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MONOPOLY POWER SESSION

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C O N T E N T S

P R O C E E D I N G S

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MR. KLOTZ: Good morning. I am Tom Klotz, an attorney in the Office of General Counsel at the Federal Trade Commission, and I am one of the moderators for this morning. My co-moderator is Greg Werden, Senior Economic Counsel at the Antitrust Division of the Department of Justice.

Before we get into the substance of the program, I want to go through a couple of preliminaries. First, I want to thank our colleagues at the Department of Justice for jointly presenting this program, and on behalf of the Federal Trade Commission, I would like to thank each of the panelists for agreeing to participate with us today.

As I cover a couple of housekeeping matters, I would ask first of all that you turn off any cell phones, BlackBerries or other devices that would make noise and that would interrupt our panel. Second, the restrooms are outside the double doors. Just go across the lobby, and there are signs that will help direct you to the appropriate place.

Third, particularly for visitors, in the unlikely event that the building alarms go off, we ask that you please proceed calmly and quickly as

instructed. If we leave the building, we will go out the exit on New Jersey Avenue, past the guard's desk, and just follow the group of people across the street to await further instructions.

Finally, given the format of the program, we ask that you not make comments or ask questions during the session, and we will proceed from there.

Yesterday, we began the program on monopoly power and market definition, and today we are going to continue that discussion, and at this point, I will turn things over to Greg Werden.

DR. WERDEN: Thank you.

This is the last of our three sessions on monopoly power. This session is focused in particular on technology markets, with all the possible meanings of that term, and single-brand markets. I want to join my FTC colleague in thanking the panelists for appearing here today and to thank the staffs of the two agencies for doing quite a bit of work in organizing these sessions.

These are sessions in a continuing process of hearings that the Antitrust Division and the Federal Trade Commission began last June on the law and policy concerning single-firm conduct addressed under Section 2 of the Sherman Act. The materials from these hearings

are being made available on the agencies' web sites. Submissions of panelists, their slides, and ultimately transcripts, although they run a little behind, are being made available. The sessions are being also videotaped. I am not sure whether they will be available for sale or not, but you might want to put your orders in.

Our panelists today, in the order that they will be speaking, are first Richard Schmalensee, who is the John C. Head, III Dean and Professor of Economics and Management at Sloan School at MIT. I am sure everybody is very familiar with Dick's contributions to industrial organization and antitrust policy, and he will speak with particular experience from some work that he has done in technology markets in recent decades.

Second, we have Mike Williams, director of ERS Group, formerly, a long time ago, a colleague of mine at the Antitrust Division at the Department of Justice.

If he arrives, we will then have third Andrew Chin, Associate Professor of Law at the University of North Carolina, who worked a little bit with Judge Jackson on the Microsoft case, a little behind the scenes, we learned about that recently.

Then Bob Lande, Venable Professor of Law at the University of Baltimore School of law, frequent

commentator on antitrust policy issues and long ago with the Federal Trade Commission.

And finally, Alan Silberman, a partner at Sonnenschein Nath & Rosenthal, LLP, a long-time practitioner of antitrust law who will be bringing the practitioner perspective to these issues.

With that, I will add that we unreasonably refuse to allow audience participation in any way, shape or form, but we will allow people to submit written comments for the record if they want.

I now turn it over to Dick Schmalensee.

DR. SCHMALENSEE: Okay, thanks, Greg, and thank you for having me. This is a set of semi-disconnected comments on markets that are experiencing or could be experiencing rapid technological change.

Now, there are a number of basic features of in these markets. Greg pointed out that occasionally witnesses in these hearings go over well-known ground, and I am going to do a little bit of that today, but I think we do that to make sure everybody remembers that this is well-known ground.

In markets with rapid technological change, you expect to see market power because that is the reward to innovation. So, you would be surprised in a market where there is a lot of innovation going on if you did

not see some market power, because that is the return for the investment. To find monopoly power, the issue is typically durability of that market power. Is this the blink of an eye in a Schumpeterian world, or is this something that is likely to endure long enough to be an issue?

