

ANTITRUST MODERNIZATION COMMISSION

PUBLIC HEARING

Tuesday, November 8, 2005

Federal Trade Commission Conference Center
601 New Jersey Avenue, N.W.
Washington, D.C.

The hearing convened, pursuant to notice, at 9:38 a.m.

PRESENT:

DEBORAH A. GARZA, Chairperson
JONATHAN R. YAROWSKY, Vice Chair
BOBBY R. BURCHFIELD, Commissioner
DENNIS W. CARLTON, Commissioner
MAKAN DELRAHIM, Commissioner
JONATHAN M. JACOBSON, Commissioner
DONALD G. KEMPF, JR., Commissioner
DEBRA A. VALENTINE, Commissioner
JOHN L. WARDEN, Commissioner

ALSO PRESENT:

ANDREW J. HEIMERT, Executive Director and General
Counsel

WILLIAM F. ADKINSON, JR., Counsel

TODD ANDERSON, Counsel

HIRAM ANDREWS, Law Clerk

KRISTEN M. GORZELANY, Paralegal

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- STEPHEN M. PINKOS, United States Patent and Trademark Office
- STEPHEN A. STACK, JR., Dechert LLP

These proceedings were professionally transcribed by a court reporter. The transcript has been edited by AMC staff for punctuation, spelling, and clarity, and each witness has been given an opportunity to clarify or correct his or her testimony.

PROCEEDINGS

CHAIRPERSON GARZA: I'd like to open the Antitrust

Modernization Commission hearings for November 8, Antitrust and the New Economy. A hearty welcome to all of our panelists and our sincere thanks for your agreeing to be here and the submission of your very thoughtful papers.

Let me take a minute to explain the process, how this will work. I'll ask each of you, each of the panelists, to summarize your testimony in about five minutes. And because we have a large panel, and we do want to give adequate time for questions and answers, I'd ask you to really try hard to keep your summaries to about five minutes.

There's a box on your table and on our table with red, green, and yellow lights, and the red light means that the time is up, and if you see that light, if you haven't done so already, I ask you to please wrap it up. I'm not likely to say anything to you out of fear of being impolite, but I will be thinking to myself, will he wrap it up?

Then after that, we'll do that going across the table. After we've had all of your statements, then we will have a lead questioner for the Commission, and that's Commissioner Carlton this morning, take about 20 minutes to ask questions. And then after that, we will give an opportunity to each of our other Commissioners, limiting them to roughly five minutes each. So that's how the morning will

proceed. And then we will start with Mr. O'Connell.

Panel I: Antitrust and the New Economy

MR. O'CONNELL: Thank you, Madam Chairperson. Good morning. My name is Jim O'Connell, and I am Counsel to the Assistant Attorney General in the Antitrust Division of the Department of Justice. I'd like to thank the Commission for giving me the opportunity to be with you this morning to talk about the issues that you all have raised regarding antitrust analysis in new economy industries, or industries where innovation, intellectual property, and technological change are pervasive.

What I'd like to do in this opening statement is lay a couple of background points out, briefly address just a couple of the questions that you have asked, and I'll try to keep it as brief as I can, because I do recognize there are a number of us here on the panel.

Many of the topics that we're here to discuss this morning carry with them the suggestion that new industries should perhaps be treated differently under the antitrust laws than old industries, or that at least they should not be subjected to the same analytical process, for example, during merger review. It should perhaps not surprise anyone here that the Antitrust Division does not share that view. A

former Assistant Attorney General at the Antitrust Division pointed out that when it comes to antitrust enforcement, the new "new thing" often isn't so new after all, and the core principles of antitrust reflected in the Sherman Act are enduring rules that can and should be applied to new situations.

Now, it is true that the federal antitrust laws, at least some of them, have been around for over 100 years, but during that time they have repeatedly demonstrated the flexibility and resiliency necessary to deal effectively with rapid, indeed, sometimes dramatic changes in the American economy. They've served the American public well, we believe, from the industrial age right up through the information age, and we believe they will continue to do so in the future.

They are flexible enough, we believe, to work in all industries, including those that are constantly evolving through the introduction of new technologies. Of course, while the antitrust laws are the same for all industries, with the exception of per se violations antitrust analysis requires that we evaluate conduct and, most particularly, mergers in light of the specific facts that are involved and the characteristics of the industry that is before us. This

is a flexible fact-based analysis that's supported by sound economic principles that don't change from industry to industry, and it enables us to deal with industries that experience fast-paced changes while serving the primary goal of protecting competition in rapidly evolving markets.

With that as a background, I'd like to touch briefly on a couple of the questions that the Commission has put forth this morning. First, the Commission has asked whether there should be a presumption of market power in tying cases where the defendant holds a patent or a copyright or some other form of intellectual property. This is obviously a very timely question. Since the Commission put it out for public comment, the Supreme Court agreed to hear the *Independent Ink* case, which is going to be argued in just a couple of weeks.

The United States has submitted an *amicus* brief in that case that is publicly available, and I'd be happy to provide that to the Commission if it doesn't already have it. The brief thoroughly explains the government's position on these issues.

In short, though, for purposes of this morning's hearing, I'll just say that the Division does not believe that there should be a presumption of market power in such

cases. The government's brief in *Independent Ink* explains that there is no economic basis for inferring market power from the mere fact that the defendant holds a patent. And while the existence of a patent can, of course, be relevant to the question of market power, as Professor Hovenkamp said, "A patent grant creates an antitrust 'monopoly' only if it succeeds in giving the exclusive right to make something for which there are not adequate market alternatives, and for which consumers would be willing to pay a monopoly price."

The Division does not believe that those relatively rare instances where a patent actually confers significant market power support a sweeping presumption of the existence of that power whenever the tying product is patented.

In the interest of time, let me skip ahead to one of the other questions that you have asked: should antitrust law be concerned with innovation markets, and if so, how should the enforcers analyze innovation markets?

I'd like to say as a principal, as an initial matter, I'm not sure that the innovation markets issue presents much of a practical problem, at least at the Division. It is a theory that we apply rarely in our merger analysis, and indeed, in the last ten years, we've only brought one case where we alleged innovation markets.

Innovation effects, of course, are something else. The Department does care about the effects of a merger on innovation, and the Horizontal Merger Guidelines specifically state that sellers with market power may lessen competition on non-price dimensions, such as innovation. But separately defining an innovation market, which is to say, a market for research and development that is not connected to a specific product market, is only necessary, we believe, if a merger may affect innovation in a way that cannot be adequately addressed through the analysis of a goods or product market. In 2004, I believe actually in this very room, the FTC and the DOJ held a joint merger workshop that had a panel devoted to this topic, where the issue was discussed in some detail. The general consensus at that discussion was that innovation markets is a potentially useful theory, but one that should be applied with caution for a number of reasons, including the fact that it presents particular predictive challenges, because after all, in those cases, we're talking about products that don't yet exist. Also, it can be difficult outside of certain industries, such as pharmaceuticals, to ascertain all the potential sources of innovation if one is conducting an innovation markets analysis.

The Division generally agrees with those views

regarding the innovation markets theory, and I'd be happy to discuss that further. With that, I will yield the floor to my co-panelists, and I look forward to discussing these and the other issues the Commission has raised further.

CHAIRPERSON GARZA: Thank you very much. Professor Shapiro.

PROF. SHAPIRO: Well, thank you for inviting me to be here today. A great deal of attention has been paid in the last ten years or longer to antitrust and innovative industries, certainly going back to the '95 Intellectual Property Licensing Guidelines. I'm delighted the Commission is looking at it. At the same time, I think we can ask what is new that we want to address, given all the attention that's been paid to this? I think we've come a long way in the last 30 years, for example. Rich Gilbert and I actually wrote a paper comparing the way these issues were treated in the late '90s, to the days of the nine no-noes in the '70s, and I think the balance is much better in terms of recognizing, for example, the many ways in which various provisions in intellectual property licenses can be procompetitive without having rigid rules.

At the same time, I think the Commission can clarify some areas here without necessarily suggesting any

changes in legislation—areas and important principles, where you could focus both the agencies and in general and in present, sort of, views on things, including the courts, in some areas that I think are tricky, not necessarily new, but where I sense some confusion, and I think you can maybe make an important statement.

So let me, in addition to—focus on some of the things I said in my written statement; let me make four points in this short introductory thing here, and they're all keyed in various ways to the questions that you've posed. First, price-cost margins. The fact is, a margin between price and cost, let's say marginal cost, is a necessary and desirable feature of an innovative market. That's the only way companies can get a return on their R&D, having such margins to pay back those fixed costs and other costs associated with their R&D projects, and you talk to just about any firm, they'll tell you, well, yeah, our operating profits are such and such, and we return a certain fraction of it to our R&D, so it also, as a practical matter, funds future R&D, as well. As an incentive matter, it's a return to previous successful projects. So the notion that a gap between price and marginal cost is some sort of indication that the market isn't performing well or that there's—

monopoly power is mistaken, and you could help clarify that. I think that does crop up sometimes in an unhelpful way.

And I would just point out the Lerner Index, price-cost margins in percentage terms, if you have a very competitive market where the firms are not earning any extra profits, the Lerner Index will equal the ratio of the fixed cost to the revenues, as a simple rule of thumb, and so it certainly should not be zero if the fixed costs are significant because there are R&D expenses. So that's price-cost margin.

The second point, complements. Antitrust I think has learned a lot and should continue to be flexible and learn about the importance of cooperation between companies that are providing complementary products. So that could be hardware and software. Any time there's a system that has different elements and components, it could be content and distribution, and the economic theory here is very clear and rather straight forward, that that sort of cooperation could lead to lower prices and basically be a win-win situation. And I think there is a tendency for antitrust to, with its inherent suspicion of cooperation based on collusion and the lack of desirability of certain types of cooperation, namely collusion between competitors, to have that spill over when

it's cooperation among different component suppliers, and that's undesirable. And I don't think it's—I think it's well understood in some circles, but it's an important message to continue to emphasize.

Third point, disruptive technology, and I emphasize this in my written statement. The mere fact that technology is changing rapidly, that products are getting better, does not mean that there can be no monopoly power. And I think the same way we've just heard, these core principles, going back to the Sherman Act, if a company has had a very large share of a well defined market for a considerable period of time, that is a suggestion, and I don't mean more than suggestion, but a suggestion that they really have monopoly power.

If the other conditions are met, of course, we have to look at entry barriers, the ability to control price, exclude competition, but the mere fact that technology is changing does not undermine that, okay, particularly if it's changing for exogenous reasons; maybe their inputs are becoming cheaper, or technologies are being developed in the scientific community that are causing this rather than even the firm itself being the generator of the technological innovation. So I think there is some danger of ignoring the

concerns of monopoly power just because an industry happens to be innovative. And I labeled this disruptive technology because I think really one of the fundamental concerns here is, we want to prevent—well, “entrenched” is a leading word—a company with a considerable vested interest in the status quo, from protecting that from would-be competitors with new technologies, disruptive technologies, who would like to topple that *status quo*, and that is a very important role of antitrust, and it fits squarely within the Sherman Act, and so I want to emphasize that, and that's not just about Section 2; that's also about mergers, as far as I'm concerned.

So fourth, patent settlements, I have written a number of things about this, as have others. I think there's—I'm increasingly concerned with where the courts are going in terms of giving—allowing the settlements of patent disputes that may be—that are anticompetitive. The Eleventh Circuit decision in *Schering-Plough* worries me. I understand there's a recent Second Circuit decision, as well. So I'm very concerned about these reverse payments. I've done some research on this lately, and I'm concerned where the courts are going.

This could open possibilities to a range of

anticompetitive settlements of patent disputes, particularly in a context where there really are concerns about the quality of the patents, as you will hear about this afternoon. Thank you.

CHAIRPERSON GARZA: Thank you. Mr. Osborn.

MR. OSBORN: Thank you very much for inviting me here today. I know you have my written testimony, so I will focus on the business perspective of mergers and acquisitions, in the life sciences industry.

My company, Cephalon, is a small company by the standards of Pfizer, Merck, or the other major pharmaceutical companies, but it is a relatively successful commercial enterprise from the standards of the many hundreds of biotechnology companies that have been established in the United States over the last 20 years. We have about 2,500 employees at this point, we are focused on central nervous system disorders, including sleep, pain, addiction, and anxiety, as well as cancer, and we market products in the United States and in Europe. We have a little more than one billion dollars in annual revenue.

My experience in this area largely comes from a Federal Trade Commission review of Cephalon's proposal to acquire CIMA Labs. We were under review by the Commission

during late 2003 and much of 2004. Having said that, I certainly don't want to be seen as coming here to criticize the FTC, but rather to provide some perspective so that this Commission might consider whether our experience reflects that of other firms, and if it warrants any policy changes. I will make three points.

I strongly believe that mergers are an integral part of the innovative process in life sciences. Although there are well over 1,000 research-stage biotechnology companies in the United States that employ wonderfully creative and energetic teams of scientists who develop promising research approaches and innovative compounds, it is quite rare for a research-stage company to develop into a mature, commercial-stage firm. It is very difficult for a research-stage company to develop or acquire the kinds of functional expertise, whether regulatory, clinical, marketing, sales, medical, to be able to take those promising research leads and develop them, gain FDA approval, and commercialize them. Without commercialization, research innovation does not lead to consumer benefit.

An example of this process may be seen in a deal that we did back in the early 1990s, before my time at the company, when Cephalon obtained an exclusive license for a

compound known as modafinil. At the time, a small firm in France was close to obtaining approval to be able to market it in that country, but they had no ability to do anything in the United States. Following an investment of hundreds of millions of dollars in clinical studies, Cephalon now has a product that is sold under the trade name Provigil® for a variety of sleep disorders, and it has just received an approvable letter from the FDA to treat attention-deficit disorder. Thus, the combination of clinical, regulatory, medical, and marketing resources that we engaged has resulted in a very important product for consumers in this country.

Similarly, Cephalon regarded CIMA Labs, which was primarily a drug-development and manufacturing company, as an interesting firm because of its efforts to develop a product known as OraVescent Fentanyl, which we saw as an opportunity to expand an existing line of products. As we struggled through our review process with the FTC staff, a couple of things became apparent to me that perhaps would be of interest to this Commission.

First is the question of how to properly appraise risk in evaluating a merger. I certainly do not suggest that merger review in an innovation industry is itself problematic or unimportant, but I do think that if you tend to discount

substantially the probability of other market entry, it will lead you to oppose the proposed acquisition. Second, this approach suggests that you are not really putting a lot of value on the consumer benefits that may flow from the ultimate consummation of the deal. And as I've said, I think acquisitions, in fact, ultimately add to consumer value, if they would increase the odds of successful commercialization of the product.

I am out of time, so I will conclude by encouraging the Commission to consider the ways in which risks are appraised in evaluating possible market entry, and in evaluating the scope of the relevant product market. Thank you very much.

CHAIRPERSON GARZA: Thank you.

Mr. Morse?

MR. MORSE: Thank you. I'm honored to have been asked to testify before this Commission. I'm currently a partner in the Washington, D.C. office of Drinker, Biddle & Reath. Before joining the firm, I was Assistant Director in the Federal Trade Commission's Bureau of Competition. I'll offer my perspective this morning based on my ten years at the FTC, enforcing the antitrust laws against transactions in high-tech industries, as well as my years in private practice

representing companies in the computer hardware and software, pharmaceutical, biotech, and medical device industries.

My message this morning is that antitrust law must focus on dynamic effects to be relevant in the 21st century. Others have argued that innovation is king for good reason. Everyone should understand that small increases in productivity from innovation dwarf even significant reductions in static efficiency over time.

This reality can be grasped by considering Moore's Law, which teaches that computer chip capabilities double every one to two years. Slowing the introduction of new and improved products in that environment can harm consumers far more than even a significant increase in price. That said, I agree that the broad language of the Sherman and Clayton Acts, the antitrust laws are sufficiently flexible to take innovation concerns into account. Moreover, our economic learning continues to progress. It would, therefore, be a mistake to codify today's theories into statute, even if there was consensus.

It is time, however, to update the government's Merger Guidelines, which today focus primarily on the ability to maintain prices above competitive levels. The only mention of innovation in the Guidelines is in a footnote,

which states that sellers with market power may also lessen competition on dimensions other than price, such as product quality, service, or innovation.

And it's far from clear that the models set forth in the Guidelines to analyze price competition, including the close-substitutes paradigm, translate to innovation competition. I understand that debate continues among economists as to whether there is correlation between concentration and innovation. But it is increasingly accepted that a firm's size and position in a market may effect its incentive to innovate.

Certainly, in my experience, dominant firms have less incentive than a new entrant to pursue disruptive leapfrog or paradigm shifting technologies. Mergers of the only two firms in a market pursuing R&D would appear to raise serious antitrust concern. At the same time, the acquisition by a leading firm of an entrant with promising technology may well hasten commercialization of the technology, as long as there are other firms to ensure the market leader won't suppress or delay the introduction.

Theories of competitive harm to innovation in markets where there are several competitors require further elucidation. Collusion or coordination or coordinated

interaction in R&D seems unlikely as R&D is often secret and the rewards from innovation great. A unilateral theory might be articulated where the merging firms control the most advanced R&D efforts and others are well behind, so the merged firm may slow its efforts and still be the first to market.

But while the Guidelines explain why mergers of firms with products that are close substitutes may lead to higher prices, it's not at all clear that that theory applies to innovation. Combining similar research efforts may lead to efficiencies, and the merged firm, dropping one research path, may result in cost savings and still leave several firms in a race to innovate.

It is important to distinguish between research and development, which is input and innovation. A merger that leads to a reduction in R&D, but no reduction in innovation, should be considered efficient. In fact, I was member of the FTC-DOJ Task Force that drafted the revised efficiencies language in the current Merger Guidelines, along with Commissioner Valentine and others. With respect to innovation efficiencies, the 1997 Guidelines took only a small step forward, noting that efficiencies relating to R&D are potentially substantial, but generally less susceptible

to verification than other efficiencies. In private practice, I found that it is just such efficiencies from the combination of complementary expertise, while not easily measured, that drive many transactions and have great potential consumer benefit. Further consideration should be given to efficiencies that lead to more rapid or enhanced innovation, including development of new or improved products. Thank you.

CHAIRPERSON GARZA: Thank you.

Professor Gilbert?

PROF. GILBERT: I'm grateful for the opportunity to be here today. I also would caution against special antitrust enforcement rules for new economy industries. While dynamic, innovation-driven industries have a number of characteristics that challenge conventional approaches to antitrust enforcement, there is nothing in antitrust policy that prevents a sound analysis of competitive effects in the new economy.

The composition of the new economy is itself somewhat ambiguous. Some would say the new economy consists of computers, communications, and the Internet. Others would include, I'm sure John would include, biotech and pharmaceuticals. In any case, we can be confident that the

composition of the new economy is going to morph into new fields as innovations change the ways that we think about old activities. In some respects, advocates of an antitrust exemption for the new economy, if there are any such advocates, are a special interest group whose members are likely to change over time. Antitrust policy has served the interest of consumers by resisting pressures to apply special rules and enforcement standards to individual industries.

Innovation is a critical determinant of market performance in both the new and the old economies, and it's correct for the antitrust agencies to take likely impacts on innovation into account when reviewing mergers or other firm conduct. There are two polar views of the effects of competition on innovation. One view, typically associated with the writings of Joseph Schumpeter back in the 1940s, is that large and dominant firms provide a superior platform for innovation and that new discoveries arrive in frequent gales of creative destruction to eliminate entrenched market power.

In this view, antitrust need not be concerned about monopolies in innovation intensive industries, because monopolies promote innovation, and whatever market power may exist would only be temporary. The other polar view is that competition promotes innovation, both because firms and

competitive industries have more to gain by innovating and because protection from rivalry in monopolistic industries makes managers slow to adopt new technologies. In this view, antitrust concerns about innovation roughly parallel concerns about traditional static market power. The importance of innovation, which I think we all agree is very important for market performance, is not well served by enforcement actions that adhere categorically to one or the other polar view. The relationship between competition and innovation is complex, and neither economic theory nor empirical evidence supports a general conclusion that competition always increases or always decreases incentives for innovation.

This complexity, however, does not justify a policy of denial. Antitrust enforcers should not presume that because the forces of innovation are complex, enforcement decisions should not even try to account for the likely impacts on innovation. Instead, a reasonable antitrust enforcement policy would begin with a presumption that competition promotes innovation. This presumption, in my view, is justified, because it is consistent with a large body of empirical evidence showing that competition and innovation are positively correlated.

However, this is only a presumption, and the

presumption should be rebuttable. Economic theory shows that competition can discourage innovation under some circumstances, particularly in industries in which it is difficult for firms to approximate the value of their innovative efforts. And there is empirical evidence that is consistent with this economic theory. A rebuttable presumption that competition promotes innovation would align antitrust policy with the substantial body of empirical evidence that shows a synergy between competition and innovation while preserving the ability to present contrary evidence when warranted by particular circumstances. Thank you.

CHAIRPERSON GARZA: Thank you.

Mr. Cooperman?

MR. COOPERMAN: Good morning. I would like to focus my remarks this morning on some practical aspects of antitrust enforcement that affect transactions proposed by software companies and others in the new economy. At the outset, I'd like to emphasize that time is precious in the software industry. Competition in our markets develops with extraordinary speed. New entrants can quickly displace incumbents.

