Intellectual Property High Court)¹² ruled that the fact of a SEP holder exercising an injunction claim based on the

11 Masako Wakui “Technological Standards and Patents – Examination of the Guidelines on Handling Intellectual Property by the European Public Standardization Bodies (IPR policy)”, (Patent Research No. 39) p. 32 (2005)

12 Precedent Times No. 1402, p. 166. As a commentary from the point of view of the Antimonopoly

patent against a “person who had the intention of receiving a license based on the FRAND conditions” (hereinafter referred to as “willing licensee”) would be an abuse of rights and could not be permitted, since allowing unlimited exercise of an injunction claim based on a SEP with a FRAND declaration would not only undermine the trust of those who intend to comply with the standards, but would overprotect the patented invention leading to problems such as causing hesitation in widespread use in society of the technology brought by the invention, ran the risk of hindering the objective of the Patent Act, the “Industrial Development” (Article 1), and lacked rationality.

In this case, the Intellectual Property High Court pointed out that those who intended to manufacture or sell products that conformed to the standards trusted that they could receive a license based on the FRAND conditions, but on the other hand, as long as SEP holders who had made a FRAND declaration could obtain the value based on the FRAND conditions, the need to protect the maintenance of monopoly through the exercise of an injunction claim is not strong and therefore balancing the trust or interests worth legally protecting of a potential licensee and a SEP holder led to the conclusion that the exercise of the injunction claim against the willing licensee as mentioned above was an abuse of the right, and could not be permitted.

In addition, with regard to the SEP holder’s claim for compensation of damages against the implementer, the same court ruled to the effect that (i) a claim for compensation of damages in excess of the equivalent amount of royalties based on the FRAND conditions could not be permitted unless special circumstances exist, (ii) on the other hand, the right to claim damages within the range equivalent to the royalties under the FRAND conditions is not restricted unless there are special circumstances otherwise.

B. Actions of the competition authorities

The Japan Fair Trade Commission (JFTC) states in the “Guidelines for the Use of Intellectual Property under the Antimonopoly Act” (hereinafter referred to as “Intellectual Property Guidelines”) that the act of a person who has the right to certain technology of refusing to grant a license for use of the technology to other business operators (including cases where requesting excessive royalties can be regarded as refusal of the license) or seeking an injunction against a business operator who uses the technology without being granted a license is an act that is seen as the exercise of such right and is usually not a

Law, see Takashi Ito, “Applicability of the Antimonopoly Act with Respect to the Exercise of Standard Essential Patents - Apple v. Samsung Intellectual Property High Court grand panel case”, Jurist No. 1475, pp.100 - 103 pages (Yuhikaku 2015).

problem in itself but if these acts deviate from the object of the intellectual property system, or if they are deemed contrary to the purpose of the system¹³, they are deemed not to be an exercise of rights and may come under private monopolization or unfair trade practices¹⁴.

Furthermore, as a method of analyzing the anti-competitive effect in the Intellectual Property Guidelines, it is said that whether or not restrictions pertaining to the use of technology reduce competition in the market is determined by fully considering the nature of the restrictions, how they are imposed, the use of the technology in the business activity and its influence on it, whether or not the parties pertaining to the restrictions are competitors in the market, their market positions (such as market share and rank), the overall competitive conditions that prevail in the markets (such as the number of companies competing with the parties concerned, the degree of market concentration, the characteristics and the degree of differentiation of the products involved, distribution channels and difficulty in entering the market), whether or not there are any reasonable grounds for imposing the restrictions, as well as the effects on incentives of research, development and licensing¹⁵.

In relation to the SEP, the JFTC amended the Intellectual Property Guidelines on January 21, 2016 through which it became clear that if a SEP holder who has made a FRAND declaration refuses to grant a license or brings an action for injunction against a party who is willing to take a license based on the FRAND conditions (willing licensee), thereby excluding trading opportunities of parties engaging in research and development, production or sales of products that adopt the standards, or reducing competitive capabilities thereof, this may come under private monopolization or unfair trade practices (General Designations, paragraph (2) and paragraph (14))¹⁶.

After the revision of the Intellectual Property Guidelines on January 21, 2016, the JFTC recognized one violation of the Antimonopoly Act in relation to restrictions of the right to seek an injunction based on a SEP¹⁷. After this one case, there were no other cases

13 In Europe, in the Magill Case Judgment (1995), refusing a license is not usually a problem, but in exceptional circumstances, it is judged to come under abuse of a market dominating position (Article 82 of the EC Treaty).

14 Intellectual Property Guidelines 3-1(1) main text, 4-1(1) main text

15 Intellectual Property Guidelines 2-3

16 Intellectual Property Guidelines 3-1(1)E, 4-2(4)

17 “(November 18, 2016) Closing the investigation on the suspected violation by One Blue LLC of the Antimonopoly Act” (Japan Fair Trade Commission website). For a commentary, see Takashi Ito, “Interference in Transactions of Licensees of the FRAND Conditions, Economic Law Precedent, Trial

recognizing a violation of the Antimonopoly Act by the JFTC in relation to the restrictions above.

To date, there have been no case recognized as a violation of the Antimonopoly Act for refusal to grant a license pertaining to a SEP.

(2) Developments in the U.S. and Europe

In both the U.S. and Europe, the exercise of the right to seek an injunction in relation to a SEP with a FRAND declaration is partially subject to restrictions as well as in Japan. However, the legal basis and actions of the competition authorities have different aspects from those of Japan as shown below.

A. The United States

(A) Restrictions on the right to seek an injunction

In the United States, from the point of view of equity law, not simply in the case of SEPs but situations where injunction claims are submitted based on a patent right are generally limited, and injunctions are only permitted in cases where the following four requirements are met: (i) suffering irreparable harm, (ii) other legal remedies including monetary compensation are insufficient, (iii) an equitable remedy is justified having weighed up harm to the plaintiff and to the defendant, and (iv) public interest is not compromised through the injunction¹⁸.

Even in relation to the SEP, in *Microsoft v. Motorola* (2012)¹⁹, a judgment was made on the basis of the same four requirements as an injunction based on a non SEP. The judge decided the first requirement, (i) the requirement of suffering irreparable damage, was not met because of the following reasons; Microsoft, the third beneficiary, was entitled to a license because Motorola had made a FRAND declaration with regard to the disputed SEP, and Microsoft had expressed the intention to accept the license based on the FRAND conditions, and moreover, since litigation was pending to determine the specific details of the license, in the near future the licensing agreement would be realized, and through this agreement Motorola would be able to obtain a remedy with regard to use of the SEP

Decisions 100, 2nd Edition, pp.190 - 191 (Yuhikaku 2017).

18 *eBay, Inc v. MercExchange, LLC*, 547 US 388, No. 05-130 (2006)

19 *Microsoft Corporation v. Motorola Inc, et al*, No. 2: 2010cv01823 (WD Wash. 2012)

from Microsoft. Furthermore, for the same reason with respect to the requirement of (ii) other legal remedies were insufficient other than monetary compensation, had not been met. In conclusion, the court denied Motorola's exercise of the right to seek an injunction based on the SEP.

Subsequently, in the Apple v. Motorola case of first trial after Microsoft v. Motorola, a judgment was rendered that the exercise of the right to seek an injunction based on the SEP should naturally be restricted, but in the appeal of the same case, there was a return to the conventional thinking of a judgment to be made based on the four requirements above²⁰.

(B) Actions of the competition authorities

The Federal Trade Commission (FTC), adopts the stance that an injunction claim against a willing licensee is in violation of the competition law (specifically a violation of FTC Act Article 5)²¹, similar to the JFTC.

As a recent concrete example, the FTC asserted that the fact Qualcomm engaged in various acts including not entering into a licensing agreement pertaining to the SEP with other baseband chip competitors²² was a violation of Article 5, and instigated litigation against Qualcomm (FTC v. Qualcomm). Then, on May 21, 2019, a California Federal District Court rendered a ruling in favor of the FTC²³. Since the case is vital in thinking about "Access for all / License to all", we discuss it in detail in the below mentioned 5 4 (1).

The Department of Justice (DOJ) recently showed a trend that could be called a swing-back towards the above FTC action. Makan Delrahim, the Assistant Attorney General for the Antitrust Division of the DOJ pointed out that a relationship-specific investment takes place on the side of the SEP holder in advance of the licensing negotiations relating to the SEP, and moreover in practice, since there is no threat²⁴ of an injunction claim being made based on the SEP against its implementer, the SEP holder

20 Apple Inc. v. Motorola, Inc. 757 F.3d 1286 (Fed. Cir. 2014)

21 In the Matter of Motorola Mobility LLC, a limited liability company, and Google Inc., a corporation (FTC Matter / File Number: 1210120) (July 24, 2013)

22 It is also called a modem chip, but in this paper, it is standardized as a baseband chip.

23 Federal Trade Commission v. Qualcomm Incorporated (Case No.17-CV-00220-LHK)

24 As in the above Microsoft v. Motorola (2012), in the United States, there are generally only a few cases where an injunction claim based on a patent right is granted.

may be forced to accept disadvantageous conditions (so-called holdouts²⁵)²⁶, as a result.

In addition, the Attorney General for the Antitrust Division indicated the stance that a violation of the FRAND conditions is solely an issue of contract law and not a problem of antitrust law and, from the perspective of innovation, the authority should not preclude the legitimate exercise of rights by the patent holder through the enforcement of competition law. Besides, he also strongly questioned the joint formulation of SSO rules to reinforce the bargaining leverage on either the licensor side or licensee side, and indicated a negative view towards revision of the IRP policy by the United States Institute of Electrical and Electronics Engineers (hereinafter referred to as “IEEE”)²⁷.

The IPR policy revision by the IEEE took place in February 2015, which stipulated that the smallest saleable patent-practicing unit (hereinafter referred to as “SSPPU”) should be the base in principle with regard to calculating reasonable SEP royalties²⁸.

