8 Japanese Guidelines on Standardization and Patent Pool Arrangements: Practical and Legal Considerations under the Current Antimonopoly Act - A Global Perspective^(*)

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Patent pools are essentially agreements where different patent holders "pool" together, i.e. assemble, their respective technologies in order to license them as a unique "package" to third parties. Nowadays, in response to the globalization of technologies and more severe conditions of competition, resulting in a faster pace for innovation also at international level, technology pools have gained increasingly relevance, as successful cooperative IP licensing models.

Reflecting the importance won by such institutions, the purpose of this research is to outline the defining features and the strategic considerations underlying the establishment of patent pools, both in a legal and empirical context, in order to identify what are the best conditions for such cooperative practices to prosper in a competitive setting, with a view of cultivating innovation.

In this respect, attention will be brought both on the internal organizational framework adopted, with regard to the particular nature of the technologies involved, and on the legislative treatment that patent pools have been reserved in different jurisdictions, by summarily comparing US, EU and Japan, the latter having adopted in relation to the other systems in consideration the most recent Guidelines on "Standardization and Patent Pool Arrangements".

Finally, there are many questions still to be answered, and correspondingly many new fields of application where the successful implementation of patent pools still needs to be explored. However, within the scope of this project, the present research hopes to shed at least some light and raise interest on such collaborative IP mechanisms and their goal to promote technology access.

Introduction

1 Outlook on patent pools: a cooperative solution to a business and legal deadlock

The observation of modern economic and social environments shows that nowadays technologies have become more and more complex. Indeed, competitive pressure for interoperability, increased functionality and improved product performance are to a great extent driven by growing consumers demand. This pressure leads to an urgent need for a variety of patents, which in this context are typically detained by multiple right holders and simultaneously needed in order to develop new products based on complex technologies.

From a legal angle, this means that it has become increasingly hard to innovate without infringing prior intellectual property (IP) rights, a problem which is sadly known in the patent literature as the one of so-called "blocking patents", i.e. overlapping rights leading to the self-explanatory metaphorical image of a "patent thicket".

It is to counter this problem that this contribution deals with patent pools, which represent a collaborative IP strategy, where right owners can overcome respective blocking positions by bringing their patents together, while granting each other mutual technology access through licenses.

2 Structural approach and objectives of this contribution

The first part of the report is going to retrace the recent Japanese legislative endeavours to regulate patent pools, in compliance with the IP strategic program set by the government, having placed the protection of IP rights on the top priorities of his agenda. Therefore, this research aims at analysing how a well-thought patent pools' policy may help attain the targeted goal of promoting innovation in a "knowledge-based" economy, such as Japan, which is certainly placed

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at the forefront of technological breakthroughs. In this context, close consideration will be dedicated to the recently issued Japanese Guidelines on Standardization and Patent Pool Arrangements, under which the business practices at issue have to undergo a competitive assessment, pursuant to the parameters set forth by the Antimonopoly Act. Indeed, the core of this project relies on the legal treatment of patent pools in a competitive perspective, taking Japan as the main standpoint, having adopted the most recent Guidelines when compared with the US and the EU.

Subsequently, the second part of this research is going to focus on different business endeavours underlying technology transfer agreements, taking into account their actual impact on promoting innovation and, ultimately, economic growth. In fact, the legal formal framework built around patent pools, as outlined in Part I, shall be coupled by some practical significant instances of actually concluded pooling agreements. These latter shall be closely investigated in order to determine the direction in which market trends in Japan are evolving, also in a business-oriented perspective. Indeed, the value of this research relies on a global analysis of "best practices", involving examples of undertakings setting forth collaborative IP mechanism to enhance access to key technologies. In this respect, the Japanese paradigm is taken as a standpoint, since the Japanese market is placed at the forefront of technological innovation, thereby often acting as "anticipator" of new promising trends around the world.

