WIPO Survey on Technology Transfer Agreements and Antitrust

Prepared by the Secretariat
(December 2013)

I. INTRODUCTION

1. In 2012, the Secretariat of the World Intellectual Property Organization (WIPO) submitted a questionnaire to a number of Member States with the aim of obtaining information on the experience developed at the national level on the interaction between technology transfer agreements and antitrust (competition law). Such an exercise was undertaken in the framework of Recommendation 23 of the WIPO Development Agenda, which reads:

> "To consider how to better promote pro-competitive intellectual property licensing practices, particularly with a view to fostering creativity, innovation and the transfer and dissemination of technology to interested countries, in particular developing countries and LDCs."

2. This topic has been in the multilateral agenda since the 1960s.[1] For a number of years, the United Nations Conference on Trade and Development (UNCTAD) has led discussions on possibly harmonized criteria to address eventually anticompetitive clauses in technology transfer-related licensing agreements, but those discussions did not lead to an agreement.[2]

3. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)[3] contains provisions that include language on technology transfer and antitrust. For example, Article 8.2 provides:

> "Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology."

Article 21 provides:

> "Members may determine conditions on the licensing and assignment of trademarks, it being understood that the compulsory licensing of trademarks shall not be permitted and that the owner of a registered mark shall have the right to assign the trademark with or without the transfer of the business to which the trademark belongs."

Article 28.2 states:

> "Patent owners shall also have the right to assign, or transfer by succession, the patent and to conclude licensing agreements."

Article 40.1 and 40.2 states:

> "1. Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.

---

[1] *See*, *e.g.*, *The Role of Patents in the Transfer of Technology to Developing Countries – Report of the Secretary-General* (United Nations, New York, 1964).
[2] The Draft International Code of Conduct on the Transfer of Technology and the documents reflecting discussions between 1974 and 1985 are available at <www.unctad.info>.
[3] The Agreement on Trade-Related Aspects of Intellectual Property Rights is Annex 1C to the Agreement Establishing the World Trade Organization (WTO).

> 2. Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member."

5. Keeping Development Agenda Recommendation 23 in mind, the WIPO Secretariat elaborated a questionnaire that asks a number of Member States which have acquired legal and practical experience in addressing technology transfer from an antitrust perspective with the aim to identify a number of common positions and, in particular, to identify experiences that could be shared with those other Member States that have no such experience. That questionnaire was shared with those Member States that agreed to participate.

6. The WIPO Secretariat would encourage and greatly appreciate receiving inputs, comments and queries from WIPO Member States that were not involved in this exercise, so that, in a second phase, more responses could be added to this document. It goes without saying that the ultimate objective of this exercise is not to issue recommendations or suggestions on how Member States should address the antitrust interface of technology transfer agreements, but rather facilitate an exchange of relevant information among Member States in a way that is accessible to policy makers.

7. Eventually, if Member States show interest, this exercise may be followed by a comparative analysis of two central issues in the evaluation of technology transfer agreements by antitrust enforcement authorities in Member States. The comparative analysis could consider Member States' practices on: (1) the use of preventive monitoring or *ex ante* review of technology transfer agreements; and (2) the use of the rule of reason approach in analyzing the effects of such agreements. Before conducting this analysis, the WIPO Secretariat would seek additional inputs, comments and queries from WIPO Member States that did not respond to this survey. Such an analysis, if it takes place, would be conducted in cooperation and in consultation with all participating Member States, and would aim at elaborating on the practices adopted by the participating Member States with respect to these two issues.

II. OVERVIEW OF THE REPLIES TO THE QUESTIONNAIRE

8. The following responses express how the responding Member States address certain aspects of the antitrust interface of technology transfer agreements. Even though approaches vary, it is possible to identify certain converging trends. A table summarizing some of the key points is included below.

9. The replies indicate that, in general, the competition authority has responsibility for conducting an antitrust analysis of technology transfer agreements. Where the intellectual property offices have a role in that analysis, they tend to cooperate or coordinate with the competition authority.

10. Even though the demographic basis of the survey is small, it seems that there is a trend for not opting for an *ex ante* review of technology transfer agreements, on the assumption that they are mostly pro-competitive or competitively neutral, in addition to the significant costs that such a review entails, and the delay it imposes on bringing new products and technologies to the market. This is corroborated by the information provided, for example, by Thailand, where no contract has been found anti-competitive so far. In Brazil, only 20% of contracts lead to a request of clarifications by the intellectual property office.

11. There is a clear trend towards the adoption of directives or guidelines clarifying the objectives and the ways of implementing the relevant national statutes. Responding countries have emphasized the importance of those guidelines as tools for establishing business confidence and legal security.

12. Countries tend to use the rule of reason approach, and in order to apply it they focus on efficiencies that can result in reductions in price, increases in output and increases in innovation rather than other public policy goals.

13. Finally, responding Member States have emphasized the importance of the mutually reinforcing relationship between competition policies and intellectual property in order to promote R&D and improve consumer and economic welfare.

WIPO Survey on Technology Transfer Agreements (TTAs) and Antitrust Key Points						
	Brazil	**China P.R.**	**EU**	**Japan**	**Thailand**	**United States**
Entity/ies responsible for analyzing the antitrust nature of TTAs clauses	IP Office/Courts	N.A.	European Commission/ Courts	Competition Authority	N.A.	Competition Authorities
Opportunity of analysis	Ex Ante	N.A.	Ex Post	N.A.	Ex Ante	Ex Post
Predominant analytical tool	Rule of reason + hardcore restrictions	N.A.	Rule of Reason +hardcore restrictions	Rule of reason	N.A.	Rule of reason
Type of efficiencies in the rule of reason	N.A.	N.A.	Economic efficiencies	Economic efficiencies	N.A.	Economic efficiencies and consumer welfare

III. QUESTIONS

1. Please indicate whether the measures, identified above, are enforced by a competition/antitrust agency, an intellectual property agency, or another agency.

2. What is your country's experience with collaboration of competition and IP agencies in monitoring/controlling the antitrust interface of TTAs?

3. Please indicate whether your country evaluates TTAs prior to their operation and, if so, explain the evaluation criteria and process:

   i. If your country reviews TTAs ex ante, which agency carries out that examination: the IP office, the competition authority(ies), or both? Please explain your choice.

   ii. What is the percentage of contracts in which your authorities have found hardcore anti-competitive restrictions as a proportion of the total of contracts examined?

   iii. What is the frequency of restrictions that have been found restrictive of competition with no compensatory efficiencies?[4]

4. Are there clauses in TTAs that should be identified as hardcore restrictions to competition – in which case they would be deemed unlawful and invalid, and would not entail any examination of efficiencies eventually produced?

   i. If you answered yes, could you please identify, even if not exhaustively, which types of clauses should qualify and explain why they should be per se illegal?

5. For all other TTA restrictions, how do you evaluate potential efficiencies and harms to competition when determining whether such a restriction is anticompetitive?

   i. What types of efficiencies and harms may be considered when determining whether a TTA restriction harms, or is likely to harm, competition?

   ii. Are some efficiencies more important than others? If so, please explain which ones are more important and why they are more important.

   iii. What is the outcome if the effects of a TTA restriction are competitively neutral?

In an objective and realistic assessment of your country's experience, what elements of your norms/statutes/practices do you believe have been most useful in promoting pro-competitive technology transfer and dissemination in your country/jurisdiction?

---

[4] For the purposes of this Resource Kit, the term "efficiencies" has two different meanings. One is "economic efficiencies", i.e., those facts or circumstances that positively affect consumer welfare. The other is efficiencies of a more social nature that can be eventually considered by antitrust enforcement agencies or courts and yet do not necessarily lead to increased consumer welfare, such as fairness, freedom of trade and job creation.

IV. REPLIES

BRAZIL

6. *Please indicate whether the measures, identified above, are enforced by a competition/antitrust agency, an intellectual property agency, or another agency.*

In the reported cases, decisions were taken by INPI[5] in the course of the registration of licensing agreements. In some of those cases, the decisions were confirmed in appeals to the Presidency of INPI.

7. *What is your country's experience with collaboration of competition and IP agencies in monitoring/controlling the antitrust interface of TTAs?*

The scrutiny and the registration of licensing and technology transfer agreements by INPI, as far as restrictive clauses are concerned, historically takes the statute concerning repression of economic abuses into account.

In the 1960s, before the creation of INPI, art. 2 of Law nr. 4.137/62, which dealt with repression of abuse of economic power, was used as a basis for the scrutiny of such clauses by the Central Bank. Subsequently, after the entry of the Industrial Property Code into force, a number of clauses were deemed restrictive *per se* by INPI.[6] After the entry into force of the TRIPS Agreement and Law nr. 9.279/96, restrictive clauses started being evaluated in the circumstances of each case, with INPI requesting the submission of clarifications by the requesting company.

In this context, since 1996, when the Industrial Property Law was signed, the structuring of cooperation activities between INPI and CADE[7] has been foreshadowed by means of memoranda of understanding. However, those operations have not yet been organized.

With the signature of the Memorandum of Understanding with CADE, currently in force,[8] an increased interaction with that entity is sought, because of its essential role in the definition of acceptable provisions in IP licensing and technology transfer agreements.

8. *Please indicate whether your country evaluates TTAs prior to their operation and, if so, explain the evaluation criteria and process:*

    i. *If your country reviews TTAs ex ante, which agency carries out that examination: the IP office, the competition authority(ies), or both? Please explain your choice.*

[5] [Note by the Secretariat] INPI stands for Instituto Nacional da Propriedade Industrial (National Institute of Industrial Property).
[6] [Note by the Secretariat] This is Law Nr. 5.772, of 1971. Subsequently, INPI adopted a Directive (Normative Act 15/75), largely inspired by the work of the United Nations Conference on Trade and Development (UNCTAD) in the context of the Code of Conduct on Technology Transfer.
[7] [Note by the secretariat] CADE stands for Conselho Administrativo de Defesa Econômica (Administrative Council of Economic Defense). Its authority as the Brazilian national competition agency is established by Law nr. 12.529, of 2011. This statute has reestructured the Brazilian system of antitrust enforcement, attributing to CADE the activities of investigating and sanctioning antitrust violations.
[8] [Note by the Secretariat] An English version of this Memorandum can be found at WIPO website (<www.wipo.int/ip-competition/en/cooperation.html>).

INPI, through its General Coordination of Contracts, Directorate of Contracts, Geographical Indications and Registrations, is the competent authority for the analysis and registration[9] of IP licensing, technology transfer and franchising agreements.

The law that created INPI[10] established that the agency would have the mandate of regulating industrial property and technology transfer. The Industrial Property Code, Law nr. 5.772/71, established that those agreements that implied the transfer of technology were the subject of registration by INPI. The law that created INPI was modified by Law nr. 9279/96, but this law, in conjunction with other statutes dealing with currency exchange and taxes, keeps with INPI the authority to register IP licensing, technology transfer and franchising agreements. Under the Brazilian laws in force, the same public agency that recognizes IP rights also assesses the ways in which those rights circulate economically.

The analysis of technology transfer agreements is carried out by two technical divisions, which deal with the analysis of contracts. Another division is in charge of formalities and expedition of documents.

The analysis for the purposes of registration has the objective of ensuring the validity of contracts as regards third parties, of permitting the remittance of payments abroad and the tax deduction of payments, besides enforcing the law on repression of economic power abuse. For that purpose, INPI checks the existing records, the relationship between the contracting parties, the subject matter of the deal, payment conditions, time periods, and the restrictive clauses.

ii. What is the percentage of contracts in which your authorities have found hardcore anti-competitive restrictions as a proportion of the total of contracts examined?

Statistical data are not precise. We know, however, that 20% of the agreements whose registration is required are the subject of administrative action seeking clarifications. Therefore, we can say that the number of agreements submitted to INPI containing anticompetitive clauses is about that percentage.

iii. What is the frequency of restrictions that have been found restrictive of competition with no compensatory efficiencies?[11]

There is no information available.

9. Are there clauses in TTAs that should be identified as hardcore restrictions to competition – in which case they would be deemed unlawful and invalid, and would not entail any examination of efficiencies eventually produced?

We understand that those clauses that should be deemed as "hardcore restrictions to competition" are that that establish the cessation of production in know-how transfer

[9] [Note by the secretariat] The original answer, in Portuguese, says "averbação/registro." Indeed, there is a difference between "averbação" e "registro," the latter term generally being reserved to those formalities that give rise to rights, whereas the former generally means the mere formality of inscribing a private document, such as a contract or a deed, into public records, for the purposes of publicity.

[10] [Note by the Secretariat] Law nr. 5.648/70.

[11] [Note in the original questionnaire] For the purposes of this Resource Kit, the term "efficiencies" has two different meanings. One is "economic efficiencies", i.e., those facts or circumstances that positively affect consumer welfare. The other is efficiencies of a more social nature that can be eventually considered by antitrust enforcement agencies or courts and yet do not necessarily lead to increased consumer welfare, such as fairness, freedom of trade and job creation.

agreements, restrictions to exports, obligation to buy from the licensor/supplier (tie-in clauses) and the examples listed in Article 40.2 of the TRIPS Agreement.[12]

Brazilian law, at this point in time, does not recognize *per se* restrictive clauses. The analysis of contracts identifies those clauses that may be restrictive, and the Brazilian party is asked to submit clarifications aimed at evaluating those clauses under the "rule of reason" approach. Where the company declares that the clause in question has no negative effect the so-called economic abuse is not considered.

It is worth noticing that, under current laws, CADE must be consulted on these matters. The implementation of the Memorandum of Understanding signed with that entity shall structure the joint activities of the two agencies.

i. *If you answered yes, could you please identify, even if not exhaustively, which types of clauses should qualify and explain why they should be per se illegal?*

Those clauses were mentioned above. They should be deemed *per se* abusive because they restrain the transfer and dissemination of technology, besides restraining the exploitation of markets.

10. For all other TTA restrictions, how do you evaluate potential efficiencies and harms to competition when determining whether such a restriction is anticompetitive?

i. *What types of efficiencies and harms may be considered when determining whether a TTA restriction harms, or is likely to harm, competition?*

ii. *Are some efficiencies more important than others? If so, please explain which ones are more important and why they are more important.*

iii. *What is the outcome if the effects of a TTA restriction are competitively neutral?*

11. In an objective and realistic assessment of your country's experience, what elements of your norms/statutes/practices do you believe have been most useful in promoting pro-competitive technology transfer and dissemination in your country/jurisdiction?

(a) The laws that enabled the establishment of a register of technology transfer agreements by the industrial property agency (the statute that established INPI, the Code of Industrial Property Code and, subsequently, the Law on Industrial property) have made it possible to give special attention to technology transfer, thus strengthening industrial property and its importance for the economic development of the country.

(b) Another important element is the existence of antitrust laws in Brazil, which repress abuses in technology agreements.

It should be emphasized that the procompetitive thrust of technology transfer agreements depends to a great extent on the terms of the agreement signed by the parties. The agreement must lead to the absorption and the dissemination of technology, its

[12] [Note by the Secretariat] Article 40.2 of the TRIPS Agreement lists exclusive grantback conditions, conditions preventing challenges to validity and coercive package. This list is generally considered by commentators as not being exhaustive.

adaptation to the needs of the country, as well as to the development of improvements (*catching-up*).

RELEVANT STATUTES, GUIDELINES AND OTHER NORMS (as designated by the responding Member State)

The interface between technology transfer agreements and issues related to competition law are dealt with in Brazil by a set of statutes pertaining to different legal fields, as indicated below. The institutional responsibility over this matter belongs to CADE and INPI, the latter being in charge of operational aspects.

Laws concerning Technology Transfer Agreements

- Law nr. 9,279/96 (Industrial Property Law), articles 61, 62, 121, 139, 140, 211 and, as far as compulsory licenses are concerned, articles 68 through 74[13]

Laws concerning remittances of currency abroad

- Law nr. 4,131/62 (remittances abroad) articles 9 and 12[14]

Laws concerning Income Tax

- Decree nr. 3,000/99 (Income Tax Regulation), articles 353, 354 and 355

Laws concerning the Repression of Economic Power Abuse

- Law nr. 12,529/11 (Brazilian System of Competition Defense), article 36; Memorandum of Understanding INPI/CADE, dated of June 7, 2010[15]

RELEVANT CASE LAW (as designated by the responding Member State)

In the analysis of technology transfer agreements, activity that has been under the authority of INPI since its establishment in 1970, the standards of the Code of Conduct on Technology Transfer, which were under discussion in UNCTAD, have always been applied pursuant to the statute that repressed economic power abuses at that time. In 1971, articles 29 and 30 of the Industrial Property Code, and, in 1975, Normative Act/INPI nr. 15 also became relevant.

Thus, all decisions on technology transfer agreements concerning restraining clauses have been issued by INPI.

Only after the entry of Law nr 9.279/96 into force judicial proceedings [involving INPI decisions concerning technology transfer agreements] were launched.

As an example of a case that illustrates situations involving economic power abuse in patent licensing dealt with by INPI as well as by courts, it is worth mentioning the proceeding of registration of contracts entered into by KONINKLIJKE PHILPS ELECTRONICS N.V. As regards those contracts INPI, based on its statutory authority, established limits for the payment of royalties by licensed companies.

The decisions of INPI, which were taken after hearing the licensees, took into account economic power abusive practices, revealed by:

---

[13] [Note by the Secretariat] Several language versions (including English) of this statute can be found at <www.wipo.int/wipolex/en>.

[14] [Note by the Secretariat] The Portuguese version of all Brazilian statutes in force are available at the Legislation Portal of Palácio do Planalto (at <www4.planalto.gov.br/legislacao>).

[15] [Note by the Secretariat] See note 4, *supra*.