The cycle of innovation in the software industry is

measured in days, in months, and not in years. When a transaction is held up, product design decisions, the core of innovation, may come to a complete halt, because the merging companies cannot predict which resources from each company will be at their disposal and when. The resulting delay may deal a fatal blow to an otherwise procompetitive merger transaction.

For that reason, the fragmentation of the merger clearance process internationally has become a critical issue for new economy companies. Because their business does not depend on significant physical facilities, new economy companies often do business in a large number of jurisdictions. That is especially true for companies involved in software or software-driven services, where a product can be distributed and sold anywhere in the world with relatively little additional expense. About 60 nations have some form of premerger clearance systems. The wide divergence in rules, procedures, and standards presents significant hurdles to any company that is trying to close a deal without violating any nation's laws, especially because failing to file a required notification can result in a fine or even in a divestiture or unwinding order.

Now, let me be clear; I completely understand that

with the proliferation of premerger clearance regimes around the world inevitably come differences in substantive antitrust standards of consideration and approval; that is as it should be. Each nation has its own legal standards, and conflicts of some kind are almost inevitable when different jurisdictions apply differing analysis to the same transactions. Transacting parties have to hope that the conflicts do not reach the core of the deal and that one's jurisdictions cure is not another's harm.

Today, however, I'd like to address a problem that I hope can be fixed more easily, that is the procedural minefield that awaits any party that engages in a merger or acquisition that implicates multiple jurisdictions around the world. Merging parties commonly need to file in a dozen or more different jurisdictions. We suggest closer international coordination to produce streamlined premerger notification, a coordinated investigation protocol, and depositions that occur within a single agreed upon limited time. I will explain our perspective on the problem along with the solutions we propose. Some countries require filings as soon as a week after the execution of the merger agreement. Different countries also have different rules about follow-up information requests, so that companies must

engage in a series of search and production exercises over a period that may extend to several months.

The enforcement agencies also start and finish their investigations according to different timetables, so that the jurisdiction with the closest connection to the deal may not be the first to rule on the transaction. For example, in mergers between U.S. companies, the European Commission may issue a decision that includes recommended dispositions or licenses that address a perceived competition issue even before the responsible U.S. agency has even completed its review.

Moreover, software companies may be uniquely susceptible to substantive variations between jurisdictions. Because software products increasingly are offered for purchase and download directly over the Internet, it is virtually impossible to refrain from doing business in any jurisdiction. As a result, the jurisdiction with the strictest antitrust review procedures or the lowest jurisdictional standards may dictate the timing and the substantive result for all other jurisdictions, leading to what I call a highest common denominator solution that may not be the most efficient or economically sound. But the hardest part is knowing where to file. The economic

thresholds for a jurisdiction, and the filing scope, often are not confined to the transaction's effect in a particular country, and the filing thresholds often do not clearly distinguish between worldwide economic activity and activity within a jurisdiction. The complexities of modern business transactions can combine with the complexities of jurisdictional rules to produce compliance traps.

This regulatory disarray imposes real costs on productive commerce. The combination of expense, legal risk, uncertainty, and delay will deter procompetitive transactions on the margin. The deterrence because of substantive competitive concerns may benefit consumers, because the deterred transactions are at least arguably anticompetitive, but by contrast, deterring substantively procompetitive transactions based on mere procedural impediments creates a deadweight loss.

We would call on the Commission and on the federal enforcement authorities to spearhead procedural reform of the international merger investigation regime by enlisting the involvement of the United States Trade Representative, if necessary. We believe that the filing, information gathering, and statutory review periods for merger investigations could be substantially coordinated by taking

just a few simple steps. First, there should be a standard form for information requests with a single set of filing dates for initial and follow-up submissions. Companies should be able to file one set of information to which all interested jurisdictions have access. Second, the antitrust enforcement agency of the domicile of the acquiring company should be the primary investigating agency. Other countries would channel additional information requests through that agency to reduce duplication. That would permit companies to provide fewer but more comprehensive responses, reducing the risk of inadvertent non-compliance, without reducing the volume and quality of relevant information.

Third, the investigations of various antitrust authorities should take place concurrently. The common information submissions would feed into a multiplicity of merger review processes on a coordinated schedule. And finally, the primary investigating agency should complete its investigation and any resulting enforcement activity first, before other non-primary agencies within a strictly limited time frame could bring enforcement actions for additional relief.

The agencies in the non-primary states accordingly could focus on regional and local issues that were less

likely to be adequately addressed by the primary agency. In conclusion, these modest steps and procedural streamlining could render the procedural aspects of merger review less *ad hoc*, more efficient, and more predictable, with far fewer traps for the unwary. I note that antitrust law aims at preserving the innovation and efficiency provided by competition in the marketplace. Antitrust enforcement itself should aim to be just as efficient and nimble as the companies it regulates. I thank you for your attention.

CHAIRPERSON GARZA: Thank you.

Commissioner Carlton?

COMMISSIONER CARLTON: Okay. Thank you, and I want to thank the panelists. I read all your statements, and I appreciate all the hard work that went into them. I only have 20 minutes to ask you questions, and there are six of you, and I have 20 minutes of questions for each of you, so I would ask you to try and keep your responses to my questions, if you can, short, so we can cover more topics.

I want to start out really following up on something that Professor Shapiro, Carl, said, and that is, there's often a confusion between price above marginal cost, and market power, rates of return, and I want to explore that a little bit, and I want to really focus on the economists on

the panel to answer the question.

We don't need new economic principles, I think both of you would agree, to analyze a high-tech industry versus a low-tech industry, the application will differ obviously. What a high-tech industry puts in stark contrast, though, is that there are high fixed costs, and low or zero marginal costs. So the question is, what do you mean by market power? If price is above marginal cost, both of you point to that would seem like a funny definition to say that's market power because every industry would have market power. And both of you in your statements say that's not market power in an antitrust sense. And I think, Carl, you used the language—it's not durable monopoly power; it's not genuine monopoly power. And I really want to make sure I understand the distinction that you're drawing.

I know you're not proposing that price above marginal cost be the screen for market power. It sounds to me like, since I'm an economist, as you are—I know marginal cost; I know rates of return—it sounds like you're saying that there's not market power, durable market power, unless the level of profit, the rate of return, is above the competitive level; is that what you guys are saying, and if so, over what length of time would you calculate this rate of

return? So why don't I start with Rich and then Carl?

PROF. GILBERT: Well, I think antitrust policy has been generally correct in the way it's looked at the market power issue, in that it's not really so much—antitrust has not been so much concerned about actually measuring the Lerner Index or rates of return, but rather investigating when market power is an issue for antitrust purposes, and so the absence of market power, is a good starting point, for there is not an antitrust problem. So if we don't see any market power, we can say there's no antitrust problem. Now, of course, in many industries, and particularly high-tech industries, you're always going to see high price-cost margins and always some theoretical evidence of market power. But then antitrust asks the correct question, I believe, which is, in a merger case, is the merger going to raise prices substantially or limit output or reduce innovation? And in a unilateral conduct case, is there conduct that leads to either higher price-cost margins or sustains price-cost margins in ways that are anticompetitive?

So the use of market power as a screen seems to me to be the right thing, and then applying market power to the relevant questions seems to be done in the correct way by antitrust enforcement agencies for new and old economy

industries.

COMMISSIONER CARLTON: Yeah, so let me—I think that's exactly right. The way I think about it is that the antitrust laws are trying to see, in a merger case, is the price going to go up as a result of the merger? And in a monopolization case, as a result of a bad act, is price going up, meaning, is there an increase in elevation of price above marginal cost?

The reason we have market power and focus on market power is, we want to throw out cases, not clog up our administrative system. It really doesn't raise significant issues. And for that, we define a market, and we want to say that if a person doesn't have market power, let's forget about the case. And my question is, both you and Carl are saying that durable market power has to be a high rate of return, and that suggests that you're going to have to start measuring rates of return, and to do that, you're going to have to have sometime interval over which you measure it, and so I think that's my thinking on—my interpretation of what you guys are saying. It sounds right; that's similar to my thinking on the topic, I just wanted to—what do you think, Carl?

PROF. SHAPIRO: Well, I think if you were just

doing it conceptually, that's right, if you're not going to compare price to marginal cost. Is it some sort of average cost? Is there a rate of return? How are you going adjust for risk? That gets to be difficult, and it raises the time-frame issue, no question. But in practice, let me give you an example. I had a case once for Apple Computer, and it was accused of being a monopolist over basically Apple computers. And I think most people think, well, that's crazy; they have to compete against Microsoft; they've got to compete against machines or whatever it is. That doesn't make any sense.

But, in fact, they had authorized some cloning of Apple computers, and then they withdrew allegedly, so now the question was, had they done something that had actually allowed them to get a higher price at reduced—eliminated some type of maybe called localized competition that would have pushed down price. So then you get to the practical question, well, did the conduct actually lead to significantly higher prices, whether or not they were getting—regardless of just how good their return on their R&D investments was? So you start to pose that practical question. You don't really need to necessarily get into measuring risk-adjusted rates of return, and in a merger case it's the same thing. You may have very large R&D

investments, but now they're sunk, and if the merger allows the firms to raise prices, we don't necessarily care whether it's above or below a competitive rate of return, because, in the long run, the merger is having certain effects.

COMMISSIONER CARLTON: That sounds right--

PROF. SHAPIRO: Oh, good. I'm glad.

COMMISSIONER CARLTON:--and that's focusing on what the effect of the price going up is, but it seems to me the administrative reason that lawyers like to say there's no market power in a Section 2 case is, you don't address those issues, so that even if you--if someone comes to you, a defendant in a monopolization case, and you say, I can prove to you that your price is way above marginal cost, but the bad acts aren't raising prices, the lawyer will typically say, well, can you also say I don't have market power, if I can just get this case thrown out at the beginning? In other words, that's the initial screen, and that, it seems to me, is why there's so much emphasis in our system on market power.

And it does seem to me that economists waver a little bit in the precise definition of what that first screen is. Even though I agree with you, the focus that economists can bring to the table is really that second

element—price going to go up—and that seems to me the source of a lot of confusion in the legal writing in the courts. And the difficulty it raises is, you do have to say, is the rate of return a little too high? And then you get into some difficult problems. All right. Let me go on.

Is there anyone on the panel who believes that tying of a patented product should create the presumption that, when that occurs, there's market power? That's one of the questions I think you were all unanimous in saying that the mere fact that you have a patent shouldn't give the presumption of market power. I just want to make sure everybody—I was reading everyone's statement. Does anyone disagree with that statement? Good, okay.

Let me ask a question that didn't come up in the panel's oral comments but did in the written comments of Mr. Morse and Professor Shapiro, and it has to do with networks, which I think is also an important topic in the new economy. Suppose that networks interconnect with each other initially, and then suppose the industry grows, and one network gets a little bigger than the other network and stops interconnecting; should that be an antitrust violation, or can that be an antitrust violation? So let me first ask Mr. Morse that question.

MR. MORSE: Well, I start with the presumption that network effects are a given in certain markets that we're dealing with and are increasingly common in the high-tech sector, but as has been pointed out, it is not necessarily a new feature. The network effects create both efficiencies, which are a good thing, and they create barriers to entry or switching costs, and I think that therefore, we want to look carefully at them, whether we're dealing with mergers or monopolization conduct.

I think your specific question, which is, does simply the denial of access to a network, as I understand the question, create a monopolization question? I think it's a difficult issue. When companies never allow access, we don't usually think that there's a problem, but when they quit providing access, as in *Aspen Skiing*, then occasionally questions are raised, but I think it certainly should be, as the Court most recently said in—rare that we insist upon access.

COMMISSIONER CARLTON: Carl?

PROF. SHAPIRO: Well, Dennis, I know what a fan you are of the *Aspen* case, so I won't mention that one.

COMMISSIONER CARLTON: Thank you.

PROF. SHAPIRO: My short answer is, yes, it can be.

Such refusal—changing of interconnection policies, in particular, if there's been some representation that there would be interconnection. In that case, very possibly, one company managed to grow its network with certain promises of openness, open interfaces or interconnection, and if that's withdrawn, that could lead to market power, monopoly power, and harm to consumers, and that seems to me to then go beyond simply a, I don't know, a tort or contract issue to potentially become an antitrust issue.

COMMISSIONER CARLTON: Okay. Let me ask Mr. Cooperman; your statement I think makes crystal clear that time is of the essence in these high-tech industries, and you talk mainly in the context of mergers and the difficulty and sometimes the nightmarish difficulty there must be to get a big transaction through. But isn't there—I want to apply that idea to monopolization cases.

Would the implication of what you're saying be the following, that if there's a bad act created, it could do in the rival pretty quickly, and therefore, maybe in—and by the time the courts administer the case it's too late to resurrect the rival who's dead, so would that suggest, or would you suggest, therefore, in Section 2 cases, in these high-tech industries, that the standards for, say, a

preliminary injunction based on irreparable harm be used to prevent defendants from engaging in bad acts if the court thinks that it is a rapidly changing industry and the bad act will do in the rival?

MR. COOPERMAN: Well, certainly; as I said, I think time is of the essence. I don't think it requires a change in the standards for some type of remedial relief in the interim. But I think courts, in administering the case, overseeing the case, need to be particularly mindful of the impact of time, of the passage of time, and need to move the case along with dispatch. But I don't think the legal standards for remedial relief really ought to be changed.

COMMISSIONER CARLTON: Okay. Let me just briefly turn to innovation markets. I wanted to ask Mr. O'Connell, you spoke of the ZF/GM case, which was the one case where—or the initial case where innovation markets were brought, and I should reveal that I was involved in that case. And with due respect to my friend, Rich, I don't have the same view of innovation markets as he does, but I wanted to follow up on that.

Do you know, in fact, whether innovation occurred in the ZF/GM case as a result of stopping the merger in transmissions, which was what was alleged to have occurred?

So if we called up GM today and I asked, did either ZF or GM engage in the innovations? Did it occur?—Do you know that?

MR. O'CONNELL: I don't know that for a fact. I actually was not involved in that case, although I am familiar with it. But I don't know.

COMMISSIONER CARLTON: Okay.

PROF. GILBERT: I was, so I can say something.

COMMISSIONER CARLTON: Okay. Yes, Rich, why don't you?

PROF. GILBERT: I haven't followed up on the actual innovation story, but I think people who have written on that case—and I know you have, and I appreciate your insights, but I think there's one thing that's been overlooked, Dennis, which is that the case was really about competition in Europe; it was not about competition in the U.S. And it was the concern that the complete absence of competition in Europe, which would have happened, were those were the two only major producers, if they had merged, the consequences for the U.S. market could have been significant. And procedurally, you can't do anything from the U.S. side about what's going on in Europe.

So I think in analyzing what happened in that case or what could have happened with or without that case, you

really have to look at what was going on in Europe, and that's a hard but-for calculation.

COMMISSIONER CARLTON: Okay. Mr. Osborn, you criticize innovation markets in your testimony, and although I am a critic of innovation markets, one of the few exceptions to innovation markets where people say, maybe it works, is the drug industry, because you can see the pipeline, and in fact, if you see the pipeline of products coming out, you can actually say it's a product market or a future product market case.

But your testimony I think would lead one to question the value of innovation markets even in the drug field; am I reading your testimony correctly?

MR. OSBORN: I think you're talking to Mr. Morse, aren't you?

COMMISSIONER CARLTON: Yes, I'm sorry.

MR. OSBORN: I'm quite fond of innovation and life sciences, and I believe it's pretty important actually.

COMMISSIONER CARLTON: Well, I was asking Mr. Osborn because you talked about the difficulties and uncertainties, I thought, of administering the merger process at the FTC and how they—it's very speculative, and that's been the criticism of innovation markets, and I thought that

you were, therefore, saying that you would even attack that concept in the case of product markets, but that's all right, let's just--maybe I misread.

MR. OSBORN: Well, I probably was thinking of innovation, not in the economic sense, and I did--what I tried to express in my written testimony was that, while there is necessarily uncertainty in any effort to predict the effects of a merger, at least in our experience, the perspective of the Commission staff was to resolve the uncertainties against the proposed merger.

If there were possibilities of generic entry, those possibilities tended to be discounted heavily; if there were possibilities of other proprietary products coming in, they were discounted heavily; if there were any distinguishing features between products, there was a seeming unwillingness to evaluate in a sophisticated way whether they were really functionally interchangeable, or how physicians might regard the products. And it seemed to me that the process inevitably was skewed toward opposition to the proposed merger without giving much weight to the value of our ability to leverage our firm's assets to effectively commercialize the product.

COMMISSIONER CARLTON: Okay, thank you.

Let me ask a question of Mr. Morse. You stressed how important innovation was in these new economy industries, and I think that's absolutely right, innovation is responsible for our improved standard of living. Here's the question I have to you; if there's a merger case and innovation may be involved, what you're worried about is, well, if I stop the merger, I prevent new products from coming out; that's a tremendous cost to the economy if new products would come out as a result of the merger. On the other hand, if I stop a merger that would, as a result of stopping the merger, create more competition in innovation, then that's a benefit.

So it seems to me that, although you're correct to point out that we should pay a lot of attention to innovation and its effect on mergers, it's very hard for us to predict it, and I can't figure out—do you think the Type One errors are worse than the Type Two errors, that is, how are we going to—there are two types of mistakes you can make, and balancing those mistakes is what's going to determine how you decide issues, and I'm trying to say—are you saying we should tip the balance more in favor or less in favor, other than trying to do the best job we can?

MR. MORSE: Two thoughts in response to that; one,

I am probably very concerned about it in the merger-to-monopoly situation. I think that when you've got the only two firms there, the possibility of delay is much greater, and the models about which the economists can speak are much greater than that in single firm conduct, and incentives to innovate at least fall in the category where Professor Gilbert has said there should be a strong presumption.

I am much less sanguine that there should be concerns about mergers, say four-to-three players, because I think of the difficulty of collusion in R&D, and I don't think that the unilateral close-substitutes model applies to that sort of combination. I think it is essential, though, that the agencies articulate as clearly as possible the models that they operate under and that it's an insufficient answer to say that the cases are case specific. Case-specific analysis leaves too much discretion in junior staff, and that there is a need for broad principles to which the staff can look and to which parties can look in doing the analysis.

COMMISSIONER CARLTON: Okay, thank you. I'm out of time, and I have more questions, especially for Rich and Carl. But let me just end with one quick question to Carl. In your paper, in your discussion, you talk about the problem

of weak patents, and you refer to some other papers you've written on that, and I was wondering, could you just take a minute to explain what you're referring to, so you can explain it a little more clearly than in your statement?

PROF. SHAPIRO: Certainly, thank you. Just by definition, we could think of patent strength as the—how likely it is that it will be held valid if it's, in fact, litigated, and no doubt, there are some patents that are very strong in that sense; some are very weak, and the FTC report that you all know about and—talk about asks, are there more questionable, or I might say "weak," patents that are being issued?

If a weak patent—if any patent is asserted against a competitor, I think of it probabilistically, that is, well, maybe the patent is valid, in which case the competitor could be legitimately excluded from the market: let's say the competitor cannot compete without infringing. On the other hand, if the patent is invalid, the field would be wide open, and we'd have more competition.

An agreement between the patent holder and the alleged infringer that totally eliminated the competitor or caused the competitor to leave the market might be quite suitable if the patent were known to be very strong, but it

would lead to a significant reduction in competition if the patent were, in fact, thought to be very weak, when we really should sort of expect—at least if there were litigation, we would have a high likelihood of invalidity, and, therefore, a more competitive outcome. So that's the notion, and then it has particular implications, I think, for patent settlements, which I mentioned is one of my areas of concern.

COMMISSIONER CARLTON: Thank you.

CHAIRPERSON GARZA: Commissioner Warden.

COMMISSIONER WARDEN: Thank you. I think that everyone here would probably agree that all of what Mr. Cooperman asks for, he should be given, were it within our power to do so. My question to Mr. O'Connell is, how likely is it in the real world that we're going to get any of what Mr. Cooperman wants?

MR. O'CONNELL: Well, first I should say, I do sympathize with the problem Mr. Cooperman articulated. I spent a lot of time as a very junior antitrust associate devising chart after chart, charting all the jurisdictions where a client potentially had to file a merger notification, all the standards, and for every transaction the chart got longer, the file kept crashing, it was too big, it was a growing problem, and I do sympathize, and the Division

recognizes that that's an issue.

I don't know that I could comment on how likely it is that we're going to get the kind of relief that Mr. Cooperman is talking about. But I will say that the Division works very hard with the enforcers in other jurisdictions, and communicates with them frequently when it's conducting investigations in particular, but also on these larger policy questions through the ICN, the OECD, and the other groups to try to alleviate the problems that he's articulated. We do recognize that this is a significant drain on resources, and it makes the merger review process significantly more complicated than perhaps it needs to be.

COMMISSIONER WARDEN: My next question is for both Mr. O'Connell and Mr. Morse, in turn. I found Mr. Osborn's written statement very interesting, and I would like to ask each of you in turn if you think that it is an accurate portrayal, based as it is on one merger, of the attitudes of the merger review people in the DOJ and in the FTC?