Finally, the report is going to encompass the essential traits of both EU and US' current legislative treatment of patent pooling agreements, in order to place the undergone respectively complementary legal and business analysis in a wider context. Therefore, the embraced conclusions are going to be set within a broader reference frame, taking into due consideration the closely intertwined effects of our global economy.

I From the IP Strategic Program to the Guidelines: Japan's legal framework for patent consortiums

1 Current Japanese regulation of patent pools

In June 2005 the Japanese Fair Trade Commission (hereinafter JFTC) announced its lastly issued Guidelines on Standardization and Patent Pool Arrangements (hereinafter PP Guidelines).

These were also followed, in September 2007, by the same JFTC with some Guidelines for the of Intellectual Property under Use the Antimonopoly Act. further specifying the principles for the application of the Antimonopoly Act to restrictions in relation to the use of technology. These also included patent pools, which were examined from an antitrust viewpoint to the extent that they may represent an "unreasonable restraint of trade", in case competition in the field of trade associate with the technology at issue is "substantially restrained". Otherwise, it is acknowledged that: "A patent pool can be useful for encouraging the effective use of technologies required for business activities and setting up a patent pool does not immediately constitute an unreasonable restraint of trade".

The above-mentioned PP Guidelines shall enlighten patent pool practices in relation to standard-setting activities, as scrutinized though the antitrust lenses. In Japan the relevant piece of legislation regulating antitrust law is the Act Prohibition Concerning of Private Monopolization and Maintenance of Fair Trade, so-called Anti-Monopoly Act (hereinafter AMA), which dates back to 1947 and lastly underwent a thorough revision in April 2005. This latter did not include patent pools, which is the reason why the need of a regulation in this respect was mandated by the Japanese government and consequently addressed by the PP Guidelines.

2 Policy background leading to Japan's IP Strategic Program, including patent pools

Following the "Intellectual Property Policy Outline" decided in July 3 2002, setting out some key IP issues in need to be implemented, in December 4 of the same year the so-called "Intellectual Property Basic Act" was introduced, identifying a number of primary IP objectives to fulfil, as well as new entities that shall be responsible for realizing them. Since then the government has been placing the protection of IP rights near the top of its agenda and has promoted key IP initiatives as means to transform the national economy.

In particular, in July 8, 2003 the "Strategic Program for the Creation, Protection and Exploitation of Intellectual Property" was submitted to and adopted by the IP Strategy Headquarters, after one and a half year of preparation under the direct supervision of the Japanese Prime Minister Koizumi. Such program represents a more detailed version of the broader IP Policy Outline drafted one year earlier and is periodically re-defined trough a meeting taking place around May-July each year.

In this respect, patent pools were already dealt within a specific section of the July 2003's IP Strategic Program.

3 Patent pools including technology standards

With regard to the Strategic Programs, technical standards invest an important role for IP, since the relevant policy may also have a direct impact on the regulation of patent pools, at least to the extent these consortiums do eventually encompass said standards.

In particular, holders of essential patents, which are necessary for the implementation of a given standards, shall grant access to their rights under reasonable and non-discriminatory (so-called RAND) terms. Conversely, if a right holder refuses to give licences or require excessive licensing fees for the use of this technical standards, such behaviour will hinder the standardization process in place. Therefore, the Japanese government rightly addressed the need to regulate such phenomena, which frequently arise in the context of patent pools, through the PP Guidelines.

4 Fundamental precepts under the PP Guidelines

In principle, following the PP Guidelines, standardization of specifications by competitors as such is not assumed to pose problems with the AMA, unless some pre-identified restrictive conditions are found in the agreement under consideration.

In particular, in order to have some degree of legal certainty and predictability also in individual assessment cases, the Guidelines attempt to provide a general guidance on how to establish good practices when running a patent pool licensing agreement.

