

**The Harmonization of Intellectual Property Rights and Competition Policy:
A Unified Approach to Economic Progress**

**Remarks by
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**Before the APEC High-Level Symposium on IPR
Xiamen, People's Republic of China
September 8, 2005**

I. Introduction

Thank you for inviting me to participate in your symposium on Intellectual Property Rights (“IPR”). I am very delighted to be here, and I thank you for your gracious hospitality.

This symposium on intellectual property rights is very timely, as intellectual property has a critical role in furthering economic progress and the welfare of the world’s citizens. The reason is simple. Intellectual property typically is both a key input into and a byproduct of successful innovation, which is a principal factor in fostering a dynamic, growing economy. Innovation promotes consumer welfare and economic efficiency in a number of ways. It drives down costs through the development of more efficient production and distribution techniques. It stimulates economic growth by bringing to market new products desired by consumers and the business community. And it can limit the creation and exercise of market power by fostering the development of new technologies that permit new entrants to leapfrog the advantages and entry barriers enjoyed by entrenched dominant firms. Intellectual property, therefore, is a highly valued asset, and it has been granted substantial legal protection by the nations of the world. It is important that we preserve those protections.

Intellectual property rights increasingly are implicated in standard setting and licensing arrangements. For example, standards that enable the interoperability of products or services, such as the telecommunications network or your mobile phone system, often incorporate multiple technologies protected by intellectual property rights, often held by more than one person or entity. The licensing of intellectual property rights may substantially influence the way in which new technologies are disseminated and, in turn, affect the introduction of new products and services in the marketplace. IPR licensing arrangements frequently are associated

with the introduction of standards. In short, standard-setting and IPR licensing policies may greatly affect the development of new goods and services, future innovation, and the competitiveness of markets.

I would like to speak today about the interrelationships between and among standard-setting, IPR licensing, and antitrust policy. A sound evaluation of those interrelationships requires that business, economic, and legal principles be considered in combination in order to maximize economic progress and the economic welfare of our citizens. In other words, properly understood and applied, IPR and antitrust law are complementary, not conflicting, legal systems that should be applied harmoniously to promote a vibrant, health economy.

Before proceeding, I am obliged to state my agency's standard caveat that the views I present today are my own and do not necessarily represent those of the United States Federal Trade Commission ("FTC"), or those of any individual Commissioner of the FTC. Having said that, the subjects that are being discussed at this symposium are of very great interest to the Federal Trade Commission and the United States Department of Justice, and I have conferred with colleagues at both the FTC and the Antitrust Division of the Department of Justice regarding my remarks today.

II. Scope of Protection for Intellectual Property Rights

Given the importance of intellectual property in fostering economic progress, one might wonder whether our economies might progress even faster if intellectual property was more freely available for others to use and build upon – *i.e.*, treated more like a public good than private property. I believe the correct answer is "No". An erosion of intellectual property rights would be extremely shortsighted. There is a strong consensus today that a strong intellectual

property regime is needed to provide an incentive to undertake costly and risky investment in innovative activities.

It can be very expensive to conduct the research and development that is necessary to come up with new products and technologies, and there can be many failures before a successful innovation is achieved. There would be little incentive for firms to make such a risky investment in research and development if others could freely copy or use a successful innovation and prevent the inventor from realizing well-earned rewards. Strong intellectual property rights are one of the most important means for providing those incentives. In the United States, IPR laws give the innovator the right to exclude others from using its invention for a specified period, and thus guarantee the innovator an opportunity to realize a return commensurate with the value of the invention and the risk that was undertaken. Protecting IPR is one of the major challenges – and obligations – of a global economy.

An intellectual property regime needs to have certain elements in order to provide meaningful IPR protection. Consider an inventor who holds a valid patent that covers a particular invention. Three propositions regarding the rights of the inventor merit emphasis.