MR. O'CONNELL: Well, I can't speak to, obviously, the particular circumstance, and mergers in that industry, as everyone here knows, are not generally something that the Division looks at. I hesitate to make general characterizations about what individuals might be thinking,

but I don't think that that represents the approach that is taken at the Antitrust Division. We do take these cases, each one, on a case by case basis.

The facts of every transaction that we look at, every industry, are different, and the system that we use to analyze these transactions we believe is sufficiently flexible to take into account all of those different facts. I noticed, for example, that Mr. Osborn alluded, in his written testimony, to something of a general anti-merger bias, and while that may be the case on the part of this or that staff member in one or the other agency occasionally, I do not think that is a pervasive bias, certainly not at the Antitrust Division.

COMMISSIONER WARDEN: Mr. Morse, as to the FTC.

MR. MORSE: Well, I have tremendous respect for the staff at the Commission. I've worked with them closely for a long time. There are a large number of incredibly dedicated career civil service people in the agencies who work incredibly long hours at their mission, and that mission is to protect competition and to protect consumers. And as a manager at the staff, I occasionally disagreed with my staff, as well. So I think parties who are approaching the Commission have to educate the staff about the matter that

they're dealing with, and I think for the most part, the Commission gets it right.

COMMISSIONER WARDEN: Carl, do you see anything you recognize in Mr. Osborn's statement?

PROF. SHAPIRO: Yes, I do. I think--sometimes I work for the agency, and sometimes I work for private parties, so I have both perspectives in a way, without being a staff member there. But I think it's natural, human nature, for people to say, well, how do I build my case? How do I make it strongest? and also, on the agency side, to say, we're out here; we have to be somewhat skeptical of what we hear from the parties, and that's going to play out differently with different individual staff members, different cases. But, sure, I see that type of thing sometimes, but again, I wouldn't want to generalize.

COMMISSIONER WARDEN: Do you agree that it's appropriate for an agency to take the position, we don't do risk?

PROF. SHAPIRO: Well, they do risk whether they want to or not. There are--one thing I thought reading Mr. Osborn's statement and hearing him talk was--the other risk is, well, what's the risk of slowing up or stopping the procompetitive aspects, and I would just say--when I have

clients, I say, well, let's get—let's understand what the procompetitive aspects of this deal are, because ultimately it's going to be some sort of balancing, and so the risk has to be considered on both sides.

COMMISSIONER WARDEN: Thank you.

CHAIRPERSON GARZA: Okay.

Commissioner Delrahim?

COMMISSIONER DELRAHIM: Thank you. Let me ask a question that came up in a prior hearing dealing with Section 2, and there seems to be some debate as to whether or not the unilateral refusal to license a patent should be—and if so, in what circumstances should that be—a violation of the antitrust laws? And is there anybody on the panel who would think that the unilateral refusal to license intellectual property, whether it's a patent or a copyright, could be in violation of antitrust law? We'll start with Mr. Shapiro.

PROF. SHAPIRO: Well, yes, it could, depending on, for example, conditions that were imposed associated with the license.

COMMISSIONER DELRAHIM: I should clarify that, unconditional refusal to license.

PROF. SHAPIRO: Well, as you know, we had a hearing that we talked—I was at the hearing where we talked about

this. So generally, no, although it would be my view that there is the situation where there's a change of policy, for example, a misrepresentation to an unconditional refusal from previous licensing. I wouldn't want to—excuse me—that could raise issues, but generally, no, if it's unconditional and just flat.

COMMISSIONER DELRAHIM: Mr. Gilbert?

MR. GILBERT: Well, as you know, there's already the amendment to the Patent Act that says that a refusal to license intellectual property cannot be a basis of a patent misuse. And it doesn't take much of a step to say, well, it can't be an antitrust violation either. So if we're just talking about an unconditional refusal to license, I don't see how that can be an antitrust violation.

Now, I do believe that there could be a set of circumstances in which—I think Carl said it well—refusals to deal is one thing, but a conditional refusal to deal might be another thing. There I would apply similar approaches that we apply to conventional property in thinking about refusals to deal. I don't think intellectual properties are particularly different from other forms of property in that regard, but it does have the protections against an unconditional refusal to deal.

COMMISSIONER DELRAHIM: Mr. O'Connell?

MR. O'CONNELL: I don't know that I have anything specifically to add to that. I generally agree with the statements that Dr. Shapiro and Gilbert have made on that point.

COMMISSIONER DELRAHIM: Mr. Morse, I know you did not come here as a proxy for the Federal Trade Commission, but given your vast experience there, would you like to comment on that, given some of the differences that appear to emanate from the FTC?

MR. MORSE: I certainly would not want to pretend that on this issue I would speak for the Commission. I agree with what's been said: the very essence of intellectual property is the right to exclude others. It seems to me it would be anomalous for antitrust law to impose an obligation to license on a firm that unilaterally refuses to license. And as it's been said, I think the key issue is defining what is unilateral, not through agreement with others, not conditioning, and I think that we should have concerns, not only what's happening in the U.S. with the theory, but globally, where I believe that there is much greater risk in foreign jurisdictions, that the approach of foreign jurisdictions to antitrust competition and intellectual

property could impose an obligation to grant licenses, compulsory licensing, and that the U.S. government should make it a priority in—to other nations on this very issue.

COMMISSIONER DELRAHIM: Mr. Osborn and Mr. Cooperman, anything that you'd like to add to that?

MR. OSBORN: Well, I would hope that a unilateral decision by a business would not be considered a violation of the antitrust laws.

MR. COOPERMAN: I would concur, as well. It seems to me the essence of the patent grant is the right to exclude others, and as long as that is not being abused by misleading parties, inducing them into some understanding, I don't see any reason at all that they shouldn't be denied the right to, or that they shouldn't have the ability to decide unilaterally not to license.

COMMISSIONER DELRAHIM: I should also—I should mention, in the interest of disclosure, my firm does work for Oracle and the medical device manufacturers, which might have some interest in some of the discussions today. Let me ask about the patent settlements, and my time is up, and Mr. Shapiro, you did discuss the issue of weak patents, and the Supreme Court may or may not take up the *Schering* case; they've requested the Solicitor's view, and the FTC has

sought cert in that case. I think everybody recognizes the potential concerns that private parties might create a monopoly, especially after there has been some kind of a ruling on patent validity at the district court. It's been a practice that no longer continues. However, patent settlements prior to the ruling between parties, and especially where there are reverse payments by the patent owner to the alleged infringer has been questioned. And you mentioned you have concerns about the Eleventh Circuit's ruling. What should be the standard?

How should we presume the strength of intellectual property beforehand, or should we, for the purposes of antitrust law, just presume that it's valid and let the patent system address its validity or its strength or weakness? We should just assume that they're all—should be valid; there is no relative strength that should be attributed to it for the purposes of antitrust law? However, if a court rules that it's unenforceable or invalid, then, at that time, it would trigger the concerns of the antitrust law. What would be the right mechanism, and who should be in that position to determine the strength of the validity? And we'll start with Mr. Shapiro.

PROF. SHAPIRO: I think the presumption of

validity—we should take that to mean that, in order for a defendant in an infringement case to show the patent is invalid, the defendant has to show clear and convincing evidence; that's what the presumption is about. It's not about some assessment of probabilities, okay, as I see it. So whether it's before or after any ruling, I believe I advocate a standard that says a fixed payment, call it a reverse payment if you want, from the patent holder to the alleged infringer in excess of avoided litigation costs should be presumptively anticompetitive, with a pretty strong presumption. And, just simply, because I don't want to go all the way to a per se rule, because we don't fully understand these things yet, it seems to me we should be a little open minded, but be presume anticompetitiveness, and the arguments here—the theory I think is very strong that such payments are, themselves, indicative of weakness by the patent holder, so it does not require a technical assessment or a view on exactly how strong or weak the patent is, we make inferences from the presence of the payment.

COMMISSIONER DELRAHIM: Okay. Mr. Osborn, your industry has been affected by this?

MR. OSBORN: Yeah, I would—I feel compelled to say something on behalf of the industry, because we do put an

awful lot of time, effort, and money behind not only our research efforts, but also into patent filings that recognize and protect the results of this research; I acknowledge what Professor Shapiro has alluded to in that we have a very significantly overworked and even overwhelmed Patent and Trademark Office, which perhaps results in a lower level of scrutiny of certain patents. However, I believe that reputable firms in our industry are acting in good faith when they prepare and prosecute patents. We employ scientists, we employ patent counsel, we work with outside law firms, and we work to protect for our shareholders the value of our innovation; I reject the notion that we are just throwing things over the transom to see what will be approved. I know that people who focus on this area have proposed a range of reforms. I was at a panel at Harvard Law School a couple of weeks ago in which patent judges at the federal and circuit level were discussing possible reforms that might aid them in evaluating patents, but I would not support changing the presumption in light of the circumstances.

COMMISSIONER DELRAHIM: Well, without changing the presumptions, and Mr. Shapiro didn't suggest that, are there costs in addition to avoided litigation costs which would justify-

MR. OSBORN: I think there are. It is just a question of two parties in litigation trying to limit uncertainty and risk. Uncertainty in terms of your stock price being held down, because Wall Street analysts want to know how a case will be resolved. There also are costs in terms of business planning and drain of management time. So it's not simply the out of pocket costs that relate to payments to lawyers and experts; it's the uncertainty associated with unresolved, lengthy litigation. We happen to have disputes ongoing with respect to two of our products, and so I know from personal experience that there are a lot of other costs that relate to uncertainty and that would perhaps warrant settlement payments in excess of the pure costs of litigation.

COMMISSIONER DELRAHIM: Mr. O'Connell, I know that the Solicitor General has been asked for his views, and, therefore, the Antitrust Division, so I will, unless you have something to add, I know you would not want to comment on this.

MR. O'CONNELL: I think that's right.

COMMISSIONER DELRAHIM: Mr. Morse, and I apologize for going over my allotted time, if we could just get the views of the rest of the panelists on that.

MR. MORSE: I've written an article on settlements of patent litigation in the George Mason Law Review. I think the general approach that I've taken there is that the proper question here, as in most of the licensing issues under the Intellectual Property Guidelines is, what would have happened in the absence of the agreement, and that can look to different factual proof. One of the questions is, would there have been another settlement?

I'm not sure that it is appropriate, as I think the Commission has in the *Schering-Plough* case, to assume that there would have been another settlement on alternative terms, but in other cases there may be proof of what would have happened in the absence of the agreement.

I do think it's particularly important to draw the distinction between what are sometimes characterized as "partial settlements" and "permanent settlements". The "partial settlement" cases weren't really settlements of litigation at all. The first of the cases the Federal Trade Commission brought in this area were simply agreements that limited competition during the pendency of litigation, and so the argument that there is an efficiency from the settlement of litigation seems to me to be absent in those cases. But in cases such as *Schering-Plough*, where there is splitting of

the patent life, it seems to me particularly important, and the agency ought to be focusing on what would have happened in the absence of the agreement.

COMMISSIONER DELRAHIM: Professor Gilbert.

PROF. GILBERT: Well, a reverse payment can raise a flag, but I'm not sure it does a lot more than that. The problem is, what's a weak patent? We don't know what a weak patent is. You could have a very good patent that gets overturned in court; you could have a poor patent that gets sustained in court. So who knows, really, what there is? It goes back to what—the uncertainty here is so great. And there are efficiencies from settlements. So I wouldn't take the hard-line view about reverse payments that have been suggested by some.

I would like, and I don't know how you'd do this, but there's been certainly a lot of effort to get this message across—that when patents are granted in the first place, there are obvious implications for consumers. If you are granting a patent in an area that really isn't doing much in the way of novelty or what we traditionally associate with the standards for patentability, and similarly, with regard to a settlement, I think courts are conditioned to say that settlements are a good thing, because it's better for the

parties to work it out on their own, but of course, a settlement involving a patent can have implications for third parties, the consumers, so the courts need to take that into account. But I wouldn't say that there should be any per se rules in this area.

COMMISSIONER DELRAHIM: Finally, Mr.—

MR. COOPERMAN: I think I'm in the same camp as Rich. I don't think we ought to draw any inferences from the making of a reverse payment particularly in the software industry where the standards for patenting have been called into question, and the resources of the Patent Office to review prior art have been called into question, just the capability of the staff to marshal their attention at the time of granting patents, I think that's the issue we need to address.

And I think we ought to be sure that when patents are granted, the patent is entitled to the presumption of validity, and to the extent that there is some type of a payment, there are many good reasons to justify it. We've talked about the uncertainty here, and I think that's absolutely correct. There's also the involvement of senior management or senior technical staff in the litigation resulting from the patent and their inability then to

participate in other activities of the corporation, which is an enormous potential loss. So there are lots of good reasons that, given the uncertainty, and the litigation risk and management time—there might be payments that would exceed strictly the cost of the proceeding itself.

COMMISSIONER DELRAHIM: Thank you.

CHAIRPERSON GARZA: Okay, thank you. The witnesses have done a good job in their papers of discussing the theoretical and empirical basis for concern about the effects of mergers or other former collaboration on incentives to innovate and the predictive challenges facing the courts and enforcers.

I'd like to get the panelists' views on how well the current federal enforcement—how well this current federal enforcement at the DOJ and the FTC correspond with what we presently know about theory, data, and the complexities, and do the agencies' Guidelines provide adequate guidance on what their enforcement policies are?

And if you could, in addressing that question, perhaps consider the issue of whether or not you think the agencies are giving appropriate weight in evaluating mergers and other forms of collaboration to innovation synergies, whether you think that the Merger Guidelines' unilateral

effects analysis accurately describes the analysis used by the agencies in those cases where there have been concerns specifically about alleged innovation effects, and how the standards articulated in the collaboration Guidelines and IP Guidelines come into play in the agencies' merger analysis. Professor Shapiro, would you like to start?

PROF. SHAPIRO: Sure, I'd be happy to start. I think the Guidelines, it's already been pointed out, really do dwell on pricing and hardly talk about innovation effects and how they'll be analyzed at all. So I'm actually pretty open to the idea that's been—that I think Howard Morse suggested, that some addition to the Guidelines, some amendments along these lines would be useful.

I think focusing on unilateral as opposed to coordinated effects, but we're not talking about pricing; we're talking about product introduction, R&D efforts, both sides of it—how do they think about anticompetitive effects, and what sort of factors would be most convincing or not convincing regarding synergies and efficiencies? I think there is sort of practice that people who do this in and out know about, but really, you can't tell from the Guidelines. So there could be some important guidance for the business community in that respect.

I don't sense that things are out of whack; I think it varies a lot from one case to the other and depends on the staff, and that's the sort of area where guidelines might be pretty helpful. I just did a--was involved in a software merger where the concern at the agency was very much about innovation rather than pricing effects, whether new products would be introduced in a timely manner, and whether as much time would be spent with software engineers developing them, and I thought the staff was receptive to what I thought were sort of sound economic arguments about that, but we couldn't really point to the guidelines very specifically to help us.

CHAIRPERSON GARZA: Thank you.

PROF. GILBERT: If I could follow up on that, I'd agree that some amendments to the guidelines, particularly to the IP Guidelines, would be useful, because we know a lot more now than we did ten years ago, certainly about things like patent pools, complementary products, network effects, areas where I think more guidance could be given, but I also agree; I think the agencies have been doing a fairly responsible job in applying the concepts that are known.

CHAIRPERSON GARZA: Thank you. Any other witnesses have any comments?

MR. O'CONNELL: I would like to say that I think,

generally speaking, the Guidelines set out—the Merger Guidelines, all the agencies' guidelines—a flexible, analytical process, but that is all that they lay out; they're not meant to address every possible theory or even every way of looking at a merger. They instead set up a framework within which the agencies, based on the facts that they have in front of them in a particular transaction, can—a process that they can follow in assessing the likely impact of a transaction. The Division doesn't believe that the Guidelines need to be amended to reflect or address additional theories, because we believe that those theories are already incorporated where appropriate in the analysis that we conduct.

CHAIRPERSON GARZA: Can I ask Mr. Osborn and Mr. Cooperman, as our representatives of industry and representing companies that have been through the merger analysis at the FTC and the DOJ, do you have any comments in response to my question?

MR. OSBORN: Well, of course my testimony focused on my recent experience with the FTC. It's just one anecdote; it may or may not be fairly reflective of how things work across the board, but as I've said today, my observation was that there should have been more weight given

to innovation in the broader sense of the word, that mergers can support the fostering of further product development and more effective commercialization in bringing products to consumers. So perhaps guidelines that would address that point could change the perspective that is brought to bear in an individual merger proposal.

CHAIRPERSON GARZA: Mr. Cooperman, do you have anything to add?

MR. COOPERMAN: Just that I think it has been a while since the Guidelines were issued, and I think it probably would be worth while to take a look to see whether or not some of the features that have emerged over the last ten years or so have been appropriately considered within the Guidelines. I think in our industry, for example, the concept of network economies is such a pervasive consideration, and I think some specific attention there would be warranted.

CHAIRPERSON GARZA: Thank you. Commissioner Jacobson.

COMMISSIONER JACOBSON: Thank you. Again, just thoroughly excellent presentations, both written and oral, and I know all the Commissioners are extremely grateful. I just want to focus on one limited set of questions, which I

mentioned before the hearing today to Professor Gilbert, and I'm going to start with Professor Gilbert. What is the state of the empirical evidence today on the Schumpeter versus Arrow debate about whether a monopoly or competition is more conducive to innovation?

PROF. GILBERT: Well, there have been many, many studies that have been done. I would say 20, 30, 40 studies, serious studies, empirical studies of the relationship between competition and R&D. And certainly the vast majority of them have come to the conclusion that competitive markets tend to be associated with—they either come to the conclusion that competition is good for innovation, or some of the studies that have used a lot of controls for different industry circumstances have found no effects at all. There's also been some work showing that, in certain types of innovations where appropriation is very difficult, concentrated market structures have been more innovative. But those results rely on either process innovations or other types of innovations where appropriation is very difficult. Most of the results, I would say, are either neutral or favor competition for innovation.

COMMISSIONER JACOBSON: Professor Shapiro.

PROF. SHAPIRO: Well, I've conducted my own

empirical study, which has consisted of reading strategy documents from dozens and dozens of companies associated with the mergers, okay. This is a highly systematic, quantitative, econometric exercise, I assure you. (I'm joking about that.) And it is very plain to me, and I think, by the way, the testimony, for example, of the FTC hearings on innovation some years ago now showed the same thing, that basically all of these companies, in all the industries we're talking about here—it's like, what are the other guys doing? Is somebody going to come up with something new and eat our lunch? We'd better get to work on this? They hired somebody; they're working on this project; we've got intelligence. And that's the fear; that's the motivator.

Fear is a powerful force, and so I have no doubt in my mind, based on this study, as I am calling it, that competition in that sense is a very, very powerful force to innovate. Now, in practice, does that mean a four-to-three merger among companies who are doing software in a particular category is going to be anticompetitive because we've reduced competition? No, of course not. If there are still a couple of players in there who are—the merging entity is going to be very afraid of some threats from the outside; the fear can stay plenty high, and innovation can stay up.

COMMISSIONER JACOBSON: A question for Professor Gilbert, I guess, since he's not relying on Shapiro's life experience, but rather on-

PROF. GILBERT: I always rely on-

COMMISSIONER JACOBSON: What are the best sources for us to go to get the highest level of learning on the current state of the empirical debate?

PROF. GILBERT: Well, thank you for that question, because I did supply-I just recently-I don't want to say it's the very best source, but I did just write a survey of competition and R&D for the National Bureau of Economic Research, and it's a long survey, I supplied that as part of my testimony, not assuming that everybody would read it, but it was my attempt to summarize the state of knowledge in that area.

COMMISSIONER JACOBSON: I have nothing further.

CHAIRPERSON GARZA: Okay, thank you. Commissioner Kempf.

COMMISSIONER KEMPF: Let me start with something and make a comment and see if anybody has any questions. There's a fair amount of discussion in the various submissions about dynamic analysis versus static analysis. My own view is that it's been clear since at least the

General Dynamics case that it's only a dynamic analysis that counts and that a static analysis is only relevant in an industry where the static—the industry itself is static, or, to state it differently, where the dynamic and static analyses are the same. And the problem occurs because so much of the data we have to look at is backward-looking rather than forward-looking. Market shares are by definition backward-looking.

And the *General Dynamics* case sought to reconcile those drawing on *Brown Shoe* with the statement that, of course, they're a great starting point, but only, I think, are the words they used, a further analysis of all the relevant factors counts, and you have to start somewhere, so I'm not troubled by the fact that you start with static data. But the discussion that, gee, there should be more dynamic analysis thing I think is settled by *General Dynamics*. Does anybody have a quarrel with that?

[No responses]

Okay.

The Guidelines themselves grew out of a couple of decisions in the mid '60s, where, as Justice Stewart I think was famously observed, "The sole consistency that I find is that. . .the government always wins." And the business

community said, gees, we spent a lot of money to do all this stuff, and it's a crap shoot; we need some guidance. But I have never viewed them as a proxy for what the law is or should be.