Typically we address the issue of durability by looking at entry barriers, but entry barriers usually involve me-too entry, of a similar product. The hard part -- and it is a hard part, though I am not making a pitch that it is ubiquitous or inevitable is that in markets with rapid technological change, entry may take a rather different form than the incumbent's product even if matching the incumbent's product is difficult. So, in markets like that, when rapid technological change is possible, the key to market performance is competition to innovate, is competition on technology or dynamic competition.

Unfortunately, I do not have any solutions to this. This is a cautionary tale. If you ignore the special features of these markets, you will tend to find monopoly power where, in fact, it is relatively transient. If you exaggerate those features, you will tend to think it is transient when it is not. And there are no bright lines that I can think of for reasons I

will discuss.

So, I am going to focus on three issues. The first is, the difficulty of thinking about whether rapid technological change is of the disruptive sort. Let me be clear that technological change comes in various flavors. If you think about microprocessors, there has been enormous technical change, but nothing truly disruptive for some time; very rapid increases in performance, but incremental change; no one innovation has radically disrupted things. Other markets have been marked by rapid, disruptive change. Both pose problems, and the tricky part is predicting whether disruptive change is likely.

Then I want to talk about network effects briefly. This is, I think, relatively well-understood stuff. Finally, then I want to say a little bit about something have been interested in for the last several years: Two-sided businesses, which I do not think of as two-sided markets. I will spend a little time on that.

So, if there is Schumpeterian competition, competition for the market, the kind of competition that in the Microsoft case we noted had occurred with some regularity in the early years of PC software when dominant products losted their positions, then short-run market power is less of a concern. You still worry,

properly, about an incumbent's ability to use short-run power to stifle that dynamic competition, but if competition is healthy, the fact that a software product sells for well over its marginal cost is not problematic.

The problem is that that kind of competition often comes in bursts. If you look at the automobile industry early on, it is really quite extraordinary, right? You had steam, you had electric, you had the invention of the starter, you had the innovation of the closed body, you had all kinds of things going on, and then quiet. There is a great quote in Alfred P. Sloan's book, My Years with General Motors, to the effect that by the mid-1920s, the automobile and the industry were set, and that is about right. Sloan was writing in the late fifties.

You could argue that was an industry with rapid technological change for a time and then it was not. There was innovation after the 1920s: Engines got better as did many other things, but nothing disruptive happened. So, if you were trying to make policy in the auto industry in 1910, you would have this question of how long will this healthy dynamic competition continue, and there would have been no easy answer.

It is also hard -- and this is troubling in

these markets -- by the nature of disruptive innovation to predict its direction and source. Most of us, I hope, can remember when the Walkman owned the carrying around music business. It was wiped out not by somebody who did anything with tape but by a very different approach based on disk drives. The difficulty with looking at who is spending what on innovation, which I think is a useful thing to do, is that it may miss the radical, the novel.

Now, again, this is a call for skepticism. There are two possible errors. One is ignoring the disruptive that is being developed over here in the next room out of sight of the industry players, and the other is reading my alma mater's alumni publication Technology Review, too closely and becoming convinced that every technology they talk about is going to come to market tomorrow and disrupt its industry. Both are wrong, and finding the truth is hard. Ignoring the potential for disruptive innovation, however, gives you the bias of assuming the status quo is forever.

In a number of markets marked by rapid technological change, network effects can lead some firms to high shares. If you have a snapshot in which network effects have led to a dominant position, that snapshot is consistent with a world of vigorous

Schumpeterian competition, in which the next hot product may displace the leader. Think word processors in the early days. WordStar dominates; WordPerfect comes along and is better, and wham, WordPerfect owns the market. Why? Network effects. So, a snapshot in which WordPerfect owns the market is consistent with vigorous Schumpeterian competition. It is also consistent with its absence. So, just looking at the leader's share, just looking at its apparent dominance, just looking at the network effect, does not tell you whether there is dynamic competition in the market. You have to look beyond the snapshot.

