14 Study on Intellectual Property Licensing under Antimonopoly Law in the U.S., Europe, Japan and Korea

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In the market economy the intellectual property laws and antitrust law share a common purpose of promoting innovation and enhancing consumer welfare, even though they seem to have a possibility to crash each other. The reason is that the intellectual property rights provide incentives for innovation through giving a monopoly right for a certain period, while antimonopoly law is aiming to prevent misuse of predominant position in the marketplace and concentration of overriding.

In the field of intellectual property rights the owners make profits through using his right by themselves as well as through licensing contract. The licensing contract is, however, likely to be applied by antitrust law in accordance with under which conditions and restraints a licensing contract is concluded, and herein many complicated constituents get involved. Therefore, countries such as America, Japan and Korea establish their own guidelines in order to assist those who want to predict whether a licensing practice would be regarded as anticompetitive. Especially it is noticed that with its enlargement European Union has published the Regulation No. 772/2004 which came into effect on May 1st 2004 and will have a dramatic impact on technology licensing in the European Union.

The following article gives an overview of major anticompetitive constituents in the guideline of each country, and inspects legal meaning of guideline and the new Regulation of the EU competition law as well.

I Introduction

Intellectual property gives the owners monopoly right and incentives for innovation, and allows them to exclude others from the benefits arising from new knowledge. Unless intellectual property rights (IPR) are protected, imitators could more rapidly exploit the efforts of innovators and investors without compensation. In this case, intellectual property licensing is effective not only for those who want to use such new knowledge, but also licensors who exploit it, *inter alia*, by licensing it to third parties. IP licensing is getting more important through technology innovation, for example IT, biotechnology. In the end, IPR promotes innovation and support economic growth.

On the other hand, competition law aims to promote innovation and consumer welfare, and it could be arrived by prohibiting any action which may harm competition.

Therefore, there is a consensus of opinion that competition law and IPR share the identical goal of economic development and consumer welfare through innovation.(*1)

The purpose of the report is to find out preferable forms by comparing competition law with intellectual property licensing in four countries, US, EU, Japan and Korea.

II Acts concerning Competition

1 Overview

Each country usually has its own acts concerning competition. The oldest act concerning competition in the world is the US Sherman Act which was already established in 1890. In addition, US have other two acts concerned, namely Clayton Act (1914) and Federal Trade Commission Act (1914). The Department of Justice has authority over the Sherman Act, while FTC (Federal Trade Commission) over the FTCA. Since Reagan Administration US competition policy has moved from antitrust toward pro-patent policy.

On the other hand, on 25 March 1957 six (6) countries(*2) have established the first European competition law, so-called Rome Treaty. Its purpose was to ensure the economic and social progress of the Member States by common action to eliminate the barriers which divide Europe. On

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(*1) See US, EU and Japan Guidelines.
(*2) Belgium, Germany, France, Italy, Luxemburg and the Netherlands

1 May 2004 enlargement of EU including east-European countries(*3) has brought fundamental change of EU competition law, which is called modernization package being consisted of three (3) regulations and additional six (6) notices. (*4) The modernization package has two essential features; first, it is moving from legal, clause-by-clause approach toward more focusing on economic analysis. Second, the authority to grant exemption has moved from EC Commission to national competition authorities and courts which can apply to Article 81 (1) and (3).(*5)

After World War II, Japan was required by SCAP (Supreme Commander of the Allied Power) directive to passage of "such laws as will eliminate and prevent monopoly and restraint of trade". (*6) As a result, the first Japanese Antimonopoly Act based on US Antitrust laws was enacted in 1947(*7), and the Japanese Fair Trade Commission (JFTC) was established as an entity to enforce the Act. Through several revisions, especially in 1977 and 1997, JFTC has been empowered strongly to enforce the Act.