Obviously, there's a closeness to them, but not an identity, in my judgment. And I have always thought that they provided a sensible approach for the business community to know what, as a starting proposition, the government was likely to scrutinize closely and perhaps challenge that it was always open for merging parties to come in and say, gee, you shouldn't do this, and whether it's a two-year test or a five-percent test or anything else, those were always benchmarks for enforcement likelihood, not for illegality, and it was always open for someone to come in and say, gee, to build a widget plane, it always takes three years. They'll start building them immediately, but they won't be open until the third year. Yet the impact will be felt immediately, because there will be holes in the ground and widget plants going up. And my question is, does anybody have any comment on that?

PROF. GILBERT: I'd like to say a little bit about that. Merger analysis is always forward-looking; it has to be by definition. And we try to look for competitive

conditions that are going to say something about the future, whether it's in the near term or a couple of years out.

Innovation analysis is clearly an attempt to do that.

And I'd like to take the opportunity to say something about innovation market analysis. It's very much—I think it's very much like product-market definition in that no one assumes that defining a product market is going to tell you the answer as to whether or not prices are going to go up or go down; at least that's not the conventional economic wisdom today. And the same with an innovation-market approach; that doesn't tell you whether innovation is going to go up or go down; it's just a screen, just like a product market is a screen to identify areas where you don't expect prices to be affected by a transaction. Once you've identified those transactions where you could either have price effects or innovation effects, that's when the hard work starts; that's when you have to actually see, are the conditions going to favor innovation, or discourage innovation, or result in a price increase or not result in a price increase?

And certainly my view is that an innovation analysis could very well lead to a conclusion that a transaction is going to promote innovation even though it may

have some price impacts, even if it might have some undesirable price impacts. Or the opposite could be true; you could reach the conclusion that a transaction would harm innovation. But it's not the product market analysis, or it's not the innovation market analysis that gets you there; that's just the first step in the real analysis.

COMMISSIONER KEMPF: Let me follow up on that. As I read the papers, essentially everybody agrees that innovation is important, and in reviewing transaction likely competitive effects, it is important to consider what its impact will be on innovation. My question goes from that to this: I can see that in, how will this impact innovation on widgets, or whatever the product is. But what about innovation as its own separate self-contained market, saying, well, I'm not talking about innovation in widgets; I'm talking about innovation as innovation, and I'm having a separate market for innovation?

PROF. GILBERT: Yes, I think innovation markets are useful in that instance, because if you know exactly what's going to happen, or you have a very good idea of the probability of developing a particular type of widget, you can use the potential-competition type approach to evaluate the competitive effects of a transaction.

I think innovation markets are particularly useful when you have a situation where you know people are doing R&D in an area that everyone agrees is very important. I use the example of gene transplants to treat macular degeneration of the retina; there are no products to do that yet, but people are working in that area.

So you can't use the potential competition analysis because potential competition assumes you have a product market in which competition would be affected. Here you have innovation in a very important area that's likely to lead to something, so you care very much about whether innovation is going to be promoted or retarded in that area, and I think an innovation analysis is appropriate for that type of situation.

COMMISSIONER KEMPF: Anybody want to comment, particularly someone who might disagree?

MR. MORSE: Well, I want to disagree not with that point, but with part of I think your previous question. On that point, to be honest, I am in agreement with Rich on innovation markets, particularly drawing attention to the issue of the pace of innovation and not just the price in the future market, and that focus on the pace of innovation is important. But I also wanted to address your question

regarding the Guidelines.

I think it would be a mistake to understate the importance of the Merger Guidelines, not only in counseling, where it's important, but also in litigation. I think that there are any number of cases in the last 10 or 15 years where courts have relied on what the government has said in the government's Merger Guidelines, and I think that's generally positive.

I think the Merger Guidelines have been particularly successful because they are based on a lot of experience in looking at mergers, not just a bunch of theoretical policy folks sitting in the back room, but the government actually writing its Guidelines to catch up with what they've been doing over the years. But the Guidelines are also important to us in helping our clients to understand the government thinking. It is a wonderful educational tool for the business community, as well.

COMMISSIONER KEMPF: Carl.

PROF. SHAPIRO: I think the innovation-market analysis should really be rooted in what's going to happen in future product markets, and that's an important discipline. Take a Defense Department merger; so maybe there are only two or three companies who the DOD thinks are really in a

position to develop the next-generation fighter jet or helicopter, whatever; it's fine to say, well, these are the companies we think have the capabilities or are doing the R&D, perhaps in that case paid for by DOD, but ultimately they're saying, six years from now, when we think we're going to have the next procurement, we don't want to lose one of these; we want them two or three or whatever number to be there; we need and want the competition in the future.

So with that discipline, I think looking at current capabilities is fine if you really know who can identify who has those capabilities, which is an important discipline, as well.

CHAIRPERSON GARZA: Okay.

Commissioner Valentine?

COMMISSIONER VALENTINE: Thank you. Since I come late in the line here, I am going to actually ask a question more related to the subject matter of our next panel, and if you don't feel prepared to answer, would prefer to think about it and submit written comments, that's fine too. One of our panelists this afternoon has suggested that, with respect to litigation, there be a proposed amendment to the injunctive relief section of the Patent Act, which essentially allows court to issue injunctions consistent with

principles of equity, and he proposes the following amendment: "In determining the right to injunctive relief of a patent owner who does not participate in the market for a patented invention against an infringer who did not act", and I think he means to say willfully or intentionally or knowingly, "copy the invention from the patentee or otherwise act willfully, the court shall consider, where relevant and among other factors, the portion of the defendant's product that constitutes the inventive contribution as distinguished from other features of the product or improvements added by the infringer." I'd like to know peoples' thoughts on this proposed modification. Rich, you look ready to answer.

PROF. GILBERT: Well, I did read the testimony, so I had a chance to think about it. Certainly, it addresses—we have many industries—semiconductors are a good example—where a particular product can be covered by just thousands of pieces of intellectual property, whether it's patents or copyrights or trade secrets or whatever. And someone can pop up and have one tiny little piece, and that can be the basis of an injunction against the whole product.

And that piece, the actual contribution of that piece, could be very, very small, and yet it can—it's kind of like the last person to agree to sell some land to build a

freeway, can get the whole value of the freeway. So I think it's a sensible policy recommendation to have some kind of apportionment. There might be other approaches, maybe allowing royalties with some multiple and denying injunctive relief all together. Another possibility would be to make damages, allow a defense in damages to include some measure of the invent around costs, because there are some circumstances where you can get millions and millions of dollars worth of damages for a technology that could have been invented for around \$100, and so that is—I find could be another way of doing this.

I think one of the important issues raised by that proposal is that many of the problems of the patent regime that face so many industries today I think could be addressed, if not solved, but at least addressed, by thinking about redesigning damages and how we think about damages, rather than having to go back and rewrite the patent laws.

COMMISSIONER VALENTINE: Okay.

Carl?

PROF. SHAPIRO: I'm very tempted to want to support that, because I think problems of hold-up patent thickets are very real. However, everybody just agreed that a unilateral unconditional refusal to license was not an antitrust

violation at least, and I'm concerned; how are we going to figure out—now you're going to have a permanent mandatory licensing regime, I guess, for these—in a situation; if there's no injunction issued, there's going to be some royalties that will have to be paid; somebody is going to have to figure out what those are. So I find it difficult, but I think maybe a better solution to avoid hold-up is to make sure that the defendants in these patent cases have plenty of time to invent around, so they're not held up, so there will be a lag before imposing the injunction, but eventually the injunction would issue, okay, and then the damages or reasonable royalties should very much recognize this type of thing, the percentage of the product that's the contribution to the patented invention; if it's one slice, we should have much smaller reasonable royalties. But eventually I think the right has to be reasserted, as much as I hate to say that, but I think you can avoid hold-up by giving time before the injunction enters.

COMMISSIONER VALENTINE: Got you.

Mr. Morse?

MR. MORSE: I share Carl's concerns. I just want to point the Commission to the fact that this issue, the patent, what's sometimes called the patent-control issue, and

the kind of provision you're talking about was in some proposed legislation, I believe, earlier this year. I think the patent reform--

COMMISSIONER VALENTINE: That's hopefully described in the testimony; don't worry.

MR. MORSE:--is going--has been debated on the Hill, and that, as I understand it, the lead legislation has dropped--

COMMISSIONER VALENTINE: That's all--we've got all that before us. Thank you. One more quick question; I thought that I was essentially hearing from all of the witnesses, plus or minus a little, that we shouldn't have new rules for high-tech industries, and that the antitrust laws that we've got out there work pretty well, except for the timing, and we obviously do all sympathize with Mr. Cooperman, and I fully endorse his proposal and think we should do it, except that, possibly, we have two lead agency investigators so we don't get national champions. But in any case, if that's what I was hearing, then how do we square that with the concept that maybe the Merger Guidelines, in fact, don't sufficiently accommodate innovation and we ought to be changing or tweaking the Merger Guidelines to better accommodate innovation? Or what is a specific change to the

Merger Guidelines?

And I really want pretty specific changes now rather than grandiose thoughts, because somebody has got to write this stuff eventually, that we could make to better accommodate innovation that wouldn't be some kind of special rule, special pleading for high-tech industries? Thoughts, anybody? Rich's hand is up first.

PROF. GILBERT: I think the value of writing new Guidelines, whether they're new IP Guidelines or new Merger Guidelines, is not so much to change the way the agencies do business, because I think they do business now by drawing on all the available theoretical and empirical evidence, but rather, the value is, as Howard said, in educating the industry and practitioners about how the agencies might look at a transaction and be useful in that manner, because we do know some things now. I mentioned patent pools, when patent pools are desirable, when they're not desirable, some conditions on patent pools that would make them—that provide safeguards against antitrust violations, the issue of pricing complementary products, when that is beneficial, and when it's not. We might also add something about what I would call an innovation-market defense for mergers, under what conditions might innovation be—would a reduction in market

competition be associated with an enhancement of innovation? So these are things that are in the literature, both in theory and empirically, that the agencies know about, so they can apply it, but it's not communicated to the larger universe of people who work in this area, and it could be useful to do that.

COMMISSIONER VALENTINE: Carl—Mr. Shapiro?

PROF. SHAPIRO: Here are three things you could do, you could—they could say something about why it would be rare, I think, to have a coordinated effects case involving R&D or innovation. On the unilateral effects side, the second thing, what do we do, since we're not—if we're looking at product introductions instead of the pricing issues, we presumably would look at how much one—when one company introduces a product, how much it takes business from the other companies' products, and that would be a central thing to look at, and how that affects incentives to bring out new products, and how that would be changed by the merger, so articulate how unilateral effects arithmetic and logic would work, and then talk about what would count as a merger-specific R&D efficiency. There are some offsets. If you're combining complementary products, that could be very procompetitive; will that be offset by potential price

increases due to unilateral anticompetitive effects, and how would combining research synergies be evaluated? Those things could be articulated. I'll give you language this afternoon.

COMMISSIONER VALENTINE: Thank you.

Anyone else?

MR. OSBORN: Well, I think it's a good question. The frustration that I felt as I went through the process, though, probably had more to do with sort of a cultural perspective. I'm struggling a little bit to come up with specific language. I guess it would perhaps be along the lines that Carl suggested, that at least as to pharmaceuticals and biotechnology, there might be some specific consideration given to the ability of the acquired company to further develop and effectively market the product, as opposed to a more focused analysis that relates purely to potential entry and effect on price.

COMMISSIONER VALENTINE: I'll ask you later who your outside counsel were and who the staffers were. I better pass my time.

CHAIRPERSON GARZA: Okay.

Commissioner Burchfield?

COMMISSIONER BURCHFIELD: Thank you, thank you all.

To all the panelists, this has been a very insightful discussion. I want to start by going to Mr. Cooperman. You have tabled a proposal that is drawing universal praise apparently from the panel and from many of our Commissioners. I want to ask you, though, about one statement in your written statement, and that is, you stated on page four, that the fragmentation and the resulting confusion related to international reviews of antitrust far exceeds the similar problems often observed as a result of the parallel antitrust jurisdiction shared by the federal government and the 50 states.

And I wanted to ask the other panelists, particularly Mr. Morse, in your private practice capacity, and Mr. Osborn, in your capacity as in-house counsel who deals with at least potentially the international agencies, whether you have also found the international issues of coordination to be far more problematic than the issues of coordination among the states?

MR. OSBORN: I can answer briefly. We have completed acquisitions in Europe and in the United States, but they have tended to be of a far more limited scope than those that Oracle is engaged in, and so perhaps we had occasion to deal with authorities in Belgium and France, but

not, in that case, the United States agencies, let alone 25 other countries, so our experience simply isn't as vast.

COMMISSIONER BURCHFIELD: Mr. Morse.

MR. MORSE: Well, on the merger front, there's no question that the number of jurisdictions reviewing mergers creates difficulties, but we deal in a world of sovereign governments, and so the question is how we solve the problem, and I do believe that my sense that the ICN process has been a positive one, that the ICN has developed best practices for jurisdictional review and has made some of those countries that appeared on all of our charts--well, why is it that we're having to file in country X? Some of those countries have moved off of that list. So there has been progress, and I think, to the extent that Mr. Cooperman is urging--

COMMISSIONER BURCHFIELD: How do you compare that, though, to the experiences you've had domestically with the states reviewing mergers?

MR. MORSE: I have not had a lot of personal experience. I think that the states have jumped in on only a small number of mergers other than those that are particularly local where they do jump in. Obviously, they have got involved in some mergers that we think have national impact, I don't have much personal experience there. I have

had experience with the states on some of the other issues that we've talked about, and I'm not sure that the states are all on the same page as the federal government on some of the issues such as unilateral refusals to license. I am hopeful that that is a question of educating the states so that they end up in the same position.

COMMISSIONER BURCHFIELD: Let me ask, turn to Mr. Osborn, for what may very well be my last question, and that is, you referred in your statement to the particular situation you had in a merger your company was trying to complete in which one of the important assets was technology that your company would have been better able to commercialize than the target company, and the question that I would ask you is, and then I would also like Mr. O'Connell's view on it, is, to what degree is the ability of the developing company to license that technology, as opposed to allow itself to be a merger candidate, relevant, or should it be relevant to the analysis of the antitrust agencies as they review a merger?

MR. OSBORN: Well, it's my understanding that exclusive-license arrangements are subject to Hart-Scott-Rodino review, so I suppose that would be your starting point. Whether or not a transaction is structured as a

license or as an acquisition, I'm not sure it really affects the analysis that we're talking about here today. There are a lot of business reasons to why a firm might want to restructure a deal as an acquisition rather than as a licensing transaction.

The transaction that I did not mention in my written testimony, but I alluded to it in my brief opening statement, was a two-part transaction in which we initially licensed a product from a smaller company in France, took it through clinical development, received FDA approval, did additional studies, received a number of additional indications for it, and along the way, ended up acquiring the company because their CFO decided that it was time for him to sell the firm. And so whether that analysis would have changed early on, certainly the product was more valuable and more developed at the time we completed the acquisition, but I don't think that particularly mattered.

COMMISSIONER BURCHFIELD: Well, hypothetically, you can envision a situation in which a developing company is one of the cutting-edge thought leaders in an industry, and there might be some concern, maybe there isn't, that the acquisition of the company might have an adverse effect on further development, whereas the licensing of the particular

invention might allow commercialization of that product, as well as continued development.

MR. OSBORN: We would have been delighted to have either acquired or in-licensed the OraVescent Fentanyl product from CIMA Labs, but the CIMA Labs shareholders and their board wouldn't have been delighted to do that deal.

COMMISSIONER BURCHFIELD: From the Justice Department's perspective, Mr. O'Connell, can you comment on the role, the alternative an exclusive license might play in the sort of situation that Mr. Osborn has described?

MR. O'CONNELL: I guess if I could ask for a clarification; is the question whether we would have a view one way or the other way if it were an exclusive license as opposed to an outright merger?

COMMISSIONER BURCHFIELD: That's correct.

MR. O'CONNELL: I think--well, it would depend I think on the facts of the case that we had in front of us. I think the question that we would have to address in either case is, what's the likely effect of the proposed transaction, whether it be an exclusive license or a merger, on the market, on competition down the road, and I could easily see facts where either could be a problem, where neither could be a problem. It's certainly something that we

look at frequently. But the structure of the transaction is less important than its effect on competition.

COMMISSIONER BURCHFIELD: Okay, thank you.

CHAIRPERSON GARZA: Commissioner Yarowsky.

VICE CHAIR YAROWSKY: Okay. I'll wrap this up just with two questions, and that will be the morning. The first one, to Mr. Osborn. I understand your point that, in some industries, mergers and acquisitions may be absolutely indispensable. You can commercialize quicker, you can maybe develop a uniform offering nationally, all the things that maybe some small start-up companies can't do. Let's say that's the case in a certain situation.

But let's say, in effect, that acquisition is that intergenerational change—the pace of generational change in that particular industry doesn't have to be the pharmaceutical or biolife industry, but whatever industry we're talking about would slow down, because, let's say, the smaller company was a disruptive—company that kept whose whole—was to, every 18 months, move forward, move forward. Let's say, after the acquisition occurred, that pace slowed down, not necessarily for any nefarious reason or conscious reason; it just slowed down. How would one balance those effects competitively in that kind of situation?

MR. OSBORN: Well, first of all, I didn't mean to suggest that you wouldn't necessarily wish to take into account factors other than the ones I highlighted. I am simply suggesting that I see an imbalance and a lack of appreciation for what you've set out.

Again, just from a practical business perspective, what I would observe is that it's just a very dynamic business. Even if you were to take it down to the level of an individual acquisition, people often don't stay with the firm after the acquisition. You acquire the assets of a firm; some of the folks stay, but many of them leave.

People who have the kind of character and perspective and entrepreneurial capacity for risk, that's what they want to contrive to do; so they're going to go out and do other things. That's why there are always thousands of these companies at any given time, but they're always different. So in the aggregate, I don't think you would likely lose much, although again, I wouldn't say you shouldn't think about those issues in the course of evaluating a given transaction.

VICE CHAIR YAROWSKY: Any other comments?

PROF. SHAPIRO: A quick comment; take the case you've got a developing company, and they've got this great

product, but they're not in a position to commercialize it, and then there's the incumbent product, which is the main one that they will be taking business away from, wants to buy them. You could say, well, look, the little guy is not going to commercialize it on his own, so, what's the harm? But look, you probably look at those documents, and the little company says, well, we'd love to sell it to these guys if they pay enough, but if we don't sell to them, we're going to have another strategy for getting to market, and it seems to me it would be sort of silly not to consider that in figuring out the genuine effects of the proposed transaction.

VICE CHAIR YAROWSKY: Last question, and this I think is going to draw from Commissioners Jacobson's and Valentine's attempts to try to see how to—some of these issues. What more needs to be done, both empirically and analytically, to bring innovation to the Merger Guidelines? I may learn this after Carl jots some things down at lunch, but let me just say why I rephrase that question one more time. We've heard that the Merger Guidelines of '97 hardly mention innovation. This really amazing survey that you just took us into, Professor Gilbert, even in your written testimony, really shows a rich, diverse set of empirical research findings that are often based on industry

circumstances and other variables, but there's certainly not a unified field theory. Unfortunately, for public officials who make policy in at least two branches of government, and those are probably the only two that should be making policy, you almost need a unified field theory or at least some well accepted finding so that someone then will sit down and write something in a guideline or in a statute so that a judge, if it ever reached the judicial level, would be able to apply it.

In no way to take away from the amazing field of innovation, we are not quite there yet, with all the work that's gone on, to be able to take that next step, not that that's the most important step. Research is important in and of itself, but to take the next step to the policy-making level—I think that's why—I heard a couple other Commissioners—that, as well, and that's my last question really.

PROF. GILBERT: If I can respond.

VICE CHAIR YAROWSKY: Yes, absolutely.

PROF. GILBERT: We aren't quite there yet. People have been working hard on innovation and its relationship to competition for over 50 years, and just the paper count in this area is staggering. I keep reading this literature, and

every time I read it, I find another paper that has been written in this area that I should read. I think it's unrealistic to expect that we will ever have a unified theory, but I don't think that means we should disregard this issue. We don't really have a unified theory of the relationship between market structure and prices either, because there are lots of things that can happen there as well. What we will have is a better understanding, I think, of when innovation is likely to be a concern in a merger case or in a Section 2 case and when it's not going to be a concern, but any determination would have to be very highly fact specific, look at the record in the case, and bring in individual circumstances. I don't think we'll ever be able to have a "simple rule" that will give us the answer.

VICE CHAIR YAROWSKY: And I want to hear others, but do you think we'll ever reach the point of being able to weigh these factors, that without have a unified field theory, kind of the next step down would be, if there was a way to judge them, balance them, and weigh them, so that you actually then could reach a conclusion?

PROF. GILBERT: I think we can do that, much as we weigh efficiencies and anticompetitive effects in a rule-of-reason analysis. I don't think there's any reason we can't

also weigh innovation effects if we're fairly confident of them, and we know that these innovation effects can be very-- can be dramatic.

VICE CHAIR YAROWSKY: Okay.

CHAIRPERSON GARZA: Well, thank you very much to the panelists, again, for both your papers and your testimony here today. And while I'd like to be able to tell you that's the last you'll hear from us, I can't make that promise; it's conceivable that we'll want to follow up with you on certain things. But I'll also tell you that the Commission's doors and windows are open. We have an Internet portal. So if there are any other additional papers or thoughts that you'd like to get to us for us to consider, please feel free to do so. Thank you.