- Setting of excessive royalties, due to the increase of the significance of the values initially negotiated, when compared to the net sale price, with an impact on the financial revenue of the companies established in Brazil, leading to the reduction in investment on R&D, discouraging investment in the country as well as the transfer of technical knowledge;
- Patent pooling: the patent licensing agreements for recording compact discs involve several companies holding industrial property rights. Worldwide those companies have established two consortia. This fact obliges the licensees to enter into two contracts for the same products, which leads to doubling the royalty amount.

KONINKLIJKE PHILPS ELECTRONICS N.V. has filed two requests of “Writs of Mandamus” [before a Federal Judge] against the INPI decisions that set a limit to royalties in the amount of 5% over the net sale price of the products covered by the patent licensing agreements established with NOVODISC MIDIA DIGITAL LTDA and MICROSERVICE TECNOLOGIA DIGITAL S/A.

A translation of the summary of the opinion by the Federal Court of Appeals for the 2nd Region in the case Philips v. INPI follows:

FEDERAL REGIONAL TRIBUNAL OF THE SECOND REGION)

XII – APPEAL IN WRIT OF MANDAMUS
2006.51.01.504157-8

RAPPORTEUR JUDGE : FEDERAL JUDGE LILIANE RORIZ
PLAINTIFF : KONINKLIJKE PHILIPS ELETRONICS N V
ATTORNEY : RODRIGO SERGIO BONAN DE AGUIAR AND OTHERS
DEFENDANT : NATIONAL INSTITUE OF INDUSTRIAL PROPERTY (INPI)
LEGAL REPRESENTATIVE : ANDRE LUIS BALLOUSSIER ANCORA DA LUZ
SOURCE : THIRTY-SEVENTH FEDERAL COURT OF RIO DE JANEIRO (200651015041578)

SUMMARY

INDUSTRIAL PROPERTY. TECHNOLOGY- TRANSFER CONTRACT. ANNOTATION. INPI LIMITATION. COMPETENCE. EXCESSIVELY ONEROUS NATURE OF CONTRACT. ROYALTIES. FIXED MAXIMUM PERCENTAGE.

1. There are a number of different and specific aspects involved in the formation of an international technology-transfer contract. On the one hand, there is the holder of the technology – the transferor or licensor, usually located in a country that is a producer of technology in the so-called first world, and, on the other hand, there is the recipient, or licensee, almost always based in a developing or less-developed country. The main aims of the former party are to maximize remuneration for his technology, optimizing its exploitation, and to promote the use of said technology as a way of entering new markets. The main aims of the latter party are to obtain innovative technology and technological capacity in itself.

2. When considering the contracts submitted to it for annotation or registration, the National Institute of Industrial Property (INPI) can and must assess the conditions under which said contracts were signed, in light of the mandate bestowed upon it by Act No. 5.648, of December 11, 1970, creating the INPI. Fundamentally, the INPI’s task is to give effect to industrial property legislation, but without losing sight of the social, economic, legal and technical functions of said legislation and always bearing in mind the desired aim of the economic development of the country.

3. In repealing the sole paragraph of Article No. 2 of Act No. 5.648/70, Act No. 9.279/1996 merely withdrew the INPI’s competence in terms of judging whether contracts were appropriate and opportune, that is to say, the power to decide which technologies would be the most appropriate with regard to the economic development of the country. This decision is now uniquely the preserve of the contracting parties. The INPI has, however, retained the power to remove unfair terms, in particular those involving payment in foreign currencies, given the need to carry out payments of values abroad. In this regard, the INPI operates at least as the delegated agent of the tax authorities.

4. The large-scale dissemination of production on a global scale gave rise to a dramatic drop in prices (owing to oversupply), a situation which led to excessive costs, with the implementation of the contract being jeopardized should the fixed value of each product marketed be maintained.

5. The figure of 5 per cent set for royalty payments is both reasonable and proportionate given that it is both the maximum percentage coefficient authorized in terms of tax deductions, in line with Article 12 of Act No. 4.131/62, and the most frequent maximum value, as well as having been adopted as a reference with regard to technology-licensing and transfer contracts.

6. Appeal rejected.

RULING

The legal proceedings to which the persons indicated above are party have been heard and recorded:

The Members of the Second Specialized Panel of the Federal Regional Tribunal of the Second Region decided, by a majority, to reject the appeal, under the terms of the opinion of the Rapporteur.

Rio de Janeiro, June 4, 2008 (date of judgment).
LILIANE RORIZ
Rapporteur Judge

CHINA, P.R.

In recent years, competition-related issues arising from the abuse of intellectual property rights (IPR) have attracted wide attention. Many countries and regions have established and issued guidelines or regulations to make clarifications and provisions concerning antitrust issues resulting from the abuse of IPR.

Along the same line, the *Anti-monopoly Law of the People's Republic of China*, which went into effect in 2008, provides in Article 55 that "[t]his law is not applicable to undertakings which exercise their intellectual property rights in accordance with the laws and administrative regulations on intellectual property rights； however, this law shall be applicable to the undertakings which exclude or restrict market competition by abusing their intellectual property rights." This is rather a provision in principle, and there is no clear and specific definition of what acts could be deemed as legitimate exercises of rights, and what would be deemed as abusive conducts excluding or restricting competition. Different sectors of the society, especially the numerous IPR-intensive enterprises, wish to see relevant provisions or guidelines established, thereby providing legitimate expectations for business activities and a uniform guide for antitrust agencies' law enforcement.

Therefore, the State Administration for Industry and Commerce (SAIC) is currently working in this respect. Firstly, the SAIC have collected the latest guidelines, case law and theoretical literature, both Chinese and from foreign countries, which include, for example, the *Antitrust Guidelines for the Licensing of Intellectual Property* issued by the U.S. Department of Justice and the Federal Trade Commission in 1995, the report *Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition* published in 2007 by the same agencies; *Commission Regulation (EC) No 772/2004* and *Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements* issued by the Commission of the European Communities in 2004; and *Guidelines for the Use of Intellectual Property under the Antimonopoly Act* issued by the Fair Trade Commission of Japan in 2007. Secondly, SAIC conducted surveys and researches on the situation of IPR abuse in China. Workshops were organized and questionnaires issued to enterprises and relevant Chinese agencies with the aim of gaining insight into the actual exercise of IPR by enterprises as well as the problems faced by the agencies in enforcement. On the basis of this work, the SAIC drafted the *Guidelines on the Enforcement of Antitrust Law in the Field of Intellectual Property (draft for discussion)*. As a next step, SAIC will hold wide consultations on these *Guidelines* in order to make further improvements.

EUROPEAN UNION

1. Please indicate whether the measures, identified above, are enforced by a competition/antitrust agency, an intellectual property agency, or another agency.

EU competition law is enforced by the European Commission and the competition authorities of the Member States, forming together a network of public authorities applying EU competition rules in close cooperation, with national courts having an essential part to play.

2. What is your country's experience with collaboration of competition and IP agencies in monitoring/controlling the antitrust interface of TTAs?

The Commission's opinion is that the most important elements in achieving a well-balanced competition and intellectual property law system are well-functioning intellectual property and competition laws as well as well-functioning authorities responsible for the implementation of these laws.

3. Please indicate whether your country evaluates TTAs prior to their operation and, if so, explain the evaluation criteria and process:

i. If your country reviews TTAs ex ante, which agency carries out that examination: the IP office, the competition authority(ies), or both? Please explain your choice.

The EU system is based on *ex-post* analysis of the technology transfer agreements; there are no requirements to register the licensing of intellectual property rights.

ii. What is the percentage of contracts in which your authorities have found hardcore anti-competitive restrictions as a proportion of the total of contracts examined?

iii. ***What is the frequency of restrictions that have been found restrictive of competition with no compensatory efficiencies?[16]***

The Commission currently has no information on the existence and frequency of the issues mentioned in questions 3.ii) and iii) of the questionnaire. The EU's system is focused on the *ex-post* assessment of the agreements, therefore, the undertakings must self-assess the terms of their agreements without any obligation to notify them to the Commission.

4. Are there clauses in TTAs that should be identified as hardcore restrictions to competition – in which case they would be deemed unlawful and invalid, and would not entail any examination of efficiencies eventually produced?

[16] [Note in the original questionnaire] For the purposes of this Resource Kit, the term "efficiencies" has two different meanings. One is "economic efficiencies", i.e., those facts or circumstances that positively affect consumer welfare. The other is efficiencies of a more social nature that can be eventually considered by antitrust enforcement agencies or courts and yet do not necessarily lead to increased consumer welfare, such as fairness, freedom of trade and job creation.

i. If you answered yes, could you please identify, even if not exhaustively, which types of clauses should qualify and explain why they should be per se illegal?

The Commission supports the suggestion to establish a list of clauses in technology transfer agreements that should be regarded as hard-core restrictions of competition. The restrictions that are regarded as hard-core restrictions of competition are set out in Article 4 TTBER. The lists of hard-core restrictions differ depending on whether the parties to the agreement are competitors or not. In general the agreement between competitors will be regarded as having hard-core restrictions of competition if the agreement, directly or indirectly, has as its object the restriction of a party's ability to determine its prices, the limitation of output and the allocation of markets or customers. With regard to agreements between non-competitors, in general they will be regarded as hard-core if they, directly or indirectly, have as their object the restriction of a party's ability to determine its prices, the restriction of passive sales based on the territory or on the customers and the restriction of active or passive sales to end-users by a member of selective distribution system.[17]

5. For all other TTA restrictions, how do you evaluate potential efficiencies and harms to competition when determining whether such a restriction is anticompetitive?

i. ***What types of efficiencies and harms may be considered when determining whether a TTA restriction harms, or is likely to harm, competition?***

In the Commission's view, social efficiencies/objectives should not be taken into account when examining possible efficiencies of the agreement[18] and the analysis should only focus on the economic efficiencies. For further information on how the Commission assesses efficiencies we refer to the Commission's Guidelines on the application of Article 81(3) of the Treaty[19] ('Article 81(3) Guidelines'). The main principles set out in the Article 81(3) Guidelines could be summarized as follows: the efficiencies of the agreement are only examined where the agreement restricts competition within the meaning of Article 101(1) TFEU. In such a case, the efficiencies generated by the restrictive agreement within the relevant market must outweigh its anti-competitive effects. The Commission takes into account only objective benefits that are a direct result of the agreement. The Commission's Article 81(3) Guidelines distinguish between the following categories of efficiencies (non-exhaustive list): cost efficiencies (e.g. cost savings; synergies resulting from integration of existing assets, such as combination of two existing technologies with complementary strengths; economies of scale and scope; rationalization of production) and qualitative efficiencies (e.g. new or improved products; greater product variety; faster introduction of the products on the market).

ii. Are some efficiencies more important than others? If so, please explain which ones are more important and why they are more important.

The importance of a given efficiency depends is subject to an individual case-by-case analysis. To note that in the context of TTAs, dynamic efficiencies in the shape of innovation

[17] These are only the most general rules. The exceptions to them can be found in Article 4 TTBER.
[18] Although social objectives might be taken into account when examining the agreement under Article 101(3) TFEU, if they give rise to economic efficiencies.
[19] Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty (Text with EEA relevance), OJ C 101, 27.4.2004, p. 97–118.

are particularly relevant, but also more difficult to quantify (see paragraph 103 of the Article 81 (3) Guidelines).
5.iii.

iii. What is the outcome if the effects of a TTA restriction are competitively neutral?

TTAs which are competitively neutral do not restrict competition, and are therefore in line with Articles 101, 102 TFEU.

6. *In an objective and realistic assessment of your country's experience, what elements of your norms/statutes/practices do you believe have been most useful in promoting pro-competitive technology transfer and dissemination in your country/jurisdiction?*

The EU competition rules for licensing agreements are set out in Article 101 TFEU. Article 101 prohibits agreements between companies which lead to an appreciable restriction of competition. Enforcement of this primary rule is complemented by the two instruments mentioned above under (a), the TTBER and accompanying Guidelines. The TTBER creates a safe harbour for technology transfer agreements under EU competition law. The Guidelines provide guidance on the application of the TTBER as well as on the application of EU competition law to technology transfer agreements that fall outside the safe harbour of the TTBER. The competition rules aim to strengthen the incentives for initial R&D, facilitate diffusion of intellectual property and generate market competition. The two instruments allow flexibility in the individual assessment, at the same time enhancing legal certainty.

RELEVANT STATUTES, DIRECTIVES AND OTHER NORMS (as designated by the responding Member State)

On 27 April 2004 the Commission published the Technological Transfer Block Exemption Regulation[20] ('TTBER') and the Commission Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements[21] ('TTBER Guidelines'), which deal with the technology transfer agreements. Both of these documents are attached to this submission (follow hyperlink).

These instruments will expire on 30 April 2014. In order to prepare the regime to be applied after that date, the Commission is currently reviewing the instruments. A public consultation earlier this year had invited stakeholders' views on their experiences in applying the BER and accompanying Guidelines in practice. The consultation is to ensure both the reflection of current market realities in the instruments and the possibility of non-competitors and competitors to enter into technology transfer agreements, while contributing to economic welfare and not posing a risk for competition.

RELEVANT CASE LAW (as designated by the responding Member State)

[20] Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements (Text with EEA relevance), OJ L 123, 27.4.2004, p. 11–17.
[21] Commission Notice – Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements (Text with EEA relevance), OJ C 101, 27.4.2004, p. 2–42.

Among the many decisions of the Court of Justice of the EU pertinent to technology transfer agreements, we present the following ones we consider relevant (for access to the full text of the judgments, please click on the hyperlink):

1. C-56&58/64 *Consten & Grundig* : Prior to *Consten & Grundig*, many restrictions in patent licensing agreements were found to be acceptable under Article 101 (1) TFEU as simply emanating from the patentee's exclusive right, provided that they did not exceed the scope of the latter's patent rights. This started to change with *Consten & Grundig*, where the Court confirmed in particular the applicability of Articles 101 and 102 TFEU to licensing agreements, emphasizing that the fact that IP law grants exclusive rights of exploitation does not mean that IPR are immune to competition rules.

The *Consten & Grundig* judgment moreover raised awareness for the potential of IPR licenses to seal off markets and limit competition, and the Court stated that the use of IPR can contribute to an infringement where it enables a distributor to enjoy absolute territorial protection in its allotted territory. It consequently widened the scope of the prohibition in Article 101 (1), stating that it also applies to market partitioning, and adopted a per se rule against absolute territorial protection, to be later confirmed by *Nungesser* (see below). Since this case, there have been specific competition concerns with restrictions on intra-technology competition, such as provisions placing obligations on licensees not to sell directly into the territories of other licensees.

As for Article 101 (3), the Court had emphasized the complex economic assessment needed to decide whether to grant an exemption, with discretionary power only being exercised by the Commission.

2. C-258/78 *Nungesser ('Maize Seeds case')*: In this case, the *'new technology/market opening' doctrine* originated.

The case concerned an assignment of breeders' rights to a maize seed variety by INRA, a French research institution, to Eisele who registered the right in Germany. In addition, INRA agreed to refrain, and to prevent others, from importing their maize seed varieties in Germany. Eisele had relied upon its IPR to prevent a parallel importer from importing into Germany from another French source, and had obtained a court-approved settlement. A key question was whether an exclusive license of plant breeders' rights is a restriction of competition by object under Article 101 (1) TFEU.

The Court of Justice distinguished between an *open exclusive licence* on the one hand and an *exclusive license* conferring absolute territorial protection on the other, eliminating all competition from third parties. The latter would automatically be caught by Article 101 (1) TFEU and was not eligible for exemption under Article 101 (3) TFEU. As for the assessment under Article 101 (1) TFEU, the Court adopted a concept of *qualitative appreciability*, stipulating that if the exclusive territorial obligation in the licensing agreement is an indispensable inducement[22] for the licensee to invest in the new technology, this could make the agreement compatible with Article 101 (1) TFEU. In particular, an *open exclusive license* of plant breeders' rights was not a restriction by object and not in itself contrary to Article 101 (1) TFEU; a detailed analysis was necessary to determine the effects of the agreement.

The case illustrates that in certain cases, certain restraints may *not be caught* by the prohibition in Article 101 (1) TFEU, because the restraint is objectively necessary for the existence for an agreement of that type or nature. This case marked a change towards an IP friendlier approach by EU Courts, as the Court confirmed that vertical exclusive distribution can under certain circumstances be pro-competitive.

3**. C-193/83** *Windsurfing* : This case concerns a non-territorial restriction in licenses of intellectual property rights.

---

[22] The Court acknowledged that the licensee of the new technology may be deterred from accepting the risk of cultivating / marketing a new product, unless it knows that it will not encounter competition from other licensees in its territory.

Windsurfing International, an American company, had invented a rig for a sailboard and applied for patents in several countries, including Germany. It had granted a number of non-exclusive licenses of its German patent for windsurfing equipment to firms within the EU, with patent litigation on-going in Germany over whether the scope of the patent covered only the rig, or both the rig and the board. The Commission had proceeded on the basis that only the rig was covered by the patent.

The validity of the patent for the sailboard, already granted to the plaintiffs, was raised as a defense in infringement proceedings brought against the defendant. The Court held that the patentee's improvement was insufficient for justifying patent protection, as there was no inventive step in making an obvious (and thus non-patentable) improvement[23].

Moreover, in this case the Commission had found several clauses of the license agreement to be an infringement of Article 101 (1) TFEU, among others an obligation on licensees to acknowledge the word marks 'Windsurfer' and 'Windsurfing', as well as a design mark or logo as valid trademarks. The Commission considered the latter as a no-challenge clause to the validity of the trademark[24].

The Court stated that whether a no-challenge clause restricts competition depends on the license agreement's legal and economic context, and upheld the Commission's *per se* prohibition of the no-challenge clause which in this case related to a trademark that had not been licensed together with the patent[25].