One important thing that I would point out is that network effects build large shares, build apparently dominant positions, through expectations. You can have a large share because everyone expects you to have a large share. PCs wiped out Wang word processors very quickly. WordPerfect took over from WordStar very quickly, and Word took over from WordPerfect very quickly. These things happened rapidly, but -- and again, I will come back to my cautionary note -- it is hard to predict the pace of that kind of change.

There was discussion in the Microsoft trial of software as a network-based service. This idea was in

the air then, it was being discussed by the engineers, but it has taken a long time to happen. Could you know it was going to take a long time to happen? Maybe; maybe not. But that seemed to me to be a relevant question. Google now has an online service offering that may actually be serious. There has not been anything terribly serious until now.

Finally, let me talk about multi-sided businesses, my third topic. There are a whole set of businesses that fit this two-sided market paradigm. If you think of businesses that bring different customer groups together, there are indirect network effects, and the Coase theorem fails. This means that a wheat market that brings buyers and sellers together really does not quite do this if it is just buyers and sellers, because you know that the price structure does not matter, right? You can tax the buyer; you can tax the seller; the end result is the same.

An important point here is that the term "two-sided markets" is, a misnomer, because it is not necessarily a characteristic of a market; it is a characteristic of a business model. This is a strategy. You could have some firms competing with two-sided models with firms that do not. Two-sided medels apply, as Rochet and Tirole pointed out, to a wide variety of

businesses: Obviously marriage brokers; media bring eyeballs and advertisers; shopping malls bring customers and stores.

In case of securities exchanges, one thinks of the group as buyers and sellers, but, in fact, if you look closely, it is providers and consumers of liquidity. A number of exchanges have what are called "maker-taker" models where, in fact, if you post a standing order and somebody comes in and takes you up on it, you are paid. So, it is a more complicated thing than buyers and sellers. And payment cards, of course, connect merchants and consumers.

This class of business strategies has become more important recently because software platforms are in a number of settings a natural way to build a business like this. The Windows platform is an obvious one. It links applications developers, not all of whom work for Microsoft, and end users. The firm that has the platform, Microsoft or Apple, needs to court its developers, and its end users.

I want to make a few points about these business models, based in part of a book David Evans and I have coming out from the Harvard Business School Press this spring. First, one of the surprising features is how often in practice pricing is quite asymmetric; that is

to say, all the money is made from one of the groups. Theory does not predict this.

In credit cards, if you pay on time and do not have an annual fee, you do not pay anything to use a credit card. The merchant pays. But, of course, for any two-sided business, all the groups it deals with need to be treated as customers, even if they are not directly the source of profits.

One can have competition involving firms with the same business model; that would be overlapping platforms. One can have a platform competing with a single-sided business, i.e., a business that targets only one customer group, or one can have a competition involving intersecting platforms that target only some groups in common. This would happen if I target groups A and B, and you target groups B and C. These potential patterns of competition, complicate assessment of market power.

The business in these cases is not just sales to the profitable side. So, if you think about the business that the credit card companies are in as sales to merchants, you fundamentally misunderstand what is going on. The money is directly made on the merchant side, but, in fact, the consumer who carries the card is just as important as the merchant that takes the card.

That is an obvious mistake one would not make in this setting, but it is less obvious elsewhere.

Think about video game console makers. They also have to court game developers, because if there are not games for the consoles, the consoles do not sell. So, they are in the business of dealing with both groups, not just selling consoles. And, in fact, consoles, as we know, are not the source of profit in that business.