MR. HEIMERT: The Commission will adjourn for lunch and resume at 12:45 with the panel on patent reform.

[Recess.]

Panel II: Patent Law Reform

CHAIRPERSON GARZA: Thank you very much to the panelists this afternoon for your very thoughtful written testimony and for coming here to subject yourselves to our questions this afternoon. Let me just very quickly go over how we want to proceed. First, I'm going to ask that each of

you summarize your written testimony in short, five minute statements. There are boxes on each of the tables with red, green, and yellow lights to help you gauge where you are in that five minutes. We've taken great care to read all of your statements, I can assure you, and we hope to cover the major points in our questioning. So if you could try to keep it to five minutes, we'd appreciate it; it'll leave more time for a discourse between yourselves and the Commissioners.

After each of you have given your separate statements, then Commissioner Delrahim will be the lead questioner for the Commission. He'll have about 20 minutes to put questions to the panelists, and then we will give each of the other Commissioners about five minutes to ask follow-up questions. So that's how we'll proceed this afternoon. And with that, we usually honor our guests from the government first, and so, who all is that? Susan—it's just Susan now?

MS. DeSANTI: We have two government witnesses, so we need a second rule.

CHAIRPERSON GARZA: Okay. Well, we're going to put ladies first, so Susan DeSanti, we'll start with you, if you can summarize your written testimony.

MS. DeSANTI: Thank you. Thank you for inviting me

to join this afternoon's discussion of patent law reform, which is a topic on which the FTC has produced an extensive report. In these brief remarks, I will discuss the FTC's activities in this area. And, rather than delve into the particular details of the FTC's recommendations for patent reform, I'd like to share some of what we heard from business people about how patents operate to promote or deter competition and innovation in their particular industries.

This broader context may best illustrate how patent law relates to the work of the Antitrust Modernization Commission. The views I express are my own and do not necessarily represent those of the FTC or any Commissioner, although the Commission has authorized me to appear and provide this statement.

Competition and patent law stand out among the federal policies that influence innovation. Both competition and patents can foster innovation. But each requires a proper balance with the other to do so. As antitrust practitioners have learned, overzealous antitrust enforcement, such as that during the 1970's, can undermine the innovation that patents can promote. Conversely, an invalid patent can harm competition. To examine the current balance of competition and patent law in policy, the FTC,

together with the Antitrust Division of the Department of Justice, undertook joint hearings in 2002. The FTC's report, issued in 2003, discusses and makes recommendations for the patent system to maintain a proper balance with competition law and policy. A second joint report by the FTC and the DOJ will discuss and make recommendations for antitrust to maintain a proper balance with the patent system. We are working with renewed vigor on completing that report.

The hearings included testimony from more than 100 written submissions and 300 panelists. Business representatives were mostly from high-tech industries, pharmaceuticals, biotech, computer hardware and software, and the Internet. And hearings participants found much to praise in the current patent system.

Nonetheless, many participants in and observers of the patent system expressed significant concerns that, in some ways, the patent system is out of balance with competition policy. A global concern that representatives from each of the four industries described was that poor patent quality can stunt incentives to innovate. A poor quality or questionable patent is one that is likely invalid. Hearing participants raised concerns about the number of questionable patents issued.

Questionable patents can deter or raise the cost of innovation. Professor Jonathan Levin of Stanford identified three economic consequences that may flow from issuing patents of questionable validity. First, such patents may slow follow-on innovation by discouraging firms from conducting R&D in an area out of fear that they may be infringing. Second, if a competitor chooses instead to negotiate a license to and pay royalties on the questionable patent, the cost of follow-on innovation and commercial development increases due to unjustified royalties. Third, if instead the patent is challenged in litigation, the ensuing costs are a drain on the system.

These three economic consequences are not the only costs associated with questionable patents, however. In some industries, such as computer hardware and software, firms can require access to dozens, hundreds, or even thousands of patents to produce just one commercial product. In industries with such incremental innovation, questionable patents can increase defensive patenting. The need to develop extensive patent portfolios for defensive purposes diverts funding from R&D into the obtaining of patents.

In its Report, the FTC made several recommendations for patent law. I will only speak to the last area of the

FTC recommendations, a broader policy perspective for patent law. It is this area that might be most fruitful for consideration by the Antitrust Modernization Commission. All of you understand quite well how new economic learning, most generally associated with the Chicago School thinkers, brought an updated economic framework to antitrust that, among other things, emphasized the importance of seeking to understand efficiencies, as well as possible anti-competitive effects associated with particular business conduct. The FTC recommended that patent practitioners similarly expand their consideration of economic learning and competition policy concerns in patent law decision-making. The Supreme Court has made clear in several decisions that there is room for policy-oriented interpretation of the patent laws. Indeed, to find the proper balance between patent and competition law, the FTC stated such policy-oriented interpretations are essential.

Finally, the statute that created the AMC charges it with examining whether the need exists to modernize the antitrust laws and to identify and study related issues, among other things. Antitrust law protects competition and the competitive process by preventing certain types of conduct that threaten a free market.

For the last 20 years, antitrust law has recognized enhancing consumer welfare as the single unifying goal of competition policy. Antitrust's focus on consumer welfare reveals that governmental impediments to competition can be as harmful to consumers as private business restraints. As illustrated by a wide variety of business testimony, the prevalence of poor quality patents is an impediment to competition, and it is an impediment that by definition is governmentally created and, like private business restraints, harms consumer welfare. The AMC may wish to consider the issue of patent law reform in this context. Thank you for this opportunity to speak, and I'll be happy to respond to questions at the appropriate time.

CHAIRPERSON GARZA: Thank you. Mr. Pinkos.

MR. PINKOS: Thank you very much, and it's a pleasure to be with you all today, and it's wonderful to see the Commission in action. I had the opportunity, in my former life as a staffer to the House Judiciary Committee, to help work on the legislation establishing the Commission, and actually the greater battle was getting the funding for the Commission so it could actually operate.

I never thought at the time that I would necessarily be speaking with you all in this capacity, but

circumstances change. So it's really good to be here and to have an opportunity to talk with you all about America's intellectual property system and the issue of patent reform as part of your broader effort to make recommendations on antitrust law modernization.

I want to emphasize that the U.S. Patent and Trademark Office wholeheartedly affirms and supports the underlying principles of America's system of IP protection. These principles have helped propel us from a nation that we all know as a small agrarian society to the world's preeminent technological and economic superpower, and as evidenced by Article One, Section Eight, Clause Eight to the Constitution, our founders understood that a property interest granted to inventors for a limited period of time would create an incentive for innovation and competition. And we've seen for more than 220 years the economic success story that that has spawned, and our nation has remained committed to and clearly prospered from the vision of our founders. You may have learned through some other testimony that you received that IP-based enterprises make up the largest sector of the U.S. economy, and that a recent study came out showing that its worth is between \$5 trillion and \$5.5 trillion dollars, which is about 45 percent of our GDP.

And IP-based industries, including entertainment, information technology, and biotechnology, are our nation's number one export, and they continue to need the protection that our intellectual property system provides. And some, of course, talk about the tension between intellectual property law and antitrust law, and I think, oftentimes, this arises from the belief among some that patents are a form of a monopoly, and I think that, again, it depends on how you define monopoly.

But a patent allows an inventor to exclude others from using or selling the invention without their permission, but it's not really, in our view, a monopoly in the antitrust sense. That's because, in exchange for receiving a limited grant, inventors must fully disclose their inventions in 18 months for all the world to see, study, and improve upon. And, looking across the world, what we consistently see is a high correlation between a country's economic strength and the vitality of its patent system. And, of course, there are many factors that weigh into that, but it's no coincidence that the U.S. stands at the top of the list of the most successful economic countries, with also the most vibrant intellectual property system. Now, of course, the USPTO is uniquely situated in the U.S. government as the one agency

that solely focuses on IP, whether it's on our business side of things, examining patents and trademark applications, or on the policy side. So, we very much welcome the viewpoints and the suggestions by outside parties as to how the system could work better. And really, there's no shortage of views on the patent system and what could be done to better process patent applications and evaluate them, and that's a good thing. I think that it's good for the country to be focused on such an important part of our economic system.

We've taken a close look at the NAS and FTC reports and found some things that we're very much in agreement upon, and we appreciate their insights and views. And we're also constantly considering how to do things better on the inside. What can we do within our powers and parameters to make the patent system better? We're focused on reforms that improve patent quality, first and foremost, and, of course, reduce the tremendous backlog of applications that are waiting to be examined.

Today we have a backlog of approximately 600,000 unexamined patent applications. And to put that in perspective, if we were to close our doors today, it would take about two years to work off that backlog. And then when we opened the doors again, we'd have over 850,000

applications probably sitting at the door if our growth rate continued, so it's quite a daunting challenge. Still, knowing those statistics, we're the quickest and least expensive patent processing office in the world. But if we don't implement some operational policy changes, the backlog will continue to grow at unacceptable proportions. And that would have a negative effect on patent quality and, we think, discourage innovation, because the longer people have to wait for patents, the more corporations will be encouraged to increase the use of trade secret protections, which means a decline in the publication and sharing of useful discoveries and information.

Also, a large backlog can impede the financing of new ideas and the release of new products, and it contributes to legal uncertainty as competitors try to get around unissued patents. Therefore, we're taking several steps, which were detailed in my written testimony, to address quality and pendency. We're implementing more quality training and testing, and we're reforming the way we handle ex parte reexamination and appeal briefs within the office.

But we also believe that more has to be done to have a more open and transparent and helpful patent application process. So we are in the process of considering

a rules package that will address certain areas in the patent application process. We're going to focus on claims and continuing applications and information disclosure statements, again, which I'd be happy to get into more detail about. We believe that if we can strike the right balance with some of these proposals, we will add more certainty, which is important, and increase the quality and efficiency of our patent system. We're also supportive of some of the things that Congress is looking at and Chairman Lamar Smith's bill, and we've been working as appropriate with members of Congress and others to address the issues in the bill. So I appreciate the opportunity to appear before you today, and I look forward to questions. Thank you.

CHAIRPERSON GARZA: Thank you.

Mr. Merrill?

MR. MERRILL: Thank you very much. I, too, appreciate the invitation to appear here today. As you know, my comments are based on a peer-reviewed report assessing the operation of the patent system that was issued by the National Academies in April of 2004. It was written by a committee chaired by Richard Levin, the President of Yale, an economist, and Mark Myers, former Senior VP of Xerox and an engineer.

And that I think is the distinctive feature of the work of the Academies on patent policy over the last several years, namely that it has incorporated the views, expertise, and experience of a large number of economists, technical people, both in basic science and in engineering, and investors as well as practitioners. We're about to issue a second report, on the 17th of November, on a specialized area of patents, namely gene sequences and proteins, by a similarly composed panel. The first committee's recommendations could be grouped into three areas: first, simplifying and reducing the cost and the uncertainty of litigation by removing or modifying so-called subjective issues of litigation; second, achieving greater harmonization among the three major patent systems—Europe, Japan, and the United States—to reduce transaction costs on international commerce; and finally, raising the quality of patents, and that's the issue I want to address in my remarks.

Susan has done an excellent job of talking about what quality is and why it is important. I want to say a word about what the Academy concluded about quality and what it recommended should be done to address it. It was cautious, I should say, in its conclusions, because the indicators of a deterioration in patent quality that the

committee relied on in coming to its conclusions are quite indirect.

First of all, the resources, particularly human resources, of the Patent and Trademark Office have not kept pace with the workload. Secondly, although the approval rate of patents in the United States appears to be a significantly higher than in Europe or Japan, there's a lot of dispute about the numbers there. There were significant changes in the treatment of genomic and business-method patents, which I think both the industrial and technical communities have viewed as positive steps, namely second review of business-method patents and revised utility standards, which bore most heavily in the area of genomic patenting. And finally, the committee attorneys came to the judgment that there had been some dilution, particularly in biotechnology, of the non-obviousness standard.

Since our Report came out, there have been some other indications that we haven't examined or evaluated in detail of deterioration in patent quality. Some academics and practitioners actually peer reviewed a large sample of issued biotech patents and published the results in *Science* magazine earlier this year. I think they found approximately one-third of the issued claims in that category of

biotechnology patents were suspect. And there has been a survey by the Intellectual Property Owners Association of their membership, asking their views of whether there has been a deterioration in patent quality, and they were quite affirmative on that question.

What are the sources? First, standards and their interpretation, of course. Second, resources, not only the number of examiners and their qualifications, but also access to and the existence of sources of prior art, and time on task. And third, and most difficult to tackle, is the question of the bureaucratic culture of the Patent Office, the expectations of and incentives for patent examiners. We didn't look at all of those issues. In particular, we did not examine in any detail the management and bureaucratic culture of the Patent Office. We weren't asked to do so by the Patent Office, and we felt that was an issue we could only address if we had the enthusiastic cooperation of the Patent Office. But we did look at a number of these aspects and came up with the following recommendations. First of all, the USPTO needs an infusion of new resources, not just in numbers of examiners and budget figures, but also in terms of the analytic capability within the Patent Office, particularly with respect to anticipating changes in

technology and their implications for Patent Office operations.

With respect to standards of patentability, we didn't recommend legislation, but we said the courts should revisit the question of non-obviousness, particularly in the area of biotechnology. And most importantly, we recommended, as have others, a strong post-grant review system, provided that the time and cost of such a process are contained, and it is an attractive alternative to litigation, though obviously not barring appeals from it. This would require legislation.

Why post-grant review? Well, first of all, because we thought that it was relatively efficient to focus the resources on what are viewed as commercially important or potentially commercially important patents. Second, it enables a much faster and cheaper resolution of validity questions than litigation. Third, it is in some respects, or could be, a more expert resolution of validity questions if, as the academy panel recommended, and this has not played a prominent role in subsequent discussions, the courts were encouraged to refer validity questions to administrative determination by the Patent Office. And finally, it would provide earlier guidance to examiners about evolving

standards in new areas of technology. Thanks very much.

CHAIRPERSON GARZA: Thank you.

Mr. Detkin?

MR. DETKIN: Thank you, and I appreciate the opportunity—I appreciate the invitation to come and testify before you folks. I attended part of this morning's panel, and it was clear to me that you folks have had a chance to carefully read these statements, so I will be brief and high level and look forward to your questions.

The basic message that I was trying to get across in my testimony is that, yes, there are issues that exist, but they're subtle issues, and subsidiary to that is that, if they're subtle issues, legislating with a heavy hand is definitely not called for here, and we need real data, not anecdotes, before we do any legislating. Let's be sure we know what the problem is, and not just based on anecdotes, not based on polls of what people think, but what the real problem to be solved is, and what the way to pinpoint a solution to that problem would be without upsetting the entire system.

A quick background on myself: unlike I think everybody here, I'm not an antitrust lawyer, I'm not an economist, and I'm not an academic; my background is

basically having practiced in this field. I spent the first part of my career as an associate and then a partner at a law firm in Silicon Valley, which is known for representing start-ups. In fact, I spent the bulk of my career—I didn't mention this in my testimony, so this will be new—representing a lot of companies in litigation with a certain large semi-conductor company in Silicon Valley. I then went to work for that large semi-conductor company, Intel Corporation, as Vice President and Assistant General Counsel responsible for all IP matters, including both the patent portfolio litigation policy and antitrust policy, and I negotiated the settlement with the FTC, and I handled that litigation back when that was a big litigation.

And now I am the principal in a venture that is mostly investing in inventions, including intellectual property. So, as a result, I have seen, I think, the intellectual property system through a very different end of the periscope than the typical economist, not that there is such a thing as a typical economist or antitrust lawyer. One thing for which I've gained some notoriety is, I created the term "patent trolls;" I heard it used this morning, and you'll see it now used in the popular press.

CHAIRPERSON GARZA: We avoided using those words

this morning, I believe.

MR. DETKIN: Oh, no, I heard it; I heard the phrase from one of the panelists and one of the Commissioners. It seems to me the phrase has taken on a life of its own. It's almost used now as a placeholder. I guess I'm gratified in a certain respect; I didn't expect the phrase to get that much equity. But the phrase is almost used as a placeholder for all the ills that are perceived in the patent system. And now a "troll" is almost equivalent to a plaintiff you don't like. When there's a plaintiff you don't like, he must be a troll. Let me reiterate, just because a patent plaintiff doesn't make a product, it doesn't make that person a troll. It's very hard to call University of Wisconsin a troll; it's very hard to call NASA a troll. A number of other companies that are out there do a lot of research, getting patents that we want to encourage; they aren't necessarily trolls. And a typical example, of course, is Thomas Edison, a great American hero who did nothing but invent, get patents, and license, didn't productize.

At the end of the day it's perfectly honorable to make a product without making—I'm sorry, to make a patent to invent without focusing on products. And one other area that I think people should focus on that we sometimes lose sight

of is not just the trolls, but so-called patent squatters, not a term that I'm going to claim credit for, but my partner, in fact, came up with, and these are folks who didn't win the race to invent but somehow feel it's their right to use the invention that someone else got the reward for.

They build a company or a business relying on the rights that have been awarded to somebody else, and then they complain to Congress when someone knocks on the door saying, hey, I'd like to be compensated for those rights. And I use the example, the analogy of Home Depot. I certainly don't mean to pick on Home Depot in the testimony, but it's like any big-box retailer deciding to put up a store before they even check the title and then complaining when someone says, hey, that's my land.

Companies that market products without ever doing any patent clearances, and this is something that everybody testified about at the FTC hearings and routinely will talk about—in the high-tech industry, people do not do product clearances, and then they demand that the inventor litigate to get fair compensation, and they should not be heard to complain about the property rights system.

Now, let me—in fact, this morning people talked

about patents, that the essential right of a patent is the right to exclude. There's universal agreement on the panel this morning about that being the very essence of a patent right. It's not absolute, and nobody is suggesting it should be absolute, but still, before we take away the very essential right of a patent, one would think that that would be legislating with a heavy hand, and we should have some data.

As I mentioned in my testimony, if you ask companies if they have ever actually been enjoined by a troll, not a hand goes up. I mentioned also, for example, the case involving BlackBerries--BlackBerries are going to be shut down. I've heard that for two years now; that injunction has been in place for two years, yet everybody still has his or her BlackBerry. I see everybody using it at break. They've had two years to design around them. Fortunately, as has been noticed, that controversial proposal has been out of the House-proposed reform bill, and we would argue that that should stay that way.

I can see I'm running out of time, so I would like to just simply reiterate my call for more data. There's no evidence that patents are, for example, really poor quality. There's no evidence that patents are being invalidated en

masse by the courts or in re-exams. Could they be of better quality? Yes, probably. But is there evidence that there are hundreds of thousands of really poor quality patents out there? I would argue that anecdotes and polls are not evidence. Thank you. I look forward to your questions.

CHAIRPERSON GARZA: Thank you.

Professor Lemley?

PROF. LEMLEY: Thank you. I want to start by emphasizing the importance of the patent system. Patents, it seems to me, are critical to innovation. And as a general matter, the patent system, while it's not perfect, works very well. Nonetheless, that doesn't mean it can't be improved, and I am a strong proponent of reforms of the patent system in a couple of areas. Notably, one of those areas is not, as you've heard other people on this panel today talk about, improvement of patent quality. I'm in favor of better quality patents rather than worse quality patents, to the extent we can get them, of course, but I don't think that our money and our resources, either inventors' money and resources or the government's money and resources are best spent chasing down and eliminating all the bad patents in the world. I don't think it's ever going to happen, and we ought to focus our attention elsewhere.

One thing we can do that I think is relatively uncontroversial so far in the current patent reform proposal is, simplify the patent system to the extent we can by harmonizing it internationally, and by eliminating some of the unnecessary complexities that are attendant to it, and the bill pending in the House, H.R.2795, would do that in various respects, and I endorse that.

The other significant change, though, that needs to be made, and here I'm going to diverge a bit from Mr. Detkin, is, there is a problem of litigation abuse in the patent system, and that perhaps should not be surprising, right? Whenever the government grants rights to private parties, there are going to be private parties who try to take advantage of those grants to get more than what it is that the law does or entitle them to.

And that litigation abuse is rampant. I agree with Peter that the focus ought not be on trolls. We can't identify a specific category of people, non-manufacturing patent owners, and say they're all bad and everyone else is good. The focus instead, it seems to me, ought to be on the various ways in which the patent system currently encourages people to game the system by filing an endless number of continuation applications, for example, and to get resources

out of defendants that far exceed the patentees' own contributions. So our damages rules, our—with respect to Peter, effectively mandatory injunctive relief rules under the court's current precedence, and—

MR. DETKIN:—save time for rebuttal, I forget.

PROF. LEMLEY:—and our sort of bizarre definitions of willful patent infringement in the legal system all amount to an ability for someone, especially if they wait, lurk in the background while other people develop products to pop up later and demand not just appropriate compensation for something they invented first, but disproportionate compensation.