First, the inventor-patentee has a legal right to exclude others from using that invention. As a necessary corollary, antitrust liability for unilateral, unconditional refusals to license patents will not play a meaningful role in the interface between IP rights and antitrust protections.¹

Second, whether the inventor chooses to commercialize the invention or license it to others, the patentee-inventor may unilaterally set the price or license fee at whatever level it

¹ More generally, in *Verizon Communications, Inc. v. Law Office of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004), the Supreme Court confirmed that unilateral refusals to deal are rarely, if ever, anticompetitive, whether or not they involve patents.

chooses. Indeed, the prospect of potentially high profit is a major incentive for undertaking risky and costly innovative endeavors, and the entire thrust of the IPR laws is to use that incentive to encourage innovation. Accordingly, there is no violation under U.S. antitrust law for unilaterally pricing an IPR license “too high.”

Third, there should not be a presumption that a patent or other IPR creates market power. Although a patent creates an exclusive right to the invention, there may be economically viable substitutes that can accomplish the same functional purpose as the invention. Therefore, a careful market analysis is needed to determine the scope of the relevant market and whether the patented invention has market power.

There can be situations where IPR will confer market power, as when a patented invention dominates a relevant market, but that, without more, is acceptable under American IPR and antitrust law. Indeed, the possibility of such an outcome is a major incentive to engage in innovative activities, and the IPR laws use that incentive to encourage innovation. A violation of U.S. antitrust law requires an element of anticompetitive conduct – *i.e.*, conduct that is neither competition on the merits nor efficiency-enhancing, that tends to exclude competitors or potential competitors from the market and enables the IPR holder to create, maintain, or extend its market power. I will describe some situations of that kind in a few minutes.

Before proceeding to a discussion of intellectual property rights in the standard-setting and licensing contexts, let me note that I have been discussing unilateral conduct by an IPR holder. Joint conduct, particularly with a competitor, raises the possibility of anticompetitive collusion or exclusion, and must be examined with those possibilities in mind. Even so, U.S. antitrust law recognizes that many forms of collaborative conduct can be efficiency-enhancing,

and so most forms of collaboration are analyzed under a standard – the so-called rule of reason – that balances potential anticompetitive effects against procompetitive efficiency gains.

III. Intellectual Property Rights and Standard-Setting

As I noted at the outset, intellectual property rights are often implicated in standard-setting activities. Standard setting is increasingly important as a way of reducing transaction costs, and standards have a particularly important role in ensuring compatibility and interconnectivity of products and services. Standards may be particularly important in markets with “network effects” (where the utility of the network rises as parties are added to it) and complex technologies such as information technology and telecommunications. The technological revolution that we are experiencing in these markets has benefitted from, and resulted in, significant standard-setting activity.² Standards may prove important in “low tech” industry settings as well, and in global trade.

Given the importance of intellectual property, what is the appropriate role of IPR holders in the standard-setting process, what are their rights and obligations, and how should we reconcile their right to exclusivity with standard setting’s objectives of lowering transaction costs and broadening use of a common technology? More broadly, what is the appropriate model for standard setting in promoting economic welfare?

² See Janice M. Mueller, SYMPOSIUM: PATENT SYSTEM REFORM: *Patent Misuse Through the Capture of Industry Standards*, 17 Berkeley Tech. L.J. 623, 631-32 (2003); Marc Hansen *et al*, *Disclosure and Negotiation of Licensing Terms Prior to Adoption of Industry Standards: Preventing another Patent Ambush?*, Eur. Competition L. Rev. (Dec. 2003); Robert A. Skitol, *Concerted Buying Power: Its Potential for Addressing the Patent Holdup Problem in Standard Setting*, 72 Antitrust L. J. No. 2, 727, 730 (2005) (explaining that the patent holdup problem “arises from the interaction of (1) proliferating patents generally and (2) proliferating needs for standards to enable interoperability among both competing and complementary products seeking to exploit new technologies”).