It is then up to the Japanese competition authorities to scrutinize competitive patent pools from anticompetitive one, following the principles of the PP Guidelines, in compliance with the AMA Act. In particular:

Essential patents only shall be included in

the pool, i.e. those that are strictly needed, as being mutually complements, in the lack of realistic alternatives (or otherwise said. substitute technologies) in the market, in order to realize and implement the specific technical application at issue. Under a complementary viewpoint, those are the patents that are necessarily infringed when using the targeted technology, also when an infringement is not technically, but merely practically unavoidable, taking into account costs and convenience's considerations in the overall economy of the system.

Conversely, shall non-essential patent be also included, flexible "patent platform" licensing schemes are strongly recommendable in order to reduce the risks connected with antitrust restraints. The proposed model shall allow users to appropriately select licensing conditions for the patents associated with the developed specifications. This offers a welcomed alternative to only bundled licensing packages, particularly valuable when partly substitute technologies are included.

Restrictions imposed upon pool members shall be justifiable in the light of a good management of the collective activity and shall not unduly restrict competitions. For instance, prohibiting participants from licensing their patents independently to third parties, without going through the pool, is not generally recognized as being necessary for the activities of the pool, as these are not typically going to be affected by such practices, especially when the contributed technologies are complements, thus the pooled package may offer additional benefits to licensing individual components.

Different licensing conditions to third parties shall be objectively justifiable. In other words, when contractual terms applying to different licensees are not equal - because for instance diverting on the stipulated royalties or on the scope of the authorized technological or geographical use - such differentiation shall not be arbitrary or abusive, but based on reasonable necessities. Coherently, for example licensing fees may be decided on the basis of supply and demand situations of downstream markets or on the production volume of the licensed product, without unduly exposing some licensees to discriminatory treatments, eventually to cut them out of the market. Abusive practices run the risks of being classified as "private monopolization" under the AMA.

Restrictions in concurrent R&D activities

by licensees on the specifications with respect to the pool shall be avoided, as the implementation of the underlying technologies may be limited and competition in the product market eventually hindered. However, before the specifications have been developed, and in the specific case where developing given specifications is regarded as a core activity of a joint R&D project, restrictions to participants on R&D (with third parties) on subjects closely related to the joint R&D project, during the implementation phase and eventually also for a reasonable period thereafter, may be considered necessary for preventing disputes arising over the results of such project.

So-called "grant-back clauses", under which licensees commit themselves to license back improvements they develop in relation to the pooled technologies through the pool, are permissible if the new patent is deemed to be essential to the specifications and licensed under non-exclusive terms. Otherwise, the accumulation in the pool of improvements developed by the licensees will bear the risk of hindering the implementation of alternative technologies for specifications or, even. alternative specifications.

"Non-challenge clauses", whereby a licensee agree not to challenge the validity of licensor's IP rights, represent a problem under the AMA if accompanied by a termination provision with effect on all patents licensed by the pool, which may be deemed to constitute a "join refusal to deal". Instead, a terminating licensing agreement only for those patents subject to the invalidation claim is regarded as permissible, as not unduly depriving the licensees of the opportunity to contest the validity of any patents included in the pool.

I Emerging collaborative market trends in Japan: empirical considerations

1 Exploring the establishment of patent pools in Japan

The Japanese government has been implementing the IP Strategic Program since July 2003, with the declared goal to make Japan a new IP, knowledge-based nation, namely through the so-called "Activation of the Intellectual Creation Cycle", whose underlying approach has been expressed as follows: "In order to increase national wealth through effective use of IP, it is necessary to promote creation of high-quality IP in the R&D sectors and contents businesses and promptly protect it legally, thereby maximizing added values in industry". Whereas the program emphasized the strategic importance of creation, protection and exploitation of IP, this contribution will focus on the latter, with particular attention to the arisen collaborative market trends that have gained ground in Japan in the last decades.

In particular, in the fast evolving information and communication industries, which are among the most prominent sectors in the Japanese business scene, the problem of partly overlapping and inter-dependent technologies is particularly critical, as the degree of complexity and the fast pace of innovation do not easily afford the luxury of a "play-alone" strategy. In this international standardization respect. both activities and patent pools, as brought together by the JFTC's Guidelines, constitute valid attempts to solve the tragedy of anti-commons through patent licensing, as successfully implemented by Japanese firms.