Peter mentioned BlackBerry, which, it's true, has not yet been enjoined, though the hurdles seem to be disappearing rapidly. But the BlackBerry case also involved a damages claim sort of going back for prior infringement, and the court found \$50 million in liability. The parties are considering settling that case for somewhere between \$450 million and \$1 billion in order to avoid the threat of an injunction. The threat of an injunction is, in other words, somewhere between nine and 20 times as valuable as the actual calculated value of the patentee's contribution in the past. That's not because it suddenly increased in value; it's

because the patentee can threaten to hold up not just his or her own contribution, but everyone else's contributions to a product, as well. H.R.2795, as originally drafted, had a number of provisions designed to deal with litigation abuse. A number of those have been whittled out of the bill, but there are still some that I think are good: willfulness reform, for example, is a good thing. I'm very encouraged to hear the PTO is talking about reform of continuation practice abuse in its written testimony.

So I encourage the Commission to endorse patent reform designed first to deal with harmonization and simplification, and second, to deal with the problem of litigation abuse, not to tackle patents or think patents are a bad thing, but to try to get them proportionally considered in the overall innovation context, so that patents don't inadvertently end up eliminating, rather than encouraging, innovation.

I've also noted in my testimony some things that I think the Commission could focus on that deal with the patent system but are specifically antitrust issues. And let me just mention two of those in particular; one is abuse of the Hatch-Waxman regulatory process in the pharmaceutical context. This has been a significant issue of concern to the

Federal Trade Commission over the last several years, of course. We've seen a movement away from reverse payments—paying your competitor to stay out of the market—I think because of the FTC's scrutiny, but we see a number of other practices that might or might not be illegal under the antitrust laws, but in which we could use some guidance from the antitrust laws with respect to product changes or deals between patent owners and generics that might, in fact, interfere with the incentives of generics to enter the market.

And finally, I'll note that one other area in which antitrust law could play a very important role has to do with standard-setting organizations who deal with intellectual property on a regular basis, giving standard-setting organizations the freedom to know in advance, before they adopt a standard, who has patents and what they're willing to charge for those patents. That would, I think, give all of the companies in an industry a clear idea of the true cost of adopting a particular technology before they adopt it.

Right now they're afraid, I think probably too afraid, of antitrust liability, because they're competitors in a room, and they don't want to talk about price at all, but some kind of guidance that suggested that that

negotiation or discussion was permissible I think would be desirable. Thanks.

CHAIRPERSON GARZA: Thank you.

Mr. Stack?

MR. STACK: Thank you. I'm here today on behalf of the American Intellectual Property Law Association, where I chair the Antitrust Law Committee. AIPLA appreciates the opportunity to appear before the Commission as it considers the subject of patent reform. Like each of you, my discipline is antitrust, not patent law, so let's face it, I'm not going to have a lot of profound insights into how to reform patent law practice and procedure. If you want those kinds of insights, I'll refer you to the 90 pages of single-spaced commentary that AIPLA has submitted to the Commission.

What I would like to do is put myself in your shoes and ask the question, what, if anything, can we as antitrust lawyers say about reforming a system of law, and I'm speaking of patent law, obviously, of which we have limited knowledge and experience and limited resources to investigate? Let me add that these are my personal views, not those of AIPLA.

For this purpose, I would put various recommendations of the FTC and NAS into three categories. The first involves specific aspects of patent law and

procedure that are the principal domain of patent lawyers. Examples in this category would include recommendations relating to burden of proof, patent examination procedures, standards of patentability, user rights, best-mode requirements, and the like; these I would avoid. They are topics on which the Commission is likely to have the least relevant expertise and the least credibility.

They are also topics that require the most comprehensive knowledge of U.S. and foreign patent systems. The AIPLA commentaries that we've submitted demonstrate how many of the suggestions for patent reform have implications for other doctrines of law and procedure within the U.S. patent system and for the goal of harmonizing the U.S. patent system with other patent systems of the world. It seems to me that without a comprehensive grasp of this entire framework and how each piece interrelates with the whole, the potential for unintended consequences from isolated or specific recommendations is serious; in four words, I wouldn't go there.

The second category involves general statements about which there seems to be consensus among patent and antitrust lawyers. In this category, I would include the following; first, patents that do not meet the standards of

patentability impede innovation and competition. More specifically, to the extent that current standards of non-obviousness are producing patents that do not meet patentability standards, those standards should be tightened. As for how those standards should be tightened, I would leave that to the patent law experts.

Second, the U.S. patent system ought to be harmonized as much as possible with the patent systems of Europe and Japan. We've all experienced global convergence in antitrust. I think we would all agree that it's been a good thing. It's happening in the patent field as well, and it should be encouraged. This will require changing over from a first-to-invent to a first-inventor-to-file system, and that's a significant change. To do so will require adjustments to numerous patent law doctrines, some of which we as antitrust lawyers probably can't even identify. Again, I would leave the details of this to the patent lawyers.

Third, to promote investment in innovation, the patent system must strive first and foremost for consistency and predictability. If you compare the level of innovation in the '70's, when there was great uncertainty about the value of patents, to today, that uncertainty has been significantly reduced. I think you can see how important it

is to minimize uncertainty. AIPLA agrees with the NAS observation that consistency and predictability depend heavily on retaining a unitary patent system in which the same standards of patentability are applied flexibly to different subject matter inventions.

Fourth, Congress should create an effective process for third parties to challenge the validity of patents after they issue. The hallmarks of an effective process are that it be an attractive alternative that challengers will want to use, that it be timely and efficient, and that it be fair.

Finally, the capabilities of the PTO need to be strengthened and adequately funded. This could begin by ending Congress's practice of diverting PTO fees to other budgetary uses. It seems to me that commenting on core principles at this level of generality is something the Commission is well equipped to do and should to. These propositions are well supported by the FTC and NAS reports, and I believe the Commission can evaluate them effectively on the basis of its own expertise and critical faculties.

My third category of issues are issues that relate directly to antitrust. I have only one issue in this category, and that's the question of inequitable conduct. The NAS report recommends that the defense of inequitable

conduct be eliminated or substantially modified. Some legislative proposals provide for, and AIPLA recommends that, inequitable conduct be eliminated as an infringement defense, but treated by the PTO as an internal administrative matter.

As we all know, inequitable conduct interlinks closely with fraud on the Patent Office, which can form the basis of an antitrust offense under *Walker Process*. This means that any changes to the inequitable-conduct defense will have significant implications for *Walker Process* cases and vice versa. I think the Commission can make an important contribution to the debate over changes to the inequitable conduct defense by exploring the antitrust side of that interrelationship.

In my written comments, I noted a number of questions that the Commission might address in that regard, so I won't repeat them here. If this sounds like a fairly unambitious agenda, at least it has the virtue of freeing up Commission resources for the rest of its agenda, which seems to me to be very ambitious indeed, and more in the sweet spot of the Commission's expertise. These are my thoughts, I look forward to the discussion.

CHAIRPERSON GARZA: Thank you very much.

Commissioner Delrahim.

COMMISSIONER DELRAHIM: Thank you. Mr. Stack, you mentioned that you're representing AIPLA, but then you also mentioned you're speaking in your personal capacity; which is it, just for clarification?

MR. STACK: My personal capacity.

COMMISSIONER DELRAHIM: So this is not—you're not representing the AIPLA's views, or are you?

MR. STACK: No; I think many of the things I've said, particularly the generalities, are all consistent with AIPLA's views. With respect to the rest of it, I think that's more me than AIPLA, but of course, we've submitted written statements that do reflect AIPLA's views.

COMMISSIONER VALENTINE: The part about unlimited—is his.

MR. STACK: I don't think AIPLA would presume to tell you what your job is.

COMMISSIONER DELRAHIM: Thanks much. Mr. Detkin, you were credited with the patent troll terminology that has been used, and back when you commented on patent trolls and their effect on Intel, what were patent trolls doing? What was the problem?

MR. DETKIN: What patent trolls were—the phrase was supposed to convey folks who take a single patent, or perhaps

even a single small portfolio of patents, all related subject matter and usually of dubious merit or making assertions of dubious merit, and seeking nuisance-value settlements. The case that spawned the phrase is instructive here. It was a case involving a single patent on a so called RISC microprocessor, which is very different than a CISC microprocessor, which is what Intel made at the time, and the patent holder asserting it against Intel and looking for what we felt was a nuisance-value settlement.

Now, in patent litigation, nuisance value is still millions of dollars: unfortunately, that's the nature of the beast. And we decided to put up a stance there, and in fact, we ultimately prevailed both at summary judgment and on appeal. But at the time that I was talking out about it, we had that case—we had another case or two that were also pending at the same time, one by actually—which is a record company, but also had a few patents, and a case by a company called *Data Point*.

So these were all pending at the same time. They were all single patents, clearly of questionable merit, which was since proved out by the courts, and they were seeking nuisance value settlements, and there are still examples of that today. Like I said, there are some issues out there,

but I don't think it's as broad as everybody is—again, the phrase has come to mean a lot more than what I intended.

COMMISSIONER DELRAHIM: Sure.

MR. DETKIN: Do I get a chance to rebut what Mark said? Okay, I'll wait.

COMMISSIONER DELRAHIM: You'll get a chance to do that. There will be some questions relating to that specifically.

MR. DETKIN: Okay.

COMMISSIONER DELRAHIM: Mr. Pinkos, there's been a lot of comment about the continuation process and abuse of the system; some of that has been curtailed by a 20-year patent term of the '99 legislation, but for those who continue to publish only in the-file only in the United States, and hence can keep their patents secret for some time, the continuation practice has pointed to something that needs some reform. I think it is or had been in the House legislation, some reforms, but then yourself and Mr.—had also commented on some reforms. What specifically are you trying to—is the PTO doing that you could share with us?

MR. PINKOS: Sure, what we're looking at is a situation, just a little bit of background, where we have almost one-third of the applications that come in in a

particular year involving continuations. So, in essence, all those applications have been rejected in some aspect before, and people are coming in for a redo.

Now, there are a lot of good reasons why they will come in, and so there's a certain amount of continuation practice that is, obviously, very legitimate and necessary. I think the question comes, as in many areas of the law what's the recourse when you don't prevail initially, and how many opportunities do you get? And I think that what we're looking at is potentially one continuation as a matter of right, and then placing more burden upon the applicants if they want to come in a second, third, or fourth time, and provide more information to the office, point out—more of a brief type situation where they're going to be talking about certain patentability issues.

And I think that that will—and I should preface it by saying we are considering taking some steps that we believe we have the ability to issue rules on, and we're kind of in the pre-comment period in the sense that we are seeking legitimate advice and suggestions before we roll these out, but that's the general gist of what we're thinking of doing with continuations.

COMMISSIONER DELRAHIM: Is that something that the

practice, at least as you know or anybody on the panel would think would harm the inventors' incentive? Ms. DeSanti?

MS. DeSANTI: I would think not. And I do want to say, I want to preface all my comments by saying, the FTC came through the process of the hearings and the report with an immense respect for the PTO, which does an unbelievable job in circumstances that are literally probably impossible to deal with, especially at current funding levels. I understand a theoretical possibility of incentives curtailed from limiting continuations, but I would think from what Mr. Pinkos is saying, there would be an opportunity to explain to the PTO why a subsequent continuation would be necessary. And I would rely on the PTO's judgment to say, yes, indeed, we understand, and we'll let you come and explain again.

COMMISSIONER DELRAHIM: Mr. Detkin.

MR. DETKIN: I do believe that some limitation on the ability to file continuations, unlimited continuations, is appropriate, and what Mr. Pinkos is suggesting sounds like a reasonable step. I'd like to see more about what he proposes in terms of the additional hurdles that would be placed, but I do believe—I do agree in general that it sounds like a reasonable approach.

COMMISSIONER DELRAHIM: Mr. Lemley?

PROF. LEMLEY: Yeah, I endorse the approach entirely.

COMMISSIONER DELRAHIM: Mr. Merrill?

MR. MERRILL: We didn't specifically examine the issue. We did, however, recommend removal of one source of abuse, which is to eliminate the exception for non-publication of applications, which I think is important.

COMMISSIONER DELRAHIM: Mr. Detkin, would you oppose the exception for publication only in a domestic filing situation?

MR. DETKIN: Would I oppose it? No; I think that that's-

COMMISSIONER DELRAHIM: It makes sense?

MR. DETKIN: It makes sense, yeah.

COMMISSIONER DELRAHIM: Professor Lemley, Professor Shapiro, in the prior panel, I don't know if you were in the room when Commissioner Valentine had asked the question regarding the language that you had suggested with respect to injunctive relief, and he said that that would be more akin to compulsory licensing; do you agree?

PROF. LEMLEY: No, I don't. So, let me be clear that I think that the rule of injunctive relief in patents is important, and in the overwhelming number of cases,

injunctive relief is appropriate. Frankly, what I think ought to happen is exactly what is in current law. Current statute says courts may grant injunctions in accordance with principles of equity.

The problem is that the Federal Circuit has changed "may" to "shall" grant injunctions, regardless of principles of equity, leaving only one exception, and that's a possible exception for public health. And so if we could get back to a world, which I think Congress originally envisioned, in which the normal rule would be an injunctive rule, but in some limited circumstances, where there were patent owners who had no interest except money, who weren't going to be harmed by being compensated in money damages, and where the risk to the accused infringer was significant, not just in terms of being stopped from using the infringing product, but being stopped from using a whole bunch of other products that are bound together in the same ultimate sale, then I think the court ought to have discretion--injunctive relief.

Now, it's true, in that case they would be compensated only in money damages, but that's perfectly consistent with any other property regime, real property, or chattels, or anything else, where sometimes you're not going to get injunctive relief.

COMMISSIONER DELRAHIM: Mr. Detkin, I'm sure you'd like to comment on that.

MR. DETKIN: We actually agree a little bit more than people would expect. I also agree that the current laws are sufficient. Where we disagree is how the courts have been applying the current laws. I wholeheartedly disagree that, I think the phrase Mark used was effectively mandatory. Injunctions are absolutely not effectively mandatory in the court system. There are several cases, in fact, I believe Mr. Lemley cited them, excuse me, Professor Lemley cited them in his amicus brief in the eBay case, where the CAFC affirmed the denial of an injunction in the district court below. So the courts are looking at the public interest, and not only in cases involving public health, but other situations as well. So I believe that the law, as written, is perfectly appropriate.

COMMISSIONER DELRAHIM: Ms. DeSanti?

MS. DeSANTI: Well, I want to clarify, this is an issue on which the FTC did not make any recommendations. I would simply say with reference to whether the current law is mandatory with respect to injunctions, it's my understanding that with respect to permanent injunctions, once a patent has finally, after all appeals, been declared valid and

infringed, then an injunction will issue in 99.99 percent of the cases.

COMMISSIONER DELRAHIM: Mr. Merrill?

MR. MERRILL: We didn't examine the issue.

COMMISSIONER DELRAHIM: With respect to standard-setting organizations, we haven't focused much on that, but there's been some cases that the Federal Trade Commission has brought in the *Unocal* case and in the *Rambus* case, and the status of the law has been, even though there are concerns about competition and hold-up by one of the patent owners of not disclosing the ownership, there's obviously an effect on competition through the hold-up, but the ruling was that the FTC did not have authority and the brief parties should go to the state fraud standard; should there be a federal fraud standard in standard setting or in the standard-setting process and expand that power and grant the FTC the authority to challenge conduct like the issue that was presented in *Rambus*?

Mr. Detkin?

MR. DETKIN: No, I don't believe so. I believe that these are sophisticated companies who know how to arrange for the dealings among themselves. And whether or not Rambus violated the rules of that particular organization

is a question simply of how those rules were drafted, which I'll take absolutely no position on, and whether or not they were drafted appropriately, and hopefully the standard-setting organizations will learn from whatever mistakes were present there and draft the rules a little bit more tightly next time.

COMMISSIONER DELRAHIM: Mr. Stack, as an antitrust lawyer, do you have any views on that?

MR. STACK: I don't have that much experience with standards organizations. But I have read the *Rambus* case, and clearly it seemed to me that the problem there was articulating what the rule, in fact, was. And I tend to agree with what was just said, that it ought to be left to the standards organization, because they have to balance a number of different factors in terms of incentives to disclose patents, scope of search within the company for patents and things like that, so I would generally say, leave it up to the standards organization to articulate the standard.

COMMISSIONER DELRAHIM: Professor Lemley?

PROF. LEMLEY: So I agree that the first line of defense ought to be in the private standard setting organization, and that's one of the reasons, in my written

testimony, I suggest making it easier for standard-setting organizations to adopt rules that give them the information they need ahead of time and enable them to deal with the potential for hold-up and abuse.

I think also that some of the patent reform changes that deal with litigation abuse would make the problem at least less severe. One of the reasons that Rambus can do what it does is, it's got—once the standard has been adopted and everyone uses it, it's got power to charge, and I believe actually did charge almost five times as much money as for patents for which the standard had not been adopted.

I guess my view is, antitrust can serve as a backstop in rare cases in this conduct, and the *Unocal* case may well be a good example of that, where the sort of abuse was abusive of a government standard-setting process, and so it's not clear that private standard-setting organizations could or would have solved the problem of abuse. I don't think we need a new federal fraud law or new and expanded antitrust rights to do that, though. I think that, properly understood, Section 2 claims in very rare circumstances will be appropriate.

COMMISSIONER DELRAHIM: Ms. DeSanti?

MS. DeSANTI: Thank you. I just want to clarify

that the fraud decision that you're speaking about was from the Federal Circuit. The Commission still has on appeal a *Rambus* case that it's evaluating under the antitrust law, which, of course, I can't say anything about. I just want to point out that Chairman Majoras did give a recent speech out at Stanford addressing this issue of hold-up and clarifying the FTC's view that joint ex ante royalty discussions that are reasonably necessary to avoid hold up do not warrant per se condemnation; rather, they merit the balancing undertaken in a rule-of-reason review, and we would apply the rule of reason to joint ex ante royalty discussions because, quite simply, they can be a sensible way of preventing hold up, which can itself be anti-competitive.

MR. DETKIN: Mark and I have very different views of the facts in two cases that are relevant to this discussion. First, Mark mentioned the *NTP* case, where—as far as he goes, that the damages award was \$50 million, and the negotiations led to a license agreement that's around \$450 million, perhaps a little bit more; obviously, I don't know the details.

But what is important to keep in mind here is that the \$50 million was back damages for six years prior to when litigation was filed, and during the time when BlackBerry was

first ramping up in popularity. What the \$450 million is for is for forward-going license. It's not unreasonable to think that, considering the popularity of BlackBerry, a license for the lifetime of that patent is worth nine times the value of the six years prior to when litigation was filed, so I see absolutely nothing wrong with that negotiation. Similarly, we just mentioned the *Rambus* case, and Mark claims that that is evidence of hold-up; again, I strongly disagree. What Rambus is charging is, yes, I think it's three and a half percent for SDRAM technology and .75 percent, I believe, for their RDRAM technology, and the reason is, they're trying to get people to convert, they're trying to influence the market to convert over to their technology.

They'd much rather collect .75 percent of RDRAM so they get to sell a technology license as opposed to 3.5 percent of SDRAM, assuming that they actually have claims on that particular technology. I don't know; I haven't studied those patents in a long time. But the point is, they're using their patents to try to influence their market to move towards technology where they think they can make more money, which is kind of why they're in business. So I think that their motivation is not a hold up, it's to try to get people, in fact, moving more towards their technology, which they

believe is superior.

COMMISSIONER DELRAHIM: Professor Lemley, did you have any further comments on that?

PROF. LEMLEY: Sure, and I don't want to chase us down rabbit holes here, right. If I recall correctly, the *NTP* versus-patent issued in 1991, so it's going to expire in three years. So, yeah, Peter's right, the damages award-the settlement would include not just the \$50 million for six years of back damages, it also include three years going forward, and maybe since there are more sales, maybe that would total out to \$100 million or so.

MR. DETKIN: You lost 11 years in that.

PROF. LEMLEY: Well, no, you can only get six years of back damages under the Statute of Limitations, right, but from 1991 to 2008 is the patent term. The patent term is going to end in three years. And in terms of Rambus, again, the facts are I guess in dispute, but it seems pretty clear to me that Rambus affirmatively and aggressively altered its patent applications using the continuation process precisely in order to cover the standard that was chosen by JEDEC.

That doesn't seem to me the behavior necessarily of someone who's trying to influence the technology into their direction; maybe it is, but it seems to me actually

opportunistic; they want, at a minimum, to capture some of the value in the SDRAM technology, and they're doing so not by being up front, saying, we have rights in this technology, and here's how much we're willing to charge for them, but by waiting until the industry has adopted that technology.

COMMISSIONER JACOBSON: The FTC and perhaps some court of appeals will tell us what the facts and law are on the *Rambus* case.

COMMISSIONER DELRAHIM: Mr. Pinkos, patent quality has been a large part of this debate, concerns that the quality coming out of the PTO is not good; patents or weak patents haven't been fully searched. Is that accurate? Two, what specifically are you doing to try to improve quality and address the increasing need for the PTO's resources?

MR. PINKOS: Well, I think when it comes to patent quality, patent quality is sort of determined by the—it's in the eye of the patent beholder, so to speak. One person's poor patent is another person's meal ticket. And it's interesting this year: in the last six months of the year, we really focused on literally reviewing every single allowance by the office, and what we saw was a downturn in the issuance rate. We're going to be below 60 percent for the first time in many, many years, if ever, and the response to that was

rather interesting.