The basic concept of standardization is well known, but allow me to make a few prefatory remarks. The process of establishing a standard is called, not surprisingly, standard setting, and the groups that establish standards are called standard setting organizations (“SSOs”) or standards development organizations (“SDOs”). The manner in which standards are set can have important consequences for the cost of products, economic efficiency, and innovation.

A. The Standard Setting Process: History and Key Characteristics

Standards can be defined succinctly as “any set of technical specifications that either provides or is intended to provide a common design for a product or process.”³ Standards have been in existence since the early days of civilization.⁴ For example, standards are known to have existed as early as 7000 B.C. when cylindrical stones were used as units of weight in Egypt.⁵ Standards are now ubiquitous. They affect almost every aspect of our lives, from the food we eat, our health care, the vehicles we travel in, our information technology systems, and numerous aspects of our entertainment. They are promulgated by governments,⁶ by private groups, or arise from their spontaneous acceptance by consumers. In the United States, standard setting largely is a market-driven process. Private SSOs as we now know them began to appear in the latter part

³ Mark A. Lemley, *Intellectual Property Rights and Standard Setting Organizations*, 90 Cal. L. Rev. 1889, 1896 (2002).

⁴ Maureen A. Breitenberg, “The ABC’s of Standards-related Activities in the United States,” NISTIR 6014, at 4 (1987) (citing American Standards Association, “Through History with Standards,” in Rowen Glie (ed.), *Speaking of Standards* (1972)), available at <http://ts.nist.gov/ts/htdocs/210/ncsci/primer.htm> (hereinafter “Breitenberg”).

⁵ *Id.*

⁶ Governments may develop their own standards or endorse and adopt private standards through the passage of laws or regulations.

of the 19th century, in the midst of the industrial revolution.⁷ Catastrophic events have also helped create awareness about the need for standards. For example, in 1904, a great blaze destroyed much of the city of Baltimore, Maryland because the hoses brought by the fire engines that came from outside the city did not fit the city's hydrants. This led to the standardization of hydrants and hose couplings.⁸ Similar circumstances led to the creation of hundreds of private SSOs that have promulgated thousands of standards that have improved our daily life, promoted efficiencies and innovation in industry, and facilitated trade among nations.

The market-driven, private standard setting process has served us well. It offers the greatest likelihood that an efficient standard will emerge – perhaps through consensus standard setting, or through competition between standards, or through some combination of both processes, if parties involved in an SSO are dissatisfied with its procedures and choose to operate outside the organization. A market economy is based on the premise that competition is more likely than other forms of economic organization to maximize economic progress and produce the optimal outcome for consumers with respect to product price, quality, and innovation. That basic premise should be valid regardless of the degree of standardization that is appropriate in an industry. Consensus acceptance of a standard within a market indicates that there is more than one way of providing an element of a product or service that consumers want, but the market would be better served by use of a common method. That does not mean that competition in the technology that is being standardized is no longer important. At the standard-setting stage there

⁷ For example, the American Society of Mechanical Engineers (“ASME”) was founded in 1880; the origins of the Institute of Electrical and Electronics Engineers (“IEEE”) can be traced back to 1884; the American Society for Testing and Materials (“ASTM”) can be traced back to 1898.

⁸ Breitenberg at 4.

is competition among alternative technologies to be included in the standard. There is no reason that competition to be included in a standard should be any less market driven than competition in the downstream market for products or services that incorporate the standard. Given the basic premise of a market economy, we can expect market participants in a competitive system to select the technology that is most likely to meet consumer needs and desires in an efficient manner. After a standard is established, there will be competition to improve upon the standard and, perhaps, to supersede it. Here again, the market is an excellent arbiter of which technology prevails.

The benefits of market-driven standardization depend, in turn, on several attributes of competitive markets. One such attribute is the absence of artificial or arbitrary restraints on entry. Viable technologies and interested market participants should not arbitrarily be excluded from the process. At the same time, absent compelling reasons to the contrary, firms should be able to offer, and buyers should be able to adopt, competing technologies. The availability of this choice protects against the unnecessary exclusion of efficient technologies. It also allows spontaneous market forces to displace standards, or to spawn a new variety of competing standards, as producers of goods and services respond to consumers' shifting preferences.