This case is also an example of the way in which the extension of a licensing agreement beyond the scope of a patent, by tying a patent with a non-patented product, could make the agreement unenforceable.

[23] The plaintiff's patent had been anticipated by a boy on holiday using a straight boom. By comparison, the plaintiff's patented boom was arc-shaped to enhance aerodynamics and attain greater speed; however, even the previously existing straight boom assumed a slight arc-shape when in use.

[24] Windsurfing International, however, had claimed that this clause formed part of an attempt to stop its trademark from being used as a generic designation.

[25] The Court upheld this finding despite the fact that licensees had developed their own trademarks, so that arguably, the no challenge clause had in this respect a reduced impact on competition.

JAPAN

1. *Please indicate whether the measures, identified above, are enforced by a competition/antitrust agency, an intellectual property agency, or another agency.*

   They are enforced by a competition authority.

2. *What is your country's experience with collaboration of competition and IP agencies in monitoring/controlling the antitrust interface of TTAs?*

   No.

3. *Please indicate whether your country evaluates TTAs prior to their operation and, if so, explain the evaluation criteria and process:*

   No.

   JFTC establishes the prior consultation system, in which JFTC provides consultation for enterprise and trade association about whether concrete actions they are going to do have any problems according to the laws under the JFTC's control ("The Antimonopoly Act" and "The Subcontract Act"), in order to enhance the transparency of the law management and to improve consultation system. (Consultations about business combinations are out of the scope of this system.)

   JFTC accepts general consultations through telephone, and they can also come to JFTC's office for consultation.

   i. *If your country reviews TTAs ex ante, which agency carries out that examination: the IP office, the competition authority(ies), or both? Please explain your choice.*

   ii. *What is the percentage of contracts in which your authorities have found hardcore anti-competitive restrictions as a proportion of the total of contracts examined?*

   iii. *What is the frequency of restrictions that have been found restrictive of competition with no compensatory efficiencies?*[26]

4. *Are there clauses in TTAs that should be identified as hardcore restrictions to competition – in which case they would be deemed unlawful and invalid, and would not entail any examination of efficiencies eventually produced?*

   For example, clauses which restrict selling or resale prices are recognized as hardcore restrictions.

[26] [Note in the original questionnaire] For the purposes of this Resource Kit, the term "efficiencies" has two different meanings. One is "economic efficiencies", i.e., those facts or circumstances that positively affect consumer welfare. The other is efficiencies of a more social nature that can be eventually considered by antitrust enforcement agencies or courts and yet do not necessarily lead to increased consumer welfare, such as fairness, freedom of trade and job creation.

i. If you answered yes, could you please identify, even if not exhaustively, which types of clauses should qualify and explain why they should be per se illegal?

In the case in which a licensor places a restriction on licensees on the selling or resale prices of products incorporating licensed technology, this restriction limits the most fundamental means of competition in the business activities of licensees and distributors purchasing such products from them, and it evidently reduces competition.

5. For all other TTA restrictions, how do you evaluate potential efficiencies and harms to competition when determining whether such a restriction is anticompetitive?

The legal frameworks to protect intellectual property in relation to technology (hereinafter referred to as "intellectual property systems") may encourage enterprises to conduct research and development and may serve as a driving force for creating new technologies and products based on the technologies. They can be seen as having pro-competitive effects. In addition, technology transactions assist in promoting competition by enabling increased efficiency in the use of technology through combinations of different technologies, the formation of new markets for technologies and their associated products, as well as an increase of competing parties. In a free market economy, intellectual property systems motivate enterprises to actualize their creative efforts and contribute to the development of the national economy. It is important to ensure that their basic purposes are respected and that technologies are traded without impedance.

Under intellectual property systems, however, competition in technologies and products may be diminished if a right-holder does not allow other enterprises to use its technology or grants other enterprises a license to use the technology on the condition that their research and development, production, sales or any other business activities are restricted ("restrictions pertaining to the use of technology"), depending on how such refusal or restrictions are imposed and the specific conduct to which the restrictions apply.

Consequently, when applying the Antimonopoly Act with respect to the restrictions pertaining to the use of technology, it is important for competition policy to insulate competition in technologies and products from any negative effect caused by any restrictions that deviate from the intent of the intellectual property systems, while making every effort to facilitate competition through the intellectual property systems.

For example, Guidelines on Standardization and Patent Pool Arrangements Part 3 include the following descriptions.

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

However, if competitors pool their patents for specifications they can limit competition by mutually restricting the use of the patents and by restricting licensees' business in downstream markets.

With activities to pool patents for specifications, the problems under the AMA are assessed in each case, on the basis of market conditions such as the share of products with specifications in the related market and the position of the pool in that market. The effect on competition is comprehensive assessed, including not only anti-competitive but also pro-competitive effects.

i. *What types of efficiencies and harms may be considered when determining whether a TTA restriction harms, or is likely to harm, competition?*

See above.

ii. *Are some efficiencies more important than others? If so, please explain which ones are more important and why they are more important.*

As mentioned above, matters which JFTC generally examines are pro-competitive effects. The promotion of competition often results in improving consumer welfare and economic welfare. In this sense, according to the definition of "efficiencies" stipulated in Note 13, "economic efficiencies" of Note 13 is the closest one.

iii. *What is the outcome if the effects of a TTA restriction are competitively neutral?*

See the answer of the question 5.

6. *In an objective and realistic assessment of your country's experience, what elements of your norms/statutes/practices do you believe have been most useful in promoting pro-competitive technology transfer and dissemination in your country/jurisdiction?*

We believe that appropriate measures well-balanced between intellectual property system and competitive policies should be taken, in order to promote pro-competitive technology transfer and dissemination that as a result, lead to the development of new industries.

This basic idea about the balance of the intellectual property systems and competition policy is specified by the laws, regulations and guidelines of Japan as follows.

- Intellectual Property Basic Act (Act No. 122 of 2002)

(Consideration for promoting competition)

Article 10 In promoting measures for the creation, protection and exploitation of intellectual property, consideration shall be paid to secure the fair exploitation of intellectual property and public interests and to promote fair and free competition.

- Guidelines for the Use of Intellectual Property under the Antimonopoly Act

Part 1 Introduction

(1) Competition Policy and Intellectual Property Systems (excerpt)

When applying the Antimonopoly Act with respect to the restrictions pertaining to the use of technology, it is important for competition policy to insulate competition in technologies and products from any negative effect caused by any restrictions that deviate from the intent of the intellectual property systems, while making every effort to facilitate competition through the intellectual property systems. (See the answer of the question 5.)

Part 2 Basic Principles on Application of the Antimonopoly Act

(1) The Antimonopoly Act and Intellectual Property Acts (excerpt)

Article 21 of the Antimonopoly Act prescribes: “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”. This means that the Antimonopoly Act is applicable to restrictions pertaining to the use of technology that is essentially not considered to be the exercise of rights.

An act by the right-holder to a technology to block other parties from using its technology or to limit the scope of use may seem, on its face, to be an exercise of rights. The provisions of the Antimonopoly Act apply even to this case if it cannot be recognized substantially as an exercise of a right. In other words, any act that may seem to be an exercise of a right cannot be “recognizable as the exercise of the rights” provided for in the aforesaid Article 21, provided that it is found to deviate from or run counter to the intent and objectives of the intellectual property systems, which are, namely, to motivate enterprises to actualize their creative efforts and make use of technology, in view of the intent and manner of the act and its degree of impact on competition. The Antimonopoly Act is applicable to this kind of act.

JFTC considers that the structure of the antimonopoly regulation explained above has been the most effective in promoting technology transfer and dissemination in a pro-competitive manner.

RELEVANT STATUTES, DIRECTIVES AND OTHER NORMS (as designated by the responding Member State)

・The Antimonopoly Act, Articles 3, 6, 8, 19, 21,100.
http://www.jftc.go.jp/en/legislation_guidelines/ama/pdf/amended_ama09.pdf

・Guidelines for the Use of Intellectual Property under the Antimonopoly Act
http://www.jftc.go.jp/en/legislation_guidelines/ama/pdf/070928_IP_Guideline.pdf

・Guidelines on Standardization and Patent Pool Arrangements
http://www.jftc.go.jp/en/legislation_guidelines/ama/pdf/Patent_Pool.pdf

・Guidelines Concerning Joint Research and Development under the Antimonopoly Act
http://www.jftc.go.jp/en/legislation_guidelines/ama/pdf/jointresearch.pdf

RELEVANT CASE LAW (as designated by the responding Member State)

・公共下水道用鉄蓋カルテル事件（公取委平成5年9月10日審判審決）
http://snk.jftc.go.jp/JDSWeb/jds/dc/DC005.do?documentKey=H050910H03J01000003_

・日本マイクロソフト抱き合わせ事件（公取委平成10年12月14日勧告審決）
http://snk.jftc.go.jp/JDSWeb/jds/dc/DC005.do?documentKey=H101214H10J02000021_

・ぱちんこ機製造特許プール事件（公取委平成9年8月6日勧告審決）
http://snk.jftc.go.jp/JDSWeb/jds/dc/DC005.do?documentKey=H090806H09J02000005_

・着うた事件（平成22年1月29日高裁判決）
http://snk.jftc.go.jp/JDSWeb/jds/dc/DC005.do?documentKey=H220129H20G09000019_
http://www.jftc.go.jp/en/pressreleases/uploads/2008-July-28.pdf

・マイクロソフト非係争条項事件（公取委平成20年9月16日審判審決）
http://snk.jftc.go.jp/JDSWeb/jds/dc/DC005.do?documentKey=H200916H16J01000013_
http://www.jftc.go.jp/en/pressreleases/archives/individual-000082.html

THAILAND

1. *Please indicate whether the measures, identified above, are enforced by a competition/antitrust agency, an intellectual property agency, or another agency.*

2. *What is your country's experience with collaboration of competition and IP agencies in monitoring/controlling the antitrust interface of TTAs?*

   The Trade Competition Commission has usually invited expertise from Department of Intellectual Property to give information and share ideas when the case in question involves a business operator who has used IP as a means to restrain trade.

3. *Please indicate whether your country evaluates TTAs prior to their operation and, if so, explain the evaluation criteria and process:*

   i. *If your country reviews TTAs ex ante, which agency carries out that examination: the IP office, the competition authority(ies), or both? Please explain your choice.*

      According to article 41 of the Patent Act, the Department of Intellectual Property will review a license of patent when the patent owner files for license registration.

   ii. *What is the percentage of contracts in which your authorities have found hardcore anti-competitive restrictions as a proportion of the total of contracts examined?*

      No contracts have been found anti-competitive so far.

   iii. *What is the frequency of restrictions that have been found restrictive of competition with no compensatory efficiencies?*[27]

4. *Are there clauses in TTAs that should be identified as hardcore restrictions to competition – in which case they would be deemed unlawful and invalid, and would not entail any examination of efficiencies eventually produced?*

   i. *If you answered yes, could you please identify, even if not exhaustively, which types of clauses should qualify and explain why they should be per se illegal?*

      According to Patent Act Article 41 and Ministerial Regulation No. 25 clause 4, the licensing agreement for patent that has the following clauses shall be regarded as being unjustifiably anti-competitive:

      (1) a requirement that the licensee shall use other invention or design of the patentee or the owner of the petty patent with remuneration for such use, unless it is proved that the requirement is necessary for the effective

[27] [Note in the original questionnaire] For the purposes of this Resource Kit, the term "efficiencies" has two different meanings. One is "economic efficiencies", i.e., those facts or circumstances that positively affect consumer welfare. The other is efficiencies of a more social nature that can be eventually considered by antitrust enforcement agencies or courts and yet do not necessarily lead to increased consumer welfare, such as fairness, freedom of trade and job creation.

working of the patent or petty patent or the invention or design cannot be obtained from any other source in the country and the remuneration is suitable with the benefits from such invention or design;

(2) a prohibition that the licensee shall not challenge or raise a defense that the patent is invalid pursuant to Section 54 or 64 or the petty patent is invalid pursuant to Section 65 *novies* or Section 77 *octies*;

(3) a requirement that the licensee shall disclosed to the licensor any improvement of the licensed invention or design or allow the patentee to exclusively exploit such improved invention or design without providing for appropriate compensation for such exploitation;

(4) a requirement that the licensee shall pay remuneration for the use of the licensed invention or design after the expiry of the patent or petty patent;

(5) a requirement that the licensee shall be subject to such a condition, restriction or remuneration regarded as being unjustifiably anti-competitive by the court, the Board of Patents or the committees appointed under the law on competition.

The Copyright Act, Article 15, and Ministerial Regulation (B.E. 2540) Issued under Copyright Act, provide in clause 1 that the following licensing conditions shall be deemed to unfairly restrict competition:

(1) A condition binding the licensee to obtain materials used in the production of the licensed work in whole or in part from the copyright owner or from the seller specified by the copyright owner either with or without remuneration, unless the condition is necessary to make the copies fulfill the standard as set by the copyright owner, or the materials are not available from other sources within the territory and the remuneration is not higher than the price of materials of equal quality which are obtainable from other persons.

(2) A condition prohibiting the licensee to obtain materials used in the manufacture of the licensed work in whole or in part from one or several sellers specified by the copyright owner, unless the omission of the condition would make the produced copies fail to fulfill the standards set by the copyright owner, or the materials are not obtainable from other sources in the territory.

(3) A condition or restriction binding the licensee concerning the employment of persons to produce the copies of work under the license, unless it is necessary to make the copies fulfill the standard as set by the copyright owner or to keep the trade secret of the copyright owner or to render necessary technical service.

(4) A condition stipulating a royalty rate for the copyright license which is unfair when compared to the rate stipulated by the copyright owner in another license for the same copyright work in which the said licensee has similar relationship or status and the license takes place at the same period of time.

(5) A condition or restriction binding the licensee concerning the research or study of the licensed copyright work.

(6) A condition binding the licensee to assign the copyright in the work adapted or developed from the licensed copyright work to the copyright owner or to any other person, or to authorize the copyright owner or another person to hold exclusively the right with respect to the adapted or developed work unless the copyright owner or the said person shall pay reasonable remuneration to the licensee.

(7) A condition in favour of the licensor to terminate the license arbitrarily and without reasonable cause.

5. *For all other TTA restrictions, how do you evaluate potential efficiencies and harms to competition when determining whether such a restriction is anticompetitive?*

   i. *What types of efficiencies and harms may be considered when determining whether a TTA restriction harms, or is likely to harm, competition?*

   ii. *Are some efficiencies more important than others? If so, please explain which ones are more important and why they are more important.*

   iii. *What is the outcome if the effects of a TTA restriction are competitively neutral?*

6. *In an objective and realistic assessment of your country's experience, what elements of your norms/statutes/practices do you believe have been most useful in promoting pro-competitive technology transfer and dissemination in your country/jurisdiction?*

RELEVANT STATUTES, DIRECTIVES AND OTHER NORMS (as designated by the responding Member State)

The related statutory provisions are

1) the Patent Act B.E. 2522 and Ministerial Regulation No.25 under the Patent Act[28]

2) the Copyright Act B.E. 2537 and Ministerial Regulation B.E. 2540 under the Copyright Act[29]

3) the Competition Act B.E. 2542

[28] [Note by the Secretariat] English version available at <www.wipo.int/wipolex/en>.
[29] *Id*.

UNITED STATES

1. Please indicate whether the measures, identified above, are enforced by a competition/antitrust agency, an intellectual property agency, or another agency.

The antitrust measures identified above may be enforced by the Antitrust Agencies and by private parties. They are not enforced by U.S. intellectual property or other non-antitrust agencies. The United States Antitrust Agencies use the same investigative and analytical tools when assessing the competitive effects of TTAs as when analyzing any other business activity.

2. What is your country's experience with collaboration of competition and IP agencies in monitoring/controlling the antitrust interface of TTAs?

The Antitrust Agencies do not routinely review the competitive effects of TTAs before they are used in the market. However, a party may request the Agencies' review of a proposed agreement before it takes effect, pursuant to the agencies *ex ante* review procedures.[30] The USPTO never reviews TTAs regarding competition concerns.

By contrast, FTC and USDOJ collaborate with the USPTO to address IP policy issues related to competition, including WIPO's work on IP and Competition and hosting of joint workshops.

3. Please indicate whether your country evaluates TTAs prior to their operation and, if so, explain the evaluation criteria and process:

> *i. If your country reviews TTAs ex ante, which agency carries out that examination: the IP office, the competition authority(ies), or both? Please explain your choice.*
>
> *ii. What is the percentage of contracts in which your authorities have found hardcore anti-competitive restrictions as a proportion of the total of contracts examined?*
>
> *iii. What is the frequency of restrictions that have been found restrictive of competition with no compensatory efficiencies?*[31]

The United States antitrust and IP agencies do not require *ex ante* review of TTAs for competition or other economic reasons.[32] Because these agencies do not regularly review TTAs, we are unable to state in this response what percentage of such contracts contain *per se* anticompetitive restrictions, but we believe that they are uncommon. The same would be true with regard to the frequency of restrictions (provisions) that might be restrictive of competition with no compensatory efficiencies.

---

[30] *See* Fed. Trade Comm'n, Advisory Opinions, Policy, 16 C.F.R. §1.1 (2012), *available at* http://www.gpo.gov/fdsys/pkg/CFR-2012-title16-vol1/pdf/CFR-2012-title16-vol1-part1-subpartA.pdf; Dep't of Justice, Antitrust Division Business Review Procedure, 28 C.F.R. § 50.6 (2012), *available at* http://www.gpo.gov/fdsys/pkg/CFR-2012-title28-vol2/pdf/CFR-2012-title28-vol2-sec50-6.pdf.