2 Patent pools as strategic business alliances: some major examples

Major Japanese companies have implemented patent pools' strategies, as effective way to foster durable partnerships, as they both indeed build on creating business "alliances" as a strategy for affirming or consolidating a sound patent exploitation in the technical field of reference.

To quote some notable current cases involving the participation of major Japanese firms, we shall, for instance, recall the one established in 1997 around the MPEG-2, a video coding standard, formed by Columbia University, Fujitsu, General Instrument, Lucent Technologies, Matsushita, Mitsubishi, Philips, Scientific Atlanta and Sony. Under this mechanism, relevant patents were pooled together through an independent agency, which was appointed to provide licensing and royalty collection services.

Another prominent example concerns the so-called Third-generation (3G) mobile telephone standards, on the basis of which the 3G Patent Platform Partnership (3GPPP) was finally established in 2002 as a patent pool, after finally getting "green light" approval from the major antitrust regulatory authorities, including the JFTC in June 2002, and both the European Commission and the U.S. Department of Justice Antitrust Division in November 2002. The 3G Patent Platform provided for a coordinated, procedure centralized for the evaluation.

certification and licensing of patents technologically essential for the manufacture and operation of third generation (3G) mobile communication systems. In a preliminary phase, essential patent declarations, submitted to the Association of Radio Industries and Businesses (ARIB) according to a report of the Japanese Ministry of Internal Affairs and Communications, regarding W-CDMA and CDMA 2000, the two major specifications for 3G mobile telephony, the former of which amounted to 117 from Japan. followed by 102 from the U.S. and 68 from Europe.

While the patent pool established around the MPEG standard, mentioned above, is still regarded as one of the most lucrative consortium of the kind, some other examples of patent pooling agreement involving major Japanese companies will be recalled within this contribution, highlighting a positive Japanese trend towards such collaborative IP mechanisms.

Conclusions: the example set by Japan in a wider comparative context

Nowadays, in a more and more global context, characterized by closely succeeding breakthroughs and a faster pace for innovations bearing a deeper impact on the worldwide economy, beyond individual geographical borders, the interconnected effects of national legislative interventions cannot be neglected and therefore ought to be given the proper consideration.

Accordingly, this contribution is going to encompass the essential traits of both EU and US' current legislative treatment of patent pooling agreements in order to place the undergone legal and business analysis, which was centred around Japan, in a wider international context.

In this respect, the Japanese PP Guidelines are representative of the most recent trend in the antitrust assessment of such business practices, side to side with analogous regulations, in particular as previously adopted in the US and EU. In this respect, while Japan has comparatively adopted the latest guidelines on patent pools, these latter can be seen as representative of the same general principles that have inspired the respective preceding legislative interventions, first in the US and then in the EU.

1 United States

Specifically, in the US the relevant piece of legislation is represented by the Department of

Justice (hereinafter DOJ) and Federal Trade Commission (FTC)'s Antitrust Guidelines for the Licensing of Intellectual Property (also known as "IP Guidelines"), issued in April 1995.

Such guidelines marked the beginning of a new, matured and more balanced approach towards technology pooling agreements, overcoming the past preconceived mistrust and defiance - where patent pools were ultimately seen as "evil" expression of "legal monopolies" in order to introduce a new evaluation procedure based on the so called "Rule of Reason". Indeed the latter advocates the adoption of a contextual and pragmatic approach in the evaluation of the overall pro- and anti-competitive effects of a patent pooling agreement.

US The IP Guidelines are further complemented by the DOJ and FTC joint report "Antitrust dedicated to Enforcement and Intellectual Property Rights: Promoting Innovation and Competition", released in April 2007. This is a comprehensive report, embracing also patent pooling licensing agreements, that is based on the cardinal assumption that preserving the incentive for both creative efforts (trough patent law) and competition (trough antitrust) is fundamental for the progress of society.