Compared with other countries, the first antimonopoly Act in Korea was later established. Since the Monopoly Regulation and Fair Trade Act (KMA) came into effect in 1981, KMA has experienced 13 times revisions, and current Act is version of 26 January 2002. In 1987, the Korea Fair Trade Commission (KFTC) adopted a policy to restrain concentration of economic power in order to inhibit excessive concentration of economic power among a few conglomerate business groups in Korea called as 'chaebeol'. Since the Asian financial crisis in late 1997, there was a broad national consensus in Korea that the economy should be essentially driven by the principle of market competition. In this climate, the Korean government took steps to eliminate the old structural inefficiencies of the Korean economy, and KFTC strengthened the enforcement of competition law and actively promoted market competition through the deregulation and privatization of state-owned companies.

2 Principle of Interpretation on Antitrust law

(1) 'Rule of Reason'

According to this principle, both anti- and pro-competitive effects should be taken into account in analyzing restriction of a licensing agreement, namely whether pro-competitive effects outweigh anticompetitive effects by comprehensive inquiry into market conditions(*8).

(2) 'Per se illegal'

According to the principle, a restraint's nature and necessary effect are so plainly anticompetitive without an elaborate inquiry into the restraint's likely competitive effect.(*9)

Both rules have greatly influenced not only on the US, but also EU, Japan and Korea regarding restriction of IPR licensing agreements.

Ⅲ Guidelines of IPR Licensing under the Antimonopoly Act

Herein Guidelines of IPR licensing under Antimonopoly Act will be dealt with. Some important features of them will be analyzed later by comparing each other.

1 US Antitrust Guidelines

US Antitrust Guidelines which state the antitrust enforcement policy of Department of Justice and FTC have been established on 6th April 1995.

(1) Principles

The Guidelines embody three general principles; (a) IP is essentially comparable to any other form of property of antitrust analysis; (b) There is no presumption that IP creates market power in the antitrust context; and (c) Licensing of IP will generally be recognized as pro-competitive.

The purpose of the Guidelines is to assist those who need to predict whether the Agencies will challenge a practice as anticompetitive. But, these Guidelines cannot remove judgment and

(*3) With this reform EU has enlarged from 15 to 25 countries including East-European Countries, for example, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

(*4) Antitrust enforcement Regulation EC 1/2003; Horizontal merger control Regulation EC No. 139/2004; New Block Exemption Regulation on Technology Transfer EC No. 772/2004; and 6 Additional Notices to complement and to facilitate the implementation of the reform steps.

(*5) Art. 81 (1) is related to general prohibition on agreements which restrict competition and affect trade between Member States, while Art. 81 (3) provides for an exception to the prohibition laid down in Art. 81 (1).

(*6) See Hiroshi Iyori and Akinori Uesugi, The Antimonopoly Laws of Japan, 10-11 (1983).

(*7) Act concerning Prohibition of Private Monopolization and Maintenance of Fair Trade

(*8) The US Supreme Court agreed on the "rule of reason" as the principle to apply in antitrust cases, for example Standard Oil case in 1911.

(*9) For example, 'Nine-No-No's' rule in US; 'black' clauses in Japan and Korea, such as exclusive grant back; and 'hardcore restrictions' in EU.

discretion in antitrust law enforcement.

(2) Scope of application

The Guidelines are concerned with intellectual property protected by patents, *copyrights*, trade secrets and know-how agreements, but do not cover the antitrust treatment of trademarks. It is noteworthy that the Guidelines cover copyright licensing agreements even in 1995, while other countries' Guidelines at the same period did not cover them. Although it is not obviously described, it might be interpreted that copyright licensing agreements could cover high technology-related copyright licensing agreements such as software, IT, etc.

(3) Antitrust "Safety zone"

Pursuant to the 'safety zone' of the Guidelines the government will not challenge a restraint in an IP licensing arrangement if (a) the restraint is not facially anticompetitive; and (b) licensor and its licensees collectively account for no more than 20% of each relevant market significantly affected by the restraint. The Guidelines also state that the status of a licensing arrangement with respect to the safety zone may change over time.