A two-sided business also has to worry about competition from different business models. Satellite radio is a single-sided business by and large. I mean, it is not heavily advertising-dependent, yet it deals with the same listeners that broadcast FM deals with. Broadcast radio deals with those listeners with two-sided models, advertisers and consumers; satellite radio, consumers only.

Google and magazines compete for advertisers, but they do it in different ways. Magazines use content to assemble eyeballs; Google uses search to assemble eyeballs or, better, to assemble focused eyeballs. Craig's List has kind of wiped out newspaper want-ads; it is again, a very different model.

The price-cost margin is pretty useless in assessing the market power of two-sided businesses

because of asymmetric pricing, how do you compute the price-cost margin? Think about a video game console maker. Video game consoles are sold at a loss or at break-even, depending on the maker and the year, but that is not where the money comes from. The money comes typically from sales of games you make yourself and license fees from independent people like Electronic Arts that make games to run on your console.

So, what is the price-cost margin? It is not the loss on the consoles, and as to the royalties, there is no cost or a very tiny cost associated with the royalties you get from Electronic Arts. So, it is very hard to figure out how to do a price-cost margin with these businesses, and if you leap into some calculation, it will likely be misleading.

As to market definition, the Guidelines approach can be hard to adapt. The problem is multiple groups and different models. In video games, the money is made from the games. In contrast, in games that run on PCs, the PC software platform vendor, does not make anything from the game developers. So, games are not a source of profits in the PC gaming, but they are the source of profits for consoles. How do you think about a price reduction or a price increase for purpose of market definition -- which price?

Another problem is posed by feedback effects. If you sell to A and B, you go through a hypothetical price increase to A that reduces demand from A, but, of course, if there are indirect network effects, that will make the platform less attractive to B. There will be a reduction of demand on the B side, which in turn will make the platform less attractive to A, and so on.

Now, it is not hard to write down the mathematics. It is just hard to think about how you would do the calculation correctly in practice. The existence of this sort of feedback effect does not mean there is a death spiral with quantities driven to zero -- things converge typically. The point is just that you have to be very careful, and the typical Guidelines approach is not well-suited to market definition in these contexts, nor do we have data that lets us measure those kinds of externalities.

Finally, and this is a cute feature of these businesses, you must have both groups. The simplest case is singles bars. For a heterosexual singles bar, you really have to get both men and women in the door, and if you have to spend a lot of money to persuade one group or the other to come, it does not matter if you have dominance, so to speak, on the other side. Competition for the patronage of men or the patronage of

women, depending on the market, can eliminate profits. So, you have to look at both sides, because again, the key to these businesses is the need to balance, and the need to balance means competition on either side can dissipate profits.

Now, this is not obviously a presentation that gives you answers, but I have tried at least to pose some important questions. I wish I could be more upbeat, but sometimes life is hard.

Thank you very much.

(Applause.)

DR. WERDEN: Mike Williams.

MR. WILLIAMS: Okay, thanks a lot, Greg.

So, I am going to talk about technology markets in a different sense than Dick just talked about them. I am going to talk about technology markets as they are defined in the FTC and DOJ IP Guidelines, and those technology markets are really literally markets for ideas. So, they are markets for intellectual property. They are not markets for widgets or even software. They are markets for intellectual property.

I will start with just a few of the more prominent cases. I think the main take-away from this overview slide is some of the bigger cases is just that, number one, there have been a number of them. Number

two, economists always get in trouble for making predictions, but I think it is a fairly safe prediction that there is going to be more, and probably disproportionately more, as obviously intellectual property is so critical to future markets.

Another quick take-away from this is that I have put in quotes after each case what the technology was that was being disputed, and I think another thing to draw from this is that there are certainly a lot of examples where the technology in question was intellectual property for what we would traditionally call high technology industries, but there is also intellectual property for very mundane things.

For example, the DOJ versus American National Can case, the laminated tube-making was -- at least in part the intellectual property was the patents that protected a certain way of making toothpaste tubes. So, you can have intellectual property for high technology things and intellectual property for very ordinary things.