[31] [Note in the original questionnaire] For the purposes of this Resource Kit, the term "efficiencies" has two different meanings. One is "economic efficiencies", i.e., those facts or circumstances that positively affect consumer welfare. The other is efficiencies of a more social nature that can be eventually considered by antitrust enforcement agencies or courts and yet do not necessarily lead to increased consumer welfare, such as fairness, freedom of trade and job creation.

[32] As noted in response to question 2(c)2 above, a party may request FTC or USDOJ review of a proposed agreement pursuant to the FTC's Advisory Opinion or USDOJ's Business Review procedures.

The definition of "efficiencies," provided in footnote 3 of the survey (see footnote 16), is not the one used by the Agencies. U.S. antitrust laws focus on economic efficiency and consumer welfare, not on social efficiencies. While social welfare benefits can be important, we view them as matters of general economic or industrial policy, rather than as antitrust enforcement considerations. Some social welfare claims may even lead to increased consumer costs and diminished consumer welfare, effects that run contrary to the goals of U.S. antitrust law.

4. Are there clauses in TTAs that should be identified as hardcore restrictions to competition – in which case they would be deemed unlawful and invalid, and would not entail any examination of efficiencies eventually produced?

> *i. If you answered yes, could you please identify, even if not exhaustively, which types of clauses should qualify and explain why they should be per se illegal?*

Most licensing agreements among competitors may benefit rather than harm competition. However, some IP licensing restrictions are likely to be identified as "per se" illegal under our antitrust laws. For example, licensing terms of a horizontal nature that constitute naked price-fixing agreements to reduce output and certain group boycotts would meet this standard.[33]

The Antitrust Agencies are of the view that specific licensing restrictions identified in Article 40.2 of the Agreement on Trade-Related Aspects of Intellectual Property Rights as potentially anticompetitive – exclusive grant backs, clauses preventing challenges to validity, and "coercive package licensing" – should be evaluated under the rule of reason approach, where both the harm to competition and potential benefits are evaluated, as these restrictions do not necessarily harm competition.[34]

5. For all other TTA restrictions, how do you evaluate potential efficiencies and harms to competition when determining whether such a restriction is anticompetitive?

> *i. What types of efficiencies and harms may be considered when determining whether a TTA restriction harms, or is likely to harm, competition?*
>
> *ii. Are some efficiencies more important than others? If so, please explain which ones are more important and why they are more important.*
>
> *iii. What is the outcome if the effects of a TTA restriction are competitively neutral?*

The Antitrust Agencies evaluate the same range of possible efficiencies and harms from a TTA as we do in our antitrust inquiries of other business activities. In the TTA context, we recognize that voluntary IP licensing may facilitate integration of the licensed property with complementary factors of production, leading to cost reductions and introduction of new products. Voluntary licensing may also increase incentives for additional IP creation and may facilitate the entrance of new market participants. In addition, voluntary licensing may help resolve "blocking" situations and lead to faster introduction of new products and technologies.[35]

---

[33] *See* 1995 ANTITRUST-IP LICENSING GUIDELINES, § 5.1.
[34] Agreement on Trade-Related Aspects of Intellectual Property Rights, Jan. 1, 1995, Art. 40.2, available at http://www.wto.org/english/tratop_e/trips_e/t_agm3_e.htm.
[35] 1995 ANTITRUST-IP LICENSING GUIDELINES, § 2.3.

Licensing restrictions can sometimes facilitate collusion among competing firms that leads to decreased innovation or output and higher prices.

It would be hard to generalize as to which efficiencies might be most important, given the varied circumstances in individual cases. Longer-term incentives to invent, produce, and sell new products, however, may outweigh transitory, short-term benefits to the enterprises involved

If a TTA provision is found to be competitively neutral, there would be no antitrust violation and no reason to interfere with that provision's use. Many TTAs, and other licensing agreements, are likely to be competitively neutral, and licensors and licensees need not prove they are affirmatively pro–competitive in order to use them.

6. In an objective and realistic assessment of your country's experience, what elements of your norms/statutes/practices do you believe have been most useful in promoting pro-competitive technology transfer and dissemination in your country/jurisdiction?

The Antitrust Agencies apply standard mechanisms of antitrust analysis to TTAs, analyzing most TTAs under the rule of reason approach. The United States has benefited from not attempting to screen TTAs *ex ante*, a process that would subject large numbers of pro-competitive or competitively neutral licensing arrangements to unnecessary costs and delays, thereby increasing the time it takes for new products to reach consumers in the marketplace and potentially reducing long-term incentives to innovate. Such *ex ante* screening reviews also impose significant costs, in terms of time and resources of the reviewing agency, thereby limiting the agency's ability to investigate and potentially prosecute priority competition concerns.

RELEVANT STATUTES, GUIDELINES AND OTHER NORMS (as designated by the responding Member State)

In the United States, the TTA antitrust-intellectual property interface is primarily governed by the three national antitrust laws: the Sherman Act, the Clayton Act, and the Federal Trade Commission Act. An additional relevant antitrust-related statute is the National Cooperative Research and Production Act of 1993.

- The 1890 Sherman Act prohibits contracts, combinations, and conspiracies that unreasonably restrain interstate and foreign trade. The Sherman Act also outlaws acts of monopolization. It is enforced by the United States Department of Justice through criminal and civil sanctions and through private civil legal action.[36]1

- The 1914 Clayton Act is a civil statute prohibiting mergers and acquisitions the effect of which may be substantially to lessen competition as well as other business practices that may harm competition under certain circumstances. It is enforced by both Antitrust Agencies and through private legal actions.[37]

[36] Sherman Act, 15 U.S.C. §§ 1-7 (2006), *available at* http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE&searchPath=Title+15%2FCHAPTER+1&oldPath=Title+15&isCollapsed=true&selectedYearFrom=2011&ycord=815.

[37] Sherman Act, 15 U.S.C. §§ 12-27 (2006), *available at* http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE&searchPath=Title+15%2FCHAPTER+1&oldPath=Title+15&isCollapsed=true&selectedYearFrom=2011&ycord=815.

• The 1914 FTC Act prohibits "unfair methods of competition, including violations of the Sherman and Clayton Acts." It is enforced by the Federal Trade Commission and carries no criminal penalties.[38]

• The 1993 Cooperative Research and Production Act applies the rule of reason standard of liability to the antitrust analysis of joint ventures and standards development organizations ("SDOs") engaged in a standards development activity. The Act also establishes a voluntary procedure under which joint ventures and SDOs that notify the Antitrust Agencies of their cooperative ventures and standards development activities are liable only for actual, rather than treble, antitrust damages.[39]

Further information about these statutes is available on the Agencies' websites.[40]

The TTA interface is also addressed in the 1995 DOJ-FTC Antitrust Guidelines for the Licensing of Intellectual Property (1995 Antitrust-IP Licensing Guidelines),[41] the 2007 joint report by the Agencies entitled Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition (2007 Antitrust-IP Report),[42] and the 2011 FTC Report entitled The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition (2011 FTC Evolving IP Marketplace Report).[43]

The 1995 Antitrust-IP Licensing Guidelines and the 2007 Antitrust-IP Report explain in detail the Agencies' analyses and policies with respect to the antitrust laws' application to IP-related transactions and activities. The 2011 FTC Evolving IP Marketplace Report analyzes the different competitive implications of TTAs signed before the potential licensee makes use of the technology as compared to those of licenses signed after the would-be licensee already uses that technology.

The United States maintains a variety of other Federal mechanisms and measures that apply to TTAs outside of the antitrust context. These include the Committee on Foreign Investment in the United States,[44] which examines inward investments that may have a national security dimension; U.S. export control laws,[45] which regulate and – as necessary –

[38] Federal Trade Commission Act, 15 U.S.C. §§ 41-58 (2006), *available at* http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE&searchPath=Title+15%2FChapter+2%2FSUBCHAPTER+I&oldPath=Title+15%2FCHAPTER+2&isCollapsed=true&selectedYearFrom=2011&ycord=931.
[39] National Cooperative Research and Production Act of 1993, 15 U.S.C. §§4301-4306 (2006), *available at* http://www.gpo.gov/fdsys/browse/collectionUScode.action?collectionCode=USCODE&searchPath=Title+15%2FCHAPTER+69&oldPath=Title+15%2FCHAPTER+1&isCollapsed=true&selectedYearFrom=2011&ycord=3260.
[40] *See, e.g.*, FED. TRADE COMM'N, AN FTC GUIDE TO THE ANTITRUST LAWS, http://www.ftc.gov/bc/antitrust/factsheets/antitrustlawsguide.pdf; and U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION MANUAL, Ch. III § H.2 (5th ed. 2012)(USDOJ guidance on the National Cooperative Research and Production Act of 1993), *available at* http://www.justice.gov/atr/foia/divisionmanual/204293.htm.
[41] U.S. DEP'T OF JUSTICE &FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY (1995), *available at* http://www.justice.gov/atr/public/guidelines/0558.htm, *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,132 [hereinafter 1995 ANTITRUST-IP LICENSING GUIDELINES].
[42] U.S. DEP'T OF JUSTICE &FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION (2007), *available at* http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf. [hereinafter 2007 ANTITRUST-IP REPORT].
[43] FED. TRADE COMM'N, THE EVOLVING IPMARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION (2011), http://www.ftc.gov/os/2011/03/110307patentreport.pdf [hereinafter 2011 FTC EVOLVING IPMARKETPLACE REPORT].
[44] *See* The Committee on Foreign Investment in the United States (CFIUS), U.S. DEP'T OF THE TREASURY (Apr. 10, 2012), http://www.treasury.gov/resource-center/international/Pages/Committee-on-Foreign-Investment-in-US.aspx.
[45] *See* Introduction to Commerce Department Export Controls, U.S. DEP'T OF COMMERCE, BUREAU OF INDUSTRY & SECURITY (Aug. 2012), http://www.bis.doc.gov/licensing/exportingbasics.htm.

prohibit export of technologies with national security implications; and those laws and policies governing transfer of technologies developed and/or owned by the United States Government itself. Current policies for the dissemination of government technologies favor rapid and widespread commercialization of such technologies as appropriate.[46]

RELEVANT CASE LAW (as designated by the responding Member State)

Tying and bundling

In *United States v. Microsoft Corp.*, the U.S. Court of Appeals for the D.C. Circuit held that tying of platform software products should be analyzed under the rule of reason because the application of traditional *per se* analysis in the pervasively innovative platform software industry risks condemning ties that may be welfare-enhancing and procompetitive.[47]

The Agencies analyze ties involving IP rights pursuant to the rule of reason as explained in section 5.3 of the 1995 ANTITRUST-IP LICENSING GUIDELINES[48] and Chapter 5 of the 2007 ANTITRUST-IP REPORT.[49]

Patent pooling

The USDOJ has issued a number of business review letters applying a rule of reason analysis when examining the competitive impact of patent pools. Although no one element is dispositive, USDOJ has identified a number of safeguards in these letters that reduce the risks of anticompetitive effects from patent pools.[50]

The guidance in these letters is in accordance with section 5.5 of the 1995 ANTITRUST-IP GUIDELINES[51] and Chapter 3 of the 2007 ANTITRUST-IP REPORT.[52]

Exclusive licensing

In deciding a case challenging the grant of an exclusive license, *Genentech, Inc. v. Eli Lilly & Co.*, the U.S. Court of Appeals for the Federal Circuit held that such a grant did not violate antitrust principles, noting that “the grant of an exclusive license is a lawful incident of the right to exclude provided by the Patent Act.”[53]

The Agencies advised in the 1995 ANTITRUST-IP LICENSING GUIDELINES that an exclusive license may only raise antitrust concerns if the licensees are in a horizontal

---

[46] For more information on this topic, *see, e.g.*, NIST [National Institute of Science and Technology] to Help Speed Technology Transfer from Federal Labs, NIST *TECHBEAT*, Nov. 8, 2011, http://www.nist.gov/director/techtransfer-110811.cfm. In addition, several Federal agencies and laboratories employ technology transfer offices to facilitate the dissemination of technologies.

[47] *United States v. Microsoft Corp.*, 253 F. 3d. 34, 84, 94-95 (D.C. Cir. 2001).

[48] 1995 ANTITRUST-IP LICENSING GUIDELINES, *supra* note 6, § 5.3.

[49] 2007 ANTITRUST-IP REPORT, *supra* note 7, Ch.5.

[50] Letter from Joel I. Klein, Assistant Att’y Gen., U.S. Dep’t of Justice, to G[a]rrard R. Beeney, Partner, Sullivan & Cromwell LLP (June 26, 1997), http://www.usdoj.gov/atr/public/busreview/215742.htm; Letter from Joel I. Klein, Assistant Att’y Gen., U.S. Dep’t of Justice, to Garrard R. Beeney, Partner, Sullivan & Cromwell LLP (Dec. 16, 1998), http://www.usdoj.gov/atr/public/busreview/2121.htm; Letter from Joel I. Klein, Assistant Att’y Gen., U.S. Dep’t of Justice, to Carey R. Ramos, Partner, Paul, Weiss, Rifkind, Wharton & Garrison LLP (June 10, 1999), http://www.usdoj.gov/atr/public/busreview/2485.pdf; Letter from Thomas O. Barnett, Assistant Att’y Gen., U.S. Dep’t of Justice, to William F. Dolan, Partner, Jones Day & Geoffrey Oliver, Partner, Jones Day (Oct. 21, 2008), http://www.atrnet.gov/subdocs/238429.htm.; *see also* Letter from Charles A. James, Assistant Att’y Gen., U.S. Dep’t of Justice, to Ky P. Ewing, Partner, Vinson & Elkins LLP (Nov. 12, 2002), http://www.usdoj.gov/atr/public/busreview/200455.htm (analyzing patent portfolios).

[51] ANTITRUST-IP LICENSING GUIDELINES, *supra* note 6, § 5.5.

[52] 2007 ANTITRUST-IP REPORT, *supra* note 7, Ch.3.

[53] *Genentech, Inc. v. Eli Lilly & Co.*, 998 F.2d 931, 949 (Fed. Cir. 1993).

relationship or the licensor and the licensees are in such a relationship. Non-exclusive licenses that do not restrain the competitive conduct of the licensor or the licensee generally do not raise any antitrust concerns even when the parties to the license are in a horizontal relationship.[54]

Territorial Restrictions

The opinion in *Miller Insituform, Inc. v. Insituform of N. Am., Inc.* by the U.S. Court of Appeals for the Sixth Circuit affirms that patent licensors may generally restrict licensees to designated geographical areas, provided that two or more licensees are not agreeing to use a licensor's restraints as a means to divide territories among themselves.[55]

Grantback clauses

Transparent-Wrap Machine Corp. v. Stokes & Smith Co., a 1947 opinion of the U.S. Supreme Court, informs us that that a license agreement that requires the licensee to grant back license rights is evaluated pursuant to a rule of reason analysis.[56]
The Agencies analyze grantbacks in IP licensing agreements under the rule of reason approach as explained in section 5.6 of the 1995 ANTITRUST-IP LICENSING GUIDELINES[57] and Chapter 4 of the 2007 ANTITRUST-IP REPORT.[58] In that report, the Agencies explained that they measure potential concerns about grantbacks against the "but for" world considering the amount of innovation that might have occurred in the absence of the licensing restraint because "without the security of a grantback provision, a licensor may be hesitant to share its intellectual property with others, fearing that it might be prevented from accessing and benefitting from follow-on improvements to its own technology."[59]

TABLE OF CASES

I. *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001)…………...........
II. *Genentech, Inc. v. Eli Lilly & Co*, 998 F.2d 931 (Fed. Cir. 1993)…………........
III. *Miller Insituform, Inc. v. Insituform of N. Am., Inc.*, 830 F.2d 606 (6th Cir.1987) ……..…………………………………………………………………………...
IV. *Transparent-Wrap Machine Corp. v. Stokes & Smith Co.*, 329 U.S. 637 (1947) ………………………………………………………………………………...

[54] 1995 ANTITRUST-IP LICENSING GUIDELINES *supra* note 6, § 4.1.2.
[55] *Miller Insituform, Inc. v. Insituform of N. Am., Inc.*, 830 F.2d 606, 608-9 (6th Cir. 1987).
[56] *Transparent-Wrap Machine Corp. v. Stokes & Smith Co.,* 329 U.S. 637, 648-9 (1947).
[57] 1995 ANTITRUST-IP LICENSING GUIDELINES *supra* note 6, §5.6.
[58] 2007 ANTITRUST-IP REPORT, *supra* note 7, Ch. 4.
[59] *Id.* at 93.

I. *UNITED STATES V. MICROSOFT CORP.,* 253 F.3d 34 (D.C. Cir. 2001)

United States and individual states brought antitrust action against manufacturer of personal computer operating system and Internet web browser. The United States District Court for the District of Columbia, Thomas Penfield Jackson, J., concluded that manufacturer had committed monopolization, attempted monopolization, and tying violations of the Sherman Act, 87 F.Supp.2d 30, and issued remedial order requiring manufacturer to submit proposed plan of divestiture, 97 F.Supp.2d 59. Manufacturer appealed, and states petitioned for certiorari. The Supreme Court declined to hear direct appeal, denied petition, and remanded, 530 U.S. 1301, 121 S.Ct. 25, 147 L.Ed.2d 1048. The Court of Appeals held that: (1) manufacturer committed monopolization violation; (2) manufacturer did not commit attempted monopolization violation; (3) rule of reason, rather than per se analysis, applied to tying claim; (4) remand was required to determine if manufacturer committed tying violation; (5) vacation of remedies decree was required; and (6) district judge's comments to the press while the case was pending required his disqualification on remand.

Affirmed in part, reversed in part, and remanded in part.