2 European Guidelines

On 1 May 2004 new Technology Transfer Block Exemption Regulation (TTBER) No. 772/2004 came into effect. It lays down new rules for the IPR licensing, replacing the old TTBER of 1996 (No. 240/96). Until 31 March 2006, undertakings have to bring their existing agreements in line with these new requirements. Otherwise, such agreements may lead to nullity of contract, and claims for damages and fines.

TTBER Guidelines explain application of TTBER and provide a framework for analyzing technology license agreement.

(1) General characteristics

New TTBER Guidelines recognize that technology transfer agreements usually improve economic efficiency and are pro-competitive, and that they, furthermore, strengthen the incentive for the initial research and development. The Guidelines describe that the likelihood that efficiency-enhancing and pro-competitive effects will outweigh any anti-competitive effects due to restrictions contained in technology transfer agreements depends on the degree of market power of the undertakings concerned. (*10)

Another important feature of the Guidelines is that competitors and non-competitors are differently treated in the reciprocal or non-reciprocal agreements. (*11) In this regard, the Guidelines obviously draw a distinction from other countries' Guidelines. Competitors are relatively strictly treated rather than non-competitors, because they pose a grater risk to competition than agreements between non-competitors.

(2) Scope of application

The Guidelines cover intellectual property rights including not only patents, utility models, designs, topographies of semiconductor products, plant breeder's certificates, know-how, but also software copyright licensing agreements, which was not covered in the previous EU Guidelines No. 240/96.

(3) Safe Harbor

(i) The TTBER provides a safe harbor for certain technology license agreements. These agreements are block exempted from general prohibition rule in Article 81(1) EC and so automatically legally valid. Although they do not meet requirements in Art. 81(3), namely, fall outside TTBER, they are not presumed to be illegal and still have an opportunity to individually get exempted.

(ii) New Guidelines differentiate competitors from non-competitors regarding safe harbor as well. Herein 'market share thresholds (MSH)' play an important role; exemption contained in the new guidelines covers agreements between: (a) Competitors if their combined market share does not exceed 20% on the affected relevant technology and product market; and (b) Non-competitors if each party's individual market share does not exceed 30% on the relevant technology and product markets. If the applicable MSH is exceeded on an affected relevant market, the block exemption does not apply to the agreement for that relevant market. (*12)

(4) Restrictions

TTBER Guidelines contain two restrictions; hardcore and excluded restrictions.

(*10) See II. Paragraph 15 of the Guidelines

(*11) According to the Guidelines, 'reciprocal agreement' is a technology transfer agreement where two undertakings grant each other a license, and where these licenses concern competing technologies or can be used for the production of competing product. On the other hand, 'non-reciprocal agreement' means a technology transfer agreement where one undertaking grants another undertaking a license, or where two undertakings grant each other such a license, but these licenses do not concern competing technologies and cannot be used for the production of competing products

(*12) See III. Paragraph 69 of the Guidelines

(i) Hardcore restrictions

TTBER contains a series of 'hardcore restrictions'. (*13) If a licensing agreement contains any such clause, it will lose the benefit of the block exemption, regardless of whether or not MSH is met, because they are regarded as almost always anticompetitive. Such agreement will normally not qualify for individual exemption either, and so in the context of individual assessment hardcore restrictions will only in exceptional circumstances fulfill the conditions of Article 81(3). (*14)

Hardcore restrictions are divided into two groups regarding competitors and non-competitors;

(a) In the case of competing undertakings there are following cases which belong to hardcore restrictions, such as price-fixing restrictions, reciprocal output or sales restrictions, allocation of markets or customers and restriction of the licensee's ability to exploit its own technology. (*15)

(b) In the event of non-competing undertakings there are following things which are regarded as hardcore restrictions, such as restrictions on price maintenance other than a maximum or a recommended sale price, territory restriction into licensee, and restriction of active or passive sales to end-users. (*16)

(ii) Excluded Restrictions

TTBER also contains lists of restrictions which do not benefit from the safe harbor. They are not automatically exempted, and require individual assessment on the basis of the comparison their pro-competitive effects with their restrictive effects. If pro-competitive effects outweigh their restrictive effects, they can be exempted. (*17) The licensing agreement which will belong to excluded restrictions is as follows; exclusive grant back, assign and no-challenge clauses.