I will not spend a lot of time on this slide. This is literally just the language right out of the IP Guidelines. So, what is a technology market? It consists of intellectual property that is licensed and its close substitutes; that is, the technologies or

goods that are close enough substitutes significantly to constrain the exercise of market power. So, the main thing to take away there is certainly sort of the primary intellectual property that we are thinking of is generally patents, but you may have a circumstance where other technology -- and by "other technology," it could just be know-how, it does not necessarily have to be patented -- and then goods. You can certainly imagine a circumstance where there is an allegation that somebody has market power over a certain kind of intellectual property embodied in patents, but there may be a physical product that is a good substitute for that technology.

So, three general points that I just want to touch on in this short talk. What are some of the challenges that you face when you try to define the markets? What are some of the challenges you face when you try to assign market shares? And what are some of the challenges you face when you try to determine whether or not a firm has market or monopoly power in a technology market?

So, the first thing to recognize is that these are all derived demands. Nobody wants to license intellectual property just for the heck of it. You want to license it to do something with it, to make a product

that can then be sold. So, you can obviously, going back all the way to the 19th Century, Alfred Marshall's Four Laws of Derived Demand can help you organize your thoughts about when a putative market for intellectual property may or may not qualify in terms of actually meeting the Horizontal Merger Guidelines test for an actual antitrust market.

Again, it really boils down to, is the demand for this intellectual property inelastic? Is it inelastic enough that a hypothetical monopolist would find it profitable to raise price? And I should mention that the Intellectual Property Guidelines are quite clear that even though the idea of a market for patents or a market for intellectual property is a new construct, the basic market definition methodology in the Horizontal Merger Guidelines is still quite applicable.

So, what are some of the practical problems you face when you try to define a technology market in this sense? One is that firms generally do not license their patents one at a time. They will generally license their entire portfolio. A portfolio generally has a lot of complementary technologies within it. As I am sure you are aware, a lot of big companies have hundreds if not thousands of patents. The patents generally are

not -- I mean, you would be surprised if they were substitutes, right? I mean, the whole point that they are patenting different things, and they tend to be complements, but they tend not to be sold one at a time.

Another way to think about it is, I have often found a good way to organize your thoughts when you are asking kind of what data are available, what do I have, is to ask, what is the perfect data set? What would I really like to have, and then what can I actually get? So, if you said, "Well, what is the perfect data set for thinking about technology markets," what you would really like to see is each patent licensed separately so you could look at the patents across portfolios, across -- in other words, suppliers of intellectual property -- and each patent licensed at an explicit price.

So, you could use the royalty revenues, but in most circumstances, we do not have either one of those things. They generally get licensed in a bundle, in a portfolio, that has substitutes and complements all mixed together, and they generally do not have their license revenues broken out certainly by patent or even in many circumstances -- I will get to this in a minute -- in many circumstances, no money changes hands, because many companies do these in royalty-free

exchanges. So, those are challenges that you face when you try to think about how to define these markets.

Assuming that you have managed to define a technology market in this sense, now we face the challenge of assigning market shares. So, you are in a world where, I guess the first thing to say is, what is the principle? What is it we are trying to accomplish when we assign market shares? Going back to the Horizontal Merger Guidelines, the answer, of course, is we are looking for a statistic that gives us the best indicator of a firm's future competitive significance. That is what a market share is supposed to tell us.

So, I mentioned earlier that you do not have royalty payments generally, so what are the normal ways in which we would think about assigning market shares? You might do it on the basis of output, you might do it on the basis of revenues, sales and so on, but most of the time we do not have royalty payments, because, for example, like cross-licensing, we do not have the ability to disentangle all of the IP within a portfolio because they were packaged as a portfolio and sold as a portfolio.

Of course, unfortunately, the whole notion of a capacity or a shipment does not make any sense in this context. There is no capacity constraint to an idea.

