**Title**
Converging Doctrines? US and EU Antitrust Policy for the Licensing of Intellectual Property



**Author**
Gilbert, Richard

**Publication Date**
2004-02-01


**Working Paper No. CPC04-44**

# Converging Doctrines? US and EU Antitrust Policy for the Licensing of Intellectual Property

**Richard Gilbert**
Economics Department, University of California, Berkeley

JEL Classification: L4, O3,O34

Keywords: EC Technology Transfer Block Exemption Regulation, TTBER, U.S. guidelines, block exemptions, technology licensing, competition policy

**Abstract:**
This paper was prepared for the Antitrust Section Spring Meeting, Washington D.C., 2004. The author discusses and compares European Community Technology Transfer Block Exemption Regulation (TTBER) and U.S. Guidelines. Together the guidelines present a framework to evaluate technology licensing arrangements that respects the objectives of EU competition policy and still provides a berth for procompetitive licensing.

---

Prepared for the Antitrust Section Spring Meeting, Washington D.C., 2004. As Deputy Assistant Attorney General in the Antitrust Division, the author led a U.S. Department of Justice effort to develop guidelines for the licensing of intellectual property from 1993 until their publication in 1995.

# Converging Doctrines?
# US and EU Antitrust Policy for the Licensing of Intellectual Property

Richard J. Gilbert[1]
February 16, 2004

## I. The EC Technology Transfer Block Exemption Regulation

Article 81(1) of the Treaty of Rome prohibits "agreements … and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market …" Article 81(3) provides that the Commission may declare the prohibition in Article 81(1) inapplicable if certain requirements are met.[2] The Commission can declare 81(1) inapplicable on a case-by-case basis, or it can exempt a class of practices by means of a block exemption.

Commission Regulation 240/1996 is the current regulation that block exempts a number of practices relating to the licensing of intellectual property. Regulation 240/1996 appeared soon after the U.S. Department of Justice and Federal Trade Commission published their *Guidelines for the Licensing of Intellectual Property*.[3] The US Guidelines describe the approach that the Department of Justice and the Federal Trade Commission employ in their evaluation of licensing arrangements under the applicable antitrust laws. The US Guidelines are meant to inform the business community and practitioners about how the Agencies evaluate antitrust risks in licensing arrangements. The EC Block Exemption is a regulation that identifies prohibited and permitted practices in technology licenses. The US Guidelines are analytical, almost academic, and were sometimes criticized for lacking specific direction. The current EC Block Exemption is specific and does not express the Commission's framework for analyzing arrangements that fall

---

[1] Professor of Economics, University of California at Berkeley. Prepared for the Antitrust Section Spring Meeting, Washington D.C., 2004. As Deputy Assistant Attorney General in the Antitrust Division, the author led a U.S. Department of Justice effort to develop guidelines for the licensing of intellectual property from 1993 until their publication in 1995.

[2] http://europa.eu.int/comm/competition/legislation/treaties/ec/art81_en.html.

[3] Reprinted in 4 Trade Reg. Re. (CCH) ¶13,132 ("US Guidelines").

outside the scope of the exemption.[4] The EC Block Exemption was sometimes criticized as being too formalistic and lacking an economic foundation.[5]

The new draft EC Technology Transfer Block Exemption Regulation (TTBER) and the accompanying Guidelines (EC Guidelines) are, taken together, more similar to the US Guidelines in both style and substance.[6] The Draft TTBER and EC Guidelines were published on 1 October 2003 and have been revised in response to public comments. This paper refers to the Draft TTBER and EC Guidelines as of 9 February 2004, which differ from the drafts published on 1 October 2003 in significant respects.