B. Europe

(A) Restrictions on the right to seek an injunction

As outlined in 3-2(2)A above, the right to seek an injunction based on the SEP is subject to certain restrictions from the viewpoint of equity law in the United States,

25 In Japan, there is a tendency for SEP implementer to prolong the negotiations by referring to the Apple v. Samsung Intellectual Property High Court grand panel case, and there is the opinion that a situation arises where “infringement is profitable” (Institute of Intellectual Property, Foundation for Intellectual Property, “Research Report on Solving the Actual Situation of Disputes over Standard Essential Patents”, pp. 110-111 (March 2019)).

26 Assistant Attorney General Makan Delrahim Delivers Remarks at the USC Gould School of Law's Center for Transnational Law and Business Conference (November 10, 2017)

27 *Supra* note 26 Delrahim’s speech

On the other hand, the DOJ published a business review letter describing the view that the IEEE IPR policy revision is not immediately problematic, after conducting a preliminary review of it.

(A business review letter to counsel for IEEE and IEEE-SA from Renata B. Hesse, Acting Assistant Attorney General for the Antitrust Division (February 2, 2015)).

28 IEEE Approved Clause 6 of the SASB Bylaws (2015)

<https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/approved-changes.pdf>

whereas it is subject to certain restrictions from the perspective of competition law in Europe.

In *Huawei v. ZTE*²⁹, the filing of an injunction lawsuit by a SEP holder who had made a FRAND declaration was not deemed to be abuse of domination only in cases where certain conditions were met.

Listed as those conditions were: (i) the SEP holder specifying the SEP and giving a warning identifying the aspects of patent infringement vis-à-vis the patent implementer, (ii) the patent implementer expressing an intention to enter into a licensing agreement based on the FRAND conditions, (iii) the SEP holder applying for a license using a detailed document based on the FRAND conditions, and in particular specifying the royalty and the calculation method, and presenting it to the patent implementer, and (iv) the patent implementer negligently failing to respond in good faith in accordance with widely accepted business practices in the field.

In this way, the judgment sets out the measures that should have each been taken by the SEP holder and the patent implementer for each stage of the negotiations and indicates a framework for licensing negotiations between the parties in good faith.

(B) Actions of the competition authorities

Some recent representative examples of enforcement by the European Commission include a decision on Samsung and a decision on Motorola.

(i) Decision on Samsung³⁰

Samsung filed an injunction lawsuit against Apple, who had expressed the intent to obtain a license, despite having made a FRAND declaration.

In response, the European Commission indicated a provisional view that Samsung's act in this case could constitute abuse of dominance stipulated in Article 102 of the Treaty on the Functioning of European Union (TFEU) as a result of the investigation. Therefore, Samsung withdrew the injunction claim and proposed a commitment to deal with the concern expressed by the European Commission. The commitment was approved by the European Commission.

The specific content of the commitment was that Samsung would not institute an

²⁹ *Huawei Technologies Co. Ltd v. ZTE Corp. and ZTE Deutschland GmbH*, C-170 / 13 ECLI: EU: C: 2015: 477 (2015)

³⁰ European Commission, "Antitrust: Commission accepts legally binding commitments by Samsung Electronics on standard essential patent injunctions" (April 29, 2014)

infringement claim against any patent implementers who agreed to the framework of SEP licensing negotiations proposed by Samsung with regard to the SEP pertaining to smartphones and tablets in the European Economic Area for five years.

(ii) Decision on Motorola³¹

Despite making a FRAND declaration, Motorola filed a patent infringement lawsuit and an injunction claim against Apple who had expressed the intention to take a license. After Motorola won the injunction claim, the judgment was executed. Moreover, after the execution of the judgment, Motorola entered into a settlement agreement for abandonment of Apple's claim of invalidation of the patent and non-infringement.

After having received complaint by Apple, European Commission conducted an investigation with regard to Motorola's actions. As a result of the European Commission's investigation, Motorola's actions were considered to be an abuse of dominance as defined in Article 102 of the TFEU, and the European Commission issued an order excluding the anti-competition effects resulting from these actions.

In addition, the European Commission indicated the following conditions for granting an injunction when a SEP holder has made a FRAND declaration: (i) the patent implementer is in financial straits and cannot pay the debts; (ii) the patent implementer's assets are located in a jurisdiction that does not have sufficient means to compensate for the damages, or (iii) the patent implementer is not willing to obtain a license under the FRAND conditions.

Other than the above, the European Commission indicated the most recent view with regard to the SEP in a communication that is in a non-legally binding form³² in 2017. In addition European Commission launched a review meeting of SEP experts³³ in 2018, and is continuing with the review.

Furthermore, in around March 2019, the automobile manufacturer Daimler complained to the European Commission about the issue of competition law against Nokia, the SEP holder. Although the details are unclear, Daimler stated, "We want clarification on how essential patents for telecommunications standards are to be licensed in the automotive industry" and "Fair and non-discriminatory access to these standards

31 European Commission, "Antitrust: Commission finds that Motorola Mobility infringed TFEU by misusing standard essential patents" (April 29, 2014)

32 Communication from The Commission to The European Parliament, The Council and The European Economic and Social Committee (Nov. 29, 2017)

33 European Commission, "Call for experts on the licensing and valuation of standard essential patents" (May 7, 2018)

for all users of the essential patents for telecommunications standards is a key prerequisite for the development of new products and services for connected driving”³⁴. Incidentally, Nokia has filed a lawsuit in Germany in relation to the SEPS for 3G and 4G (It does not appear to be an injunction claim lawsuit)³⁵.

Chapter 4 Discussions about “Access for all / License to all”

There are various discussions in Japan and overseas regarding “Access for all / License to all”. As well as the following advance literature surveys, the authors conducted interviews with experts from Japan and overseas in order to touch upon the most recent discussions and ideas.

Based on these findings, as sort outed by the authors at the present stage, the following perspectives, issues and related circumstances exist with regard to “Access for all / License to all”.

1. Current discussions

(1) Overview of the discussions

In general, with regard to the products implementing the patented invention, the patent holder is in the position of deciding which entity in the supply chain to enter into an agreement with³⁶. This is because, it is evaluated in the supply chain in which the products of the patented invention are being distributed that each business operator who buys and sells the products is engaging in an act of infringement (Article 101 of the Patent Act), and it is usually left to the patent holder’s free choice as to which business operator to exercise the rights against.

Since the SEP is also a patent right, it seems likely that the SEP holder should inherently be free to choose which entity to enter into a licensing agreement with in the supply chain of products implementing the SEP.

As a result, the discussion on “Access for all / License to all” is ultimately understood

34 Reuters, “Daimler asks EU antitrust regulators to probe Nokia patents” (March 30, 2019)

<https://www.reuters.com/article/us-eu-daimler-nokia-patents/daimler-asks-eu-antitrust-regulators-to-probe-nokia-patents-idUSKCN1RA2KF>

35 Juve Patent “ Daimler faces next connected cars dispute ” (April 11, 2019)

<https://www.juve-patent.com/news-and-stories/cases/daimler-faces-next-connected-cars-dispute/>

36 *Supra* note 1, Japan Patent Office Guidelines II.B.2 (p. 21)

with regard to the SEP to be an issue of whether the freedom to choose the other party of the licensing agreement as mentioned above is constrained. As the legal basis for the constraint, the FRAND declaration pertaining to the SEP, IPR policies, and competition law are listed as examples.

Then, there are various viewpoints with regard to which implementer should be the subject of the licensing agreement in the supply chain of products implementing the SEP based on the practical rationale and efficiency concerning the licensing agreement etc..

Specifically, the following opinions have been expressed³⁷ and at present, the issue remains controversial.

(i) Arguments from the standpoint of the essential part of the patented invention

Some argue that the counterparty to a licensing agreement should be decided based on whether the essential part of the patented invention is used only in the components provided by the supplier or it contributes to the end product.

(ii) Arguments from the standpoint of the number of players

Some argue that holding negotiations with the end-product manufacturer can minimize the number of necessary negotiations and avoid issues such as discrepancies in the licensing terms between suppliers, due to the small number of players.

Conversely, there are arguments that including suppliers in the negotiations is more efficient in such cases as when a small number of suppliers are supplying SEP-practicing components to a large number of end-product manufacturers.

(iii) Organization from the perspective of exhaustion and double earnings, etc.

Some argue that, if a rights holder concludes licensing agreements with multiple suppliers within a single supply chain, it may become unclear which right has been exhausted, and could more readily lead to the issue of double earnings or underpayment of royalties, but such issues may be avoided by conducting licensing negotiations with the end-product manufacturer.

Another view, however, is that end-product manufacturers face difficulties in ascertaining the status of licensing agreements concluded upstream, so the involvement in negotiations of those parties manufacturing SEP-practicing components is valuable in terms of avoiding the double-earnings issue.

37 See also *supra* note 1, Japan Patent Office Guidelines II.B.2 (pp. 22-23), etc., *supra* note 25 Intellectual Property Research Institute report (pp. 113-116).

(iv) Arguments from the standpoint of the technical knowledge

Some argue that when an end-product manufacturer without detailed knowledge of the SEP technologies involved is the main party to the negotiation, the manufacturer will need to coordinate with all its suppliers throughout the negotiation process, which may lengthen the process and also push up the cost. Accordingly, they argue that it may be more efficient for the suppliers, who have the necessary technical knowledge, to be parties to licensing negotiations.

When considering the issues from the perspective of competition law, it is thought necessary to bear in mind whether an anti-competitive effect is likely to occur (see the below mentioned 5-5 Qualcomm's "no license-no chips" policy) through freely choosing the counterparty to the licensing agreement while taking into account such a practical rationality and efficiency relating to licensing agreement.

(2) Discussions in Europe

With regard to "Access for all / License to all", as discussed in Europe, one useful reference is the view of Karl Rosenbrock of the European Telecommunication Standards Institute (hereinafter referred to as "ETSI")³⁸ and Bertram Huber's view in response³⁹.

Mr. Rosenbrock stated (from the position of supporting "License to all") that (i) since non-discrimination is required as a FRAND terms, SEP holders must not treat potential licensees in a discriminatory manner depending on their transaction phase (upstream or downstream the supply chain); (ii) given that the European Commission's guidelines on horizontal agreements⁴⁰ confirm that an IPR policy would need to require SEP holders to offer to license their SEPs to all third parties on FRAND terms, there is a risk that restricting access to SEPs would be regarded as having an anticompetitive effect; and (iii) because the ETSI's IPR policy does not exclude any specific categories of licensees from the right to seek a license under FRAND terms, once a FRAND undertaking is given under the ETSI's IPR policy, target licensees are not limited to end-product manufacturers producing handsets, but also include component manufacturers producing chipsets⁴¹.