So, those are challenges.

So, what have people done to try and assign market shares in technology markets? I think there is basically two approaches that have been offered. One is sort of what your Bayesian priority would be if you had a really diffuse knowledge, which would just be I really am not sure what to do, I am just going to say it is 1/N. Now, I say that is an advantage because it is simple to compute, because that is conditional on agreeing what N is, and, of course, reasonable people in any particular case might have fundamental disagreements about what N is, because again, think about N can be patents, it can be just know-how, and it can be physical products that arguably compete in the same technology market.

When would 1/N be a good statistic? When would it tell you the likely future competitive significance of a given firm in a technology market, the answer would be -- and this quoted out of the IP Guidelines -- is does 1/N give you a good estimate for the ability of firms to produce close substitutes at comparable costs?

So, another way to say it is, suppose for the sake of argument we had four different patent portfolios, four different providers of intellectual property. If each of those patent portfolios provided

the downstream manufacturers that were actually going to bend the metal and make a product with the intellectual property, do each of those four patent portfolios give the downstream manufacturers the ability to produce close substitutes at comparable costs?

If you thought that was right, then 1/N probably would be a good statistic, because you are saying that each of those four patent portfolios is reasonably equal in terms of what their probable future competitive significance is, because they all seem to be about equally valuable in the sense that if they were purchased by one of these downstream manufacturers, the downstream manufacturer, arguably in this hypothetical, would be somewhat indifferent between which of the four patent portfolios it used, because each of them, by hypothesis, is reasonably good at enabling the downstream manufacturer to produce close substitutes at comparable costs.

There are some disadvantages to the 1/N method, namely, the flip side, which is, what if the four patent portfolios are not equally valuable to the downstream manufacturers? Of course, that is -- at least that is what my prior is, is that these patent portfolios are very heterogenous animals. You know, one firm has got 200 patents; one has got one. Of course, in principle,

the one patent could be more valuable than the 200 patents, you just do not know, but you would be surprised if each of the four patent portfolios in my simple little example were equally valuable to the downstream firms.

I mean, I think going into it, at least my prior is it is more likely that they are highly differentiated in terms of their fundamental value to downstream firms in terms of making the products that can then be sold. So, the patent portfolios are highly differentiated.

Another aspect that comes up in this is that if you think about the IP suppliers, there is actually two things that they do. They provide ideas, they provide patented technology, but they also work with the firms that bend the metal, and so if you think, for example, about firms that license technology to make memory chips, for example, they license the idea, but they also work closely with the companies that try to actually make the computer chips, because if you think about it, they are the ones who in some sense know more about how the product is supposed to work.

Now, they may not have the same engineering expertise that the downstream manufacturer has, but a complementary service that they are offering is, how do you actually implement my idea? Of course, the IP

suppliers could differ quite generally in their ability to work with the downstream manufacturers; their ability to actually get their ideas implemented. So, even though you might have four equally valuable patent portfolios, one of the firms might be much better at working with the downstream firms to turn their ideas into real products.

The last bullet, I will not really go over, it frankly, it just takes too long to explain, and colleague of mine and I have -- Ashish Nayyar -- an article that is just devoted to that particular subject, but I do not have time to get into that just now. So, 1/N is one approach.

A second approach is to say I am going to look at in some sense how manufacturers have voted with their dollars. In other words, if I cannot directly observe and assign market shares based because I do not have royalties, the patents are not licensed individually, I am going to look at how manufacturers have voted with their dollars to pick amongst, for example, these four patent portfolios.

If I look at what the manufacturers have picked, who has been successful in the marketplace? Has one manufacturer been much more successful than the other manufacturers because it used firm one's patent

portfolio instead of firm two's? So, if you think about it, that is kind of the mirror image of what we are trying to observe, that is kind of the mirror image of how that technology has played out in the marketplace. Has one technology proven, based on the choices of manufacturers and ultimately the choices of consumers, to be more valuable than another set of technology?