(5) Cross-Licensing Agreements

Guidelines recognize that cross licensing agreements may have pro-competitive effects. However, if the terms of any cross-licensing restrict the ability of either undertaking to exploit its own technology, it is unlikely to benefit from the exemption in Article 81(3).(*18) The risk of negative effects on innovation is higher in the case of cross licensing between competitors in which a grant back obligation on both parties is combined with an obligation on both parties to share with the other party improvements of his own technology. (*19)

(6) Technology Pools

(i) Definition and their nature

In the Guidelines technology pools are defined as arrangements where two or more parties assemble a package of technology that is licensed not only to contributors to the pool, but also to third parties. (*20) Technology pools may have anti- and pro-competitive effects. (*21) The Guidelines classify technologies in technology pools into following, namely complementary (non-essential), substitutable, and essential technology. (*22)

The assessment of technology pools depends on which technologies are involved in pools. For example, when a pool comprises only essential technologies and by necessity complements, the creation of pool as such generally falls outside Article 81(1) irrespective of the market position of the parties. In addition, in pools comprising non-essential technologies, the Commission should consider, *inter alia*, for example, whether there are any pro-competitive reasons for including the non-essential technologies in the pool. (*23)

(ii) Assessment of individual restraints

In assessing individual restraints following principles are commonly used in technology pools; (a) the stronger the market position of the pool, the greater the risk of anti-competitive effects; (b) pools that hold a strong position on the market should be open and non-discriminatory; and (c) pools should not unduly foreclose third party technologies or limit the creation of alternative pools. (*24)

3. Japanese Guidelines

(1) Progress of Japanese Guidelines

(i) Antimonopoly Act Guidelines for

(*13) Article 4 TTBER and III.4 of the Guidelines.
(*14) See III.4.1 Paragraph 75 of the Guidelines
(*15) Article 4.1 TTBER and III.4 Paragraphs 77 to 95 of the Guidelines
(*16) Article 4.2 TTBER and III.4 Paragraphs 96 to 106 of the Guidelines
(*17) Article 5 TTBER and III. 5 Paragraphs 107 to 116 of the Guidelines
(*18) See IV.3 Paragraph 204 of the Guidelines
(*19) See III.5. Paragraph 111 of the Guidelines
(*20) See IV.4 Paragraph 210 of the Guidelines
(*21) Ibid. Paragraphs 213 and 214 of the Guidelines
(*22) Ibid. Paragraphs 215 to 222 of the Guidelines
(*23) Ibid. Paragraph 222.
(*24) Ibid. Paragraph 224.

International Licensing Agreements in 1968

It was the first effort to support the Agency's views regarding technology licensing that may violate the AMA. The 1968 Guidelines provided "black" and "white" lists, and applied solely to international licenses. Therefore, they were criticized as disfavoring non-Japanese licensors during 1968 to 1989 when Japanese industry was licensing lots of deals of foreign technology.

(ii) Guidelines for the Regulation of Unfair Trade Practices with respect to Patent and Know-How Licensing in 1989

These Guidelines replaced 1968 Guidelines, and brought important change of competition policy shifts to the same application of foreign and domestic IP licenses. The Guidelines added a "grey" list in which a licensing agreement is likely to belong to unfair trade practices. They are also characterized by shifting toward a "rule of reason" approach.

(iii) Guidelines for Patent and Know-How Licensing Agreements under the Antimonopoly Act in 1999

On July 30 1999, JFTC issued Guidelines for Patent and Know-How Licensing Agreements under the Antimonopoly Law, which replaced 1989 Guidelines.

(2) Characteristics of 1999 Guidelines

(i) 1999 Guidelines are going toward more liberalization about the policy on patent and know-how licensing agreements from Japanese Antimonopoly Act (Art. 3) and from unfair trade practice standpoint.