38 Written opinion at the request of Fair Standards Alliance

39 Written opinion at the request of IP Europe (licensor organization)

⁴⁰ Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements.

41 Karl Heinz Rosenbrock "Why the ETSI IPR Policy Requires Licensing to All" (August 2017)

On the other hand, Dr. Huber (from the position of supporting “Access for all”) stated the opinion that (i) because of the relation with the doctrine of patent right exhaustion, it is legally not allowed for a SEP holder to license the same SEP to all entities that exist in different phases of commercial distribution, and therefore license to all is impracticable; (ii) the guidelines on horizontal agreements merely indicate that FRAND terms guarantee effective access to SEPs, and instead of establishing specific rules for guaranteeing access to SEPs, the guidelines leave the method of guarantee to be decided case by case and industry by industry; and (iii) when granting a blanket license for the SEPs incorporated into a product to be sold by an end-product manufacturer, the end-product manufacturer is undoubtedly in the optimal position to receive the license, and an act of granting such license to component manufacturers would mean ignoring the fact that the same SEP could give different values to end products in different fields⁴².

2. Licensing and exhaustion

(1) Exhaustion doctrine

In order to accurately understand the discussion of “Access for all / License to all”, the existing theory on the exhaustion of patent rights has been compiled as a basic premise.

Although there are no clear provisions on the exhaustion of patent rights, it is a doctrine that has been established through case law. It is understood that if the patent holder or the licensor assigns a patented product to the third party in Japan, the patent right is exhausted as having achieved its purpose, and the patent right no longer extends to the use, assignment, etc. of the patented product, and so the patent holder cannot exercise the patent rights with regard to the product (Supreme Court judgment of July 1, 1997 (Civil Case Collection Vol. 51 No. 6, p. 2299) (BBS case), Supreme Court judgment of November 8, 2007) (Civil Case Collection Vol. 61 No. 8, p. 2989) (ink tank case).

This limitation of the patent right is not theoretically a natural consequence but a kind of policy decision. In other words, if the patent system aims to increase incentives to create inventions by permitting exclusive implementation, the stronger the patent right,

<http://www.iplayership.org/articles/why-etsi-ipr-policy-requires-licensing-all>

42 Dr. Bertram Huber, Rechtsanwalt “Why the ETSI IPR Policy Does Not and Has Never Required Compulsory “License to all”: A Rebuttal to Karl Heinz Rosenbrock” (September 2017)

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3038447

As Rosenbrock’s objection to this, Karl Heinz Rosenbrock, “Licensing at All Levels is the Rule under the ETSI IPR Policy: A Response to Dr. Bertram Huber” (November 2017).

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3064894

the better, but from a balance with public interest, the coverage of the patent right is subject to certain restrictions⁴³. If exhaustion does not exist, the patent holder is given the authority to control the distribution of the product related to the patented invention, which may hinder free distribution in the market. Therefore, in order to maintain a balance between such public interest and securing incentives to create inventions, the doctrine of the exhaustion of patent rights is necessary.

In addition, with regard to cases of so-called international exhaustion (occurring in a case of parallel imports), the previously mentioned Supreme Court precedent of July 1, 1997 (BBS case), did not use the exhaustion theory but recognized the license implied by the patent holder to balance the efficacy of the patent rights with protection of public interests. However, in light of the Supreme Court precedent of November 8, 2007 mentioned above (ink tank case) and trends of judicial precedents abroad⁴⁴, it is unclear whether the theoretical structure of implied licensing mentioned in BBS case will continue to be maintained.

(2) Indirectly infringing products and exhaustion

For example, with regard to products made up of many parts and patented inventions, such as smartphones, the relationship between indirectly infringing goods and exhaustion can be a problem. In the previously mentioned Intellectual Property High Court judgment of May 16, 2014, (Apple v. Samsung case, grand panel case of the Intellectual Property High Court), the relationship between exhaustion and indirectly infringing goods is discussed in detail in its *obiter dictum*⁴⁵.

According to the same court case, if the patent holder, exclusive licensee or normal licensee assigns an indirectly infringing product of the patented invention in Japan (Article 101, item (i) of the Patent Act), with regard to the indirectly infringing product the patent right is exhausted as having achieved its purpose, and the validity of the patent right does not extend to the use or assignment of the indirectly infringing product, and the patent holder is not permitted to exercise the patent right for the indirectly infringing product as long as the indirectly infringing product maintains its form as it is. However if

43 Nobuhiro Nakayama, “Patent Law [3rd edition]”, p. 412 (Kobundou 2016)

44 In *Impression Products, Inc. v. Lexmark International, Inc.*, No. 15-1189 (May 30 , 2017), the US Supreme Court acknowledged that patent rights would be exhausted even in the case of parallel imports.

45 In the same court judgment, it was the baseband chip that was the indirectly infringing product (No. 1 product).

later a third party produces a patented product using the indirectly infringing product, since a product that belongs to the technical scope of the patented invention is newly created using a thing that does not belong to the technical scope of the patented invention, the exercise of the patent right with regard to the act of such production or act of use or assignment of the patented product is not restricted.

Even in such case, in cases where the patent holder is deemed to have implicitly consented to the patent product being produced using the indirectly infringing product, the validity of the patent does not extend to production of a patented product using such indirectly infringing product or the use or assignment of the produced patented product.

The way of thinking with regard to the indirectly infringing product and exhaustion of the abovementioned Intellectual Property High Court case of May 16, 2014 (Apple v. Samsung grand panel case of the Intellectual Property High Court) is indicated to be reasonable without distinction of domestic exhaustion and international exhaustion, and in addition, it is understood to also extend to not only the invention of a thing but also to the invention of a process⁴⁶.

(3) Relationship between exhaustion and the licensing agreement

Since there is the abovementioned exhaustion doctrine, the patent holder cannot enter into a licensing agreement with all of the manufacturers in the supply chain of a certain patented invention. In that sense, it is considered legally or practically impossible to literally execute “License to all”.

Additionally, even if the patent holder grants a license to the extent of a part to an upstream parts manufacturer in the supply chain of the patented invention, from the above exhaustion doctrine, it is not necessarily the case that no licensing agreement need be entered into with subsequent downstream product manufacturers. For example, in cases where a license was granted to the indirectly infringing product, when a patented product is newly produced with regard to a downstream product, a separate licensing agreement is required unless implied licensing is recognized for the downstream products.

In addition, the number of SEPs is countless (said to be more than 10,000). In practice, a patent pool is used, and multiple SEPs are licensed in a package. In such case, for example, if some of the SEPs of some of the products are exhausted (or there is implied licensing), there is the concern that the management costs of both the licensor side and

46 Yoshiyuki Tamura, “Exercise of Right Based on a Patent Right with a FRAND Declaration and Success or Failure of Abuse of Rights (1) – Apple Japan v. Samsung Electronics Case Intellectual Property High Court grand panel judgment”, NBL1084 No. p. 33 (2014)

the licensee side will increase.

Therefore, when comprehensively granting a license for the SEPs which are mounted in an end product, Huber's opinion in 4-1(2) above that the end product manufacturer is in the best position to receive the license is understood to be based on the practices and actual situation concerning such a licensing agreement.

In addition, with regard to communication equipment such as smartphones, in general (as a result), the end product manufacturer became the subject of the licensing agreement so far⁴⁷.

3. Royalty calculations

(1) General

One issue deeply related to "Access for all / License to all" is considering the basis for calculating royalties⁴⁸.

"Access for all", in general, tends to be an assertion by the essential patent holder wanting a license to the end product manufacturer, and with such a license, the SEP holder is usually envisaged to calculate the royalties by focusing on the end product.

In contrast, "License to all", in general, tends to be an assertion by the SEP implementer wanting a license to an upstream parts manufacturer, and with such a license, the SEP implementer is usually envisaged to calculate the royalties focusing on the parts.

In this way, there seems to be an affinity in the thinking of "Access for all" which calculates the royalties focusing on the final product (hereinafter referred to as "end product base") and an affinity in the thinking of "License to all" which calculates the royalties focusing on the parts (hereinafter referred to as "parts base")⁴⁹.

On the other hand, who will be the other party of the licensing agreement and which products or parts to pay attention to when calculating the royalties are essentially separate issues, and it is not thought that the two are inevitably and logically linked. In fact, according to the authors' research, there are those who support "License to all" but when it comes to calculating the royalties, state that using the end product base is also possible (more specifically speaking, the below mentioned Use-Based Licensing). In addition, the

47 *Supra* note 25 Intellectual Property Research Institute report (p. x x i)

48 See Richard H. Stern, "Who Should Own the Benefits of Standardization and the Value of It?" 19 *Minn. J.L.Sci. & Tech.*197 (2018)

49 In fact, discussions seem to take place viewing these two issues as one (*supra* note 25, Intellectual Property Research Institute report (pp. 113 - 116)).

district court judgment of *FTC v. Qualcomm* indicates that the other party to the licensing agreement and the base for calculating royalties (EMV or SSPPU) are considered separately, and the two are not thought to be inevitably and logically linked together.

From the above, although the thinking on “Access for all / License to all” and the basis for calculating royalties do not immediately link together logically, it seems that the two are closely related to each other. Therefore, when thinking about “Access for all / License to all”, an overview of the debate with regard to the base for calculating royalties will be given.

(2) Disputes on the basis for calculating royalties

A. Background of the debate

Since SEPs will be used in various products due to the IoT and 5G, end products (cars, etc.) that are considerably more expensive than conventional communication devices (smartphones, etc.) will appear. For this reason, according to the end product base, there is a concern that depending on the end product, high royalties may be imposed, and it is considered that, in practical terms, this will invite a huge debate.

In fact, according to the authors’ research, in the background to the debate over the end product base and parts base, it seems that there is an implicit recognition that using the end product base leads to higher royalties.