[…]

IV. TYING

Microsoft also contests the District Court's determination of liability under § 1 of the Sherman Act. The District Court concluded that Microsoft's contractual and technological bundling of the IE web browser (the "tied" product) with its Windows operating system ("OS") (the "tying" product) resulted in a tying arrangement that was per se unlawful. […] We hold that the rule of reason, rather than per se analysis, should govern the legality of tying arrangements involving platform software products. The Supreme Court has warned that " '[i]t is only after considerable experience with certain business relationships that courts classify them as *per se* violations....' " *Broad. Music, Inc. v. CBS,* 441 U.S. 1, 9, 99 S.Ct. 1551, 60 L.Ed.2d 1 (1979) (quoting *United States v. Topco Assocs.,* 405 U.S. 596, 607-08, 92 S.Ct. 1126, 31 L.Ed.2d 515 (1972)). While every "business relationship" will in some sense have unique features, some represent entire, novel categories of dealings. As we shall explain, the arrangement before us is an example of the latter, offering the first up-close look at the technological integration of added functionality into software that serves as a platform for third-party applications. There being no close parallel in prior antitrust cases, simplistic application of per se tying rules carries a serious risk of harm. Accordingly, we vacate the District Court's finding of a per se tying violation and remand the case. Plaintiffs may on remand pursue their tying claim under the rule of reason.

The facts underlying the tying allegation substantially overlap with those set forth […] in connection with the § 2 monopoly maintenance claim. The key District Court findings are that (1) Microsoft required licensees of Windows 95 and 98 also to license IE as a bundle at a single price […] (2) Microsoft refused to allow OEMs to uninstall or remove IE from the Windows desktop […]; (3) Microsoft designed Windows 98 in a way that withheld from consumers the ability to remove IE by use of the Add/Remove Programs utility […]; and (4) Microsoft designed Windows 98 to override the user's choice of default web browser in certain circumstances […]. The court found that these acts constituted a per se tying violation. […] Although the District Court also found that Microsoft commingled operating system-only and browser-only routines in the same library files, […] it did not include this as a basis for tying liability despite plaintiffs' request that it do so […].

There are four elements to a per se tying violation: (1) the tying and tied goods are two separate products; (2) the defendant has market power in the tying product market; (3) the defendant affords consumers no choice but to purchase the tied product from it; and (4) the tying arrangement forecloses a substantial volume of commerce. *See Eastman Kodak Co. v. Image Tech. Servs., Inc.,* 504 U.S. 451, 461-62, 112 S.Ct. 2072, 119 L.Ed.2d 265 (1992); *Jefferson Parish Hosp. Dist. No. 2 v. Hyde,* 466 U.S. 2, 12-18, 104 S.Ct. 1551, 80 L.Ed.2d 2 (1984).

Microsoft does not dispute that it bound Windows and IE in the four ways the District Court cited. Instead it argues that Windows (the tying good) and IE browsers (the tied good) are not "separate products," […] and that it did not substantially foreclose competing browsers from the tied product market, […]. (Microsoft also contends that it does not have monopoly power in the tying product market, […], but, for reasons given in Section II.A, we uphold the District Court's finding to the contrary.)

We first address the separate-products inquiry, a source of much argument between the parties and of confusion in the cases. Our purpose is to highlight the poor fit between the separate-products test and the facts of this case. We then offer further reasons for carving an exception to the per se rule when the tying product is platform software. In the final section we discuss the District Court's inquiry if plaintiffs pursue a rule of reason claim on remand.

A. Separate-Products Inquiry Under the Per Se Test

The requirement that a practice involve two separate products before being condemned as an illegal tie started as a purely linguistic requirement: unless products are separate, one cannot be "tied" to the other. Indeed, the nature of the products involved in early tying cases-intuitively distinct items such as a movie projector and a film film, *Motion Picture Patents Co. v. Universal Film Mfg. Co.,* 243 U.S. 502, 37 S.Ct. 416, 61 L.Ed. 871 (1917)-led courts either to disregard the separate-products question, *see, e.g., United Shoe Mach. Corp. v. United States,* 258 U.S. 451, 42 S.Ct. 363, 66 L.Ed. 708 (1922), or to discuss it only in passing, *see, e.g., Motion Picture Patents,* 243 U.S. at 508, 512, 518, 37 S.Ct. 416. It was not until *Times-Picayune Publishing Co. v. United States,* 345 U.S. 594, 73 S.Ct. 872, 97 L.Ed. 1277 (1953), that the separate-products issue became a distinct element of the test for an illegal tie. *Id*. at 614, 73 S.Ct. 872. Even that case engaged in a rather cursory inquiry into whether ads sold in the morning edition of a paper were a separate product from ads sold in the evening edition.

The first case to give content to the separate-products test was *Jefferson Parish,* 466 U.S. 2, 104 S.Ct. 1551, 80 L.Ed.2d 2. That case addressed a tying arrangement in which a hospital conditioned surgical care at its facility on the purchase of anesthesiological services from an affiliated medical group. The facts were a challenge for casual separate-products analysis because the tied service-anesthesia-was neither intuitively distinct from nor intuitively contained within the tying service-surgical care. A further complication was that, soon after the Court enunciated the per se rule for tying liability in *International Salt Co. v. United States,* 332 U.S. 392, 396, 68 S.Ct. 12, 92 L.Ed. 20 (1947), and *Northern Pacific Railway Co. v. United States,* 356 U.S. 1, 5-7, 78 S.Ct. 514, 2 L.Ed.2d 545 (1958), new economic research began to cast doubt on the assumption, voiced by the Court when it established the rule, that " 'tying agreements serve hardly any purpose beyond the suppression of competition,' " *id*. at 6, 78 S.Ct. 514 (quoting *Standard Oil of Cal. v. United States,* 337 U.S. 293, 305-06, 69 S.Ct. 1051, 93 L.Ed. 1371 (1949)); *see also Jefferson Parish,* 466 U.S. at 15 n. 23, 104 S.Ct. 1551 (citing materials); *Fortner Enters. v. U.S. Steel Corp.,* 394 U.S. 495, 524-25, 89 S.Ct. 1252, 22 L.Ed.2d 495 (1969) (Fortas, J., dissenting) ("*Fortner I*").

The *Jefferson Parish* Court resolved the matter in two steps. First, it clarified that "the answer to the question whether one or two products are involved" does not turn "on the functional relation between them...." *Jefferson Parish,* 466 U.S. at 19, 104 S.Ct. 1551; *see also id*. at 19 n. 30, 104 S.Ct. 1551. In other words, the mere fact that two items are complements, that “one ... is useless without the other,” *id*., does not make them a single “product” for purposes of tying law. *Accord Eastman Kodak,* 504 U.S. at 463, 112 S.Ct. 2072. Second, reasoning that the “definitional question [whether two distinguishable products are involved] depends on whether the arrangement may have the type of competitive consequences addressed by the rule [against tying],” *Jefferson Parish,* 466 U.S. at 21, 104 S.Ct. 1551, the Court decreed that “no tying arrangement can exist unless there is a sufficient *demand* for the purchase of anesthesiological services separate from hospital services to identify a distinct product market in which it is *efficient* to offer anesthesiological services separately from hospital service,” *id*. at 21-22, 104 S.Ct. 1551 (emphasis added); *accord Eastman Kodak,* 504 U.S. at 462, 112 S.Ct. 2072.

The Court proceeded to examine direct and indirect evidence of consumer demand for the tied product separate from the tying product. Direct evidence addresses the question whether, when given a choice, consumers purchase the tied good from the tying good maker, or from other firms. The Court took note, for example, of testimony that patients and surgeons often requested specific anesthesiologists not associated with a hospital. *Jefferson Parish,* 466 U.S. at 22, 104 S.Ct. 1551. Indirect evidence includes the behavior of firms without market power in the tying good market, presumably on the notion that (competitive) supply follows demand. If competitive firms always bundle the tying and tied goods, then they are a single product. *See id*. at 22 n. 36, 104 S.Ct. 1551; *see also Eastman Kodak,* 504 U.S. at 462, 112 S.Ct. 2072; *Fortner I,* 394 U.S. at 525, 89 S.Ct. 1252 (Fortas, J., dissenting), *cited in Jefferson Parish,* 466 U.S. at 12, 22 n. 35, 104 S.Ct. 1551; *United States v. Jerrold Elecs. Corp.,* 187 F.Supp. 545, 559 (E.D.Pa.1960), *aff’d per curiam,* 365 U.S. 567, 81 S.Ct. 755, 5 L.Ed.2d 806 (1961); 10 PHILLIP E. AREEDA ET AL., ANTITRUST LAW ¶ 1744, at 197-201 (1996). Here the Court noted that only 27% of anesthesiologists in markets other than the defendant’s had financial relationships with hospitals, and that, unlike radiologists and pathologists, anesthesiologists were not usually employed by hospitals, *i.e.,* bundled with hospital services. *Jefferson Parish,* 466 U.S. at 22 n. 36, 104 S.Ct. 1551. With ***87 **383** both direct and indirect evidence concurring, the Court determined that hospital surgery and anesthesiological services were distinct goods.

To understand the logic behind the Court’s consumer demand test, consider first the postulated harms from tying. The core concern is that tying prevents goods from competing directly for consumer choice on their merits, *i.e.,* being selected as a result of “buyers’ independent judgment,” *id*. at 13, 104 S.Ct. 1551 (internal quotes omitted). With a tie, a buyer’s “freedom to select the best bargain in the second market [could be] impaired by his need to purchase the tying product, and perhaps by an inability to evaluate the true cost of either product....” *Id*. at 15, 104 S.Ct. 1551. Direct competition on the merits of the tied product is foreclosed when the tying product either is sold only in a bundle with the tied product or, though offered separately, is sold at a bundled price, so that the buyer pays the same price whether he takes the tied product or not. In both cases, a consumer buying the tying product becomes entitled to the tied product; he will therefore likely be unwilling to buy a competitor’s version of the tied product even if, making his own price/quality assessment, that is what he would prefer.

But not all ties are bad. Bundling obviously saves distribution and consumer transaction costs. 9 PHILLIP E. AREEDA, ANTITRUST LAW ¶ 1703g2, at 51-52 (1991). This is likely to be true, to take some examples from the computer industry, with the integration of math co-processors and memory into microprocessor chips and the inclusion of spell checkers in word processors. […] *Cal. Computer Prods., Inc. v. IBM Corp.,* 613 F.2d 727, 744 & n. 29 (9th Cir.1979) (memory). Bundling can also capitalize on certain economies of scope. A possible example is the “shared” library files that perform OS and browser functions with the very same lines of code and thus may save drive space from the clutter of redundant routines and memory when consumers use both the OS and browser simultaneously. […] Indeed, if there were no efficiencies from a tie (including economizing on consumer transaction costs such as the time and effort involved in choice), we would expect distinct consumer demand for each individual component of every good. In a competitive market with zero transaction costs, the computers on which this opinion was written would only be sold piecemeal-keyboard, monitor, mouse, central processing unit, disk drive, and memory all sold in separate transactions and likely by different manufacturers.

Recognizing the potential benefits from tying, *see Jefferson Parish,* 466 U.S. at 21 n. 33, 104 S.Ct. 1551, the Court in *Jefferson Parish* forged a separate-products test that, like those of market power and substantial foreclosure, attempts to screen out false positives under per se analysis. The consumer demand test is a rough proxy for whether a tying arrangement may, on balance, be welfare-enhancing, and unsuited to per se condemnation. In the abstract, of course, there is always direct separate demand for products: assuming choice is available at zero cost, consumers will prefer it to no choice. Only when the efficiencies from bundling are dominated by the benefits to choice for enough consumers, however, will we actually observe consumers making independent purchases. In other words, perceptible separate demand is inversely proportional to net efficiencies. On the supply side, firms without market power will bundle two goods only when the cost savings from joint sale outweigh the value consumers place on separate choice. So bundling by all competitive firms implies strong net efficiencies. If a court finds either that there is no noticeable separate demand for the tied product or, there being no convincing direct evidence of separate demand, that the entire “competitive fringe” engages in the same behavior as the defendant, 10 AREEDA ET AL., ANTITRUST LAW ¶ 1744c4, at 200, then the tying and tied products should be declared one product and per se liability should be rejected.

Before concluding our exegesis of *Jefferson Parish*’s separate-products test, we should clarify two things. First, *Jefferson Parish* does not endorse a direct inquiry into the efficiencies of a bundle. Rather, it proposes easy-to-administer proxies for net efficiency. In describing the separate-products test we discuss efficiencies only to explain the rationale behind the consumer demand inquiry. To allow the separate-products test to become a detailed inquiry into possible welfare consequences would turn a screening test into the very process it is expected to render unnecessary. 10 AREEDA ET AL., ANTITRUST LAW ¶ ¶ 1741b & c, at 180-85; *see also Jefferson Parish,* 466 U.S. at 34-35, 104 S.Ct. 1551 (O’Connor, J., concurring).

Second, the separate-products test is not a one-sided inquiry into the cost savings from a bundle. Although *Jefferson Parish* acknowledged that prior lower court cases looked at cost-savings to decide separate products, *see id*. at 22 n. 35, 104 S.Ct. 1551, the Court conspicuously did not adopt that approach in its disposition of tying arrangement before it. Instead it chose proxies that balance costs savings against reduction in consumer choice.

With this background, we now turn to the separate products inquiry before us. The District Court found that many consumers, if given the option, would choose their browser separately from the OS. […] Turning to industry custom, the court found that, although all major OS vendors bundled browsers with their OSs, these companies either sold versions without a browser, or allowed OEMs or end-users either not to install the bundled browser or in any event to “uninstall” it. […]. The court did not discuss the record evidence as to whether OS vendors other than Microsoft sold at a bundled price, with no discount for a browserless OS, perhaps because the record evidence on the issue was in conflict. […]

Microsoft does not dispute that many consumers demand alternative browsers. But on industry custom Microsoft contends that no other firm requires non-removal because no other firm has invested the resources to integrate web browsing as deeply into its OS as Microsoft has. […] (We here use the term “integrate” in the rather simple sense of converting individual goods into components of a single physical object (*e.g.,* a computer as it leaves the OEM, or a disk or sets of disks), without any normative implication that such integration is desirable or achieves special advantages. *Cf.*

United States v. Microsoft Corp., 147 F.3d 935, 950 (D.C.Cir.1998) ("*Microsoft II*").) Microsoft contends not only that its integration of IE into Windows is innovative and beneficial but also that it requires non-removal of IE. In our discussion of monopoly maintenance we find that these claims fail the efficiency balancing applicable in that context. But the separate-products analysis is supposed to perform its function as a proxy *without* embarking on any direct analysis of efficiency. Accordingly, Microsoft's implicit argument-that in this case looking to a competitive fringe is inadequate to evaluate fully its potentially innovative technological integration, that such a comparison is between apples and oranges-poses a legitimate objection to the operation of *Jefferson Parish*'s separate-products test for the per se rule.

In fact there is merit to Microsoft's broader argument that *Jefferson Parish*'s consumer demand test would "chill innovation to the detriment of consumers by preventing firms from integrating into their products new functionality previously provided by standalone products-and hence, by definition, subject to separate consumer demand." […] The per se rule's direct consumer demand and indirect industry custom inquiries are, as a general matter, backward-looking and therefore systematically poor proxies for overall efficiency in the presence of new and innovative integration. […] The direct consumer demand test focuses on historic consumer behavior, likely before integration, and the indirect industry custom test looks at firms that, unlike the defendant, may not have integrated the tying and tied goods. Both tests compare incomparables – the defendant's decision to bundle in the presence of integration, on the one hand, and consumer and competitor calculations in its absence, on the other. If integration has efficiency benefits, these may be ignored by the *Jefferson Parish* proxies. Because one cannot be sure beneficial integration will be protected by the other elements of the per se rule, simple application of that rule's separate-products test may make consumers worse off.

In light of the monopoly maintenance section, obviously, we do not find that Microsoft's integration is welfare-enhancing or that it should be absolved of tying liability. Rather, we heed Microsoft's warning that the separate-products element of the per se rule may not give newly integrated products a fair shake.

B. Per Se Analysis Inappropriate for this Case.

We now address directly the larger question as we see it: whether standard per se analysis should be applied "off the shelf" to evaluate the defendant's tying arrangement, one which involves software that serves as a platform for third-party applications. There is no doubt that "[i]t is far too late in the history of our antitrust jurisprudence to question the proposition that *certain* tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable '*per se*.' " *Jefferson Parish,* 466 U.S. at 9, 104 S.Ct. 1551 (emphasis added). But there are strong reasons to doubt that the integration of additional software functionality into an OS falls among these arrangements. Applying per se analysis to such an amalgamation creates undue risks of error and of deterring welfare-enhancing innovation.