The US Guidelines and the EC TTBER and accompanying EC Guidelines are similar in that they:

- Describe the approach that the Agencies use to evaluate licensing arrangements.
- Affirm that technology licensing is generally procompetitive.
- Distinguish licensing transactions that occur between competitors and non-competitors.
- Observe that applicable law would balance efficiencies against any negative effects on competition from licensing arrangements that do not clearly fix prices or reduce output.
- Recognize that exclusive licenses promote the adoption of new technologies in many circumstances.
- Include "safety zones". The US Guidelines state that "Absent extraordinary circumstances, the Agencies will not challenge a restraint in an intellectual

[4] For a comparison of the US Guidelines and the EC block exemption, see Richard Gilbert, "Antitrust Policy for the Licensing of Intellectual Property: An International Comparison," *International Journal of Technology Management*, vol. 19, no. 1/2, 2000, pp. 206-223.

[5] See, e.g., Joint Comments of the American Bar Association's Section of Antitrust Law, et al. at http://www.abanet.org/intlaw/EC_Tech_Block_Exemption_Reg.doc. ("The Sections welcome the TTBE Report's proposal to shift from a legalistic to a more economic and effects-based analysis.")

[6] Draft Commission Regulation on the application of Article 81(3) of the Treaty to categories of technology transfer agreements and Draft Commission Guidelines on the application of Article 81(3) of the Treaty to categories of technology transfer agreements, 2003 OJ C235, 1 October 2003.

property licensing arrangement if (1) the restraint is not facially anticompetitive[7] and (2) the licensor and its licensees collectively account for no more than twenty percent of each relevant market significantly affected by the restraint." The EC regulation exempts licenses that do not contain certain "hardcore" restrictions between non-competitors with market shares below 30% and between competitors with market shares below 20%.

Despite their apparent similarities, there are important differences between the US Guidelines and the EC TTBER/Guidelines. Based on these documents, it would be incorrect to conclude that US and EU antitrust policies for intellectual property licensing have "converged". To some extent these differences reflect the different guiding principles in US and EU competition law. But that is not the entire explanation.

## II. Conflicting Antitrust Philosophies

The US and EC policy documents reflect different concerns about technology licensing arrangements. The US Guidelines note that licensing arrangements may raise antirust concerns when they affect competition that could have occurred in the absence of the license. The US Guidelines focus on practices that may harm competition by, for example, eliminating competition between substitute technologies or foreclosing markets by imposing exclusive dealing requirements on licensees. The EC TTBER and Guidelines recognize these concerns. However, they also give substantial weight to effects of licensing arrangements on competition using the licensed technology and do not block exempt some licensing restrictions that may adversely affect this source of competition. This intra-technology competition is not competition that could have occurred in the absence of the license.

[7] "Facially anticompetitive" refers to restraints that normally warrant per se treatment, as well as other restraints of a kind that would always or almost always tend to reduce output or increase prices. US Guidelines at §4.3.

The US Guidelines describe the Agencies approach to licensing arrangements as follows:

> The Agencies will not require the owner of intellectual property to create competition in its own technology. However, antitrust concerns may arise when a licensing arrangement harms competition among entities that would have been actual or likely potential competitors in a relevant market in the absence of the license (entities in a "horizontal relationship"). A restraint in a licensing arrangement may harm such competition, for example, if it facilitates market division or price-fixing. In addition, license restrictions with respect to one market may harm such competition in another market by anticompetitively foreclosing access to, or significantly raising the price of, an important input, or by facilitating coordination to increase price or reduce output.

The EC TTBER and the accompanying Guidelines use similar language to distinguish parties to a licensing arrangement that should be identified as actual or potential competitors. The TTBER defines competing undertakings as "undertakings which, in the absence of the technology transfer agreement, compete on the relevant technology market and/or the relevant product market."[8] However, unlike the US Guidelines, the EC TTBER/Guidelines specifically address concerns that may arise in licensing arrangements that do not involve competitors. The EC Guidelines state:

> The assessment of whether a licence agreement is restrictive of competition must be made within the actual context in which competition would occur in the absence of the agreement with its alleged restrictions. In making this assessment it is necessary to take account of the likely impact of the agreement on *inter-technology competition* (i.e. competition between undertakings using competing technologies) and on *intra-technology competition* (i.e. competition between undertakings using the same technology). Article 81(1) prohibits restrictions of both inter-technology competition and intra-technology competition.[9]

The emphasis in the US Guidelines is on inter-technology competition. The US Guidelines say "The Agencies will not require the owner of intellectual property to create competition in its own technology." Contrast this with the EC Guidelines, which say "A technology owner cannot normally be expected to create direct competition with himself

[8] EC TTBER, Article 1.1 (j).