In this regard, using the end product base means calculating the royalties by multiplying the end product price (for example, the price of a car) by a certain royalty rate, and so there is the criticism that the royalties become too high⁵⁰, but even when thinking in terms of the end product base, it is not necessarily the case that the royalties will be high in proportion to the final product price, and so there seems to be some misunderstanding.

For example, Avanci, a patent pool in which many well-known SEP holders participate⁵¹ publishes the royalties per car in relation to 2G to 4G⁵² and do not calculate

50 Even in *supra* note 1, Japan Patent Office Guidelines III.A.2. (p. 32) a way of thinking is indicated that “in the EMV method, while rates are fixed, the basis for calculation increases and the final royalties increase”.

51 Avanci announced in 2017 that it had entered into a licensing agreement with the BMW Group relating to 2G to 4G. The BMW Group, as a car manufacturer, for the first time, entered into a licensing agreement with Avanci.

52 <http://avanci.com/pricing/>

the royalties by multiplying the price of a car by a certain rate. In this way, even if considered on an end product base, the royalties do not necessarily increase proportionally with the price of the final product.

Moreover, even with the end product base or the parts base, there is the view that since there is a correction depending on the contribution rate, in theory, the royalties do not differ⁵³.

However, even so, if the end product base is used, in comparison to the parts base, the possibility that, practically speaking, royalties will become high cannot be denied. That is, since usually the price of the parts is considerably less expensive compared to the price of the final product, using a parts base means a virtual upper limit (cap) will be formed. Therefore, with an end product base where, practically speaking, there is no upper limit, the royalties are likely to be higher.

It should be noted that on May 10, 2019, Continental filed a lawsuit against Avanci and its members at a United States district court claiming that Avanci's royalties per car were high when considered based on Continental's parts, and in addition, denying a direct license to the parts manufacturers was a violation of FRAND.

B. EMV rules and SSPPU

In the United States, in relation to the basis for calculation of damages for a patent right infringement, there is the thinking of the entire market value rule (hereinafter referred to as "EMV rule")⁵⁴ and the concept of the smallest saleable patent-practicing unit (SSPPU)⁵⁵.

The EMV rule is the thinking that the technology pertaining to the patented invention contributes to the functions of the end product as a whole, and in cases where it is possible to say that it is driving demand in the market of the end product, the value of the entire end product is used as the basis for calculating compensation of damages, and has

53 See also *supra* note 1, Japan Patent Office Guidelines III.A.2. (p. 32), Toshiaki Eto, "Relationship between the Magnitude of the Described Items in the Extent of the Patent Claim and Compensation of Damages – Whether by Increasing the Claim Targets the Calculated Damage Amount Will Increase" (Ryu Takabayashi edition, published in "Intellectual Property Rights Infringement and Damages") p. 154 (2011).

54 As an example of recent application of EMV rules, Commonwealth Scientific and Indus. Research organization v. Cisco Sys., Inc., No. 15-1066 (Fed. Cir. 2015)

55 As a recent example of limiting EMV rules, Laserdynamics, Inc. v. Quanta Computer, Inc. No. 11-1440 (Fed. Cir. 2012)

conventionally been used as case law in the United States. By contrast, the SSPPU is built on the thinking that where the technology pertaining to the patented invention is used only in the parts which are the smallest saleable patent-practicing units (SSPPU), the value of the part that is thought to contribute to such patented invention is the basis for the calculation of the damages⁵⁶.

In US courts, the EMV rule was conventionally used, but since as a result there have been judgments permitting considerably high damages, recently there have been court decisions that limit the application of the EMV rule⁵⁷.

Although the EMV rule and SSPPU were brought into the discussions on the basis for calculating royalties pertaining to SEPs, there seems to be a discussion over which should be used as the basis for calculation⁵⁸, but both have in common that the value of the technology related to the patented invention is the basis for the calculation, and the amount of damages should be considered according to the individual case, and there is the criticism that it is not that one way of thinking is continually correct⁵⁹.

Incidentally, as given in the abovementioned 3-2(2)A(B), the IEEE adopts the SSPPU principle in the IPR policy, but with regard to this, the Head of the Antitrust Division Makan Delrahim has expressed a critical view.

C. Use-based licensing

The thinking of use-based licensing is another way of considering the royalties.

Use-based licensing is the thinking of permitting of different royalties depending on the nature of the end product using the SEP.

In general, from the side of the patent holder (SEP holder), even when the technology is the same, if the end products in which the technology is used differ, the licensing fee rate and amount should differ depending on the usage of the technology supporting the concept of use-based licensing⁶⁰. On the other hand, from the side of the implementer,

⁵⁶ *Supra* note 1, Japan Patent Office Guidelines III.A.2. (p. 31)

⁵⁷ *Supra* note 55 of Laserdynamics, Inc. v. Quanta Computer, Inc. Regarding the movement of such court cases, see also Toshiko Takenaka, “Compensation for Intellectual Property Rights Infringement in the United States” (Ryu Takabayashi, “Intellectual Property Rights Infringement and Compensation”), p. 192 (2011).

⁵⁸ *Supra* note 1, Patent Office Guidelines III.A.2. (p. 31), Research Institute of Economy, Trade and Industry (RIETI), “Towards Dispute Resolution Surrounding Standard Essential Patents – Licensing 5G SEPs (Proceedings Overview) (2018)

⁵⁹ *Supra* note 1 Patent Office Guidelines III.A.2. (pp. 31 - 32)

⁶⁰ For example, Qualcomm differentiates automobiles and other IoT with 5G royalties, and seems to

there is the opinion that use-based licensing is discriminatory and is contrary to the FRAND conditions⁶¹.

Incidentally, the European Commission recognized this debate, but in the abovementioned Communication of 3-2(2)B(B), did not indicate a direct solution in relation to the suitability of use-based licensing⁶².

D. Summary

The method of calculating the royalties itself is not the main focus of this paper, and so a detailed examination will not be made, but since in reality the damages for the patent infringement (including royalties (see Article 102, paragraph (3) of the Patent Act)) are calculated using the price of the end product as a starting point, including the abovementioned EMV rule of 4-3(2)B, in court cases in Japan and abroad, in terms of the SEP license, denying the end product base uniformly regardless of the specific situation, lacks continuity with judicial thinking and is not thought to be valid.

The method of calculating the royalties is thought to vary depending on circumstances such as what the nature of the SEP technology is, and whether its nature contributes to an increase in the value of the end product⁶³.

Therefore, when calculating the royalties, it is not possible to deny that there are the two viewpoints of an end product base (EMV rule, use-based licensing) and a parts base (SSPPU), and it is not thought possible to categorically state that one thinking is always correct excluding specific circumstances.

In any case, further discussion is needed on this point.

Chapter 5 Examination of the Qualcomm case

In connection with the considerations in this paper, it is important to consider in detail the way Qualcomm who is the SEP holder exercised its rights in relation to the baseband chips. This would also appear to be useful in considering the validity of “Access for all /

rely on the concept of use-based licensing.

<https://www.qualcomm.com/invention/licensing>

61 *Supra* note 58, summary of the RIETI proceedings

62 Kaori Minami “Overview of the Thinking of the European Commission Relating to Licensing of Standard Essential Patents for an IoT Overview era”, No. NBL1114, p. 18 (2018)

63 *Supra* note 2, Kuchinomachi (p. 12) also points out that specific FRAND conditions are determined on a case-by-case basis by courts and others.

License to all” , which will be discussed later in the context of a legal theory structure.

The following is an overview of the cases in each country where the business strategy which focused on Qualcomm exercising its SEP was a problem in relation to competition law. As a procedure at that time, after confirming the background relating to the expansion of mobile phone communications (cellular communication) and organizing Qualcomm’s business approaches, an overview will be given of the theoretical structure of legal judgments in each of the applicable countries and regions (the United States, China, South Korea and the EU).

Incidentally, the Qualcomm case saw developments in Taiwan and also in Japan, but it was decided these would not be proactively considered because as confirmed below, in Taiwan, it was a unique case in that the perspective of an industrial policy differing from competition policy was introduced, and in Japan, it was a limited action that was the problem.

1. Background of the mobile phone industry

Mobile telephone communication has spread widely through the use of a standardized protocol. Major network operators have invested in building a network to match the standard protocol. In such a situation, starting from the time of commencement of the sale of the terminals, it has been developed technologically over four generations⁶⁴.

The first generation standard (first generation: 1G) was introduced in the 1980s and was a technological standard of a scope limited to analog transmission of voice calls. In the early 1990s, the standard expanded to digital voice transmission of voice calls, and the second-generation standard (second generation: 2G) was established. This was classified into the two types of GSM (Global System for Mobile Communications)⁶⁵ and 2 G-CDMA (Second-Generation Code Division Multiple Access). In the late 1990s to the early 2000s, the third generation standard (third generation: 3G) which speeded up the data-transmission speeds was established. The third-generation standard was classified as UMTS (Universal Mobile Telecommunications System) and 3G-CDMA (third-

⁶⁴ In addition, as already mentioned, currently there is a further shift to the next generation 5G.

⁶⁵ In Europe, mobile communication adopts their own individual systems such as the Nordic “NMT900”, the French “NMT450/900”, “RC2000”, the German “B”, “C-Netz”, and the British “ETACS”, and because of these systems, there was a growing demand for the development of a communication system that could be used across borders by formulating a unified standard in Europe. Therefore, the European Telecommunications Standards Institute (ETSI) (at that time the European Postal and Telecommunications Agency Council (CEPT)) was organized and GSM was formulated as a unified standard.

generation CDMA). From later 2009 to early 2010, a fourth-generation standard to achieve a high-speed information transfer rate faster than the third-generation standard (fourth-generation: 4G) was established. The major fourth-generation standard is the LTE (Long-Term Evolution) and has led to many of the major network operators adopting it.

The terminal incorporates a baseband processor, which makes it possible to connect to the operator network by encoding. In this case, if for example, the terminal only complies with the UMTS standard, it becomes impossible to connect to the 3G-CDMA, but if the terminal incorporates a multi-mode baseband chip, it becomes possible to connect to a network adopting different standards.