Some people cheered and said, they're giving greater scrutiny to patents and that's what's necessary, and they're bringing more certainty to the system. Other people who complain about certain patents because perhaps they're being sued, and some of the suits that alleged are not particularly legitimate, on the other side came back and said, well, our patent portfolio is really shrinking this year. We had 1,500 applications, and we expected to see so many patents issued, and we didn't, because they thought their patents were very good, and other peoples' patents were not. So I think, again, what I'm trying to say is that, it's really—it is a bit of a double-edged sword. But the bottom line is that we take patent quality extremely seriously. We would like it to be deemed that every single patent going out of the office is beyond reproach. The reality is that the error rate, as we've measured it by traditional approaches, is about four to seven percent per year.

This year, again, we drove it down to a little under four percent in the last half of the year by re-examining every single patent application. But we're doing things differently than we have in the past; we're reviewing not just the end-product, but we're reviewing it along the

way, and I think it's important to review by the time of a first action so that you don't get all the way to the end of the game and have a poorly issued patent.

We are recertifying patent examiners, which has been controversial inside the office, to say the least, to make sure—to reach a certain grade, that they are still very—that their skills are finely tuned. We're also thinking about using our quality reviewers to analyze more of the end-process and train better on the errors they're seeing, so again, things don't make it to the end with errors in them. And we're also seeking to convene panels of outside folks to give their input on patent quality, and we're asking what the users of the Office think. We're hearing a lot about it, but we want to reach out in some particular organized fashion to convene that. You did ask about resources; the Administration has advocated now for a couple of years that the Office should keep all of the fees that it collects. Congress last year essentially obliged it in the appropriations bill with a conference report that was just filed last Friday. Congress is agreeing to do so again. So the Office does have adequate resources to try to address the quality issues.

But what happens sometimes is that, when you focus

particularly on quality, which is our number-one priority this year, and I talked about reviewing every single allowance. Well, that takes resources away; that takes quality examiners and quality supervisors away from the production line. So what did we see? Unfortunately, we saw a slight downtick in our production. We didn't meet our production goal for the year, and we're a very production-oriented environment, where we have specific production units that we want to accomplish. So there is some trade-off.

But we do have the resources now to tackle the problem, at least for this year, and there hasn't been a—there's not a permanent solution to the issue of fee diversion, but it's still under consideration by Congress.

COMMISSIONER DELRAHIM: Thank you, thanks to the panel.

One question, Madam Chair, that I didn't ask, and I would just want to mention it here, and hopefully it will manifest itself in responses to other Commissioner's questions: Mr. Detkin, in your testimony, in your Home Depot example, you discussed the patent clearance study to be performed by a company in order to avoid being a squatter. It would be interesting to hear whether or not, if a company performs such a patent clearance, the injunctive relief or

other litigation mechanisms could factor in their favor had they performed such a clearance standard. Hopefully that will come up unless we have time for a response.

CHAIRPERSON GARZA: We have a little bit of time, so—

COMMISSIONER DELRAHIM: If we have time to respond, that would be great—Mr. Detkin, and others on the panel.

MR. DETKIN: Okay, I'll be glad to respond. I think that that will go more towards the willful infringement issue. In other words, the companies are looking for relief from what they believe to be an onerous willful infringement standard and never show whether they're on notice and what they need to do when they're on notice.

I think there's more symmetry there between an effort to clear yourself, and, as I say in my testimony, I don't believe for a minute that any decent patent clearance study could possibly cover the entire waterfront, but at least if they're willing to make an effort to see if their patents are infringing anything, it would balance nicely with some relief on the willful infringement standard. I don't believe that there's a corollary, though, or any analogy to the injunction issue.

COMMISSIONER DELRAHIM: Would you exclude from that

study patents that haven't been issued or published abroad for those who have been—

MR. DETKIN: Well, if you can't—then, of course, again—

COMMISSIONER DELRAHIM: So if it issues later than that same standard, or whether it's willful infringement or whatever the relief might be, could still apply?

MR. DETKIN: Sure. You're asking me for details on legislation that I haven't really drafted, but all I'm suggesting is that companies should be under an affirmative obligation to at least make an effort to find out what's out there; right now they're not doing that.

PROF. LEMLEY: Yeah, right. So if—I think I agree with Peter on this. Right now we affirmatively discourage in the law people from looking at patents, particularly in industries like information technology, where there are a whole bunch of patents out there. People still do searches in medical devices, in pharmaceuticals, because they know they're going to either find nothing or they're going to find one or two patents. If we actually coupled elimination of the kind of bizarre nature of the willfulness rules with some affirmative incentive for people to go out and do a search, for example, by saying that if you went out and did a search

and you didn't find a patent, because it had been concealed or not published, or because it was later the subject of a continuation application that changed it, that we reduced damages or reduced remedies, that actually might line up the incentives the right way, so that people could find out what they were up against and pre-clear those rights.

MR. DETKIN: Mark and I agree, shockingly.

COMMISSIONER DELRAHIM: Thank you.

CHAIRPERSON GARZA: Thank you.

Commissioner Warden?

COMMISSIONER WARDEN: Thank you. First let me say I agree with the remark that was made that the patent—what a good patent is is in the eye of the beholder. And I also agree with Mr. Stack's suggestion that whatever problems the patent system may pose for competition in our economy, and I happen to believe they're material, antitrust law is not the way to resolve them.

As Mr. Pinkos says, there's nothing that says antitrust law trumps intellectual property law. They both have equal standing. But I find very persuasive both the anecdotal evidence that Mr. Detkin dismisses, and the analysis that Dr. Merrill discussed with respect to bad—that's the term that's been used here today—patents, I would

say patents of trivia, patents that aren't inventions and so on, and obviously, the solution to that is the one Dr. Merrill suggests, which is resurrection of the non-obviousness standard, but I would also say a standard of non-triviality should be added to that. And I despair of doing anything about this because the Supreme Court, which has a lot more authority than we have, in *Graham v. John Deere*, 39 years ago, lectured the PTO on its failure to obey the Constitutional mandate, as the Supreme Court put it, that there be an invention. And my first question to Mr. Pinkos is, do you require all of your examiners to read *Graham v. John Deere*, 383 US 1?

MR. PINKOS: The examiners are, in their initial training, briefed on all of the legal principles and rules that they have to apply. And interestingly, one of their favorite seminars that they participate in the year is the annual update they get from our solicitor on the recent developments in the law. So the answer is, yes, they're very well trained in following the law as it comes from Congress and is interpreted by the courts.

COMMISSIONER WARDEN: You have a lot of, not a lot, but some statistics in your written testimony: number of patent examiners, numbers of patents issued, number of

applications, and so on. I tried to do a little math, and it looks like it works out to about 35 man-hours of an examiner's time per issued patent. And having had the occasion to look at patents—I've been in some litigation, not as much as Mr. Detkin by any means—in this area, it takes two days just to figure out what the hell is being said in the application, and I just don't understand how obedience to the Constitutional and statutory requirements can be achieved at 35 or 40 hours per patent, and that's allowing no time for the turn downs; can you respond to that?

MR. PINKOS: The time is actually less than that.

COMMISSIONER WARDEN: Okay. And how can the system possibly work and produce something that the law puts a presumption of validity on?

MR. PINKOS: Well, I think, for one, the time that the patent examiners have is adequate for some, and others struggle to do a good job in that period of time. It also varies depending on the complexity of the art area. For example, we always say mousetraps there are not a lot of mousetrap applications coming in, but technology similar to that may only get 12 or 14 hours to review, but something much more complex could get 35 hours to review. I think one of the keys to improving the process and helping bring more

clarity and certainty to the system would be to have better applications coming in, quite frankly.

COMMISSIONER WARDEN: I'm sure.

MR. PINKOS: So, for example, if you've got hundreds of references to the point where—there's a little more direction to the examiner of where the relevance is. It could be much like a legal brief: when you're briefing the appellate court, you present the relevant case law and frame the arguments in your favor, of course, but you lay it all on the table. Sometimes it's a little bit like a needle in a haystack for the examiner, so that's why we're looking at those issues of information-disclosure statements, the number of claims that are submitted, to help, again, bring better quality into the Office, so examiners can do a better quality examination in the time they do have.

COMMISSIONER WARDEN: Well, I'm skeptical that there are 170,000 inventions, in the constitutional sense, every year myself. May I just have one more moment? You made reference, Mr. Detkin, to Thomas Edison in your oral testimony, and in your written testimony, you say he made his career by inventing and licensing his patents, not productizing, a word with which I was unfamiliar, but I think I understand.

My recollection is that Thomas Edison sold the ticker tape to J.P. Morgan as a working product, not as a piece of paper, not as a patent. And my recollection also is that he was one of the founders of the General Electric Company, originally known as the Edison General Electric Company; does your recollection differ from mine in those two respects?

MR. DETKIN: On the ticker tape, I believe he produced a prototype, but he didn't—he never built a company; he never built more than one.

COMMISSIONER WARDEN: Right, but he had a product. Anyway, how about GE?

MR. DETKIN: I'll have to be honest, I'm not sure of the genesis of GE. I understand that was much later in his life, and it was primarily based on his inventions around electricity and the whole interesting discussion—with Nicholas—about the whole issue.

COMMISSIONER WARDEN: True. Thank you.

CHAIRPERSON GARZA: Thank you.

Commissioner Carlton?

COMMISSIONER CARLTON: Okay, thank you. Professor Lemley raised the concern that in standard setting organizations, the standard-setting organization, and to

quote from your testimony, "is constrained by the fear of antitrust liability from determining in advance the reasonable royalties," and Susan DeSanti explained how there was just a recent speech by the Chairman of the FTC explaining why that would be dealt with under the rule of reason.

I guess my question is, does anyone disagree that that is a reasonable stance, and that if you were advising a standard-setting organization, you would tell the standard-setting organization, go ahead and do it, because as long as it's not misused, if it's done for procompetitive purposes, it would be sensible?

PROF. LEMLEY: If I could address that, I certainly don't disagree with Commissioner Majoras' statement, and I was encouraged to see it. But, of course, the rule of reason can conceal a multitude of sins. And so if you're an antitrust lawyer, I think you can't say go ahead and do it and you're fine, you can say, go ahead and do it, and you won't be subject to per se condemnation. I think it's probably also fair to say that the FTC has sent appropriate signals that this isn't going to be something they will be affirmatively and aggressively pursuing. But the worry is private antitrust enforcement, and there have been a number

of cases filed in private litigation against standard-setting organizations for this sort of behavior. So I think you'd have to counsel your organization that there is some risk associated with doing this.

MR. DETKIN: I'm going to take that one step further. This is not an issue that Intellectual Ventures struggles with, but as someone who has counseled very large corporations, I would affirmatively say, under the current law, they'd be crazy to get into a room with any competitors and discuss price-setting under any set of circumstances absent strong and direct guidance from the FTC.

COMMISSIONER CARLTON: Okay. Let me turn to another topic that didn't really come up, but I think it's quite important. There's been an explosion in the number of patents issued since say the early '80's, and another consequence of the explosion, other than just more patents out there, is that the amount of cross-licensing in certain industries has, in a sense, replaced royalty payments for licensing intellectual property. Are there any particular antitrust concerns that the cross-licensing movement poses? The cross-licensing movement is one in which one firm gives its intellectual property to another, only if it gets in return intellectual property from the other firm. In a

sense, it can freeze out people who don't have the same portfolio, or an intellectual property portfolio. So my question to the panel is, does that raise—does cross-licensing raise particular concerns that we should pay attention to?

PROF. LEMLEY: Yeah, I think you just raised the antitrust worry, though. It's not necessarily—because it's an antitrust worry doesn't mean it's an antitrust violation. I think cross-licensing in general is vital in these industries for which there are tens of thousands of patents. It's the only way large companies can get along without debilitating litigation. But it is the case that—one implication of that is that if you don't have your existing patent portfolio and you want to enter the market, you're at a decided disadvantage relative to the ones who do have it.

Now maybe that's a function of the fact that those companies have been inventing, and they're getting some value for their patents, though it's not a direct monetary payment, but it does, I think, cement a kind of all—structure in certain industries.

MR. DETKIN: I disagree. Actually, I do agree with some of what Mark says is inherent in your question. At the end of the day, companies with large patent portfolios are

looking for a value for that portfolio, and they may see value in a balancing payment back, or they may see value in a cross-license to the other company's portfolio.

Where I disagree, though, is that it's cement in all—I'm a patent lawyer; I can't even say the word "structure," because—and I give speeches about this all the time—in fact, just at Stanford Business School—a well-counseled start-up with zero patents can very effectively enter a market if it understands the problem ahead of time and works on the problem from the beginning.

If I'm going to be a semi—if I'm starting a semiconductor company, which, by the way, does not require, contrary to popular belief, a \$2 billion investment in a fab—and it requires 30 people who know how to design semiconductors better, faster, and cheaper than anybody else out there, then go to Taiwan and have it manufactured for you—if I wanted to start a semiconductor company, I know I've got to deal with Intel, I know I've got to deal with AMD, and I know I have to deal with some of the other entrenched players, National Semiconductor—I don't mean to pick on anybody in particular—and if I realize that going in, then I can figure out strategies, and I know I can counsel, and I have counseled companies on strategies for how to deal with

that and not be crushed by those companies that are entrenched with large portfolios. And I'd be happy to explain that at length if you'd like, but it's the subject of an hour-long lecture at Stanford Business School right now.

COMMISSIONER WARDEN: Okay, thank you.

MS. DeSANTI: Dennis, I would just like to respond that the issue you raise is one that's worth thinking about, and it is one that the DOJ and the FTC will be thinking--have been thinking about and will be addressing in the second IP report. Certainly, I do want to emphasize, though, that it came across loud and clear that extensive cross-licensing is, in fact, the way that many companies in computer hardware and software have freedom to operate. And there are, obviously, efficiencies that come across from the cross-licensing, as well as the potential for anti-competitive concerns.

COMMISSIONER WARDEN: Okay, thank you.

CHAIRPERSON GARZA: Okay.

Commissioner Valentine?

COMMISSIONER VALENTINE: So little time, so many questions. I'd like to try to cover eliminating inequitable conduct defense, better information disclosure, and post-grant opposition, so let me see if I can focus this. We'll start with post-grant opposition. Mr. Detkin has suggested a

standard in which, for nine months after a patent issuance, the opposition procedure should be permitted to occur; he would endorse that. Mr. Lemley would like a second bite, a six-month window after notice of infringement. Mr. Stack, I believe you go with a nine-month standard. Mr. Merrill, it's somewhat unclear from your open-review procedure what you envisage. And I would like to hear from Ms. DeSanti and Mr. Pinkos and Mr. Merrill on what the optimal time for a post-grant opposition procedure might be to best promote the ultimate goal of having valid patents.

MS. DeSANTI: I'll start if you want.

COMMISSIONER VALENTINE: Thank you, Susan.

MS. DeSANTI: And I will emphasize, again, these are my own personal views, because the Commission did not take any position on the timing issue, which is the most difficult issue. Certainly, nine months after seems like a reasonable time period.

The question with respect to the second window really has to do with the IT industries that say we don't know when a patent is going to pop out at us from somewhere. We had no idea about this patent because, as Peter Detkin explained, for semiconductors, for instance, there are 90,000 patents held by 10,000 companies that relate to

microprocessors, and so the IT companies explain that having that nine-month window doesn't really do them any good, because what they're concerned about are patents that have already been issued that will pop out of nowhere. The biotech companies, on the other hand, will explain to you that their venture capital funding is put at risk if, in fact, you don't stop at the nine months, that they can't get the kinds of investment they need. This is what they would say, I'm taking their name in vain here so you'll have to rely on me for that. But they are going to have problems with their investments because they cannot say to their investors, okay, this patent now is presumed valid, and you can take it to federal court, and it's got a presumption of validity; you couldn't say that if you had a nine-month window.

I don't have a good solution for that problem. But I see both sides as having very valid points.

COMMISSIONER VALENTINE: Okay. Mr. Pinkos or Mr. Merrill, do either of you care to comment?

MR. PINKOS: Go ahead.

MR. MERRILL: We said a year as an initial window and a second window, but at the discretion of the district court, not at the discretion of parties to dispute. I have

no idea what the right term limit is, and I dare say that we didn't have a firm empirical basis for choosing one year over nine months or 18 months. I think there is an argument in starting up a new post-grant review system, not to have it indefinitely open, because the number of cases should be contained initially.

COMMISSIONER VALENTINE: Okay.

MR. MERRILL: But I don't know what the right number is, frankly.

COMMISSIONER VALENTINE: Okay.

Mr. Pinkos?

MR. PINKOS: I can't give you a specific answer right now.

COMMISSIONER VALENTINE: Okay. Feel free to write it.

MR. PINKOS: The administration is working up a specific position on that. As many of you have been in the administration before, I can't speak prematurely, but we're considering many of the issues that were just discussed.

COMMISSIONER VALENTINE: Perfect; please let us know when you get a position. Better information disclosure—Mr. Pinkos' statement indicates that voluminous citations really are a problem. One proposed suggestion is when more

than 25 references are cited, the PTO may require applicants to identify which parts are relevant to the case and why the applicant believes each reference is relevant. Mr. Stack, I understand you oppose the FTC's proposal to allow examiners to request when there are voluminous submissions to explain the relevance of the ones; would you accept or endorse Mr. Pinkos's proposal?

MR. STACK: Again, to say that I advance at AIPLA-

COMMISSIONER VALENTINE: AIPLA had said in its statement that you submitted for them that they oppose the FTC.

MR. STACK: Right, and I don't have an answer on the specific question with respect to Mr. Pinkos, but I will provide one.

COMMISSIONER VALENTINE: Thank you.

And, Ms. DeSanti, any thoughts on Mr. Pinkos's proposal?

MS. DeSANTI: I think it's a great proposal.

COMMISSIONER VALENTINE: Thank you. Could I ask one quick question on eliminating inequitable conduct defenses? I think that I see Mr. Merrill recommending the elimination of the defense and Mr. Stack also, or-I don't intend to totally identify with your testimony, but your

testimony supporting the elimination, I think, is recommending that the PTO, as an administrative matter, would then find fraud, and then whether or not one brought an antitrust case, a *Walker Process* case, would occur only after that.

I would be interested in Ms. DeSanti's and Mr. Lemley's, and I guess after that anyone else's, to the extent we have time, thoughts on eliminating inequitable-conduct defenses and what repercussions that might have or how we might accommodate or compensate for that with *Walker Process* and antitrust claims.

MS. DeSANTI: That's not an issue that we specifically studied, so I don't know that we know enough based on the record we created to have a view. I will say that there were some significant concerns expressed at our hearings about the PTO's capability to deal with the inequitable conduct issue. That issue was within the domain of the PTO many years ago, and it was found that it was a very difficult mission for the PTO. The PTO has a very different mission in general, as patents come in, patent applications come in, to examine them, rather than to be fraud investigators, and that concern was raised, so I simply bring that to your attention.

COMMISSIONER VALENTINE: Okay.

PROF. LEMLEY: To me, this is tied to the question of hold-up and litigation abuse. If we have reforms in place that deal with those problems, I can live with elimination of inequitable conduct as a litigation defense, because as Mr. Merrill's report points out, it does add significantly to the cost and uncertainty of litigation.

But I'd hate to see us in the name of patent reform make it easier for people who want to game the system to get through the Patent Office by deceiving the Patent Office and getting a patent that they can then use for a nuisance value hold up or something else. So I'd be reluctant to weaken the inequitable conduct defense unless I were confident that we also dealt with the problem of litigation abuse.

COMMISSIONER VALENTINE: Mr. Pinkos or Mr. Detkin or anyone, or Mr. Stack, sure.

MR. STACK: I have one thought; you do have to think about collateral-estoppel implications if you decide to turn this into an administrative proceeding before the PTO. You've got issues about right to jury trial. If you look at the convergence, and it's not complete, but it's almost complete, between inequitable conduct and fraud, you've got very little more to argue if you've been found guilty of

inequitable conduct when you're defending a fraud case in court. And in that situation, it seems to me one could make the argument that it ought not to—a finding by the PTO ought not to have collateral-estoppel effect and you ought to be able to bring the whole factual matrix before the court de novo.

MR. DETKIN: A quick comment; as a practitioner, I can't emphasize enough that what—the CFC's words, which is that the inequitable-conduct defense has become a plague; it's brought up in every case, and it does consume massive amounts of resources to defend. Having said that, I also want to echo Mark's comments, which is that there are some cases where it's appropriate, and we don't want to throw the baby out with the bath water. And I do think that H.R. 2795's approach is a reasonable accommodation of trying to balance those two interests.

COMMISSIONER VALENTINE: Okay, thank you very much.

CHAIRPERSON GARZA: Okay.

Commissioner Kempf?

COMMISSIONER KEMPF: Yes, Mr. Stack; you said that you weren't a patent lawyer; you were an antitrust lawyer like the members of the Commission. I'm not sure I think of myself as an antitrust lawyer. I think of myself as a trial

lawyer, and it was my great good fortune to try a lot of antitrust cases during my career, which I found to be interesting, but, like Commissioner Warden, I don't view the antitrust laws as trumping the patent laws. He said he thought that the IP laws were of equal standing; I'm not sure that there are not more than that. After all, they were around 100--well over 100 years before anybody even figured out we needed antitrust laws, and they reside in the Constitution, where things like free speech and the right of assembly reside.