(ii) Regarding restrictions the Guidelines maintain black, grey and white lists, but add 'dark-gray' lists which are defined as such restraints are *highly* likely to be unlawful.[*25] They were previously black-listed, but are now subject to a strict sub-species of the rule of reason.

(iii) Scope of application

The Guidelines cover patent and know-how licenses, introducing the word "*mutatis mutandis*", which means that other forms of IP can be covered to the extent possible on the nature of those rights. But it is non-obvious which meaning other forms of IP have, namely, whether trademark or copyright licensing agreements also belong to these 'other forms of IP'. In this regard, it should be expressly described.

(iv) Definition of relevant market

The Guidelines define relevant market, and make clear that product market definition for technology licenses will use the same general approach applicable to markets for goods or services; however, they do not introduce the concept "market share thresholds" like in the European TTBER Guidelines. In this regard, it may be discussed in the future as to whether or not such concept 'market share thresholds' should be introduced into the Japanese Guidelines.

(3) Relationship between AMA and IPRs

The JFTC's analysis of licensing clauses under the 1999 Guidelines begins with the central issue by §21 AMA: "The provisions of this Act shall not apply to such acts recognizable as the exercise of rights under the Copyright Act, the Patent Act, the Utility Model Act, the Design Act or the Trademark Act".

If a conduct is an "exercise of rights", JFTC proceeds to ask whether it violates against the purposes of the intellectual property laws. An exercise of rights that do not violate against the IP laws' purposes is exempt from the application of the AMA. However, if the conduct either (i) is not an exercise of an IPR; or (ii) violates against the purposes of IP laws, it is not exempt and is subject to scrutiny to determine whether it constitutes monopolization, an unreasonable restraint of trade, or an unfair trade practice under the AMA. With respect to exercise of rights, it might be still criticized that there is not any obvious objective criteria to differentiate justifiable from unjustifiable acts.

4. Korean Guidelines

(1) Relationship between Art. 59 KMA and Antimonopoly Guidelines

The normative system to apply Korean antitrust law to IPRs licensing is consisted of Articles 59 and 32 of Korean Monopoly Act (KMA), and both have their own guidelines established by the Korean Fair Trade Commission (KFTC).

Article 59 KMA has the same rule to Art. 21 of Japanese Antimonopoly Act, and its interpretation can be found in Art. 1 Guidelines. Article 32 KMA deals with international contract, and there is Notification concerned. The purpose of the Notification is to define the types and the criteria for determining undue concerted acts, unfair business practices and resale price maintenance activities in international contracts. In this regard, KMA recognizes intra-national competition as well as competition concerning international contracts. In order to remove misunderstandings that foreign and domestic IP licensing agreements could be separately dealt with, it should be, however, discussed on the

(*25) See Part 1.2. (1) (b) of the 1999 Guidelines.

matter concerning unifying the Guidelines and Notification.

(2) Characteristics of Guidelines

(i) Scope of Application

Compared with other countries' Guidelines, Korean Guidelines cover not only patent, know-how, but also trademark and copyright. (*26) However, it is strange why the Guidelines even cover trademark licensing agreements. The reason might be found in the name of the Guidelines 'Guidelines of reviewing undue exercise of IPRs'. It means that application of the Guidelines probably would not be limited to technology transfer agreements, but to all kinds of undue exercise of IPRs. It should be, however, discussed whether trademark should be covered in the Guidelines.

(ii) Restrictions

Articles 3 to 5 of the Guidelines define unfair business practices, in which black lists and their some exceptions are described. In determining whether or not restraint of a licensing agreement is unfair, the prescribed criteria in Guidelines as well as the effect on competition, the contract duration, relevant market conditions and so on shall be comprehensively taken into account.

(iii) Tying agreements

If a licensor requires a licensee either to collectively enforce technology or to purchase products in a bundle which are not directly necessary for the performance of the licensed technology, it is unfair, except that the usage of technology and product is necessary to maintain the quality of the contract product and the credibility of the attached products of the owner of the industry property rights. (*27)

(iv) Grant back clause

According to the Guidelines it is unfair if a licensor requires a licensee to provide the licensor, without compensation, with the ownership of or the exclusive or non-exclusive right to use the technology or product improved by the licensee; or if a licensor unilaterally requires a licensee to report or give notice to the licensor of all technology or product improvements about the licensed technology or product.