The Supreme Court has warned that " '[i]t is only after considerable experience with certain business relationships that courts classify them as *per se* violations....' " *Broad. Music,* 441 U.S. at 9, 99 S.Ct. 1551 (quoting *Topco Assocs.,* 405 U.S. at 607-08, 92 S.Ct. 1126); *accord Cont'l T.V., Inc. v. GTE Sylvania Inc.,* 433 U.S. 36, 47-59, 97 S.Ct. 2549, 53 L.Ed.2d 568 (1977); *White Motor Co. v. United States,* 372 U.S. 253, 263, 83 S.Ct. 696, 9 L.Ed.2d 738 (1963); *Jerrold Elecs.,* 187 F.Supp. at 555-58, 560-61; *see also* Frank H. Easterbrook, *Allocating Antitrust Decisionmaking Tasks,* 76 GEO. L.J. 305, 308 (1987). Yet the sort of tying arrangement attacked here is unlike any the Supreme Court has considered. The early Supreme Court cases on tying dealt with arrangements whereby the sale or lease of a patented product was conditioned on the purchase of certain unpatented products from the patentee. *See Motion Picture Patents,* 243 U.S. 502, 37 S.Ct. 416, 61 L.Ed. 871 (1917); *United Shoe Mach.,* 258 U.S. 451, 42 S.Ct. 363, 66 L.Ed. 708 (1922); *IBM Corp. v. United States,* 298 U.S. 131, 56 S.Ct. 701, 80 L.Ed. 1085 (1936); *Int'l Salt,* 332 U.S. 392, 68 S.Ct. 12, 92 L.Ed. 20 (1947). Later Supreme Court tying cases did not involve market power derived from patents, but continued to involve contractual ties. *See Times-Picayune,* 345 U.S. 594, 73 S.Ct. 872, 97 L.Ed. 1277 (1953) (defendant newspaper conditioned the purchase of ads in its evening edition on the purchase of ads in its morning edition); *N. Pac. Ry.,* 356 U.S. 1, 78 S.Ct. 514, 2 L.Ed.2d 545 (1958) (defendant railroad leased land only on the condition that products manufactured on the land be shipped on its railways); *United States v. Loew's Inc.,* 371 U.S. 38, 83 S.Ct. 97, 9 L.Ed.2d 11 (1962) (defendant distributor of copyrighted feature films conditioned the sale of desired films on the purchase of undesired films); *U.S. Steel Corp. v. Fortner Enters., Inc.,* 429 U.S. 610, 97 S.Ct. 861, 51 L.Ed.2d 80 (1977) ("*Fortner II*") (defendant steel company conditioned access to low interest loans on the purchase of the defendant's prefabricated homes); *Jefferson Parish,* 466 U.S. 2, 104 S.Ct. 1551, 80 L.Ed.2d 2 (1984) (defendant hospital conditioned use of its operating rooms on the purchase of anesthesiological services from a medical group associated with the hospital); *Eastman Kodak,* 504 U.S. 451, 112 S.Ct. 2072, 119 L.Ed.2d 265 (1992) (defendant photocopying machine manufacturer conditioned the sale of replacement parts for its machines on the use of the defendant's repair services).

In none of these cases was the tied good physically and technologically integrated with the tying good. Nor did the defendants ever argue that their tie improved the value of the tying product to users *and* to makers of complementary goods. In those cases where the defendant claimed that use of the tied good made the tying good more valuable to users, the Court ruled that the same result could be achieved via quality standards for substitutes of the tied good. *See, e.g., Int'l Salt,* 332 U.S. at 397-98, 68 S.Ct. 12; *IBM,* 298 U.S. at 138-40, 56 S.Ct. 701. Here Microsoft argues that IE and Windows are an integrated physical product and that the bundling of IE APIs with Windows makes the latter a better applications platform for third-party software. It is unclear how the benefits from IE APIs could be achieved by quality standards for different browser manufacturers. We do not pass judgment on Microsoft's claims regarding the benefits from integration of its APIs. We merely note that these and other novel, purported efficiencies suggest that judicial "experience" provides little basis for believing that, "because of their pernicious effect on competition and lack of *any* redeeming virtue," a software firm's decisions to sell multiple functionalities as a package should be "conclusively presumed to be unreasonable and therefore illegal without elaborate inquiry as to the precise harm they have caused or the business excuse for their use." *N. Pac. Ry.,* 356 U.S. at 5, 78 S.Ct. 514 (emphasis added).

Nor have we found much insight into software integration among the decisions of lower federal courts. Most tying cases in the computer industry involve bundling with hardware. *See, e.g., Digital Equip. Corp. v. Uniq Digital Techs., Inc.,* 73 F.3d 756, 761 (7th Cir.1996) (Easterbrook, J.) (rejecting with little discussion the notion that bundling of OS with a computer is a tie of two separate products); *Datagate, Inc. v. Hewlett-Packard Co.,* 941 F.2d 864, 870 (9th Cir.1991) (holding that plaintiff's allegation that defendant conditioned its software on purchase of its hardware was sufficient to survive summary judgment); *Digidyne Corp. v. Data Gen. Corp.,* 734 F.2d 1336, 1341-47 (9th Cir.1984) (holding that defendant's conditioning the sale of its OS on the purchase of its CPU constitutes a per se tying violation); *Cal. Computer Prods.,* 613 F.2d at 743-44 (holding that defendant's integration into its CPU of a disk controller designed for its own disk drives was a useful innovation and not an impermissible attempt to monopolize); *ILC Peripherals Leasing Corp. v. IBM Corp.,* 448 F.Supp. 228, 233 (N.D.Cal.1978) (finding that defendant's integration of magnetic disks and a head/disk assembly was not an unlawful tie), *aff'd per curiam sub. nom. Memorex Corp. v. IBM Corp.,* 636 F.2d 1188 (9th Cir.1980); *see also Transamerica Computer Co. v. IBM Corp.,* 698 F.2d 1377, 1382-83 (9th Cir.1983) (finding lawful defendant's design changes that rendered plaintiff peripheral maker's tape drives incompatible with the defendant's CPU). The hardware case that most resembles the present one is *Telex Corp. v. IBM Corp.,* 367 F.Supp. 258 (N.D.Okla.1973), *rev'd on other grounds,* 510 F.2d 894 (10th Cir.1975). Just as Microsoft integrated web browsing into its OS, IBM in the 1970s integrated memory into its CPUs, a hardware platform. A peripheral manufacturer alleged a tying violation, but the District Court dismissed the claim because it thought it inappropriate to enmesh the courts in product design decisions. *Id*. at 347. The court's discussion of the tying claim was brief and did not dwell on the effects of the integration on competition or efficiencies. Nor did the court consider whether per se analysis of the alleged tie was wise.

We have found four antitrust cases involving arrangements in which a software program is tied to the purchase of a software platform-two district court cases and two appellate court cases, including one from this court. The first case, *Innovation Data Processing, Inc. v. IBM Corp.,* 585 F.Supp. 1470 (D.N.J.1984), involved an allegation that IBM bundled with its OS a utility used to transfer data from a tape drive to a computer's disk drive. Although the court mentioned the efficiencies achieved by bundling, it ultimately dismissed the per se tying claim because IBM sold a discounted version of the OS without the utility. *Id*. at 1475-76. The second case, *A.I. Root Co. v. Computer/Dynamics, Inc.,* 806 F.2d 673 (6th Cir.1986), was brought by a business customer who claimed that an OS manufacturer illegally conditioned the sale of its OS on the purchase of other software applications. The court quickly disposed of the case on the ground that defendant Computer/Dynamics had no market power. *Id*. at 675-77. There was no mention of the efficiencies from the tie. The third case, *Caldera, Inc. v. Microsoft Corp.,* 72 F.Supp.2d 1295 (D.Utah 1999), involved a complaint that the technological integration of MS-DOS and Windows 3.1 into Windows 95 constituted a per se tying violation. The court formulated the "single product" issue in terms of whether the tie constituted a technological improvement, ultimately concluding that Microsoft was not entitled to summary judgment on that issue. *Id*. at 1322-28.

The software case that bears the greatest resemblance to that at bar is, not surprisingly, *Microsoft II,* 147 F.3d 935, where we examined the bundling of IE with Windows 95. But the issue there was whether the bundle constituted an "integrated product" as the term was used in a 1994 consent decree between the Department of Justice and Microsoft. *Id*. at 939. We did not consider whether Microsoft's bundling should be condemned as per se illegal. We certainly did not make any finding that bundling IE with Windows had "no purpose except stifling of competition," *White Motor,* 372 U.S. at 263, 83 S.Ct. 696, an important consideration in defining the scope of any of antitrust law's per se rules, *see Cont'l T.V.,* 433 U.S. at 57-59, 97 S.Ct. 2549. While we believed our interpretation of the term "integrated product" was consistent with the test for separate products under tying law, we made clear that the "antitrust question is of course distinct." *Microsoft II,* 147 F.3d at 950 n. 14. We even cautioned that our conclusion that IE and Windows 95 were integrated was "subject to reexamination on a more complete record." *Id*. at 952. To the extent that the decision completely disclaimed judicial capacity to evaluate "high-tech product design," *id*., it cannot be said to conform to prevailing antitrust doctrine (as opposed to resolution of the decree-interpretation issue then before us). In any case, mere review of asserted breaches of a consent decree hardly constitutes enough "experience" to warrant application of per se analysis. *See Broad. Music,* 441 U.S. at 10-16, 99 S.Ct. 1551 (refusing to apply per se analysis to defendant's blanket licenses even though those licenses had been thoroughly investigated by the Department of Justice and were the subject of a consent decree that had been reviewed by numerous courts).

While the paucity of cases examining software bundling suggests a high risk that per se analysis may produce inaccurate results, the nature of the platform software market affirmatively suggests that per se rules might stunt valuable innovation. We have in mind two reasons.

First, as we explained in the previous section, the separate-products test is a poor proxy for net efficiency from newly integrated products. Under per se analysis the first firm to merge previously distinct functionalities (*e.g.,* the inclusion of starter motors in automobiles) or to eliminate entirely the need for a second function (*e.g.,* the invention of the stain-resistant carpet) risks being condemned as having tied two separate products because at the moment of integration there will appear to be a robust "distinct" market for the tied product. *See* 10 AREEDA ET AL., ANTITRUST LAW ¶ 1746, at 224. Rule of reason analysis, however, affords the first mover an opportunity to demonstrate that an efficiency gain from its "tie" adequately offsets any distortion of consumer choice. *See Grappone, Inc. v. Subaru of New England, Inc.,* 858 F.2d 792, 799 (1st Cir.1988) (Breyer, J.); *see also Town Sound & Custom Tops, Inc. v. Chrysler Motor Corp.,* 959 F.2d 468, 482 (3d Cir.1992); *Kaiser Aluminum & Chem. Sales, Inc. v. Avondale Shipyards, Inc.,* 677 F.2d 1045, 1048-49 n. 5 (5th Cir.1982).

The failure of the separate-products test to screen out certain cases of productive integration is particularly troubling in platform software markets such as that in which the defendant competes. Not only is integration common in such markets, but it is common among firms without market power. We have already reviewed evidence that nearly all competitive OS vendors also bundle browsers. Moreover, plaintiffs do not dispute that OS vendors can and do incorporate basic internet plumbing and other useful functionality into their OSs. […] Firms without market power have no incentive to package different pieces of software together unless there are efficiency gains from doing so. The ubiquity of bundling in competitive platform software markets should give courts reason to pause before condemning such behavior in less competitive markets.

Second, because of the pervasively innovative character of platform software markets, tying in such markets may produce efficiencies that courts have not previously encountered and thus the Supreme Court had not factored into the per se rule as originally conceived. For example, the bundling of a browser with OSs enables an independent software developer to count on the presence of the browser's APIs, if any, on consumers' machines and thus to omit them from its own package. […] It is true that software developers can bundle the browser APIs they need with their own products, […], but that may force consumers to pay twice for the same API if it is bundled with two different software programs. It is also true that OEMs can include APIs with the computers they sell, *id*., but diffusion of uniform APIs by that route may be inferior. First, many OEMs serve special subsets of Windows consumers, such as home or corporate or academic users. If just one of these OEMs decides not to bundle an API because it does not benefit enough of its clients, ISVs that use that API might have to bundle it with every copy of their program. Second, there may be a substantial lag before all OEMs bundle the same set of APIs-a lag inevitably aggravated by the first phenomenon. In a field where programs change very rapidly, delays in the spread of a necessary element (here, the APIs) may be very costly. Of course, these arguments may not justify Microsoft's decision to bundle APIs in this case, particularly because Microsoft did not merely bundle with Windows the APIs from IE, but an entire browser application (sometimes even without APIs, […]). A justification for bundling a component of software may not be one for bundling the entire software package, especially given the malleability of software code. […]. Furthermore, the interest in efficient API diffusion obviously supplies a far stronger justification for simple price-bundling than for Microsoft's contractual or technological bars to subsequent *removal* of functionality. But our qualms about redefining the boundaries of a defendant's product and the possibility of consumer gains from simplifying the work of applications developers makes us question any hard and fast approach to tying in OS software markets.

There may also be a number of efficiencies that, although very real, have been ignored in the calculations underlying the adoption of a per se rule for tying. We fear that these efficiencies are common in technologically dynamic markets where product development is especially unlikely to follow an easily foreseen linear pattern. Take the following example from *ILC Peripherals,* 448 F.Supp. 228, a case concerning the evolution of disk drives for computers. When IBM first introduced such drives in 1956, it sold an integrated product that contained magnetic disks and disk heads that read and wrote data onto disks. *Id*. at 231. Consumers of the drives demanded two functions-to store data and to access it all at once. In the first few years consumers' demand for storage increased rapidly, outpacing the evolution of magnetic disk technology. To satisfy that demand IBM made it possible for consumers to remove the magnetic disks from drives, even though that meant consumers would not have access to data on disks removed from the drive. This componentization enabled makers of computer peripherals to sell consumers removable disks. *Id*. at 231-32. Over time, however, the technology of magnetic disks caught up with demand for capacity, so that consumers needed few removable disks to store all their data. At this point IBM reintegrated disks into their drives, enabling consumers to once again have immediate access to all their data without a sacrifice in capacity. *Id*. A manufacturer of removable disks sued. But the District Court found the tie justified because it satisfied consumer demand for immediate access to all data, and ruled that disks and disk heads were one product. *Id*. at 233. A court hewing more closely to the truncated analysis contemplated by *Northern Pacific Railway* would perhaps have overlooked these consumer benefits.

These arguments all point to one conclusion: we cannot comfortably say that bundling in platform software markets has so little "redeeming virtue," *N. Pac. Ry.,* 356 U.S. at 5, 78 S.Ct. 514, and that there would be so "very little loss to society" from its ban, that "an inquiry into its costs in the individual case [can be] considered [ ] unnecessary." *Jefferson Parish,* 466 U.S. at 33-34, 104 S.Ct. 1551 (O'Connor, J., concurring). We do not have enough empirical evidence regarding the effect of Microsoft's practice on the amount of consumer surplus created or consumer choice foreclosed by the integration of added functionality into platform software to exercise sensible judgment regarding that entire class of behavior. (For some issues we have no data.) "We need to know more than we do about the actual impact of these arrangements on competition to decide whether they ... should be classified as *per se* violations of the Sherman Act." *White Motor,* 372 U.S. at 263, 83 S.Ct. 696. Until then, we will heed the wisdom that "easy labels do not always supply ready answers," *Broad. Music,* 441 U.S. at 8, 99 S.Ct. 1551, and vacate the District Court's finding of per se tying liability under Sherman Act § 1. We remand the case for evaluation of Microsoft's tying arrangements under the rule of reason. *See Pullman-Standard v. Swint,* 456 U.S. 273, 292, 102 S.Ct. 1781, 72 L.Ed.2d 66 (1982) ("[W]here findings are infirm because of an erroneous view of the law, a remand is the proper course unless the record permits only one resolution of the factual issue."). That rule more freely permits consideration of the benefits of bundling in software markets, particularly those for OSs, and a balancing of these benefits against the costs to consumers whose ability to make direct price/quality tradeoffs in the tied market may have been impaired. *See Jefferson Parish,* 466 U.S. at 25 nn.41-42, 104 S.Ct. 1551 (noting that per se rule does not broadly permit consideration of procompetitive justifications); *id*. at 34-35, 104 S.Ct. 1551 (O'Connor, J., concurring); *N. Pac. Ry.,* 356 U.S. at 5, 78 S.Ct. 514.

Our judgment regarding the comparative merits of the per se rule and the rule of reason is confined to the tying arrangement before us, where the tying product is software whose major purpose is to serve as a platform for third-party applications and the tied product is complementary software functionality. While our reasoning may at times appear to have broader force, we do not have the confidence to speak to facts outside the record, which contains scant discussion of software integration generally. Microsoft's primary justification for bundling IE APIs is that their inclusion with Windows increases the value of third-party software (and Windows) to consumers. *See* Appellant's Opening Br. at 41-43. Because this claim applies with distinct force when the tying product is *platform* software, we have no present basis for finding the per se rule inapplicable to software markets generally. Nor should we be interpreted as setting a precedent for switching to the rule of reason every time a court identifies an efficiency justification for a tying arrangement. Our reading of the record suggests merely that integration of new functionality into platform software is a common practice and that wooden application of per se rules in this litigation may cast a cloud over platform innovation in the market for PCs, network computers and information appliances.

[…]

II. ***GENENTECH, INC., v. ELI LILLY AND COMPANY***, 998 F.2d 931

United States Court of Appeals, Federal Circuit.

GENENTECH, INC., Plaintiff–Appellant,
v.
ELI LILLY AND COMPANY, Defendant,
and
The Regents of the University of California, Defendant–Appellee.

No. 91–1249. | July 1, 1993. | Rehearing Denied Sept. 13, 1993. | Rehearing Denied; Suggestion for Rehearing In Banc Declined Sept. 23, 1993.

Plaintiff sued for declaratory judgment regarding scope of university's patent. The United States District Court for the Southern District of Indiana, Larry J. McKinney, J., entered order dismissing action, and plaintiff appealed. The Court of Appeals, Pauline Newman, Circuit Judge, held that: (1) statutory abrogation of state's sovereign immunity from suit under federal patent laws permitted plaintiff to bring declaratory action for determination as to whether its actions infringed state university's patent; (2) contract-based estoppel and antitrust claims could be asserted as defense to university's patent infringement claim; but (3) university's decision to grant exclusive license was not, in itself, "act in restraint of trade." Affirmed in part, vacated in part and remanded.

[…]

Before NEWMAN, Circuit Judge, SKELTON, Senior Circuit Judge, and LOURIE, Circuit Judge.

Opinion

PAULINE NEWMAN, Circuit Judge.

Genentech, Inc. appeals the judgment of the United States District Court for the Southern District of Indiana [note omitted] dismissing, as to the Regents of the University of California ("the University"), the declaratory judgment action brought by Genentech against the University and Eli Lilly and Company ("Lilly"). We affirm in part, vacate in part and remand for further proceedings.