Another important characteristic is transparency of the process and the ability of participants to make informed decisions based on the merits. For example, if a technology that is being considered for use in a standard is subject to IPR, or potentially subject to IPR due to a pending application, SSOs that are unaware of such facts cannot make an informed decision about the potential cost of including the technology in the standard.

B. Antitrust Implications of Standard Setting

Standard setting normally is an efficiency-enhancing activity and, as such, usually does not raise significant antitrust concerns. On the contrary, standard setting usually is considered to be procompetitive. However, antitrust concerns can and do arise on occasion. The standard setting process may raise such concerns if it involves unreasonably exclusionary conduct or anticompetitive collusion. For example, in one American case,⁹ makers of steel conduit were found liable for “packing” an SSO meeting with its agents and thereby improperly obtaining an SSO decision that limited the standard to steel conduit, thereby excluding a perfectly viable product (plastic conduit) from being used in the building industry. This is an example of an artificial restraint on entry, resulting in unreasonable exclusion from the market.

There are also examples of unilateral exclusionary conduct in the standard setting context. In particular, an IPR holder that takes part in standards-setting may have an incentive to improperly obtain or increase the market power of its IP right. Such a strategy may involve the IP holder: (1) misleading a standards-setting body regarding its IP interests, leading to the adoption of a standard that “reads on” the holder’s IP; and then (2) subsequently exercising that new market power by demanding unexpected IPR licensing royalties after a standard has been set and producers have incurred costs that “lock them in” to the standard. The FTC recently brought two cases involving that sort of conduct, one involving a governmentally-set standard¹⁰ and another involving private SSO activity.¹¹

⁹ *Allied Tube & Conduit Corp. v. Indian Head*, 486 U.S. 492 (1988).

¹⁰ The FTC charged that the Union Oil Company of California (“Unocal”) misrepresented to a California state environmental regulator that certain information was non-proprietary, in connection with the regulator’s promulgation of a regulatory “clean air” standard for reformulated gasoline refining. The regulator allegedly relied on those misrepresentations in promulgating the standard, and refiners expended billions of dollars to “lock themselves in” to the standard. After lock-in, Unocal began enforcing its patent rights against refiners producing

C. Respecting Intellectual Property Rights in the Standard Setting Context

It is readily apparent from what I have said thus far that there is much at stake in how intellectual property rights are treated in a standard setting context. An IPR holder has a rightful expectation to be rewarded for a successful innovation incorporated into a standard. The use of proprietary IP in the standard can substantially increase the value of that IP and may increase the cost of using that standard. As I have explained before, an IPR holder may have an incentive to improperly use the standard-setting process to obtain or increase the market power of its IP.

At this stage, some might ask whether it would be acceptable to override IP rights in the interest of dispersing more broadly the benefits of a standardized technology. My view is that such a course of action would be most unwise. Regardless of what short-term benefits may accrue for customers in the affected markets, there would be serious longer-term costs. As I noted earlier, strong IP rights provide a critically important incentive to invest in costly and risky research and development. Without those IP protections, there would be significantly less incentive to make those investments, and the pace of innovation would be reduced, as would the

according to the standard, thereby alleging imposing over \$500 million of annual costs on California consumers. The case was settled with a consent agreement under which Unocal will stop enforcing the relevant reformulated gasoline patents, and Unocal will release all relevant gasoline patents to the public, potentially saving consumers nationwide billions of dollars in future years. See FTC Press Release, *Dual Consent Orders Resolve Competitive Concerns About Chevron's \$18 Billion Purchase of Unocal, FTC's 2003 Complaint Against Unocal* (June 10, 2005), available at <http://www.ftc.gov/opa/2005/06/chevronunocal.htm>. See also *In the Matter of Union Oil Company of California*, Docket No. 9305 (June 10, 2005) (Agreement Containing Consent Order), available at <http://www.ftc.gov/os/adjpro/d9305/050610agreement9305.pdf>.