[9] EC Guidelines at Para. 11. (Emphasis in original.)

inside his own technology."[10] The Commission's qualification in the draft EC Guidelines is not immaterial. Specifically, the TTBER classifies as a hardcore restraint the restriction of active or passive sales to end users by a licensee which is a member of a selective distribution system and which operates at the retail level, even though the licensor and the licensee are not competitors. An identical provision appears in the EC block exemption for vertical agreements.[11] Consistency between the block exemptions for licensing and for vertical agreements is beneficial in some respects. Indeed, the US Guidelines apply the same general antitrust principles to intellectual property as to other forms of property.[12] The Commission's hostility toward exclusive distribution networks stems from Article 81(1) of the Treaty of Rome, which condemns arrangements that affect trade between Member States.[13] It is incorrect, however, to conclude that territorial exclusivities in technology licenses restrict trade. The license provides the licensee with a product or technology that the licensee would not have without the license. In that respect the license promotes trade, even if it limits access to the product or technology to only a subset of the European Union.

Economic arguments suggest that restrictive licensing terms may be necessary for the owner of intellectual property to appropriate the full value of his property in a licensing arrangement with suppliers of complementary assets. For example, if the potential licensees are intermediate suppliers in an imperfectly competitive industry, the intellectual property owner may maximize his profit by agreeing to an exclusive license at a fixed fee. The fixed fee reduces inefficient mark-ups to final consumers, and the exclusive license limits competition with other suppliers and allows the intellectual property owner to set a high fixed fee.[14] This arrangement reduces dissemination of the intellectual property relative to non-exclusive licenses with lower fees. But that is not a

---

[10] EC Guidelines at Para. 165.

[11] Commission Regulation No 2790/1999 of 22 December 1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices.

[12] "for the purpose of antitrust analysis, the Agencies regard intellectual property as being essentially comparable to any other form of property". US Guidelines at §2.0.

[13] The EC Guidelines define an exclusive license as one that permits only the licensee to exploit the licensed technology within a given territory. EC Guidelines at Para. 156.

[14] See Morton Kamien, "Patent Licensing," in Aumann and Hart eds., *Handbook of Game Theory with Economic Applications*, North Holland (1992).

useful benchmark. The intellectual property owner should be entitled to license his property in a profit-maximizing way, provided that the license does not interfere with the price or utilization of other goods and services. By providing such flexibility, competition policy ensures that inventors have economic incentives to develop new products and processes in the first place.

Exclusivity restrictions also may be necessary to induce licensees to invest in the complementary assets and activities that are necessary to promote a new technology. Licensees may need assurance that the benefits they obtain from costly investments to improve a new product will not be diluted by lost sales to other suppliers who neither compensate the licensees for their lost sales nor invest on their own to promote the new product. Exclusivity can be even more critical to encourage licensing of new process technologies. Infringement of a process technology is difficult to detect. The owner of a process technology may severely restrict who may use the new process and where it may be used before agreeing to any license to reduce unlicensed and uncompensated uses and to better monitor authorized uses. If the Commission's competition policy does not permit the licensor to impose adequate restrictions on the use of new technologies, parties may be reluctant to license or, if they do license, may have insufficient investment incentives to realize the full commercial potential of the licensed technologies.