This is one of several lawsuits filed in the federal courts of Indiana and California involving these parties, [note omitted] relating to recombinant DNA technology as used for the production of human growth hormone ("hGH"), a product having medicinal and therapeutic properties. The patent here involved is United States Patent No. 4,363,877 entitled "Recombinant DNA Transfer Vectors", granted December 14, 1982, inventors Howard M. Goodman, John Shine, and Peter H. Seeburg ("the '877 patent"). The patent is owned by the University.

The legal issues raised in this declaratory action relate to the infringement, validity, and enforceability of the '877 patent, and include charges by Genentech of violation of federal antitrust laws and state tort and contract laws based on certain patent licensing arrangements between the University and Lilly.

[…]

Genentech filed this declaratory action against Lilly and the University in the Southern District of Indiana, requesting judicial declaration that the '877 patent is invalid and not infringed. Genentech also sought declaration that the '877 patent is unenforceable for inequitable conduct, Genentech alleging that a Certificate of Correction was obtained through false or misleading representations by the University to the Patent and Trademark

Office. Genentech also alleged that a waiver from the Department of Health, Education & Welfare (herein "HEW", now the Department of Health and Human Services), that permitted the University to grant 52 against Genentech. In addition, Genentech raised antitrust and patent misuse counts and state law tort counts as grounds of patent invalidity, unenforceability, and other relief.

[…]

C

The Antitrust and State Law Counts

Genentech's complaint as amended included charges that various agreements between Lilly and the University, and certain actions taken by the University at the behest of Lilly, constituted violations of sections 1 and 2 of the Sherman Act, 15 U.S.C. §§ 1, 2, as amended. [note omitted] Genentech also charged that the University's agreements and actions violated state laws relating to unfair competition, fraud, breach of contract, breach of third party obligations, and tortious interference with contract. Genentech also claimed that its 1980 contract with the University estops the University from charging Genentech with infringement. Genentech states that these actions render the '877 patent unenforceable against it, and also serve to recoup any damages that Genentech might incur for infringement. Genentech thus argues that inclusion of the antitrust and state law counts in this litigation is necessary to avoid injustice, and to resolve all of the issues between the parties.

The district court's dismissal of these counts was grounded on the University's asserted Eleventh Amendment and State Action immunities. Review of this dismissal, which was in terms of Federal Rules 12(b)(1) and 12(b)(6), requires that the factual premises and allegations of Genentech's complaint be deemed established. We outline some of the facts, undisputed for this purpose, that are relevant to the antitrust and state law counts:

Lilly provided funding for certain research at the University relating to the subject matter of the '877 patent, and had the option to acquire from the University the exclusive license to any patent that resulted from the Lilly-funded research. Certain other research was funded by HEW, and was subject to the requirement that any patent resulting from HEW-funded research would be made available to qualified applicants by non-exclusive license. The University had in 1980 entered into an agreement with Genentech that provided, *inter alia,* that the University would notify Genentech if Lilly exercised its option for an exclusive license, so that, according to Genentech, it could obtain a mandatory sublicense. Genentech states that at the behest of Lilly the University obtained, through misrepresentations and omissions of fact, a waiver of HEW's licensing requirement, and the University and Lilly then entered into an exclusive license, with payment by Lilly of a royalty to the University. Among other terms, this license provided that the University would at Lilly's request enforce the '877 patent against infringers, and that if the University did not take such requested legal action it would forfeit the royalty payments.

Genentech premised its antitrust and state law tort and contract charges on these and related events. The district court dismissed the antitrust and state law counts as barred by the Eleventh Amendment, and the antitrust counts as barred by the State Action doctrine. In view of the abrogation of immunity for violation of patent law, Public Law 102–560, we first consider the relation of these counts to the patent counts.

[…]

3. Antitrust Claims.

The district court held that the State Action doctrine provides immunity from the asserted violations of federal antitrust law. The principal antitrust issue raised in Genentech's pleading relates to the University's licensing activities. Genentech's position is that the University conspired with Lilly to exclude Genentech from the hGH market, in violation of the Sherman Act.

The State Action doctrine, although grounded on general principles of federalism, relates specifically to state sovereignty in state legislatively authorized activity. The doctrine provides immunity, or "exemption" as it is sometimes called, from federal competition laws when the state is performing official acts, whether or not these acts are anticompetitive in effect. As explained in *Parker v. Brown,* 317 U.S. 341, 63 S.Ct. 307, 87 L.Ed. 315 (1943), a case where California state officials were administering a legislatively-mandated program that had the purpose of restricting competition among raisin producers in California:

We find nothing in the language of the Sherman Act or in its history which suggests that its purpose was to restrain a state or its officers or agents from activities directed by its legislature.

Parker, 317 U.S. at 350–51, 63 S.Ct. at 313–14. The district court, applying this principle, dismissed Genentech's antitrust claims against the University.

To warrant *Parker* immunity the anticompetitive acts must be taken in the state's "sovereign capacity", and not as a market participant in competition with commercial enterprise. *Community Communications Co. v. Boulder,* 455 U.S. 40, 52, 102 S.Ct. 835, 841, 70 L.Ed.2d 810 (1982). If the allegedly anticompetitive acts are not explicitly ordered by a legislative arm of state government, they must be conducted pursuant to legislative authorization that contemplates such acts. *Hoover v. Ronwin,* 466 U.S. 558, 567–68, 104 S.Ct. 1989, 1994–95, 80 L.Ed.2d 590 (1984). As discussed in *City of Lafayette v. Louisiana Power & Light Co.,* 435 U.S. 389, 98 S.Ct. 1123, 55 L.Ed.2d 364 (1978), *Parker* immunity permits the state to impose anticompetitive restraints "as an act of government." 435 U.S. at 391, 98 S.Ct. at 1125 (quoting *Parker*).

However, the policies underlying *Parker* do not extend to circumstances where the state acts not in a legislative/regulatory capacity but as a "commercial participant in a given market." *City of Columbia v. Omni Outdoor Advertising, Inc.,* 499 U.S. 365, ——, 111 S.Ct. 1344, 1351, 113 L.Ed.2d 382 (1991). *See South–Central Timber Dev., Inc. v. Wunnicke,* 467 U.S. 82, 102, 104 S.Ct. 2237, 2248, 81 L.Ed.2d 71 (1984) (Rehnquist, J., dissenting) ("the antitrust laws apply to a State only when it is acting as a market participant"); *Jefferson County Pharmaceutical Ass'n, Inc. v. Abbott Lab.,* 460 U.S. 150, 154, 103 S.Ct. 1011, 1015, 74 L.Ed.2d 882 (1983) (state university's participation in private retail markets renders it subject to Robinson–Patman Act); *Union Pacific R.R. v. United States,* 313 U.S. 450, 61 S.Ct. 1064, 85 L.Ed. 1453 (1941) (rebates and concessions made by city-run produce market integrated with railroad facilities violated the Elkins Act). *Cf. Reeves, Inc. v. Stake,* 447 U.S. 429, 436, 100 S.Ct. 2271, 2277, 65 L.Ed.2d 244 (1980) (the distinction between the state as a market participant and the state as a market regulator "makes good sense and sound law" in Commerce Clause cases); *Employees of Dep't of Public Health & Welfare v. Department of Public Health and Welfare,* 411 U.S. 279, 284, 93 S.Ct. 1614, 1617, 36 L.Ed.2d 251 (1973) (state activity was not of a proprietary, commercial nature, and was protected by principles of state sovereignty).

Genentech alleges that the University was not acting under state legislative or regulatory authority when the University assertedly violated the Sherman Act. Genentech states that the University has neither regulatory interest nor sovereign authority in the national market for hGH, and simply engaged in profit-making commercial activity. The University responds that it was merely exercising its authority and obligation to manage the property of the University. The University states that it does not participate in the hGH market; that it is not in competition with private enterprise; and that the licensing of a patent based on University research is not commercial activity but is part of a university's normal functions, serving the public purpose of aiding the movement of scientific research toward practical application.

We need not decide whether the University's licensing activities establish a market participant exception to State Action immunity, for Genentech has not pled facts which if proved constitute violation of the antitrust laws. The patenting and licensing of the results of University research is not a violation of antitrust principles, and the grant of an exclusive license is a lawful incident of the right to exclude provided by the Patent Act. The University's

right to select its licensees, the decision to grant exclusive or non-exclusive licenses or to sue for infringement, and the pursuit of optimum royalty income, are not of themselves acts in restraint of trade. Although Genentech presses the position that the University and Lilly conspired to exclude Genentech from the hGH market, Genentech's pleading does not allege more substance than the University's grant of an exclusive license to Lilly; thus it is unnecessary to consider the applicability of the statement in *City of Columbia* that there is no "conspiracy exception" to State Action immunity. 499 U.S. at ——, 111 S.Ct. at 1351.
For these reasons, the charge of antitrust violation in the licensing arrangement was correctly dismissed under Rule 12(b)(6). Accordingly, we do not reach the question of whether State Action immunity protects the challenged activities.[note omitted]

Summary
Dismissal of the declaratory action is vacated. Absent sound reason favoring a different forum, a first-filed suit is entitled to precedence against a subsequent suit.
The University is not immune from suit as to the patent counts, and as to those other counts that are defenses and compulsory counterclaims to the charge of patent infringement. Dismissal on these grounds is vacated. On remand the district court may determine which counts are thus properly asserted.
The dismissal of the antitrust count is affirmed.
No costs.

Affirmed in part, vacated in part, and remanded.

III. ***Miller Insituform, Inc. v. Insituform of N. Am., Inc*, 830 F.2d 606 (6th Cir. 1987); 830 F.2d 606**

United States Court of Appeals, Sixth Circuit.

MILLER INSITUFORM, INC., and Thomas E. Smith, Plaintiffs-Appellants,
v.
INSITUFORM OF NORTH AMERICA, INC.; William C. Miller, and Ira B. Miller, Defendants-Appellees.

No. 86-5446. | Argued May 1, 1987. | Decided Oct. 6, 1987.
Patent sublicensee brought action against exclusive licensee, after sublicense was terminated, for violating Sherman Act prohibitions against monopolization and attempts to monopolize. The United States District Court for the Middle District of Tennessee, Thomas A. Wiseman, Jr., Chief Judge, dismissed claim, and sublicensee appealed. The Court of Appeals, Gilmore, District Judge, sitting by designation, held that exclusive licensee did not violate Sherman Act.
Affirmed.

Before KRUPANSKY and GUY, Circuit Judges; and GILMORE,* District judge.

Opinion

GILMORE, District Judge.
Plaintiffs appeal the district court's dismissal of their claim brought under Section II of the Sherman Act, 15 U.S.C. § 2, alleging that defendant Insituform of North America (INA) unlawfully attempted to monopolize the relevant market by revoking plaintiffs' license to sell and install a patented process for the rehabilitation of pipe lines.
The district court granted summary judgment for defendant INA on the antitrust claims, and dismissed the remaining pendent state law claims without prejudice for want of federal jurisdiction.
The only issue on appeal is whether, by terminating an agreement to sublicense a patent, the exclusive licensee of the patent violates Section 2 of the Sherman Act, which prohibits monopolization or attempts to monopolize. We hold there is no violation of Section 2 under these circumstances, and affirm the district court's order of summary judgment dismissing appellants' complaint. [note omitted]

I
The Insituform process is a patented process for the rehabilitation of pipe lines. The patent is owned by Insituform International, N.V., a Netherlamds Antilles Corporation. In June of 1980, Insituform International entered into a licensing agreement with INA, conveying to INA the exclusive right to the patented process throughout the United States, except in California. Subsequently, INA granted exclusive sublicenses to certain designated territories throughout the United States. One such sublicense was granted to plaintiff Miller Insituform, Inc. (MII) for the territories of Tennessee, Kentucky, and certain portions of Ohio. Subsequent to this sublicense agreement, INA allegedly conspired to take back control of MII's exclusive territory. On or about May 9, 1984, INA terminated the sublicense agreement, allegedly because MII had failed to provide a balance sheet showing a net worth of at least $500,000, as was required under the terms of the license agreement.

II
Appellants assert INA's termination of the sublicense agreement was without justification, and was a calculated move by INA to retake appellants' territory for the benefit of INA and other sublicensees. They claim that INA has an ownership interest in one or more of its other sublicensees, and that, in effect, it has thereby entered the market, enabling it to control

prices. They claim INA accomplished this by terminating the sublicense agreement with appellants on the pretext that appellants had failed to satisfy a $500,000 net worth requirement.
INA argues that, even assuming, arguendo, it controlled 100 per cent of the relevant market, no Section 2 violation could occur because INA had the right under 35 U.S.C. § 154 to exclude all others from using the Insituform process whenever, and for whatever reason, it chose. Simply stated, it argues that, by virtue of the patent laws, INA enjoyed a lawful monopoly and could therefore exclude others from using the Insituform process, and even enter into the market and practice the process itself (vertical integration) without committing actionable antitrust violations. [note omitted]
The issue here, therefore, is whether INA's action in terminating its sublicense agreement with MII constituted a violation of Section 2 of the Sherman Act. At issue is the "obvious tension between the patent laws and antitrust laws." *United States v. Westinghouse Electric Corp.,* 648 F.2d 642 (9th Cir.1981). While this Circuit has not dealt specifically with the issue, other circuits have reached the conclusion that a patentee is free to control licensing for the exclusive use of its patent without running afoul of the prohibitions against monopoly contained in the Sherman Act. [note omitted]

III
This case requires consideration of two federal statutory schemes, the antitrust laws and the patent laws. Under Section 2 of the Sherman Act, 15 U.S.C. § 2, it is a violation of the antitrust laws to monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States ...
A Section 2 Sherman Act violation has two elements:
(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.
United States v. Grinnell Corp., 384 U.S. 563, 570-71, 86 S.Ct. 1698, 1703-04, 16 L.Ed.2d 778 (1966).
But, under the patent laws, 35 U.S.C. § 154, it is provided:
Every patent shall contain ... a grant to the patentee, his heirs or assigns, for the term of seventeen years, ... of the right to exclude others from making, using, or selling the invention throughout the United States, ...
It is thus clear that a patentee holds a legal monopoly. *Zenith Radio Corp. v. Hazeltine Research, Inc.,* 395 U.S. 100, 135, 89 S.Ct. 1562, 1582, 23 L.Ed.2d 129 (1969). As one court has observed, there is a contradiction in terms between the antitrust and patent laws:
There is an obvious tension between the patent laws and antitrust laws. One body of law creates and protects monopoly power while the other seeks to proscribe it.... "The patent laws which give a 17-year monopoly on 'making, using, or selling the invention' are in *pari materia* with the antitrust laws and modify them *pro tanto*." *Simpson v. Union Oil Co.,* 377 U.S. 13, 24, 84 S.Ct. 1051, 1058, 12 L.Ed.2d 98 (1964). *Westinghouse, supra* at 646-47.
Although a patentee has a limited monopoly granted by the patent laws, merely holding a patent fails to render one totally immune from the antitrust laws. The Ninth Circuit pointed out that where a patentee seeks to expand the limited monopoly granted by the patent laws by misuse, agreement, or accumulation, it is subject to the antitrust laws. *See Westinghouse, supra,* at 647.4
The Supreme Court has also emphasized that there are limits on the control a patent holder may exercise over his licensee:
Among other restrictions upon him, he may not condition the right to use his patent on the licensee's agreement to purchase, use, or sell, or not to purchase, use, or sell another article of commerce not within the scope of his patent monopoly. *Zenith Radio, supra,* at 136, 89 S.Ct. at 1583.
The Second Circuit has held that no liability exists under Section 2 of the Sherman Act on the part of one who has lawfully acquired the patent, and subsequently unilaterally refuses to

license the patent. *SCM Corp. v. Xerox Corp.,* 645 F.2d 1195 (2d Cir.1981), *cert. denied,* 455 U.S. 1016, 102 S.Ct. 1708, 72 L.Ed.2d 132 (1982). Noting the conflict between these two statutory schemes as a result of the patent holder's power under the patent laws to exclude others from exploiting his invention, that court observed:

[T]he primary purpose of the antitrust laws-to preserve competition-can be frustrated, albeit temporarily, by a holder's exercise of the patent's inherent exclusionary power during its term.

Id. at 1203. The *SCM* court concluded "where a patent has been lawfully acquired, subsequent conduct permissible under the patent laws cannot trigger any liability under the antitrust laws." *Id.* at 1206.

It is clear that the instant case presents, at most, claims for violation of state law ranging from breach of contract to fraud and misrepresentation, not a violation of Section 2 of the Sherman Act.

A patent holder who lawfully acquires a patent cannot be held liable under Section 2 of the Sherman Act for maintaining the monopoly power he lawfully acquired by refusing to license the patent to others. *SCM Corp., supra.* Similarly, we conclude that the holder of a patent retains the power to exclude others from manufacturing, using, and selling his inventions without running afoul of the antitrust laws. Here, by terminating the sublicense agreement with the appellant, appellee merely exercised his power to exclude others from using the Insituform process, as was its right under 35 U.S.C. § 154. In so doing, it did not violate Section 2 of the Sherman Act.

Appellants contend that INA's termination of the agreement constituted a misuse of patent, rendering INA liable for antitrust violations. We reject this argument. A material issue of fact may exist as to whether INA was justified in terminating the contract, but mere breach of contract is not envisioned or included in the term "misuse of patent." The mere failure to observe state contractual obligations does not rise to the level of misuse of a patent that will render one liable for violations of Section 2 of the Sherman Act.

Appellants also argue that INA has entered into the Insituform process through partial ownership of some of its other sublicensees. Apparently, appellants' point is that assuming both the position of licensor and of competitor with its licensees renders INA potentially liable for antitrust violations. INA has recognized this theory of appellants as charging "vertical integration," but persuasively argues that this theory is inapplicable to a patent monopolist. We agree. There is no adverse effect on competition since, as a patent monopolist, INA, from the start, had exclusive right to manufacture, use, and sell his invention.