Furthermore, in relation to the 4G, even in networks adopting the LTE, it is common for the terminal to adopt a multi-mode processor to enable compatibility with LTE and 2G, 3G standards. This is because the LTE network basically targets data and not voice calls, etc., and in order to transmit voices, it is still necessary to conform to the 2G and 3G standards of previous generations.

2. SEP related to telecommunications business

The standards associated in the communication industry, like many other standards, are adopted depending on the SSO. The main related SSOs are the IEEE, ETSI , the Telecommunications Industry Association (hereinafter referred to as “TIA”) and the Alliance for Telecommunications Industry Solutions: ATIS (hereinafter referred to as “ATIS”).

With these SSO, in the patent policy, it is common to expect the parties to grant a license under FRAND conditions.

3. Qualcomm’s strategy

Qualcomm has a dominant market position in supplying baseband chips (baseband processors) for both CDMA and Premium LTE. Furthermore, Qualcomm not only supplies baseband chips to mobile terminal manufacturers but also owns SEP, and participates in the SSOs such as IEEE, ETSI , TIA and ATIS.

In this way, the situation was such that when Qualcomm supplied baseband chips, it was possible for it to expand a strategy using a SEP. With regard to the series of related acts, since there are differences on the focus in the responses of the competition authorities of each country outlined below, the actions that were respectively seen to be problematic for each were mainly checked.

4. Qualcomm cases in four countries

(1) Case in the US

As shown in 3-2 (2) A(B), with regard to *FTC v. Qualcomm*, a judgment was rendered on May 21, 2019 in favor of the FTC at the California federal district court.

In this case, Qualcomm was recognized to be a market-dominating supplier of the baseband chip market of CDMA and premium LTE, and it was recognized that (i) it did not sell baseband chips to the mobile terminal manufacturer (end product manufacturer) that was its customer unless it entered into a licensing agreement pertaining to the SEP owned by Qualcomm (no license-no chips), (ii) it refused to grant the SEP license to other baseband chip manufacturers (hereinafter referred to as “competing chipmaker”) and (iii) it hindered the maintenance and expansion of the business of competing chip manufacturers in the baseband chip market and maintained a market-dominating position by entering into exclusive transactions with Apple, a mobile terminal manufacturer.

The California federal district court deemed in the ruling that Qualcomm, in order to avoid exhaustion of the SEP and require mobile terminal manufacturers and others to receive a license at the time of competing chipmakers selling baseband chips, had used its dominating position in the baseband chip market to enter into a licensing agreement with the mobile terminal manufacturers and imposed unreasonably high royalties. Then, these unreasonably high royalties became an additional cost (surcharge) for competing chip makers, led to the costs of competing chip makers to rise and the margins to be reduced and reduced demand from the mobile terminal manufacturers and had the effect of eliminating competing chip manufacturers from the market.

The same ruling deemed the abovementioned acts of (i) to (iii) to be interrelated practices, and overall ultimately recognized an FTC law violation (as specific reasons, violation of Article 1 or 2 of the Sherman Act). Then, as measures to restore competition, ordered Qualcomm to review its conventional licensing agreement and enable competing chip manufacturers to obtain a license.

It should be noted that, in the same ruling, it was recognized that Qualcomm had the obligation of licensing the SEP to anyone under the FRAND declaration, and it was recognized even as an obligation under competition law that it had to grant a SEP license to competing chip manufacturers. Further, in the case, Qualcomm’s SEP was not driving demand for the end products, and according to precedent⁶⁶, it was recognized that the

⁶⁶ *Supra* note 55 of *Laserdynamics, Inc. v. Quanta Computer, Inc.*

royalties should be calculated according to the SSPPU⁶⁷.

(2) Case in China

China's National Development and Reform Commission (NDRC) imposed a surcharge of approximately 6,088,000,000 yuan (approximately 98,135,500,000 yen) as a violation of Article 17 of the People's Republic of China Antimonopoly Act.

The NDRC demarcated the relevant markets in this matter as the SEP license and baseband chip markets relating to the CDMA, WCDMA, LTE communications⁶⁸. The NDRC deemed that when certifying the SEP license markets since Qualcomm had carried out a package license with regard to the SEPs it owned, this was an assembly of separate SEPs that Qualcomm owned. In addition, with regard to geographic markets, Qualcomm demarcated them as countries and regions with the SEP.

The NDRC next investigated the position in the market, which was demarcated earlier. Article 19(1) of the People's Republic of China Antimonopoly Act stipulates that if the market share in the relevant market is more than 50%, a market dominant position is presumed, and since Qualcomm had a market share of 100% in the related licensing market, it was deemed to have a dominating position. Moreover, the NDRC listed the facts with regard to the act of abuse of a market dominating position that first, royalties had been imposed with regard to a SEP which was no longer valid; second, it had demanded a grant-back free of charge from the licensee; third, it had tied a patent unrelated to wireless communication to the SEP relating to the wireless communication; and four, had imposed unreasonable conditions on selling of the baseband chips⁶⁹.

Based on the abovementioned judgment, the NDRC judged that these series of acts corresponded to abuse of a market dominating position.

⁶⁷ However, in the same ruling, the conclusion was reached that not only should the calculation have been based on the SSPPU, but despite the fact that Qualcomm's share was declining and there was cross-licensing, the royalties had been kept at a constant level for 30 years and also based on the testimony of the mobile device manufacturers that the royalties were high compared to the average royalty rate of other companies, it was concluded that the royalties were "unreasonably high".

⁶⁸ H. Stephen Harris, Jr. "An Overview of the NDRC Decision in the Qualcomm Investigation" CPI Antitrust Chronicle July 2015 (2) (2015)

⁶⁹ See Thomas K. Cheng, Masako Wakui, "Finding of Violations of the Antimonopoly Act by the Chinese National Development and Reform Commission vis-à-vis Qualcomm and Orders on Sanctions: A Critical Review", Japan Fair Trade Commission No. 780, pp. 6-7 (2015).

(3) Case in Korea⁷⁰

The Korea Fair Trade Commission (KFTC) recognized that since Qualcomm had bypassed the granting of a license at the baseband chip stage with regard to the SEP license and had granted a license at the mobile phone device stage, the claim for royalties against the mobile phone device manufacturer was based on the amount of revenue for the entire mobile phone device⁷¹. This separated the SEP license itself from the sales figures of the baseband chips and made it necessary for the mobile phone device manufacturers buying the baseband chips from Qualcomm's competitors to enter into a licensing agreement with Qualcomm using the mobile phone device (end product) as a basis for calculation of the royalties.

In this regard, KFTC interpreted this to mean that the series of actions by Qualcomm such as denying a license to competing chip manufacturers and mutually connecting the baseband chip supply agreement and the patent license vis-à-vis the mobile phone device manufacturers showed the special nature of Qualcomm's strategy.

In particular⁷², an example was given that through Qualcomm refusing a SEP license to competing chip manufacturers, in cases where mobile phone device manufacturers purchased Qualcomm's baseband chips, they had to obtain a separate license from Qualcomm (no license-no chips).

In addition, Qualcomm demanded mobile phone device manufacturers intending to purchase baseband chips from it to first enter into a licensing agreement, and it indicated that if this agreement was not complied with, the supply would be suspended. In this regard, KFTC focused on the fact that the mobile phone device manufacturers had to enter into a patent licensing agreement with Qualcomm, and that therefore, due to this, entering into a licensing agreement and the baseband chip supply were bound together.

The KFTC interpreted Qualcomm's business dealings in this way and stated that the following were specifically illegal. First, it had refused or limited a SEP license to competing chip manufacturers; second, it had sought the conclusion of a licensing agreement and its compliance as a condition relating to the supply of Qualcomm's

70 Korea Fair Trade Commission "In Re Alleged Abuse of Market Dominance of Qualcomm Incorporated" Decision Nanba2017-0-25 (2017). It should be noted that in South Korea even after this case, there was a case where a penalty of 200 million US dollars was imposed on Qualcomm due to the fact that it ensured in essence that the baseband chips of competitors would not be used by offering discounts and rebates to mobile device manufacturers and others.

71 See.id.at 29-30

72 See.id.at 30-31

baseband chips from the mobile phone device manufacturers; third, it had sought royalty conditions specified by Qualcomm and a comprehensive license including cross-licensing free of charge in the licensing agreement with the mobile phone device manufacturers.

KFTC took this to mean that Qualcomm had become the SEP holder by obtaining the agreement of the relevant companies relating to the standardization not through competition in the SEP license market and had obtained and maintained a monopolizing position through a FRAND commitment⁷³.

In addition, Qualcomm had refused SEP licenses to its competitors, and had meanwhile granted a license to mobile phone device manufacturers, and while manufacturing baseband chips, it had entered the market as a vertically integrated company⁷⁴ in the sense of also owning the related SEPs. In other words, KFTC took Qualcomm to be a vertically integrated company in the SEP license market and the baseband chip market. On top of that, the existence of vertically integrated companies performing the above kind of commercial transactions betrayed the FRAND commitment and limited competition in both markets⁷⁵.

(4) Case in the EU⁷⁶

In the EU, this was a case of a dispute where Qualcomm had had Apple enter into an agreement⁷⁷ to pay a rebate as a condition of exclusive use of Qualcomm's baseband chips in Apple's iPhone and iPad.

The contents of the agreement which are the problem here is that if Apple sells devices using baseband chips supplied by Qualcomm's competitors, payment will be suspended. Moreover, in many cases when Apple changed their baseband chip supplier from Qualcomm to another company, it had to return the monies that it had obtained from Qualcomm in the past. This in reality made it difficult for Qualcomm's competitors to supply baseband chips to Apple.

In the fact-finding of the case, it was indicated that Apple had thought about changing their supplier of baseband chips from Qualcomm to Intel. It is presumed that the exclusivity condition imposed by Qualcomm made it impossible for Apple to do so until

73 See.id at 68

74 See. id

75 See. id

76 Summary of Commission Decision of 24 January 2018 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement (2018 / C 269/16)

77 This contract was formed in 2011, but a decision was made in 2013 to extend it until 2016.

the expiry of the contract.

In the EU decision, the series of actions by Qualcomm was positioned as hindering the benefits for the consumers and other companies and, in particular, the benefits of choice and innovation.