These types of concerns also exist in vertical arrangements that do not involve intellectual property, but not to the same extent. The uncertain potential of new technologies, the need to invest in costly complementary assets and activities, and the difficulty of detecting infringement all contribute to the value of licensing restrictions at levels that are not matched in ordinary vertical arrangements. It is incorrect for the Commission to assume that technologies will be licensed and complementary investments will occur if restrictive licenses are not permitted. There is no assurance that such licensing will occur. Furthermore, even if a technology is licensed, the licensor may demand a higher payment to compensate for the risk that adoption and promotion of the technology will be compromised by inadequate investment incentives. In that case even those consumers who would have been served under the licensor's preferred restrictions

may not be better off, because they have to compensate the licensor for the suboptimal license terms.

In most situations, territorial restrictions for licenses to new technologies do not harm competition. They promote competition. Without the license, the licensee could not compete or would not be as effective a competitor. The licensor did not have to license. One cannot merely assume a world in which technologies are licensed to all takers under the same terms. That is often not the most profitable way to license to a new technology, and if the licenses are not profitable, they may not exist at all.

The EC Guidelines impose a significant burden of proof on the parties to a licensing arrangement to defend restrictions that limit intra-technology competition. The EC Guidelines suggest that the Commission would not easily accept an argument that the licensor would choose vertical integration over a license if it could not include the challenged restrictions and in considering the benefits from restrictive licensing terms the Commission gives little weight to incentives for innovations. The Commission would accept certain restrictions that prevent licensees from competing with each other, such as "territorial or customer sales restrictions between licensees" only "when the restriction is objectively necessary for the existence of an agreement of that type or that nature."[15] In assessing what is objectively necessary, the EC Guidelines state that "The question is not whether the parties in their particular situation would not have accepted to conclude a less restrictive agreement, but whether given the nature of the agreement and the characteristics of the market a less restrictive agreement would not have been concluded by undertakings in a similar setting…. Claims that in the absence of a restriction the supplier would have resorted to vertical integration are not sufficient."[16]

The US Guidelines also consider whether licensing restrictions can be justified in light of less restrictive alternatives. The US Guidelines, however, impose a lower burden on the parties to justify a licensing restriction and state:

---

[15] EC Guidelines at Para. 12(b).
[16] *Ibid.*

> The existence of practical and significantly less restrictive alternatives is relevant to a determination of whether a restraint is reasonably necessary. If it is clear that the parties could have achieved similar efficiencies by means that are significantly less restrictive, then the Agencies will not give weight to the parties' efficiency claim. In making this assessment, however, the Agencies will not engage in a search for a theoretically least restrictive alternative that is not realistic in the practical prospective business situation faced by the parties.[17]

Instead of the Commission's requirement that a restraint be "objectively necessary", the US Guidelines use the term "reasonably necessary" and state that "the Agencies will not engage in a search for a theoretically least restrictive alternative that is not realistic in the practical prospective business situation faced by the parties."

Article 4 of the TTBE, the list of hardcore restrictions, includes licensing restrictions that could, under many circumstances, promote the adoption and commercialization of new technologies. Including these restrictions in the hardcore list could be an acceptable compromise if the Commission were prepared to act flexibly to consider individual transactions and exempt hardcore restrictions when there are clear benefits. However, the EC Guidelines note that "…in the context of individual assessment hardcore restrictions of competition will only in exceptional circumstances fulfil the four conditions [required for exemption from Article 81(1)]."[18]

## III. Competition and Reciprocity

The TTBER distinguishes licensing arrangements along two dimensions: (1) whether the undertakings to the arrangement are competitors; and (2) whether the licenses are reciprocal or non-reciprocal. Competitors are defined the same way as in the US Guidelines: parties are competitors if they would compete in the absence of the license. Licenses are reciprocal if two undertakings grant each other licenses that concern

[17] US Guidelines at §4.2.
[18] EC Guidelines at Para. 73.

competing technologies or can be used for the manufacturing or provision of competing products. Agreements can be block exempted if they do not include any of the "hardcore restrictions" identified in Article 4 and fall underneath the market share thresholds. For competing undertakings, the list of hardcore restrictions exempts some license restrictions only if they are non-reciprocal. The list of hardcore restrictions does not distinguish reciprocal from non-reciprocal licenses for non-competitors.