So, an advantage to that is that it arguably captures the differentiated nature of the portfolios, because one will probably be better than another, but as with all these things, there is some disadvantages to it. Suppose you have -- and this is common -- suppose you have a manufacturer deciding that he needs to license technology from two of the intellectual property providers. Well, now, how are you going to assign shares now? You have got two of the four, in my example, patent portfolio providers. Both of their technologies are being purchased by one manufacturing firm to produce one product. Well, now you have a problem. How are you going to sign, using this kind of mirror image approach, how are you going to assign those sales to one of the two patent portfolio providers or to the firms competing in the technology market?

Finally we get to really the last question, which is how are we going to measure monopoly power in a

technology market? As with most instances in antitrust economics, there is kind of two ways to think about monopoly power or how we would investigate monopoly power. One is structural, and one is performance.

So, from a structural perspective, remember, by this point we have defined a market as best we could, we have assigned shares as best we could, given all these problems that I have talked about, and you are going to get some measure of market concentration. Now, it might be an interesting statistic, you might view it with a lot of skepticism, but you will have some measure of market concentration, and then you would look at, again, kind of a traditional factor, barriers to entry.

Now, the barriers to entry tend to take kind of a different nature in a technology market. There is different kinds of things that firms have to do, invent around the IP, defend against patent infringement claims. If you are an entrant into a technology market, one of the things you might well have to do is indemnify people buying your technology against patent infringement claims from, say, an incumbent provider of technology. So, that gives you kind of a structural way to think about how one might study the existence of monopoly power in technology markets.

Then finally, a different way to think about it

is, can I study the performance of these markets and gain any insight as to whether or not these firms or one firm seems to have monopoly power? I think in some circumstances it might be possible to look at changes in royalty rates. I wrote in the parenthetical, "assume marginal costs are not possible to measure but constant." So, it is very difficult to know what the marginal cost of a patent is.

I mean, in one sense, on a forward-looking basis, really the marginal cost of a patent is the cost of enforcing it, because the costs of coming up with it are all sunk, so we may not know what the marginal costs are, but if we are willing to make perhaps a rogue assumption that those costs are constant, then changes or increases in royalty rates might be informative.

Then finally, there are certain circumstances where IP gets licensed with what are called tie-ins or tie-outs or in some circumstances -- and this falls back to a bit more traditional perspective -- if you are familiar with, for example, the patent misuse law, patent misuse occurs when a firm has arguably expanded the temporal or the product aspect of what they are trying to enforce beyond the four square corners of the patent. So, sometimes firms will actually ask for, when they are licensing their IP, they will ask for long-term

contracts that exceed the length of the patent life, and so that arguably is a performance indication that maybe this firm does have some substantial market or monopoly power.

So, thank you very much.

(Applause.)

DR. WERDEN: Andrew Chin.

DR. CHIN: Thank you. Here is a picture from the last time I saw Dean Schmalensee in the Microsoft case.

My name is Andrew Chin. My web site is andrewchin.com. You can get two of my recent articles I will be talking about on that web site, recently published, and the title of my talk is Defining Software Product Markets.

There is time for just one main point, and that is that relevant software product markets can be correctly delineated using the existing techniques that are described in the Merger Guidelines. By "correctly," I mean that the resulting market that you find is appropriate, is an appropriate subject for antitrust concern.

There is one tricky aspect to this, and that is what I am focusing on today, is that the key to doing this correctly is describing software products

accurately and at the right level of abstraction to perform the analysis, because here is what can happen if you get it wrong.

The conclusions of law of the District Court in Microsoft grounded the liability for attempted monopolization in a market for "platform level browsing software for Windows." On appeal, the D.C. Circuit found this description of the market to be varying and imprecise and as a consequence reversed the attempted monopolization liability and remanded the tying claim for a rule of reason analysis under which the plaintiff would have one hand tied behind their back. They would be barred from more careful approaches to market definition.