The Guidelines do not, however, describe sub-licensing contract. In addition, exclusive and non-exclusive right is, strange to say, treated without discrimination in compared with other countries' Guidelines. However, exclusive and non-exclusive grant back restraints should be, owing to their natures, discriminatorily treated irrespective of compensation, and non-exclusive grant back clause should be admitted.

(v) No-challenge clause

According to the Guidelines it is unfair if a licensor unilaterally terminate a contract in the event that the third party or a licensee dispute as to whether or not the licensed technology is valid or well-known. There are, however, two exceptions; (aa) that the licensor makes the licensee notice on the violation of industry property rights about the contract technology to the licensor; and (bb) that the licensor let the licensee execute the case of violating the industry property rights as proxy, or impose the obligation of cooperation to the licensor in carrying out such case. (*28)

(vi) Cross-licensing and Pooling arrangement

The Guidelines recognize pro-competitive and anti-competitive effects of cross-licensing and pooling arrangement. They are, however, subject to invalid if licensors in mutually competitive or substitutive relationship conclude a cross-licensing contract or a pooling arrangement regarding their own IPRs, which may give birth to any anti-competitive effect. (*29)

5 Art. 40 TRIPS

As the "largest and most ambitious attempt to harmonize intellectual property rights on a world scale" the multilateral Agreement on Trade Related Aspects of Intellectual Property (TRIPS) was established within the WTO framework. The TRIPS does not require WTO members to regulate licensing transactions to protect competition, but expressly recognizes the power of each state to take measures to redress abuses of intellectual property rights that harm competition in its markets.(*30)

(*26) Article 2 (1) of the Guidelines.
(*27) Article 3 (10) of the Guidelines.
(*28) Article 3 (16) of the Guidelines.
(*29) See Art. 7 of the Guidelines.
(*30) Art. 40.1 identifies three negative aspects of licensing practice, those which (a) restrain competition; (b) have adverse effects on trade; and which (c) may impede the transfer and dissemination of technology.
Art. 40.2 maintains that nothing in the TRIPs Agreement shall prevent Members "from specifying in their legislation licensing practices or conditions that may in particular constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market". The definition of 'market' plays a decisive role in analysis of competitive impacts, because the broader a market is delineated, the less likely will be the anti-competitive impact of an individual trader's activities. See *Re Queensland Co-operative Milling Association Ltd.*, (1976) 25 F.L.R. 169, p. 190; Michael Blakeney, TRIPs: A concise guide to the TRIPs Agreement, 1996, p. 109.

Art. 40.2 TRIPS agreement recognizes that member states may specify licensing in their legislation practices or conditions which may be deemed to constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market,(*31) and may adopt appropriate measures to prevent or control such practices, including exclusive grantback conditions in accordance with the provisions of Article 31 TRIPS. In addition, two other examples which fall within the scope of this provision are given, namely conditions preventing challenges to validity and coercive package licensing. They may be taken into account *a priori* as abusive and anti-competitive, but measures taken still need to be addressed on a case-by-case.(*32) In case of these measures the TRIPS Agreement leaves a room to be settled through consultations between a Member State who believes that a contractual practice is abusive and anti-competitive in a particular case and another Member State in which the right owner concerned is a national or domiciliary. A suggestion to refer disputes in cases where bilateral consultations failed to reach a mutually satisfactory conclusion was not retained by the group, because it would have been impracticable as regarding investigation and control and in the viewpoint of a lack of internationally agreed dispute settlement standards. Despite of lack of such an agreed procedure it is clearly emphasized on consultations between governments in order to solve trade conflicts between private parties.(*33)

Article 40.2 TRIPS specifies anticompetitive practices, such as exclusive grant back conditions, challenges to validity, compulsory tying arrangements and cross-licensing and pooling arrangements. It needs, however, case-by-case decision, because they may bring about pro-competitive or anti-competitive effect. Pursuant to Article 40 (2) TRIPS Member States have the right to specify practices to constitute an abuse of intellectual property rights and have an adverse effect on competition.