By distinguishing reciprocal from non-reciprocal licenses, the Commission is able to block exempt some licensing arrangements between competitors when the license is not reciprocal. For example, suppose Alpha and Beta are competing suppliers of polypropylene. Alpha patents a new process to manufacture high-density polypropylene. Alpha licenses Beta to exploit the technology, perhaps because Beta has complementary technology that enables it to better exploit Alpha's patent. The license also prevents Alpha from exploiting the new technology in product markets reserved for Beta. The agreement is non-reciprocal and would be block exempted under the TTBER up to the 20% market share threshold.

The license is pro-competitive because Beta has a new technology that it can use to compete with Alpha, which it would not have without the license. Alpha remains a competitor to Beta in the old technology to manufacture high-density polypropylene. Consequently, Beta can only extract the additional value created by the new technology. The transaction between Alpha and Beta does not harm competition that would have occurred in the absence of the license and would be unlikely to attract antitrust scrutiny according to the US Guidelines. This presumes, of course, that Alpha and Beta do not explicitly or implicitly refrain from competition using technologies other than the licensed technology.

Arrangements in which firms license competitors to exploit technologies in particular product markets, fields of use, or territories are common. In some industries, such as semiconductor manufacturing, hundreds or even thousands of patents and other forms of intellectual property protect the methods of manufacture and the products that are sold.

A recent scan of the Patent and Trademark Office database shows more than 24,000 patents issued since 1976 that refer to "microprocessor." Many of these patents are blocking. Firms cannot make or sell microprocessors unless they have access to large portfolios of blocking patents owned by different companies. Similar problems occur in many other high technology fields, such as biotechnology and software. A common solution to penetrate these patent thickets is to negotiate extensive cross-licenses.[19] To the extent that the cross-licenses cover blocking patents, they are non-reciprocal in the language of the TTBER. Hundreds of these agreements exist and they rarely raise antitrust concerns.[20] These licenses allow companies to transfer intellectual property where it can be most efficiently exploited and to achieve the freedom to design, manufacture, and sell competing products without infringing intellectual property rights owned by others. The Commission properly has carved out a niche to exempt these types of licenses, even though they involve firms that are competitors.

The TTBER block exempts certain types of restricted agreements between non-competitors without regard to whether the licenses are reciprocal or non-reciprocal. For example, suppose that Beta is not in the polypropylene business, but happens to own a patent on a competitive process to manufacture high-density polypropylene. The TTBER would block exempt a transaction in which Alpha and Beta cross-license their patents, provided the licenses do not restrict passive sales from licensees after the first two years of the contract.

The theory for block exempting reciprocal licenses between non-competing entities is that they do not harm competition because the entities are not competitors with or without the license. These transactions, however, are not without antitrust risk if they involve other competitors. For example, Alpha and Beta could cross-license their technologies and charge each other high royalties. Beta, although not itself in the polypropylene

[19] See, e.g., Hall and Ziedonis, "The Determinants of Patenting in the U.S. Semiconductor Industry, 1980-1994," *Rand Journal of Economics*, vol. 32 (2001), pp.101-128 and Shapiro, "Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting," in Jaffe et al., eds., *Innovation Policy and the Economy*, NBER (2001).

[20] According to Don Merino, Intel Corporation manages 7,000 patents and has over 200 licensing agreements that include 47 of the top 50 companies in the industry. See Merino, "Licensing for Success at Intel," at http://www.semiconductor.com/products_and_services/client_success_stories/intel.pdf.

business, could license another polypropylene manufacturer at a high royalty, and share the profits with Alpha.[21] The market share limitation in the block exemption greatly reduces the risk that this cascade of licensing arrangements would harm competition, but the low market share thresholds also undermine the value of the block exemptions for the vast majority of transactions that are not harmful to competition.