¹¹ The FTC charged a computer technology firm, Rambus, Inc., with deceptive and misleading conduct in connection with a private standard setting process for technologies related to “SDRAM” computer memory chips, which are used in a wide variety of products. The private SSO adopted standards encumbered with Rambus’s patents. Rambus sought to enforce its patents worldwide against companies manufacturing memory products in compliance with the standards. The matter is currently pending before the FTC on appeal from the decision of an administrative law judge dismissing the complaint after trial. See *In the Matter of Rambus, Inc.*, Docket No. 9302 (June 18, 2002) (“Rambus Complaint”), available at <http://www.ftc.gov/os/2002/06/rambuscmp.htm>; *Rambus Inc.*, FTC Dkt. 9302, Initial Decision (Feb. 17, 2004) (order dismissing complaint); appeal pending before Federal Trade Commission. Because the decision in the case is not final, this description of the case is limited to the allegations of the complaint.

rate of economic progress. A derogation of IP rights by standards organizations also would make IP owners more reluctant to participate in standard setting organizations, and the likely result would be less efficient standards, and we would lose some of the benefits of standardization. Finally, a derogation of IP rights would have a negative impact on technology transfers and foreign investment. Accordingly, I believe that governmentally-required compulsory licensing and or mandatory royalty-free licensing would be ill-advised. Such requirements would be tantamount to requiring the IP owner to create competition in its own technology. That would sharply lessen private initiative and incentive to innovate. If, however, a patentee has been found on independent grounds to have violated the antitrust laws, royalty free or compulsory licensing may under certain circumstances be an appropriate remedy.¹²

At the other end of the spectrum, from a business perspective, it also would not be prudent automatically to rule out the use of proprietary technologies in a standard, even if viable non-proprietary alternatives are available. The proprietary technology may provide substantial benefits and competition for incumbent products that would outweigh the potential costs. A blanket refusal to incorporate proprietary technologies would also inhibit innovation.

Given those considerations, an SSO's rejection of proprietary technologies would require careful scrutiny under antitrust U.S. law. In a case against the American Society of Sanitary Engineering ("ASSE"),¹³ the Federal Trade Commission challenged an ASSE policy of refusing to develop a standard for a product which is patented or manufactured by only one manufacturer,

¹² See, for example, the discussion of the FTC's *Unocal* consent agreement in note 9, *supra*.

¹³ *American Society of Sanitary Engineering*, Dkt. C-3169, 106 F.T.C. 324 (1985). The members of the ASSE include plumbing equipment manufacturers and designers.

regardless of its merits. The case was settled with the issuance of a consent order that prohibited such blanket exclusions.

At the same time, SSO members may have legitimate concerns that the cost of utilizing a standard may be excessively high (and its commercial utility may be undermined) if patent rights unexpectedly are invoked after the standard has been adopted and implemented. Joint *ex ante* royalty negotiations among SSO members and patentees prior to adoption of a standard may be an efficient way of dealing with this problem. Such negotiations can allow for an informed consideration of the relative costs of alternative technologies that may be implicated by a standard. As such, *ex ante* negotiations should be assessed under the antitrust rule of reason, with full weight being given to the efficiencies they may engender as well as their potential anticompetitive aspects.