Article 40.2 specifies anticompetitive practices as follows:

(1) Grant back

The TRIPS recognizes that grant back conditions may be both pro- and anti-competitive effects. In the case of exclusive grant back practices, they may adversely affect competitions by substantially reducing the licenses incentive to engage in research and development, while non exclusive grant back practices may be pro-competitive in supplying a means for the license and licensor to share the risk in innovation. In the case of applying the rule of reason, grant back conditions will be evaluated in light of the overall structure of a licensing arrangement, the licensors market power in the technology and the general conditions in the relevant market.

(2) Challenges to validity

It may be unlawful practices to require licensee to refrain from challenging the validity of patents and other types of protection for inventions involving the transfer or validity of other grants claimed or obtained by the supplying party.

(3) Tying arrangements

Tying is a strategy adopted by licensors who have market power in one product which is used to extort competitive advantages in the market for the tied product, in which the significant advantage of market power may not exist.

(4) Cross-licensing and pooling arrangements

They may be pro-competitive in the case of the integration of complementary technologies, avoiding transaction costs and the costs of litigation. In addition, such arrangements may be pro-competitive in which the pooling makes use of economies of scale and co-operates complementary abilities of pool participants.(*34) On the contrary, they also have anti-competitive elements when competitors with market power are excluded from a cross-licensing or pooling arrangement. In this case a pooling arrangement may retard innovation and competition through preventing participants from engaging in research and development.

(*31) The negotiation for TRIPS Agreement resulted in request of that both criteria be met simultaneously instead of a word “or”. Id., p. 191.

(*32) The following practices and conditions may be deemed to such measures: (i) exclusive dealing; (ii) restrictions on research; (iii) restrictions on use of personnel; (iv) price fixing; (v) restrictions on adaptation; (vi) exclusive sales or representation agreements; (vii) patent pooling or cross-licensing agreements; (viii) tying arrangements; (ix) export restrictions; (x) restrictions on publicity; (xi) payments and other obligations after expiration of industrial property rights; (xii) restrictions after expiration of an arrangement. See Daniel Gervais, The TRIPS Agreement: Drafting History and Analysis, 1998, p. 189.

(*33) Id., p. 192.

(*34) S. Michael Blakeney, Trade Related Aspects of Intellectual Property Rights: A concise guide to the TRIPs Agreement, 1996, p. 116.

6 Comparison

(1) Scope of application

(i) In the U.S., patents, copyrights, trade secrets and know-how licensing agreements are covered.
(ii) European new Guidelines cover patents, designs, know-how as well as software copyright licensing agreements.
(iii) Japanese Guidelines cover solely patents and know-how licensing agreements, and additionally have the rule '*mutatis mutandis*'.
(iv) Korean Guidelines cover patents, designs, know-how, copyright and even trademarks licensing agreements.

(2) Restrictions

(i) In the U.S., the 'rule of reason' and 'per se illegal' shall be applied.
(ii) Europe has abolished the classification 'white and black' lists, but introduced 'safe harbor', 'hardcore' and 'excluded restrictions' with the concept "MSH" and with discriminatory treatment of competitors and non-competitors.
(iii) Japan has classified the restrictions into 'white', 'gray', 'dark-gray' and 'black' lists.
(iv) In Korea there are 'black' lists with some exceptional cases which shall be applied according to the 'rule of reason'.

(3) Grant back

(i) In the U.S., a basic rule is the 'rule of reason'. Generally speaking, grant back restrictions of exclusive licensing are prohibited, but non-exclusive licensing is allowed.
(ii) In Europe, exclusive grant back restrictions belong to excluded restrictions (Art. 5(1)(a) TTBER) and required individual assessment, while non-exclusive licensing may be allowed.
(iii) In Japan, grant back restrictions of completely exclusive licensing agreements belong to 'dark gray', but non-exclusive licensing is allowed.
(iv) In Korea, grant back restrictions of exclusive and non-exclusive licensing agreements are not allowed without compensation.