## IV. Safety Zones

The Technology Transfer Block Exemption Regulation exempts licensing arrangements that do not contain the hardcore restrictions where the market shares of the parties to the transaction are below the thresholds levels of 30% for competing undertakings and 20% for non-competing undertakings. The calculation of market shares is always difficult and controversial. Parties often reach different conclusions about market shares, and often for good reasons. Is there a market for potato chips, or is the market for snack foods more generally? Suppose that Frito-Lay, a leading supplier of potato chips (owned by Pepsi-Cola) develops a new type of packaging material and offers a license to Hearty's, a producer of organic soy nuts. Are the parties to the license competing or non-competing undertakings?

The definition of markets and the calculation of market shares are more complicated for new technologies. Do plasma TVs compete with conventional cathode-ray TVs? It is unlikely that a 10% change in the price of $500 conventional TVs would have much impact on the demand for $5000 plasma TVs. The cross-elasticity of demand between these products is low, which suggests that they are not in the same market. As the technology matures and the prices of plasma TVs fall, plasma and conventional TVs become closer substitutes and may be considered to be in the product market.

In many instances, market definition for new technologies is so imprecise that the market share thresholds of 20% for competing undertakings and 30% for non-competing

[21] Alternatively, Beta could enter the market for polypropylene after the conclusion of the license. The block exemption would treat Alpha and Beta as non-competitors, because they did not compete at the conclusion of the license. See Article 4.3 of the TTBER.

undertakings are likely to be within the noise level for calculations of market shares for these technologies. This is not cause to reject the use of market thresholds if there is concern that transactions between undertakings with shares above the thresholds may be anticompetitive. Such concerns are justified when the parties license competing technologies with running royalties. However, these concerns are likely to be absent if the technologies are not competitive. Even if the undertakings to the agreement are actual or potential competitors, the license should not pose competitive hazards if the technologies are not substitutes for each other.

The 20% safety zone for licensing arrangements involving competitors mirrors the safety zone in the US Guidelines. When arrangements involve direct competitors, it would be imprudent to shield the arrangements from antitrust scrutiny unless one can be confident that the competitors do not have sufficient market power to raise prices significantly. The narrow 20% safety zone is appropriate for arrangements that affect competition that would have occurred in the absence of the license. A much broader safe harbor is appropriate if the license arrangement does not affect competition that would occur in the absence of the license. Licensing arrangements between non-competitors, or non-reciprocal licenses between competitors, are likely to be in this category and should be protected with a larger safety zone, considerably larger than the 30% limit in the proposed TTBER.

## IV. Converging, But Still Apart

The TTBER and the accompanying guidelines go a long way toward harmonizing antitrust policy for licensing arrangements between the US and the European Union. The new block exemption is consistent with the US Guidelines in many respects. Moreover, the EC Guidelines express an analytical framework for evaluating the antitrust risks from licensing arrangements that is close to the framework described in the US Guidelines.

Despite the many similarities in the US and EU policy documents, there are important differences. The US Guidelines focus on possible harm to inter-technology competition

from licensing arrangements. The EC TTBER and Guidelines express concerns about loss of intra-technology competition as well as inter-technology competition. The central theme in the US Guidelines is that the Agencies do not require the owner of intellectual property to create competition in its own technology and antitrust concerns may arise when a licensing arrangement harms competition among entities that would have been actual or likely potential competitors in a relevant market in the absence of the license. The EC Guidelines offer a more qualified statement about whether an intellectual property owner should be required to create competition in its own technology and explicitly note the potential harm to intra-technology as well inter-technology competition. The origin for these differences is the contrasting EU and US antitrust laws. The former prohibits agreements that limit trade between Member States. The US antitrust laws apply to interstate commerce, but do not have the promotion of interstate trade as a specific objective.

Despite the different legal principles in the US and the EU, this paper argues that the Commission should adopt a more lenient antitrust policy for licensing arrangements that may affect intra-technology competition. Innovation is the source of new products and processes that expand the frontiers of competition. A license to use a new product or process, even if restricted to a particular territory, still expands the competitive opportunities in the economy. Allowing intellectual property owners to issue restricted licenses can increase their profits, which should generate more innovation and ultimately lead to more competition. The Commission should presume that technology licensing, even if territorially restricted, promotes rather than lessens competition.