The EU decision focused on the following points when making this recognition. First, the degree of Qualcomm's market dominating position; second, the amount of the payment to be paid for the exclusive acceptance of the supply by Qualcomm to Apple; third, based on the evidence, including Apple's internal documents, due to the payment by Qualcomm, Apple's incentive to change the supplier of the baseband chips was reduced; four, Apple was an important customer for Qualcomm in the LTE baseband chip market; five, Qualcomm was unable to provide proof with regard to the creation of efficiency to justify their actions with regard to the exclusivity conditions.

In view of the above, the EU decision found that Qualcomm excluded competitors from the market, selected the products of the consumers and inhibited innovation and these actions were illegal, and imposed a fine of 997,439,000 euros (approximately 130,800,000,000 yen).

(5) Summary

As has been outlined above, the legal judgments of each country with regard to Qualcomm's series of acts are not necessarily uniform. However, the theoretical development can be summarized as follows.

In the case in the US, the FTC focused on the so-called no license-no chips policy with regard to Qualcomm's actions, and indicated that refusing to grant a license to competing chip manufacturers and the Apple de facto exclusive dealing contract led to excluding competition.

In addition, in the case in China, the detailed demarcation of the markets and the fact that Qualcomm bundled together the SEP with patent licenses with no SEP were regarded as an abuse of the market-dominating status.

Moreover, an elaborate theoretical structure was composed in the South Korean case. In the South Korean case, the actual situation was captured in detail in that the Qualcomm business model bypassed the royalties relating to the supply of baseband chips and did not demand payment, but demanded payment based on the unit of the mobile phone device (end product).

Further, the Fair Trade Commission, which is the competition authorities of Taiwan found that Qualcomm, abusing its monopolizing position in the baseband chip market,

had refused a license to competing chip manufacturers in relation to the SEP it owned, and the fact that it had stipulated and implemented a no license-no chips policy was determined to be a violation of Article 9, item (i) of the Fair Trade Act and a surcharge of 23.4 billion Taiwanese dollars (approximately 84 billion yen) was imposed on October 11, 2017, and was understood as Qualcomm adopting the same theoretical structure. However, the Fair Trade Commission in substance withdrew this payment order after one year and reached a settlement so that the surcharge amount was greatly reduced to 2.73 billion Taiwanese dollars (approximately 9.7 billion yen). In this case, as a condition of the settlement, Qualcomm was expected to invest in start-ups and expansion of the market in Taiwan with regard to 5G which was expected to see further progress over the next five years and collaboration with universities, etc., and measures are believed to have been taken considering the spread and development of 5G in Taiwan.

In addition, the Qualcomm case also saw developments in Japan. In March 13, 2019, the Japan Fair Trade Commission issued a decision to cancel an exclusion order against Qualcomm⁷⁸⁷⁹. In the exclusion order, when Qualcomm collectively licensed its patent rights, the fact that it licensed the patent rights held by mobile phone device manufacturers free of charge and forced the mobile phone device manufacturers to promise not to assert the patents rights that they held was deemed to come under trade with restraint conditions. This was a decision restricted to this point and cannot necessarily be said to have been a judgment on the entire series of actions.

On the other hand, in the EU case, the focus was on the fact that Qualcomm had, in substance, required Apple to use the company's baseband chips in its main products on the assumption of the payment of rebates.

Seen in this way, the main points of the Qualcomm cases can, in general, be organized into the following two points. That is, first, whether the fact that Qualcomm, a SEP holder in the mobile phone industry had refused or restricted licenses to competitors in baseband chip production and meanwhile engaged in acts of supplying baseband chips to mobile phone device manufacturers on the premise of a licensing agreement could be positioned as excluding competition. Second, whether the provision of rebates to Apple on condition of not using the baseband chips of Qualcomm's competitors was a violation of competition law due to it being an exclusionary transaction. In particular, with all of the competition authorities, based on the viewpoint that the no license-no chips policy caused problems in terms of competition law in relation to the first point, a review was conducted

78 No. 22 of 2009 (Measures) (September 28, 2009)

79 No. 1 of 2010 (Decision) (March 13, 2019)

on this point as given below.

5. No license-no chips policy

(1) Concerns in terms of competition law

As given in 5-4(1) above, Qualcomm's sales strategy of not selling the baseband chips unless the mobile terminal manufacturer entered into a licensing agreement was referred to as a "no license-no chips" policy.

The no-license-no chips policy is criticized as having two problems under competition law⁸⁰.

The first is the issue of not concluding a licensing agreement with competing chip manufacturers but concluding a licensing agreement with mobile phone device manufacturers and collecting high royalties based on the price of the mobile phone. ("fattening up before eating") (hereafter referred to as "collection of high royalties).

The second is the issue that even if mobile phone device manufacturers purchase chips from Qualcomm's competing chip manufacturers through a no license-no chips policy, since they also have to pay separate royalties to Qualcomm (add-on expenses (referred to as "surcharge" in *FTC v. Qualcomm*)), the manufacturers lose the incentive to use the chips of competing chip manufacturers.

(2) Review

In the no license-no chips policy, as described in 5-5(1) there are concerns in terms of competition law about (i) the collection of expensive royalties and (ii) add-ons.

(i) With regard to the collection of expensive royalties ("fattening up before eating" itself), it will be the basis for concern under competition law in respect of the fact that it constitutes abusive exercise of market dominance, and the loss of economic welfare. In addition, high royalties based on the end product may be combined with royalty add-ons to enhance the exclusionary effect against competing chip makers.

The Qualcomm cases of each country ignore the problem itself of the "fattening up before eating" through the end product base rather than the parts base but in *FTC v. Qualcomm*, the FTC asserted that the competition of an all-in-price relating to the baseband chips was relaxed and the sales price of the end product such as mobile phones

80 Yasumi Ochi, "Cross-Sectional Review of the Qualcomm Cases in Japan, the US, Europe and South Korea (Second Half), Japan Fair Trade Commission No. 817, pp. 42 - 43 (2018)

rose due to the collection of unreasonably high royalties⁸¹.

In the district court case of *FTC v. Qualcomm*, royalty add-ons were recognized to lead to the effect of excluding competing chip makers. In other words, since the mobile phone device manufacturers had to pay separate royalties (surcharge) at the time of using the chips of competing chip manufacturers through the licensing agreement with Qualcomm, this reduced demand for the competing chip manufacturers and damaged the capability and incentives for investment and innovation of the competing chip manufacturers.

Here the key point is that by combining Qualcomm's act of exclusion with Qualcomm's act of refusing licenses to Qualcomm's competing chip manufacturers, efficacy is enhanced.

In other words, if a competing chip manufacturer is able to receive a license from Qualcomm, Qualcomm's SEP would be exhausted with regard to the baseband chips sold by competing chip manufacturers and the mobile phone device manufacturers would have the choice of selecting the option of purchasing those baseband chips (not to buy the baseband chips from Qualcomm). However, in reality, since the mobile phone device manufacturer did not have this option, it was forced even more to accept the unfair high royalties.

In this sense, the district court ruling of *FTC v. Qualcomm* considered the various acts of exclusion by Qualcomm such as the collection of expensive royalties and royalty add-ons (entering into a licensing agreement specifying unfair high royalties with the mobile phone device manufacturers) and refusing a license to competing chip manufacturers, as described in 5-4(1) to be mutually interrelated rather than independent.

Chapter 6 Discussion

1. Arrangement of the issues

(1) Meaning of "License to all"

As described in 4-2(3) above, a patentee cannot conclude licensing agreements with all manufacturers in the supply chain of a product practicing the patentee's patented

⁸¹ Qualcomm imposed an additional cost (surcharge) on the baseband chips of competing chip manufacturers and by raising the total sales price of the competing chip manufacturers (chip cost + additional cost (royalties)), in other words, the net procurement price for mobile device manufacturers, it ensured that the total sales price of the baseband chip deviated from the true competitive price.

invention. Therefore, if license to all means that "a SEP holder is obligated to conclude licensing agreements with all manufacturers in the supply chain of a product practicing the SEP," it should be considered as a legally and practically impossible requirement.

However, supporters of license to all are naturally not likely to be seeking to impose such an impossible requirement on SEP holders. In reality, there is no practical benefit in having all manufacturers in the same supply chain conclude licensing agreements.

Therefore, license to all should be regarded as an argument that "a SEP holder must not refuse a request for conclusion of a licensing agreement from any manufacturer in the supply chain of a product practicing the SEP" (in other words, the SEP holder is forced to conclude a licensing agreement with any manufacturer designated by the supply chain side of the SEP-practicing product).

At least in this paper, it has been interpreted in such light, and this thinking will be discussed in terms of the Antimonopoly Act.

(2) Structure of the problem

Therefore, "Access for all / License to all", in short, is understood to be a problem of whether it is the SEP holder or the SEP implementer who has the decision-making authority with regard to the entity concluding a licensing agreement in the supply chain of the product implementing the SEP.

In other words, for easier understanding, simplifying the problem (which obviously does not apply to all cases), it comes down to which wish should be recognized: the wish of the SEP holder to enter into a licensing agreement with the end product manufacturer or the wish of the end product manufacturer to enter into a licensing agreement with the upstream parts manufacturer (a form of business model conflict).

Seen from the former, if a licensing agreement is entered into with the end product manufacturer, since it will usually also be possible to use the SEP (access is possible) in relation to the end product even with the upstream parts manufacturer, there is no particular problem in relation to the FRAND conditions. This is the thinking of "Access for all".

On the other hand, in the latter case, this way of thinking is not appropriate as a way of interpreting the FRAND conditions, and a license cannot be refused to any persons who wants to conclude a licensing agreement, whether it is an end product manufacturer or an upstream parts manufacturer (in other words, "License to all").

As given in 3-1 above, in order for competition to be promoted through standardization, it is necessary for access to standards to be open. From the perspective

of competition law, the conflict in the thinking of “Access for all / License to all” can be seen as a conflict of thinking concerning openness of access to standards. In other words, from the standpoint of “Access for all”, the opening of access to the standards is thought to be limited to the sense that use of the technology is not hindered when simply manufacturing or selling the SEP implemented products, but by contrast, from the standpoint of “License to all”, it goes even further and the thinking includes the sense that the SEP holder can be forced to enter into a licensing agreement with any manufacturers specified on the supply chain side of the SEP-implementing products.