And I sort of think of things as taking their roots out of the Constitution as pretty important stuff. So as between them, I'm not sure that I wouldn't go beyond even what Commissioner Warden said and view them--if there's an inequity that resides in the intellectual property direction.

To pick up on Peter's comment there, inequitable-conduct defense--the Federal Circuit is doing a pretty rigorous job itself. The cases all may have it, but they--you need a pretty compelling case by the time you get there. Three things, Mr. Detkin: first, you refer to your Stanford Business School paper--

MR. DETKIN: No, I'm sorry, lecture.

COMMISSIONER KEMPF:--lecture. That's my question:

does it reside in a paper, and if so, can you send that to us?

MR. DETKIN: It doesn't; it resides in a series of PowerPoint slides I could probably send to you.

COMMISSIONER KEMPF: Yeah--no, I'd welcome an opportunity to see those.

MR. DETKIN: Okay.

COMMISSIONER KEMPF: Second, in 25 words or less, you've been doing a pretty good job of rebutting Professor Lemley as you've gone along, but if there's anything else you want to pick up on that you haven't yet done, you can do it in 25 words or less. I don't mean literally 25 words or less, but I don't want to give you all my time to use for your rebuttal.

MR. DETKIN: I appreciate that, and actually, I think I've gotten two of my three points in. The only, third, point I'd make, and this is actually not one that I feel strongly about, but I think it needs to be aired--Mark said that there's no controversy about harmonization referring to first to file. There's no controversy in this room, most likely, but there is significant controversy out there about first to file.

People claim that the U.S. patent system is unique.

We shouldn't be following European patent system just for the sake of following it, and well, that's—I'm giving you the argument that's out there. I'm not like some other people on the panel, I don't speak for myself on this one, but they feel it's steal America's inventions act. So you're going to hear a lot about that if you pursue this line of inquiry, if you're that interested, so there is controversy, just not in this room.

COMMISSIONER KEMPF: Okay. Finally, on the patent troll subject, in your written submission you have, well, gee, under that definition—would be patent trolls, Dean Kamen would be a patent troll. I think the reason you may be a little thin skinned on this is that, I think people would say, no, no, you're the poster child for patent troll, so you are the quintessential definition of a patent troll.

And my question is this: if I define a patent troll as someone who goes around the countryside and acquires patents for no other purpose, and does—let me park a little bit—does no inventive activity on their own, and does those for the purpose of determining whether they're good patents or not, and then if they are, enforcing them, what's wrong with that? I would take it you'd say nothing, but I'm looking for an elaborate defense.

MR. DETKIN: Well, there are a lot of assumptions in there, and I don't think I'd like to see the question in writing, it's almost like an interrogatory here, which is kind of how I think you meant it. I don't think there's anything wrong with what you said. Assuming that they are valid patents and the claims that are being made have validity and aren't simply being made for the purpose of receiving a nuisance value. There are people out there, for example, who acquire patents, send letters to 50,000 people looking for a settlement of 10 to 20,000, because it's cheaper to settle than get an opinion letter; that's not what I heard you say.

COMMISSIONER KEMPF: No.

MR. DETKIN: I would say that there is something wrong—the first one smacks of patent ambulance chasing; what I heard you say was a different scenario. So I just want to make sure I distinguish between the two.

COMMISSIONER KEMPF: Correct; I'm looking for someone who's going out—this person has no inventive skill at all, but he does have entrepreneurial skill, and they say, hey I can go out and acquire good patents (the terminology we use, "high quality patents"), and what I'm going to do is buy them cheap and enforce them dear, and you seem so defensive

on it—

MR. DETKIN: Really, I'm not—

COMMISSIONER KEMPF:—and the reason I ask the question is that it doesn't strike me that there's a problem with that.

MR. DETKIN: No, I'm sorry it comes across as defensive. Believe me, I'm not thin skinned on this or much else, frankly, at this point in my career. But rephrasing your question, what I hear you saying is, is there anything wrong with compensating an inventor for inventing, allowing him to go back to invent, and then using those rights—licensing those rights? No, of course not.

COMMISSIONER KEMPF: Okay.

CHAIRPERSON GARZA: Okay. Commissioner Jacobson.

COMMISSIONER JACOBSON: I can't resist a little bit of history. Antitrust law actually really dates back at least to Roman times, the prohibition—and price fixing certainly dates back to 1415, when the *Dyer's* case was decided, and both of those certainly antedate the—ability to grant patent rights. So I think we have a somewhat longer pedigree, but I agree with the fundamental proposition that both laws should be construed to promote innovation, and if properly construed, they're complements rather than

inconsistent with each other.

With regard to Professor Lemley's questions about standard-setting, I'm going to venture the view, which I will stand to be corrected on later, that there is absolutely no dispute whatsoever within this Commission that a standard-setting body's requirement of ex ante disclosure of royalty prices by applicants is per se lawful, and that one of the reasons we elected not to address this specific issue, despite numerous requests from a number of companies, is that we really didn't think that was open to much dispute.

The closer question, which we didn't think was that close, was the one addressed in the speech given by Chairman Majoras a couple of months ago. And I don't think you're going to get better certainty on that one than rule-of-reason treatment, because you can't say it's per se lawful for people to sit down and agree on prices because they can do other things at the same time. So I think all the clarity that the intellectual property community wants in terms of standard setting is out there, and I maybe this Commission will address the issue in its report; that hasn't been determined, but I don't think it's the burning problem that has been presented to us. Go ahead.

PROF. LEMLEY: So I hope you're right. I guess I

haven't seen sort of anything in court decisions or guidelines that sort of leads me to have a comfort level to saying that there is per se legality for the disclosure, not just the disclosure of the existence of patents, but disclosure of licensing terms, but I hope you're right.

COMMISSIONER JACOBSON: Well, I would refer you, although it doesn't address this issue in-to the ABA's book on standard setting that was published last year, and the general standards set out in that book I think make clear the point that I was just trying to address.

I want to get back to the subject at hand, which is the patent system and antitrust, and focus particularly on the issue of post-grant review, which we've talked about a little bit. If there is a nine- or 12-month window after the grant rather than after the notice of infringement, does anyone disagree that we need then to continue to reexamine the issue of standard of proof of invalidity when the case gets to court? And let me start with Mr. Detkin on that. If we're going to hold the post-grant review period to a fixed nine months after the grant, shouldn't we be looking at revising clear and convincing?

MR. DETKIN: I don't believe so. I believe that a patent grant needs to mean something, and clear and

convincing does not mean absolute; it's still overcome all the time in court, but I think it's appropriate that someone attacking a patent be able to come forth with clear and convincing evidence.

COMMISSIONER JACOBSON: Do others agree with Mr. Detkin on that point?

PROF. LEMLEY: No, I disagree. I think it's actually important to look at the standard. As Commissioner Warden pointed out, one of the reasons that we see various kinds of bad patents issue is that, on obviousness grounds, the Patent Office has the burden of demonstrating disentanglement to a patent. An applicant never has to show any reason why they should be entitled to a patent in the first instance; the burden starts on the Patent Office.

Given that, it seems—and given the burdens that were discussed in the amount of time spent evaluating, the clear and convincing evidence presumption doesn't seem, to me, warranted. But I agree with what I think is the spirit of your question, which is if we could find a way using post-grant opposition or something else to identify those patents that are important, give them additional scrutiny, we could then justify a very high presumption of validity in court.

MR. STACK: I would say that the AIPLA agrees with

Mr. Detkin. And it might be instructive to look at the written commentary that they put in, because they've tried to analyze this question in a slightly more sophisticated way, and I think where they come out on it is to say that, with respect to the underlying facts, you ought to retain the clear and convincing evidence standard because it's so easy to fabricate a prior invention case. But with respect to the legal conclusion that comes out of those facts, then it's a straight preponderance of the evidence test.

COMMISSIONER JACOBSON: Well, except obviousness is inherently factual, isn't it? There's no dispute on what the law is on obviousness. Every case involving obviousness depends on the facts, so that doesn't seem to me to be much of a distinction; is it?

MR. STACK: It may relate more to anticipation, I'm not sure. But in any event, if that's the case, I think AIPLA's position would be that--along the lines of what Mr. Detkin said, you ought to stick with the clear and convincing standard.

COMMISSIONER JACOBSON: Before we get back to Mr.--I just want to hear from Ms. DeSanti, if she has a position or has insight into the FTC's view on these subjects.

MS. DeSANTI: Yes, and again, emphasizing these are

my own views, when we reviewed the AIPLA's commentary on our report, we did research the issue that they raised on the distinction between fact versus law. And there are two responses; one is that that distinction about factual evidence requiring clear and convincing evidence was developed with respect to oral testimony that is very easy to fabricate. However, if you look at the kinds of factual issues that are often coming up in obviousness cases, these days, those are not typically about oral testimony that would be easy to fabricate, but, in fact, are more relevant to the kinds of documents that may exist in the outside that have—that can show whether there was prior art sufficient to suggest the invention that's being claimed is not new and non-obvious.

And in the course of this, Commissioner Jacobson, I would hope you would indulge me in simply saying, in response to Commissioner Warden's earlier question about whether the PTO reads *Graham v. Deere*, I don't think the question is so much whether the PTO reads *Graham v. Deere* as whether the Federal Circuit reads *Graham v. Deere*.

COMMISSIONER WARDEN: I concur.

MS. DeSANTI: And, in fact, there is a case that may go to the Supreme Court on this. The Supreme Court has

asked for the government's views in this case, on whether they should grant certiorari on this case involving the non-obviousness standard.

COMMISSIONER JACOBSON: Okay. My time has expired, but I interrupted Mr. Detkin twice, so equal time.

MR. DETKIN: I appreciate it. Inherent in your question and inherent in Professor Lemley's answer is the underlying assumption that there are a lot of bad patents out there, similar to Commissioner Warden's comments. But again, where's the data on that? Everybody makes—

COMMISSIONER JACOBSON: I'll—my own view, it's completely anecdotal, and it is based on the experience that I've seen, which is advising clients defending utterly bogus patent suits, and unfortunately, we're all affected by our own anecdotes, and the cases that I see as an antitrust lawyer involving allegations of fraud on the Patent Office, both prosecuting those and defending them, and what I've seen is that the evidence of fraud in each case, at least if you believe the allegations, and some of the deposition testimony is shocking, and that based on my—

MR. DETKIN: That's a different—

COMMISSIONER JACOBSON:—limited experience, the amount of concealment of prior art at the PTO is

breathhtaking, and very troublesome to me, again, without any solid, empirical data, just based on years of observation.

MR. DETKIN: That is a very different issue, though. That gets to the issue of fraud, inequitable conduct, and withholding of information. I agree, that is a troublesome issue, but that is different.

COMMISSIONER JACOBSON: It's not an isolated-

MR. DETKIN: Excuse me, let me finish, that's different than looking at the claims of a patent and determining that it never should have issued in the first place. For example, everybody makes fun of the Amazon one-click patent, except everybody always talks about, I don't know, have any of you folks ever read that? I know you have- keep your hand down, Mark-but other than Mark, has anybody in this room read that patent?

COMMISSIONER JACOBSON: I try not to read patents myself because my reading comprehension is-

MR. DETKIN: Okay. So if you don't read patents, well, you just fell right into my trap. If you're not going to read the patents, then how are you going to sit and criticize their claims and criticize their scope and validity?

COMMISSIONER JACOBSON: Well, what I can-what I

have seen, and I wouldn't say fraud is an unrelated issue, when the fraud is concealment of prior art, then the issue of obviousness and whether the patent should have issued—is squarely presented, and that, again, I have no scientific data on this, but it's one of the things that makes the clear and convincing standard to me, personally, extremely troubling and difficult, and while it seems to me a sensible solution to give the patent practitioner some level of certainty is to say, okay, nine months; it's not going to be indefinite; it's not going to be when a notice of infringement is issued, but let's modify the clear and convincing evidence standard. The burden of proof is still going to be on the alleged infringer, but let's not make it impossible, let's make it a burden that can be satisfied. That's just one person's point of view.

CHAIRPERSON GARZA: All right, and 12 minutes worth.

COMMISSIONER JACOBSON: I've been under my time more often than not, so I'm guilty as charged.

CHAIRPERSON GARZA: I think—but we want to move on, unless, Mr. Detkin, there's some very, very short reply that you have to make. Okay. Debra, I'm going to exercise my—

COMMISSIONER VALENTINE: No, absolutely. I just—I

wanted one clarification, which is the case that Susan is referring to—

CHAIRPERSON GARZA: I was going to ask her about that.

COMMISSIONER VALENTINE: Oh, okay. I think it's *Teleflex*, okay.

CHAIRPERSON GARZA: Actually, I'll make it the first one. Ms. DeSanti, actually, I did want to mention, there is a case in your testimony, I think it's on page seven, and footnote six, where you mention that the FTC had filed a—or the FTC was involved in a petition for certiorari that had been filed in a patent case, *Teleflex versus KSR*; is that the one that you meant to refer to just now in your oral testimony?

MS. DeSANTI: Yes, and the FTC did not file the petition for certiorari—

CHAIRPERSON GARZA: No, but—

MS. DeSANTI:—but the Supreme Court has requested the Solicitor General to provide the government's views on whether to—whether, in fact, to grant that petition, and we'll just have to wait and see what the Solicitor General does with that. But it is a case of interest. It goes to one of the legal tests for obviousness that the FTC

criticized in its report.

CHAIRPERSON GARZA: And is that the commercial success or—

MS. DeSANTI: No, it is the so called suggestion test. It has to do with the issue of whether—when you have two different sources of—let me give you the garbage bag case; this is the easiest way to understand it. In the garbage bag, so-called garbage bag case, which is referenced in our Report, and I can give you the page and cite, the PTO found to be obvious, a so called invention that combined a garbage bag and a picture of a jack-o-lantern put on the garbage bag for fall leaf collection, okay, and the PTO found that to be obvious.

MR. LEMLEY: Non-obvious.

MS. DeSANTI: No, the PTO found that to be obvious, Mark. Okay. The Federal Circuit, however, found it non-obvious, and criticized the PTO for not having found a specific writing or some other very specific evidence that would show that a suggestion had previously existed to combine those two elements. That's the issue that's at issue in the *Teleflex* case. And I will say the technology is relatively simple in that case, so it may be a case that you want to follow. Some of these cases, we have found are very

difficult to follow.

MR. DETKIN: The good news is, it probably took less than 18 hours to examine that application, saving time for other applications.

COMMISSIONER JACOBSON: They got that one right.

CHAIRPERSON GARZA: Mr. Merrill, in your testimony earlier, you were talking about the cautious approach that the academies have taken in regard to their recommendation on approving the quality of patents, and you mentioned a couple of things I think that you said occurred post you report, one was the peer review that had been done of biotech patents; is that—and is there something public on that?

MR. MERRILL: Yes, it was published in *Science Magazine*. I think it was done out of Northwestern Kent.

CHAIRPERSON GARZA: What did they use for the—what did the people—

MR. MERRILL: They used a panel of legal practitioners.

CHAIRPERSON GARZA: But they looked at the applications that had gone to the PTO or they were looking at litigated—

MR. MERRILL: Applications and issued patents.

CHAIRPERSON GARZA: Okay. And then the survey by

IP owners of their membership, which reflected that the—
reflected that they thought there were patents being issued
that shouldn't be?

MR. MERRILL: I don't remember the numbers. It was
published within the last couple of months.

CHAIRPERSON GARZA: Where was that published?

MR. MERRILL: I assume on their web site.

CHAIRPERSON GARZA: Okay. And what's the name of
the organization, IP—

MR. MERRILL: Intellectual Property Owners.

CHAIRPERSON GARZA: Oh, okay, all right, thank you.
Now, Ms. DeSanti, one other thing I think I read was that the
FTC intended itself to become involved in potentially raising
questions about bad patents; what has the FTC been doing, if
anything, that you can tell us about?

MS. DeSANTI: The FTC has not raised that—has not
gone to the PTO with a request for reexamination of any
particular patents. However, we remain open to questions
that people may have about particular patents, that people
believe have significant competitive effects. Obviously,
there are bad patents, unlike the famous peanut-butter
sandwich; that is not the subject of the FTC's interest, but
rather, are there really questionable patents that have

significant competitive effects such that it might be appropriate for the Commission to consider referring the patent to the PTO for reexamination? That's a difficult topic for us because there's, obviously, a limit to our patent expertise.

CHAIRPERSON GARZA: Well, that's one of the reasons I asked. And also, I take it that doesn't require the creation of any kind of post-grant review process?

MS. DeSANTI: No.

CHAIRPERSON GARZA: And would the notion be that the FTC would do this in response to some sort of petitioner request or notice from parties, or what's the idea that you would examine something on your own to come up-

MS. DeSANTI: No, the notion is not that the FTC would examine anything on its own; the notion is to refer it to the PTO as a patent that should be reexamined but to leave the examination process with the PTO. The reason being, however-the reason for the reexamination would be related to the significant competitive effects and questions that had been raised about the patent's validity.

CHAIRPERSON GARZA: Okay. Another question I had is, in your testimony, you suggest that an area that might be most fruitful for this Commission to consider is the

recommendation of the bucket of recommendations the FTC made to somehow or another inject new economic learning or economic learning into the processes of the Patent Trademark Office, and also the Federal Circuit, but I wasn't clear exactly what that means. How would you have the PTO incorporate economic learning into what it does in examining the validity of patents?

MS. DeSANTI: Well, let me give you one example. Let me first say what we're not talking about. We're not talking about individual patent applications being assessed in terms of their competitive significance. However, the PTO does issue guidelines for examination, and in the context of those guidelines for examination, it can consider what kinds of rules to develop. The proposal is simply that the rules that are developed by the PTO, in its examination guidelines, and the rules that the Federal Circuit develops, for example, for non-obviousness, how to determine non-obviousness, should include consideration of economic and competition policy considerations.

And I don't want you to think that this is novel. This whole notion of paying attention to the competition that surrounds patents and ensuring that what is meant to be in the public domain stays in the public domain and is subject

to competition can be found in Supreme Court cases, in Supreme Court patent cases as well.

This is simply a proposal for the Federal Circuit, which has recently, in a recent case, announced that it does not consider such policy considerations to be worth--something that it should address or take into account in making decisions, and for the PTO in issuing its own examination guidelines, to take those kinds of competition policy considerations into account. I'm happy to go on at length, but maybe--I want to be responsive, so let me stop here.

CHAIRPERSON GARZA: I'm violating my own rules, but Mr. Stack, I think your organization, which you do or don't represent today, opposed the position that Ms. DeSanti just described to us. Can you explain in 25 words or less around that, what the basis of the opposition is?

MR. STACK: I think it was based on the misunderstanding that Ms. DeSanti just said. I think they were proceeding from the assumption that what was being advocated was individual consideration, patent by patent, of competitive effects. I'm not so sure that they would come to the same recommendation on a more general level.

CHAIRPERSON GARZA: Thank you. Thank you very much to our panelists, again, for the statements that you

submitted and for your testimony today.

COMMISSIONER VALENTINE: We technically have four more minutes. Could we just ask if any other panelists have any thoughts on Susan's proposal? I'd be particularly interested in Mr. Pinkos and Mr. Lemley; is that fair?

CHAIRPERSON GARZA: If you're willing to stay seated and respond, that's fine.

COMMISSIONER VALENTINE: You can go get a—if you need to.

MR. PINKOS: I've not examined it in great detail, but I know that it potentially could be difficult to interject economic or competitive analysis into the patent examination process. I just—even under some tightly defined criteria, what exactly would the examiners be looking at, or what type of guidelines would be issued? I don't think that we can venture to guess how economically viable a particular idea may be, or even how it could affect the marketplace in a certain technology. I just—I think I certainly would be happy to have discussions at a greater length at the staff level to talk about the ideas, but just on a threshold level, it seems very difficult for our Office to undertake.

CHAIRPERSON GARZA: We might ask for—we might follow up in another forum with you, Susan, and the FTC, to

get a bit of a better idea of what kinds of things you think are appropriate.

COMMISSIONER VALENTINE: I don't think the economic viability was what she was getting at.

PROF. LEMLEY: So I think the FTC is absolutely right on this. For better or worse, the Patent Office is making economic policy. Their decisions as to the legal standards are economic policy, and it seems crazy to me to think that we want to do that blindly, and not actually consult economic wisdom. It doesn't mean, of course, it should be determinative, but just as the antitrust agencies look, in thinking about policies and guidelines, to the advice of the economists on their staff, it would be nice to have the same opportunity provided in the Patent Office.

COMMISSIONER VALENTINE: Thanks for that question, though, Deb.

CHAIRPERSON GARZA: All right. Well, thank you very much. I should mention that all of the testimony provided, the written testimony will be posted on the AMC web site, if it's not there already, and at some point we will have a transcript of today's proceedings that I believe we share with the panelists to make any corrections, and so you will be hearing from us at least to that extent. Thank you

again.

COMMISSIONER VALENTINE: Thank you all very much;
that was very helpful.

(Whereupon, at 2:45 p.m., the hearing was
adjourned.)