Although the Supreme Court has advised courts to exercise caution in granting summary judgment in antitrust suits, *Poller v. Columbia Broadcasting System, Inc.,* 368 U.S. 464, 82 S.Ct. 486, 7 L.Ed.2d 458 (1962), the Court has also recognized that courts may grant summary judgment in appropriate antitrust cases. *Matsushita Electric Industrial Co., Ltd. v. Zenith Radio Corp.,* 475 U.S. 574, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986).

We conclude that the grant of summary judgment in favor of INA was appropriate, and AFFIRM the district court.

IV. *Transparent-Wrap Machine Corp. v. Stokes & Smith Co*, 329 U.S. 637 (1947); 67 S.Ct. 610

Supreme Court of the United States

TRANSPARENT-WRAP MACH. CORPORATION
v.
STOKES & SMITH CO.

No. 208. | Argued Jan. 7, 8, 1947. | Decided Feb. 3, 1947. | Rehearing Denied March 3, 1947.See 330 U.S. 854, 67 S.Ct. 859.
Suit for a declaratory judgment and for an injunction by Stokes & Smith Company against Transparent-Wrap Machine Corporation for determination of the legality and enforceability of a provision in a patent license agreement, wherein the defendant filed a counterclaim demanding an assignment of 14 patents. A judgment of the district court dismissing the complaint and directing plaintiff to assign 11 patents to defendant was reversed by the Circuit Court of Appeals, 156 F.2d 198, and the defendant brings certiorari.

Reversed.

Mr. Justice BLACK, Mr. Justice MURPHY, Mr. Justice RUTLEDGE, and Mr. Justice BURTON dissenting.
On writ of Certiorari to the United States Circuit Court of Appeals for the Second Circuit.

Opinion

Mr. Justice DOUGLAS delivered the opinion of the Court.
This is a suit for a declaratory judgment (Judicial Code s 274d, 28 U.S.C. s 400, 28 U.S.C.A. s 400) and an injunction, instituted by respondent for the determination of the legality and enforceability of a provision of a patent license agreement. The District Court, whose jurisdiction was based on diversity of citizenship (Judicial Code s 24(1), 28 U.S.C. s 41(1), 28 U.S.C.A. s 41(1) entered judgment for petitioner, holding the provision valid. The Circuit Court of Appeals reversed by a divided vote, 2 Cir., 156 F.2d 198, being of the opinion that the provision in question was illegal under the line of decisions represented by Mercoid Corporation v. Mid-Continent Co., 320 U.S. 661, 64 S.Ct. 268, 88 L.Ed. 376. The case is here on a petition for a writ of certiorari which we granted because of the public importance of the question presented and of the apparent conflict between the decision below and Allbright-Nell Co. v. Stanley Hiller Co., 72 F.2d 392, decided by the Seventh Circuit Court of Appeals.
Petitioner, organized in 1934, has patents on a machine which bears the trade-mark ‘Transwrap’. This machine makes transparent packages, simultaneously fills them with such articles as candy, and seals them. In 1937 petitioner sold and respondent acquired the Transwrap business in the United States, Canada, and Mexico, the right to use the trade-mark ‘Transwrap’, and an exclusive license to manufacture and sell the Transwrap machine under the patents petitioner then owned or might acquire. The agreement contained a formula by which royalties were to be computed and paid. The term of the agreement was ten years with an option in respondent to renew it thereafter for five year periods during the life of the patents covered by the agreement. The agreement could be terminated by petitioner on notice for specified defaults on respondent’s part. The provision of the agreement around which the present controversy turns is a covenant by respondent to assign to petitioner improvement patents applicable to the machine and suitable for use in connection with it. [note omitted]
The parties had operated under the agreement for several years when petitioner ascertained that respondent had taken out certain patents on improvements in the machine. Petitioner notified respondent that its failure to disclose and assign these improvements constituted a

breach of the agreement and called on respondent to remedy the default. When that did not occur petitioner notified respondent that the agreement would be terminated on a day certain. Thereupon respondent instituted this action asking that the provisions respecting the improvement patents be declared illegal and unenforceable and that petitioner be enjoined from terminating the agreement.2

In a long and consistent line of cases the Court has held that an owner of a patent may not condition a license so as to tie to the use of the patent the use of other materials, processes or devices which lie outside of the monopoly of the patent. Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 37 S.Ct. 416, 61 L.Ed. 871, L.R.A.1917E, 1187, Ann.Cas.1918A, 959; Carbice Corporation v. American Patents Dev. Corporation, 283 U.S. 27, 51 S.Ct. 334, 75 L.Ed. 819; Leitch Mfg. Co. v. Barber Co., 302 U.S. 458, 58 S.Ct. 288, 82 L.Ed. 371; Morton Salt Co. v. S. S. Suppiger Co., 314 U.S. 488, 788, 62 S.Ct. 402, 86 L.Ed. 363; B. B. Chemical Co. v. Ellis, 314 U.S. 495, 62 S.Ct. 406, 86 L.Ed. 367; Mercoid Corporation v. Mid-Continent Co. supra; Mercoid Corporation v. Minneapolis Honeywell Co., 320 U.S. 680, 64 S.Ct. 278, 88 L.Ed. 396. As stated in Morton Salt Co. v. Suppiger Co., supra, 314 U.S. at page 492, 62 S.Ct. at page 405, 86 L.Ed. 363, '* * * the public policy which includes inventions within the granted monopoly excludes from it all that is not embraced in the invention. It equally forbids the use of the patent to secure an exclusive right or limited monopoly not granted by the Patent Office and which it is contrary to public policy to grant.' If such practices were tolerated, ownership of a patent would give the patentee control over unpatented articles which but for the patent he would not possess. 'If the restraint is lawful because of the patent, the patent will have been expanded by contract. That on which no patent could be obtained would be as effectively protected as if a patent had been issued. Private business would function as its own patent office and impose its own law upon its licensees.' Mercoid Corporation v. Mid-Continent Co., supra, 320 U.S. at page 667, 64 S.Ct. at page 272, 88 L.Ed. 376. The requirement that a licensee under a patent use an unpatented material or device with the patent might violate the antitrust laws but for the attempted protection of the patent. Id. The condemnation of the practice, however, does not depend on such a showing. Though control of the unpatented article or device falls short of a prohibited restraint of trade or monopoly, it will not be sanctioned. Morton Salt Co. v. S. S. Suppiger Co., supra. For it is the tendency in that direction which condemns the practice and which, if approved by a court either through enjoining infringement or enforcing the covenant, would receive a powerful impetus. Id.

The Circuit Court of Appeals was of the view that the principle of those cases was applicable here and rendered illegal and unenforceable the covenant to assign the improvement patents to petitioner. It stated, 156 F.2d at page 202, 'The owner of all property, by withholding it upon any other terms, may, if he can, force others to buy from him; land is the best example and every parcel of land is a monopoly. But it is precisely in this that a patent is not like other property; the patentee may not use it to force others to buy of him things outside its four corners. If the defendant gets the plaintiff's patents, it will have put itself in that position, in part at any rate, by virtue of the compulsion of its own patents.'

It went on to note that since all improvement patents would not expire until after expiration of petitioner's patents on the machine, the arrangement put respondent at a competitive disadvantage. For respondent would lose the negative command over the art which ownership of the improvement patents would have given it. Moreover, respondent, though able to renew the license on conditions stated in the agreement, would be irretrievably tied to it so as to be 'Forced, either to cease all efforts to patent improvements, or to keep renewing the contract in order to escape the consequences of its own ingenuity.' Id., 156 F.2d at page 203.

First. The first difficulty we have with the position of the Circuit Court of Appeals is that Congress has made all patents assignable and has granted the assignee the same exclusive rights as the patentee. 'Every application for patent or patent or any interest therein shall be assignable in law by an instrument in writing, and the applicant or patentee or his assigns or legal representatives may in like manner grant and convey an exclusive right under his application for patent or patent to the whole or any specified part of the United

States.’ R.S. s 4898, 35 U.S.C.Supp. V, s 47, 35 U.S.C.A. s 47. The statute does not limit the consideration which may be paid for the assignment to any species or kind of property. At least so far as the terms of the statute are concerned, we see no difference whether the consideration is services (cf. Standard Parts Co. v. Peck, 264 U.S. 52, 44 S.Ct. 239, 68 L.Ed. 560, 32 A.L.R. 1033) or cash, or the right to use another patent.
An improvement patent may, like a patent on a step in a process, have great strategic value. For it may, on expiration of the basic patent, be the key to a whole technology. One who holds it may therefore have a considerable competitive advantage. And one who assigns it and thereby loses negative command of the art may by reason of his assignment have suffered a real competitive handicap. For thereafter he will have to pay toll to the assignee, if he practices the invention. But the competitive handicap or disadvantage which he suffers is no greater and no less whether the consideration for the assignment be the right to use the basic patent or something else of value. That is to say, the freedom of one who assigns a patent is restricted to the same degree whether the assignment is made pursuant to a license agreement or otherwise.
If Congress, by whose authority patent rights are created, had allowed patents to be assigned only for a specified consideration, it would be our duty to permit no exceptions. But here Congress has made no such limitation. A patent is a species of property. It gives the patentee or his assignee the ‘exclusive right to make, use, and vend the invention or discovery’ for a limited period. R.S. s 4884, 35 U.S.C. s 40, 35 U.S.C.A. s 40. That is to say, it carries for the statutory period ‘a right to be free from competition in the practice of the invention.’ Mercoid Corporation v. Mid-Continent Co., supra, 320 U.S. at page 665, 64 S.Ct. at page 271, 88 L.Ed. 376. That exclusive right, being the essence of the patent privilege, is, for purposes of the assignment statute, of the same dignity as any other property which may be used to purchase patents.
Second. What we have said is not, of course, a complete answer to the position of the Circuit Court of Appeals. For the question remains whether here, as in Mercoid Corporation v. Mid-Continent Co., supra, and its predecessors, the condition in the license agreement violates some other principle of law or public policy. The fact that a patentee has the power to refuse a license does not mean that he has the power to grant a license on such conditions as he may choose. United States v. Masonite Corporation, 316 U.S. 265, 277, 62 S.Ct. 1070, 1077, 86 L.Ed. 1461.
As we have noted, such a power, if conceded, would enable the patentee not only to exploit the invention but to use it to acquire a monopoly not embraced in the patent. Thus, if he could require all licensees to use his unpatented materials with the patent, he would have, or stand in a strategic position to acquire, a monopoly in the unpatented materials themselves. Beyond the ‘limited monopoly’ granted by the patent, the methods by which a patent is exploited are ‘subject to the general law’. United States v. Masonite Corporation, supra, 316 U.S. at page 277, 62 S.Ct. at page 1077, 86 L.Ed. 1461. Protection from competition in the sale of unpatented materials is not granted by either the patent law or the general law. He who uses his patent to obtain protection from competition in the sale of unpatented materials extends by contract his patent monopoly to articles as respects which the law sanctions neither monopolies nor restraints of trade.
It is at precisely this point that our second difficulty with the view of the Circuit Court of Appeals is found. An improvement patent, like the basic patent to which it relates, is a legalized monopoly for a limited period. The law permits both to be bought and sold. One who uses one patent to acquire another is not extending his patent monopoly to articles governed by the general law and as respects which neither monopolies nor restraints of trade are sanctioned. He is indeed using one legalized monopoly to acquire another legalized monopoly.
Mercoid Corporation v. Mid-Continent Co., supra, and its predecessors, by limiting a patentee to the monopoly found within the four corners of the grant, outlawed business practices which the patent law unaided by restrictive agreements did not protect. Take the case of the owner of an unpatented machine who leases it or otherwise licenses its use on condition that all improvements which the lessee or licensee patents should be assigned. He

is using his property to acquire a monopoly. But the monopoly, being a patent, is a lawful one. The general law would no more make that acquisition of a patent unlawful than it would the assignment of a patent for cash. Yet a patent is a species of property;3 and if the owner of an unpatented machine could exact that condition, why may not the owner of a patented machine?

It is true that for some purposes the owner of a patent is under disabilities with which owners of other property are not burdened. Thus where the use of unpatented materials is tied to the use of a patent, a court will not lend its aid to enforce the agreement though control of the unpatented article falls short of a prohibitied restraint of trade or monopoly. Morton Salt Co. v. S. S. Suppiger Co., supra. There is a suggestion that the same course should be followed in this case since the tendency of the practice we have here would be in the direction of concentration of economic power that might run counter to the policy of the anti-trust laws. The difficulty is that Congress has not made illegal the acquisition of improvement patents by the owner of a basic patent. The assignment of patents is indeed sanctioned. And as we have said, there is no difference in the policy of the assignment statute whatever consideration may be used to purchase the improvement patents. And apart from violations of the anti-trust laws to which we will shortly advert, the end result is the same whether the owner of a basic patent uses a license to obtain improvement patents or uses the wealth which he accumulates by exploiting his basic patent for that purpose. In sum, a patent license may not be used coercively to exact a condition contrary to public policy. But what falls within the terms of the assignment statute is plainly not per se against the public interest.

It is, of course, true that the monopoly which the licensor obtains when he acquires the improvement patents extends beyond the term of his basic patent. But as we have said, that is not creating by agreement a monopoly which the law otherwise would not sanction. The grant of the improvement patent itself creates the monopoly. On the facts of the present case the effect on the public interest would seem to be the same whether the licensee or the licensor owners the improvement patents.

There is a suggestion that the enforcement of the condition gives the licensee less incentive to make inventions when he is bound to turn over to the licensor the products of his inventive genius. Since the primary aim of the patent laws is to promote the progress of science and the useful arts (United States v. Masonite Corporation, supra, 316 U.S. at page 278, 62 S.Ct. at pages 1077, 1078, 86 L.Ed. 1461 and cases cited), an arrangement which diminishes the incentive is said to be against the public interest. Whatever force that argument might have in other situations, it is not persuasive here. Respondent pays no additional royalty on any improvement patents which are used. By reason of the agreement any improvement patent can be put to immediate use and exploited for the account of the licensee. And that benefit continues so long as the agreement is renewed. The agreement thus serves a function of supplying a market for the improvement patents. Whether that opportunity to exploit the improvement patents would be increased but for the agreement depends on vicissitudes of business too conjectural on this record to appraise.

Third. We are quite aware of the possibilities of abuse in the practice of licensing a patent on condition that the licensee assign all improvement patents to the licensor. Conceivably the device could be employed with the purpose or effect of violating the anti-trust laws. He who acquires two patents acquires a double monopoly. As patents are added to patents a whole industry may be regimented. The owner of a basic patent might thus perpetuate his control over an industry long after the basic patent expired. Competitors might be eliminated and an industrial monopoly perfected and maintained.4 Through the use of patents pools or multiple licensing agreements the fruits of invention of an entire industry might be systematically funneled into the hands of the original patentee. See United Shoe Machinery Co. v. La Chapelle, 212 Mass. 467, 99 N.E. 289, Ann.Cas.1913D, 715.

A patent may be so used as to violate the anti-trust laws. Standard Sanitary Mfg. Co. v. United States, 226 U.S. 20, 33 S.Ct. 9, 57 L.Ed. 107; United Shoe Machinery Corporation v. United States, 258 U.S. 451, 42 S.Ct. 363, 66 L.Ed. 708; Ethyl Gasoline Corporation v. United States, 309 U.S. 436, 60 S.Ct. 618, 84 L.Ed. 852; United States v. Masonite

Corporation, supra. Such violations may arise through conditions in the license whereby the licensor seeks to control the conduct of the licensee by the fixing of prices (Ethyl Gasoline Corporation v. United States, supra; United States v. Masonite Corporation, supra) or by other restrictive practices. United Shoe Machinery Corporation v. United States, supra.
Moreover, in the Clayton Act, 38 Stat. 730, 731, 15 U.S.C. s 14, 15 U.S.C.A. s 14, Congress made it unlawful to condition the sale or lease of one article on an agreement not to use or buy a competitor's article (whether either or both are patented), where the effect is 'to substantially lessen competition or tend to create a monopoly'. See International Business Machines Corporation v. United States, 298 U.S. 131, 56 S.Ct. 701, 80 L.Ed. 1085.
Congress, however, has made no specific prohibition against conditioning a patent license on the assignment by the licensee of improvement patents. But that does not mean that the practice we have here has immunity under the anti-trust laws. Indeed, the recent case of Hartford-Empire Co. v. United States, 323 U.S. 386, 65 S.Ct. 373, 89 L.Ed. 322; Id., 324 U.S. 570, 65 S.Ct. 815, 89 L.Ed. 1198, dramatically illustrates how the use of a condition or covenant in a patent license that the licensee will assign improvement patents may give rise to violations of the anti-trust laws.5

The District Court found no violation of the anti-trust laws in the present case. The Circuit Court of Appeals did not reach that question. Hence it, as well as any other questions which may have been preserved, are open on our remand of the cause to the Circuit Court of Appeals.

We only hold that the inclusion in the license of the condition requiring the licensee to assign improvement patents is not per se illegal and unenforceable.

Reversed.

Mr. Justice BLACK, Mr. Justice RUTLEDGE and Mr. Justice BURTON would affirm the judgment for the reasons set forth in the opinion of the Circuit Court of Appeals.

Mr. Justice MURPHY is of the view that the judgment below should be affirmed. He believes that the Court's decision in this case unduly enlarges the scope of patent monopolies and is inconsistent with the philosophy enunciated in Mercoid Corporation v. Mid-Continent Inv. Co., 320 U.S. 661, 64 S.Ct. 268, 88 L.Ed. 376, and similar cases.