The EC TTBER and Guidelines for licenses between non-competitors mirror the block exemption and accompanying guidelines for vertical agreements. The consistency is desirable, but it comes at a cost. Technology licensing has pro-competitive benefits that may be absent in many vertical arrangements, namely the promotion of innovation. The EC TTBER and Guidelines recognize this by block exempting some restrictions for the first two years of a technology licensing arrangement. The TTBER should go further and exempt

arrangements with longer durations, and should expand the safety zone for licensing arrangement between non-competitors.

Licensing contracts that allocate markets or customers for competing technologies, or for goods or services that are not directly related to the licensed technologies, should not be exempted if the parties have significant market power and there are no offsetting efficiencies, including long run incentives for innovation. However, even competing undertakings should be permitted to allocate markets and territories for the use of non-competing technologies. Many industries rely on extensive cross-licensing of technologies to achieve the freedom to design, manufacture, and sell competing products without infringing intellectual property rights. These cross-licenses often limit where and how technologies may be used. These limitations do not necessarily imply that firms have divided customers or markets in ways that increase the prices of the products they produce. Indeed, prices clearly would be higher in many industries if firms were prohibited from entering into these extensive cross licenses.

Most technology licensing is pro-competitive and should be encouraged by competition authorities. Even licenses involving competing technologies and containing hardcore restrictions can generate efficiencies, promote innovation, and benefit consumers. It is worrisome that the EC Guidelines maintain that licenses that include hardcore restrictions would be exempted only in exceptional circumstances.

The US Guidelines rely on the principle that licensing arrangement should not harm competition that would occur in the absence of the license to snag those relatively rare licensing arrangements that are anticompetitive. For example, suppose Alpha and Beta manufacture and sell competing batteries. Alpha patents a technology to extend the life of batteries and licenses Beta. Beta patents a new billing system and licenses Alpha. If Alpha and Beta do not more, the licenses are clearly procompetitive, even if they restrict where and how the licensed technologies can be used. The licenses give Beta a better battery and Alpha a better billing system. If, however, the licenses provide that only Alpha can sell to some customers and only Beta can sell to others, they would be caught

by the prescription in the US Guidelines that the license should not harm competition that would have occurred in the absence of the license. The Commission's approach also prohibits licenses that allocate markets or customers, but the list of hardcore restrictions includes a panoply of practices differentiated by whether the licenses are reciprocal or non-reciprocal. The concept that the license should not harm competition that would occur in its absence is more straightforward. It could be applied directly in the TTBER if the Commission would allay its concerns about possible reductions in intra-technology competition.

It is easy to be a critic, and having once been in the business of writing guidelines, I should be more considerate of the challenges faced by the authors of the EC TTBER and Guidelines. The proposed TTBER and Guidelines are significant accomplishments. They present a framework to evaluate technology licensing arrangements that respects the objectives of EU competition policy and still provides a berth for procompetitive licensing. The publication of the Guidelines along with the TTBER is a positive step. The Guidelines articulate the reasons why licensing restriction appear on or are excluded from the list of prohibited restrictions.

Skeptics can argue that the proposed TTBER eliminates the list of permitted licensing practices in the old technology transfer block exemption regulation and that all practices are now suspect for arrangements that exceed the market share thresholds. This is a pessimistic view. The Guidelines provide a foundation for the proposed TTBER and inform businessmen and practitioners about the types of transactions that may raise antitrust concerns in the European Community. The Guidelines also provide an analytical methodology that extends to licensing arrangements that are not covered by the block exemption, such as multi-lateral cross-licensing and technology pools. The new TTBER is a more flexible document than the current block exemption and, reasonably applied, can provide appropriate guidance for pro-competitive licensing arrangements. If only the Commission would recognize that procompetitive licensing may reduce intra-technology competition and be flexible towards restrictions that appear on its hardcore

list, we would have a closer alignment of US and EU competition policy for licensing arrangements.