The interests of IPR holders and the standards community can best be mediated in a market-driven process in which the participants can make informed assessments of the costs and benefits of incorporating proprietary technology in a standard. Prospective users of a standard have an understandable interest in knowing what it might cost to use a standard, and standards organizations should be in a position to make an informed decision about the cost effectiveness of alternative standards. Accordingly, some standards organizations have a policy of requiring participants to disclose IPR interests, or even pending applications for IPR, in technology being considered by the organization. That may be a prudent policy as a contractual matter between a standards organization and its participants. It protects against the “hold-up” situation that I mentioned earlier, in which an IPR holder fails to disclose, conceals, or misrepresents its IP interests until after its technology is included in a standard, and then, after industry “lock-in,” demands royalty fees for use of its technology. It should be up to the SSO, however, to

determine what particular rules or policies best advance its interests. As long as those rules or policies are not anticompetitive, government should avoid second-guessing such SSO decisions.

IV. Intellectual Property Licensing Arrangements and the Antitrust Laws

A. IPR Licensing Guidelines

Now let me turn briefly to IPR licensing. The 1995 *Antitrust Guidelines for the Licensing of Intellectual Property* (“*Licensing Guidelines*”), issued by the U.S. Department of Justice and the Federal Trade Commission, recognize that intellectual property licensing practices are typically welfare-enhancing and procompetitive.¹⁴ Intellectual property licensing is generally efficient because it enables firms to combine complementary factors of production, reduce transaction and production costs, and reduce free-riding by others. A portfolio cross-license, for example, permits intellectual property owners to mutually license many or all of their intellectual property rights in one portfolio. Other particular efficiencies are described in some detail in the *Licensing Guidelines*.

The *Licensing Guidelines* explain that licensing arrangements are generally evaluated under a flexible standard that weighs procompetitive or efficiency-enhancing benefits against potential competitive harms. Competitive concerns that are weighed against efficiencies in this flexible analysis include: (1) whether the licensing practice encourages unlawful coordination among competitors; (2) whether the licensing practice unnecessarily forecloses market entry; and (3) whether the licensing practice reduces the incentive to innovate in the future. Licensing

¹⁴ See United States Department of Justice & Federal Trade Commission, *Antitrust Guidelines for the Licensing of Intellectual Property* § 2.3 (Apr. 6, 1995), available at <http://www.usdoj.gov/atr/public/guidelines/ipguide.htm> [hereinafter “Antitrust-IP Guidelines”].

arrangements that are merely “sham” agreements designed to fix prices or allocate markets among competitors (and that lack any redeeming efficiencies) are plainly anticompetitive and will be condemned outright.

Concerns about exclusive licenses are heard with some frequency – typically raised by rejected applicants – but exclusive licenses can be efficiency-enhancing. Exclusive licenses can provide the sole licensee incentives to develop a technology without the fear of free-riding by third party licensees. Moreover, exclusive licensing can be viewed as a lesser-included right of a IPR holder to exclude others from using the invention – instead of excluding others entirely, one licensee is allowed to use the invention.

B. Intellectual Property Pooling Arrangements

As I noted earlier, many complex products incorporate numerous technologies protected by intellectual property rights. One scholar has described what he called a dense “thicket” of intellectual property rights around certain technologies.¹⁵ It can be costly and difficult for manufacturers to gain access to all those technologies, especially if the intellectual property is held by multiple owners. That makes it difficult for the new technology, or the products that it creates, to reach market. Certain licensing practices such as portfolio or collective licensing arrangements, such as pool licenses, can mitigate the “thicket” problem by offering several intellectual property inputs in one package. The U.S. antitrust agencies recognize the

¹⁵ See generally Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, in 1 INNOVATION POLICY AND THE ECONOMY (Adam B. Jaffe, John Lerner, Scott Stern eds., 2001).

procompetitive benefits of these agreements and have suggested a number of ways that they may be employed without unduly restricting competition.¹⁶

Pool licenses simplify access to intellectual property rights that are necessary to make a product according to industry standard. Pools offer what we call “one-stop” shopping, whereby a manufacturer can obtain all IP rights in one place, which reduces its transaction costs and will often keep prices down for consumers. Pools can have other practical aspects as well. They can integrate complementary aspects of a technology and eliminate blocking positions, also allow licensees to avoid costly infringement litigation.