(3) Relationship with the IPR policy, etc.

As given in 4-1(2) above, from the standpoint of “License to all”, in the first place, there is the criticism that “Access for all” might be in violation of the current IPR policy enacted by each SSO. Then, in *FTC v. Qualcomm*, a ruling was rendered that not granting a license to competing baseband chip manufacturers was a violation of the FRAND declaration (non-discriminatory) made by Qualcomm with regard to ATIS and TIA.

In this regard, this paper reviews “Access for all / License to all” solely from the perspective of competition law (the Antimonopoly Act) and whether “Access for all” is a violation of individual specific IPR policies and separate FRAND declarations under the same policy (hereinafter referred to together as “IPR policies, etc.) is not directly considered here.

A violation of an individual IPR policy, etc. even if it causes a civil responsibility, does not reach the conclusion that it is a violation of competition law and is considered a separate issue⁸². In addition, the obligation under the current individual IPR policies, etc. are not automatically consistent with the demands under the competition laws in specific situations⁸³. In fact, even in the district court judgment of *FTC v. Qualcomm*, as given in 5-4 (1) above, the licensing obligation based on the FRAND declaration and the licensing obligation as a requirement of competition law with regard to competing chip manufacturers are studied separately and it seems that the two do not necessarily or logically match each other.

82 In fact, in *TCL v. Ericsson* (Case 8: 14-Cv-00341-JVS-DFM) (C. D. of Cal. November 8, 2017), it was judged that the FRAND obligation violation and the standards of competition law violations differed.

83 *Supra* note 26 Delrahim's speech is to formulate rules to enhance either the bargaining power licensor side or licensee side joint is suggesting that there may even be evaluated cartels.

Of course, in situations where specific cases are problematic, under what consensus or convention the FRAND declaration was made carries great significance when considering competition law⁸⁴, and in such a situation, there will be a need to concretely consider the individual IPR policy, etc. in question (see below mentioned 6-2(2)B(B)).

That said, in this paper, the length of the paper is a problem, and putting aside this point for the time being, the issue of “Access for all /License to all” cannot be universally settled simply from the wording of the current individual IPR policies, etc., and the following study is conducted on the premise that it is not necessarily the case that there is always a clear consensus on this point on both the SEP holder side and the SEP implementer side.

2. Specific study

(1) Considering case study 1

A. Case study 1

When a SEP holder (X) is requested by the manufacturer of a certain communication unit (Y) to enter into a licensing agreement regarding the SEP implemented in the communication unit, the SEP holder (X) not entering into a licensing agreement with the communication unit manufacturer (Y), by reason of the SEP holder (X) entering into a licensing agreement with the end product manufacturer using the communication unit, may become a violation of the Antimonopoly Act.

B. Study

(A) Principle thinking

As given in 4-1(1) above, usually with regard to a SEP implementing product, which entity in the supply chain to enter into a licensing agreement with is decided by the SEP holder. Then, in principle, the SEP holder (X) is not obliged to enter into a licensing agreement with the communication unit manufacturer (Y) and is able to ask to enter into a licensing agreement with the end product manufacturer.

84 In the FTC v. Qualcomm district court ruling as well, Qualcomm’s recognition of the FRAND was approved.

This principle is a starting point that should not be neglected. As given in 4-2 above, since there is the exhaustion doctrine, the SEP holder only has one opportunity to receive royalties with regard to the act of implementing a certain invention in the supply chain of the end product implementing the SEP.

In exercising this one-time opportunity, the SEP holder chooses the other party of the licensing agreement in consideration of various matters in order to ensure the receipt of reasonable compensation for the invention. For example, a SEP holder, when concluding a licensing agreement must select the other party to the contract thinking about such circumstances as: (i) the possibility the other party may be in financial difficulties and therefore not able to pay its debts, or (ii) whether the other party's assets are located in a jurisdiction where there are no sufficient means to pay compensation for damages (see the decision vis-à-vis Motorola in the abovementioned 3-2(2)B(B)(ii)).

If such freedom of choice is not uniformly recognized and the SEP holder is forced by a third party to exercise rights, and due to this, in some form, the legitimate exercise of patent rights (SEP) is hindered (for example, a SEP holder is effectively forced to enter into a licensing agreement with a SEP implementer who owns assets in a jurisdiction that does not have sufficient means to enforce damages, and this hinders the exercise of patent rights (receipt of royalties) towards the supply chain to which, practically speaking, the SEP implementer belongs, this will ultimately connect to reducing innovation.

As given in 4-2(3) above, when comprehensively licensing a SEP mounted in an end product, in general terms, bearing in mind the end product manufacturer is the best position to receive a license, it is normally considered that a SEP holder who seeks to conclude a licensing agreement with an end product manufacturer is within the scope of legitimate enforcement⁸⁵, and such conduct should not be needlessly regulated (this is just a generality and it is possible to deem that this is not within the scope of the legitimate exercise of rights in light of individual and specific circumstances⁸⁶).

Even when thinking in this way, this does not immediately inhibit the business activities pertaining to the manufacturing and selling of communication units by the communication unit manufacturer (Y). This is because the communication unit manufacturer (Y) is ready at any time to respond to a licensing agreement (willing

85 In relation to Article 21 of the Antimonopoly Act, it would be “an act that is recognized as the exercise of rights” in the Patent Act.

86 For example, in the FTC v. Qualcomm district court ruling, Qualcomm's assertions were examined under the decision framework of rational principles, and the focus was on the fact that despite Qualcomm granting a license to competing chip manufacturers in the past, it had shifted to a policy of granting a license to mobile device manufacturers in order to monopolize profits, and the assertions were not accepted as justifiable.

licensee), if necessary, and will not be stopped from implementing the SEP by the SEP holder (X).

(B) Cases where there is an anti-competitive effect

On the other hand, in individual specific cases, if some form of anti-competitive effect occurs when the SEP holder freely chooses the licensor, the action of the SEP holder (X) in case study 1 is thought possibly to be a violation of the Antimonopoly Act (private monopolization (Article 2, paragraph (5) of the Antimonopoly Act) or unfair trade practices (General Designation, paragraph (2) and paragraph (14)).

As an example, where the anti-competitive effect may specifically be possible, there is the case of no license-no chips enforced by Qualcomm in the abovementioned 5-5. In other words, cases where the SEP holder (X) is in the position of a horizontal competitive relationship with the communication unit manufacturer (Y) who has been refused a license, and sets unreasonably high royalties on an end-product base.

In a no license-no chips case, the anti-competitive effect especially occurs when through unduly high royalties, the total sales value of the communication units of Y (obtained by adding the royalties to the sales price of the communication unit) is high when compared to the total sales value (where royalties are not added) of the communication units of the SEP holder (X)⁸⁷, and the demand for the communication units of Y declines.

It should be noted that in such cases as “no license-no chips”, even if Qualcomm decides to grant a license to competing chip manufacturers, the royalties will still be unreasonably high, and in the end, the baseband chips of competing chip manufacturers will be competitively lower than Qualcomm’s in terms of overall sales price, and therefore the fundamental anti-competitive effect lies with the fact the royalties are unreasonably high rather than refusal of a license to competing chip manufacturers.

In other words, if X asks for such high royalties that Y is unable to compete against X in terms of the overall sales price of the communication unit, it does not matter if the other party to the licensing agreement is Y or the end product manufacturer, the effect of exclusion by Y of the communication unit manufacturer will not change. Then the fact that X does not enter into a licensing agreement with Y in itself is not thought to immediately lead to an anti-competitive effect⁸⁸. On the other hand, (i) as given in 4-3

87 On the other hand, unlike Y, there is the possibility that X is paying the costs for the inventions pertaining to SEP such as research and development costs, and these costs can be recovered through X’s total price.

88 If X refuses to enter into a licensing agreement with Y, this is a single transaction refusal, and that

above, if the other party to the licensing agreement is the end product manufacturer, it becomes easier for the basis of the calculation of the royalties to become an end product base, (ii) the end product manufacturer does not have detailed knowledge about the technology of the invention to be licensed⁸⁹, and there is the possibility that it may be difficult to negotiate for the setting of appropriate royalties, and (iii) given that it is generally difficult to calculate the appropriate value of the intellectual property rights and it is difficult to determine what price setting by the SEP holder (X) is “unreasonably high” in the first place, the fact itself that X refused a license to Y, a rival in communication unit sales and has only entered into a licensing agreement with the end product manufacturer may cause an anti-competitive effect.

In addition to the above, there are cases of violation where there is discriminatory treatment of trading conditions (General Designation, paragraph (4)) such as where, for example, a SEP holder (X) refuses a license to Y but grants a license to other communication unit manufacturers.

In any case, even in case study 1, it can be said that it may be a violation of the Antimonopoly Act if an anti-competitive effect is recognized through some form of mechanism.

At such time, when recognizing an anti-competitive effect, in accordance with the thinking of the Intellectual Property Guidelines of 3-2(1) above, as well as the contents and aspects of the restrictions pertaining to use of the SEP technology, a determination will be made taking into overall account, the presence or absence of a competitive relationship between the parties pertaining to the restrictions for each target market, the positions occupied by the parties, the conditions of the entire target market, the presence or absence of rational reasons for imposing restrictions, and the impact on motivation for research and development and motivation for innovation.

At such time, the pro-competitive effect of contributing to innovation through ensuring legitimate incentives for inventions as described in 3-1 above may be considered in the factors of “the presence or absence of rational reasons for imposing restrictions” and “the impact on motivation for research and development and motivation for innovation”. Then when considering the factor of “the presence or absence of rational reasons for imposing restrictions” and “the impact on motivation for research and development and motivation for innovation”, while referring to specific cases, the rationality, etc. should be considered after bearing in mind the practical rationality and

in light of the principle of freedom of, etc., it does not immediately become a competition law violation.
89 See *supra* 4-1(1)(iv).

efficiency relating to licensing agreements such as in 4-2(3) above.