(4) No-challenge clause

(i) The U.S. do not have any provision regarding no-challenge clause in Guidelines, but this clause has been invalid since *Lear v. Adkins* Case 395 US 653 (1969).
(ii) In Europe no challenge clause belongs to excluded restriction (Art. 5(1)(c)), and needs individual assessment according to the 'rule of reason'.
(iii) In Japan no-challenge clause is classified into unfair trade, because it may have an adverse effect on competition, except that there are provisions on termination in the agreements.
(iv) In Korea no challenge is principally unfair trade practice with exceptions.

(5) Tying-in agreements

(i) In the U.S., the 'rule of reason' shall be applied, and tying agreements are unfair trade practices unless there is any justification.
(ii) In Europe they are not block exempted if MST is more than 20% between competitors and 30% between non-competitors.
(iii) In Japan they belong to unfair trade practice and unjust trade restraint. However, it may be fair if it is necessary to guarantee the effectiveness of the licensed technology.
(iv)In Korea they also belong to unfair trade practice, but they may be fair if it is necessary to maintain the product quality and credibility of the products.

(6) Cross-licensing and Pooling agreements

Four countries' Guidelines recognize pro-competitive effects of cross-licensing and pooling. The problem is under which conditions they are regarded as anti-competitive.

(i) In the U.S., the 'rule of reason' shall be applied.
(ii) In Europe the 'rule of reason' shall be applied in accordance with which technologies in the pool are included, e.g. complementary, substitutable and essential technologies.
(iii) In Japan they belong to unreasonable trade restraints and private monopolization provided that the competition is substantially restricted.
(iv) In Korea they are invalid if competitors and substitutive relationship may result in anticompetitive effects.

Ⅳ Conclusion

(1) The revised European TTBER Guidelines are mostly characterized by moving legalistic, clause-by-clause to more economic approach, e.g. through introducing market concept. In this respect it is expected in other countries to be discussed as to whether or not such concept should be introduced into restraint of licensing agreements, and whether it is preferable to differentiate "competitor" from "non-competitor" at the IP licensing market.

The market share to be introduced in the new TTBER Guidelines bring about significant legal uncertainty. In addition, self-assessment might be very complex without consistency, involving a mix of legal and economic arguments, for example, with respect to the definition of markets, the calculation of market shares, the determination as to whether technologies are essential, complementary, substitutable etc., because the current technologies are very complex and innovative. Therefore, a proper assessment is necessary to guarantee that agreements are not declared null and void, and that parties do not expose themselves to claims for damages or even fines.

In addition, there is another problem behind the EU reforms. Although the Commission wants to see a greater exchange of information between national competition authorities and courts, there remain still problems, namely there might be real risk of diverging views on similar issues by the national competition authorities and courts, because of different provisions and competition policies in the Member States. Apart from, the Commission expects an allocation of responsibility within the competition network, and so pan-European or worldwide cartels should be investigated, even though intellectual property-related infringement matters in one member state should be investigated by that state.

In the future it is being watched with keen interest how the EU Commission will confront with these matters.

(2) The United States are a case-law country whose legal system has been developed by accumulating cases. This applies to the U.S. Antitrust Guidelines as well. On the other hand, new EU Guidelines are going toward more economical-approach by minutely analyzing market elements such as market share thresholds. In this regard it is noteworthy how Japan and Korea as Continental States, in which the Guidelines in question seem to be greatly influenced by U.S. Guidelines, respond to the new EU Guidelines.

(3) Through comparison of four countries' Guidelines we noticed that intellectual property licensing agreements are closely related to each country's competition policy. We also realized in the Guidelines that antitrust laws should not be deviate from intellectual property laws. Paying attention to these matters, any competition policy should not be too much stressed than IP policy, but be harmonized in the area of IP, at least in the area of restraints of IP licensing agreements.