This approach is essentially aligned with the previously issued FTC's report, dated October 2003, "To Promote Innovation: the Proper Balance of Competition and Patent Law", according to which "competition and patent stand out among the federal policies that influence innovation", in a reciprocally complementary role, thereby expressing a substantial continuity of judgement and internal consistency of the federal antitrust agencies' position.

2 European Union

Analogously, in the EU the relevant legislative reference is Art. 81 of the European Community Treaty (hereinafter EC Treaty), which is addressed to undertakings and whose first paragraph prohibits certain anti-competitive agreements and concerted practices to the extent that they may significantly affect trade between EC member states, whereas otherwise it would be merely an internal matter of the domestic authorities and the competence of the European Commission would not be in place.

The agreements that are caught by the prohibition are then deemed to be automatically void, pursuant to paragraph 2, except if they can be individually exempted according to the prevailing criteria of paragraph 3. The latter sets the grounds for a case-by-case long evaluation that may eventually lead to an individual exemption of the agreement under examination to be granted by the European Commission, when it can be proved that the long term pro-competitive effects of the agreement outweigh its first accused anti-competitive restraints, where the evaluation then results into an overall positive balance.

However, because such case-by-case exemption entails a lengthy and consequently very costly procedure, the European Commission has finally issued a "Technology Transfer Block Exemption Regulation" (hereinafter TTBER), where all agreements falling within the so called "safe harbour" of said regulation are exempted in "block", so altogether and automatically, thereby overcoming the need of separate, individual exemptions.

This regulation entered into force on the 1st of May 2004, a date coinciding with the accession of 10 new Member States in the European Union, as part of a whole "modernization" process designed to make European procedures in general more efficient. Nevertheless, the TTBER only applies to technology transfer agreements involving two undertakings, therefore patent pools composed of more than two parties could not benefit from the established block exemption. For this reason, the Commission also issued some Guidelines that complement the TTBER, where a central section is dedicated to "Technology Pools", expressing the orientation of the European antitrust authorities towards such multiparty agreements.

3 Global "proximity"

In perspective, the US, EU and lastly the Japanese Guidelines have all succeeded in a relatively close temporal span and, indeed, the "proximity" is not just confined to the chronological aspect, but reach out also to the underlying basic principles, which sustain the whole delicate architecture on which the competitive assessment of patent pools is built.

In fact, at the heart of the legislative efforts in consideration is the common attempt to strike the right balance between patent rights, on the one side, as conferred upon the technology holders that contribute their technologies to the pool, and antitrust law, on the other side, as the pool's core business is the joint licensing of the technology package in the market. Accordingly, the regulation of patent pools lie at the "crossroad" between IP and competition law, so that heterogeneous, but equally valuable interests needs to be taken into account in order to reach a balanced judgement on the merit.

In this respect, the US, EU and Japanese legal systems the competitive appraisal of patent pools has undergone substantially the same evolution, overcoming widespread older preconceptions according to which all patent pools were presumed to be anti-competitive, finally resulting into the current more balanced approach, as expression of the reached maturity of judgement, based on pragmatism and careful observation of reality, rather than preconceived, rigid principles.

Besides. in all the systems under consideration, just as antitrust law is catching up with the competitive assessment of patent pools in their simplest forms, these are rapidly evolving, becoming increasingly complex and giving rise to new, still unexplored issues. Thus, in order to keep pace with our fast-changing reality, maintaining a given flexibility is paramount to see beyond "black & white" disused patterns and to detect "nuances" in the light of the concrete circumstances encountered. Only the observation of the real "big picture" can provide the correct references for understanding whether the implementation of such collaborative IP licensing models works well in practice.

Indeed, nowadays the competent antitrust authorities are facing common challenges and they shall stay aligned in order to reach consistent solutions in the refinement of their IP policies, which shall prove viable beyond the national borders and the peculiarity of individual cases, thereby serving the supreme, common cause of innovation on a global scale.