Therefore by taking into account the pro-competitive effect when considering “the presence or absence of rational reasons for imposing restrictions” and “the impact on motivation for research and development and motivation for innovation”, a determination is possible according to individual specific circumstances through weighing and comparing the anti-competitive effect and pro-competitive effect as stated in 3-1 above.

(2) Case study 2

A. Case study 2

The manufacturer of an end product equipped with communication functions (Z) was asked by the SEP holder (X) to enter into a licensing agreement regarding the SEP implemented in the end product.

In cases where an end product manufacturer (Z) states to the SEP holder (X) that it wants it to hold discussions with the manufacturer of the parts incorporated in the end product, and refuses to conclude or negotiate a licensing agreement, if the SEP holder (X) files for an injunction claim against the end product manufacturer (Z) by reason of a patent infringement, this may become a violation of the Antimonopoly Act. In addition, a point to consider is whether the SEP holder (X) would claim damages from the end product manufacturer (Z).

B. Study

(A) As given in 3-2(1) above, in cases where the SEP holder who has made a FRAND declaration based on the Intellectual Property Guidelines, refuses to grant a license to a willing licensee who wishes to receive the license, or files an injunction lawsuit, if it excludes the trading opportunities of persons who are engaged in research and development, production or sales of a product adopting the standards, or reduces competition capabilities, this may correspond to private monopolization (Article 2, paragraph (5) of the Antimonopoly Act) or unfair trade practices (General Designation, paragraph (2) and paragraph (14)).

Therefore, even in cases where the end product manufacturer (Z) can be said to be a willing licensee, if the SEP holder (X) files an infringement claim against the end product manufacturer (Z) because of the patent infringement, this may become a violation of Article 3 or Article 19 of the Antimonopoly Act.

Then, in case study 2, in cases where the end product manufacturer (Z) expressed that it wanted the SEP holder to hold discussions with the parts manufacturer and refused to conclude or negotiate a licensing agreement, it cannot be said at a glance to be a willing licensee, and this does not preclude the filing of an injunction claim by the SEP holder (X) against the end product manufacturer (Z).

(B) However, if for example, after taking into account various related circumstances such as, looking at the entire supply chain, a willingness to receive a licensing agreement and negotiations being held in good faith such as when Z specifically conveys to the SEP holder (X) that it wishes X to enter into a licensing agreement with the communication unit manufacturer (Y), and it is actually promptly conveyed by Y to X that it is ready to respond to negotiations for the licensing agreement, such a case does not appear to preclude X's legitimate exercise of rights, and so there is room to consider it to be a willing licensee.

Let us consider this point further. The fact that the exercising of the injunction claim against the willing licensee is restricted as an abuse of rights is as is given in 3-2(1)A above, and is the result of comparing the trust that the license may be received due to the FRAND conditions with regard to the person intending to manufacture and sell the product (end product manufacturer (Z)) in compliance with the standards with the necessity of protection with regard to the SEP holder (X) making the FRAND declaration. Then based on the premise of the framework that is the abuse of rights, in situations such as case study 2, a further study is needed as to whether there is trust worthy of protection for the end product manufacturer (Z) and whether there is the need for protection with regard to the SEP holder (X).

The point as to whether there is trust that is worthy of protection with regard to the end product manufacturer (Z), in other words, through the thinking of "License to all" ("if any manufacturers in the supply chain of a product of a patented invention is asked to conclude a licensing agreement, the SEP holder should not refuse the request"), whether the trust of the end product manufacturer (Z), which is that any manufacturers in the supply chain (the communication unit manufacturer (Y)) should be able to become the entity of the SEP licensing agreement, can be said to be trust worthy of legal protection in such a situation. Here, in some cases, the need to consider the related IPR policy emerges.

However, seen from the principle thinking that the patent holder should be the one to determine the other party of the exercise of the patent rights, except where quite explicitly arranged in the IPR policy, etc., whether the abovementioned trust of the end product manufacturer (Z) is worthy of legal protection appears to require careful

judgment.

Further, for example, even in cases where there is a fairly explicit arrangement through the IPR policy, etc., as given in 3-2(2)A(B) above, in cases of jointly formulating an IPR policy that strengthens the bargaining power on the side of the licensor or the side of the licensee, since it is possible the contents of the IPR policy themselves may be viewed as a problem under the competition law, judging the applicability of competition law immediately by relying on the IPR policy, etc. requires careful consideration.

For example, in such cases as when the IPR policy, etc. has been arranged fairly explicitly, and the SEP holder (X) has also clearly agreed to the IPR policy, the SEP holder (X) has given up the freedom to choose the other party to the exercise of the patent rights, and in some cases it may be possible to say that this has been expressed externally. In such a case (hereinafter referred to as a “party agreed case”), the trust of the end product manufacturer (Z) is worthy of legal protection, and in comparison, the need for protection with regard to the SEP holder (X) can be said to be smaller, and it is thought possible to determine the end product manufacturer (Z) to be a willing licensee throughout the supply chain and to recognize a plea for the abuse of rights.

(C) Taking the thinking of (B), in a party agreed case, if it is determined that the end product manufacturer (Z) is a willing licensee throughout the entire supply chain and the plea of abuse of rights is permitted with regard to the filing of a claim injunction against the end product manufacturer (Z), the question arises as to whether the SEP holder (X) is able to file an injunction claim with regard to Article 102, paragraph (3) against the end product manufacturer (Z) (claim for compensation of damages equivalent to the implementation fee).

As given in 3-2(1)A above, in the Apple v. Samsung Intellectual Property High Court grand panel case, a ruling was made that a claim for compensation of damages within the scope of an amount equivalent to the royalties based on the FRAND conditions could not be restricted unless there were special circumstances to warrant otherwise.

However in the party agreed case, if a claim for damages equivalent to the implementation fee (royalties) under the FRAND conditions by the SEP holder (X) vis-à-vis the end product manufacturer (Z) is granted, ultimately, within that limit, it is the same as though the end product manufacturer (Z) entered into a licensing agreement with the SEP holder (X).

Therefore, from the thinking that such a conclusion is not valid due to the weighing up described in (i) above, it is possible to consider that even the seeking of

compensation of damages equivalent to the implementation fee (royalties) under the FRAND conditions in the party agreed case will, as an abuse of rights, not be permitted. In this case, this is thought to be the “special circumstances” referred to in the Apple v. Samsung Intellectual Property High Court grand panel case.

However, in the case of royalties under the FRAND conditions, in any case, the end product manufacturer (Z) should be willing to pay the entire supply chain anyway, and the rest can be considered to be just an internal burden on the supply chain. Furthermore, in the above example, Y clearly conveyed to X that it was ready to respond to negotiations for the licensing agreement, but if the other party to the exercise of the claim for compensation of damages of the SEP holder (X) keeps changing such as a change of heart halfway through, serious de facto restrictions would be imposed on the exercise such rights.

Therefore, even in a party agreed case, the right to claim damages of an equivalent amount to the implementation fee (royalties) under the FRAND conditions of the SEP holder should not be lightly imposed. With regard to the need for restrictions and the scope, they should be considered within a very limited situation after consideration has been given to whether permitting the filing of compensation for damages by the SEP holder will have an effect on industrial development (Article 1 of the Patent Act) and related markets.

(D) The above is a study within the framework of the abuse of rights as shown by the Apple v. Samsung Intellectual Property High Court grand panel case, but if a party agreed case such as the one in the abovementioned (B) becomes generally accepted, a discussion on “Access for all / License to all” has not come up and it is supposed that it is possible that situations will arise which cannot be evaluated as a party agreed case.

Then, in the conventional framework of the abuse of rights, a situation is possible where the points at issue in the case cannot be processed. In that case, it is possible that the points at issue will be considered head-on within the judgment framework of the Antimonopoly Act.

Now considering this issue under the Antimonopoly Act.

First of all, if the injunction claim of the SEP holder (X) cannot be restricted as an abuse of rights unless it is a party agreed case, the end product manufacturer (Z) effectively cannot refuse the negotiations relating to the licensing agreement from the SEP holder (X), and will end up entering into a licensing agreement. As a knock-on effect, the communication unit manufacturer (Y) will not be able to enter into a licensing agreement with the SEP holder (X). In a sense, this is a natural consequence based on the principle thinking that the patent holder should be able to determine the

other party to the exercise of the patent right.

However, as given in 6-2(1)B (B) above, in cases where the SEP holder (X) is able to freely choose the other party to the licensing agreement, and is able to effectively refuse the licensing agreement with the communication unit manufacturer (Y), there will be some kind of anti-competitive effect, and if there is a substantial restriction of competition or prohibition of fair competition under the Antimonopoly Act, the injunction claim of the SEP holder (X) may be deemed a violation of the Antimonopoly Act, and it is possible to suppose that the exercise of such right will not be permitted (in the injunction proceedings based on the patent rights, this would be positioned as a plea of abuse of new rights).

In this case, as given in 6-2(1)B(B) above, depending on the specific case, an analysis will probably be made of the anti-competitive effect.

Chapter 7 Conclusion

The “Access for all / License to all” clashes over the demand under the competition law to indiscriminately grant access to essential infrastructure as the basis for competition and the demand to protect the invention so that in order to give the patent holder a legitimate return from the perspective of promoting innovation, the means for obtaining the return is not narrowed down more than necessary, and appropriate consideration should be given from both perspectives.

Seen from the principle concept that access under the competition law should indiscriminately permit access to the essential infrastructure, it would appear that “License to all” should be taken as the premise, but if there is no impact on competition in the relevant market, even with regard to the exercise of rights pertaining to the SEP, as is the case with other patents, the method of exercising the rights should be left to the discretion of the SEP holder.

On the other hand, “Access for all” is not always viewed as a problem from the perspective of competition law, and as in the Qualcomm cases in the United States and South Korea, in cases where there is a concrete anti-competitive effect in an individual case through the SEP holder freely choosing the other party for entering into the licensing agreement, it is amply possible that this will be a case of violation of competition law (Antimonopoly Act).

In any case, in terms of the points at issue, since there are a large number of unorganized related points such as the basis for calculation of the royalties and interpretation of individual IPR policies, etc. and the relationship between IPR policies,

etc. and the competition law, the focus should remain on the trends of practices, and further studies should be conducted. We would be pleased if this paper were to be of some help in future studies.