As with any other intellectual property licensing agreement, pools can also raise competitive concerns. Pools can, for example, be used as a forum for price fixing, or other forms of downstream collusion. They may also reduce competition between technologies outside the pool by including substitute technologies inside the pool. The mere inclusion of substitutes in a pool, however, is not necessarily anticompetitive. Any antitrust analysis of a pool’s key features requires a careful evaluation of the actual competitive effects (potential efficiencies as well as costs) of pool policies in the particular factual setting presented.

Pooling arrangements are complex transactions, but there are ways to reduce antitrust uncertainties. The U.S. Department of Justice, for example, has a “Business Review Letter” process that permits private parties to describe a business plan and request a statement of the Department’s enforcement intentions.¹⁷ Several multinational corporations have used the

¹⁶ See, e.g., Antitrust-IP Guidelines § 5.5.

¹⁷ The U.S. Federal Trade Commission has a similar advisory opinion procedure.

Department's business review process to seek approval of proposed pool licenses.¹⁸ For example, the Department has approved several pooling arrangements in which the pool members chose to limit the pool to complementary technologies, limit access to each others' competitively sensitive business information, and allow pool licensors to retain the right to license non-exclusively outside the pool. By employing such safeguards, pool members were successfully able to structure their pool licenses in a manner consistent with the antitrust laws, thereby enabling the efficient exploitation of their intellectual property rights in the global marketplace.

Properly structured pooling arrangements provide benefits to intellectual property owners as well as consumers. In addition, market-driven, "competition-friendly" solutions, subject to review by competition authorities, are likely to be more efficient than regulatory mandates.

V. Summary and Conclusion

In sum, intellectual property has a vital role in furthering economic progress and consumer welfare, and it is important to protect the incentives that the promote the creation of intellectual property – namely, IPR. Intellectual property rights in the standard setting context and in licensing are an increasingly important topic, because of the rapid expansion of intellectual property and the fact that so many standards depend on multiple licensed components of intellectual property.

¹⁸ See Letter from Joel I. Klein, Acting Assistant Attorney General, U.S. Dep't of Justice, to G[ar]rard R. Beeney, Esq. (June 26, 1997), at <http://www.usdoj.gov/atr/public/busreview/1170.pdf> (video compression technology proposal); Letter from Joel I. Klein, Assistant Attorney General, U.S. Dep't of Justice, to Garrard R. Beeney, Esq. (Dec. 16, 1998), at <http://www.usdoj.gov/atr/public/busreview/2121.pdf> (3 company DVD proposal); Letter from Joel I. Klein, Assistant Attorney General, U.S. Dep't of Justice, to Carey R. Ramos, Esq. (June 10, 1999), at <http://www.usdoj.gov/atr/public/busreview/2485.pdf> (6 company DVD proposal); *see also* Letter from Charles A. James, Assistant Attorney General, U.S. Dep't of Justice, to Ky P. Ewing, Esq. (Nov. 12, 2002), at <http://www.usdoj.gov/atr/public/busreview/200455.pdf> (3G Patent Platform Partnership).

The interrelationships among IPR, standard setting, and licensing are complex. Standards-setting, often succeeded by IPR licensing, may enhance the value of intellectual property; this tends to promote welfare by enhancing IPR holders' incentive to innovate. At the same time, some IPR holders may use anticompetitive means in standard-setting and/or licensing to obtain market power greater than the power that is inherent in the legitimate exercise of their property rights. Proper application of antitrust can counteract this competitive concern without undermining legitimate protection for IPR. In short, the interests of IPR holders, affected producers, and consumers are best mediated through a competitive, market-driven standard setting process characterized by open access, transparency, arms' length negotiation, informed decisionmaking, efficient licensing practices, and appropriate law enforcement. Such a market-driven process is the most likely to produce an efficient standard that will both protect the legitimate rights of IPR holders and promote the interests of consumers.

Thank you for your attention.