The approach of defining the browser software product market in this way, though, was doomed to failure because it defined the software product as "code and nothing else," as essentially adopting the position taken by Microsoft throughout the trial, that a software product consists of code and nothing else.

Consider whether Microsoft would have taken the same litigation position in a copyright infringement suit. Had I purchased Office XP and made several copies and sold those, put them on eBay, I doubt that a defense that I had bought the code and therefore could do

anything I wanted with it would avail me very much in a copyright infringement suit. So, the absurdity of that position percolates throughout the D.C. Circuit's tying analyses, both in the consent decree case and in the appeals decision. I have argued in my Wake Forest Law Review piece that throughout the D.C. Circuit's analysis, it relies on this fallacy, and then go into some of the consequences of relying on that fallacy in that article.

Well, another approach was available to the D.C. Circuit and to the District Court in the conclusions of law, and that was kind of buried in the findings of fact, but there was a discussion of a "market for web browsing functionality," essentially defining the web browser software product in terms of what it does. It enables a user to browse the web; in short, to select, retrieve and perceive web resources.

The conclusions of law did not cite this finding. The D.C. Circuit followed suit and did not cite it either but said as to the combined opinions of the District Court that it failed to enter "detailed findings defining what a browser is or what products might constitute substitutes."

From that I take two points: One, that antitrust analysis requires description in detailed

terms as to what a software product is and in explicit terms. Tell us what it is, not what it does. Well, at one level of abstraction, a fairly high level, you can just define what it is as the set of legal rights and technological capabilities that enable a user to select, retrieve and perceive web resources. You get two clues as to what those rights and capabilities are, and they come in the box.

They come in the box in the form of software code on some tangible medium, such as a CD-ROM, and accompanying documentation. Microsoft holds the copyright on both the code on the medium and on the documentation, so you do not own those, but the legal rights and technological capabilities are defined by reference to those accompaniments.

More detail is available but entirely unnecessary; however, they are available. I describe them fully in my Harvard Journal on Technology piece to give comfort to those who may not be convinced that these are well-defined concepts, and also, to address the misconception that arises from viewing these products as code that, for example, these are integrated by virtue of being supported by the same body of code. So, this addresses the product integration rhetoric that came throughout the case.

Now, so, why do we not need that level of detail? Because all that antitrust analysis requires is in the language of Dupont, is first to identify reasonably interchangeable software products from the user perspective for performing the same purposes or supporting the same user purposes. So, here is an example. Here is an example of two products that support the same user purpose at some level of abstraction.

Converting binary to BCD. For those of you with patent law backgrounds, this is the algorithm that was found to be non-patentable in Gotshall versus Benson by the Supreme Court. So, it is an historically interesting example. You do not need to know what BCD is, but this is a DOS program that will take a base 2 number and convert it to BCD.

Another way of doing this is create a Windows application, a calculator with a bin-to-BCD button on it. You type in the number, you click the button, and it performs the same calculation. At some level we know that these two applications serve the same user purpose.

So, if we run through the Merger Guidelines analysis, we can look on the demand substitution side, we see they are functionally interchangeable insofar as they support the same user purpose; however, if we dig

deeper, they run on different code. How important is that? Well, maybe if the user notices that one set of code runs more slowly than the other, that might factor into their preferences. The different user interfaces, one might appeal more to some sets of consumers than others. They run on different operating systems. So, there is different platform preconditions for both pieces of software, both software programs to operate, but there is high overlap. Basically all modern Windows applications have a DOS shell that you can go out to and run the DOS program with. So, there is a high overlap, but all of these can factor into the reasonable substitutability or reasonable interchangeability calculus.

Then on the supply side, you can identify structural barriers to entry. For example, if a firm with market power controls some of the preconditions for either of these programs to operate.

But what we might need more structure on -- all of these inquiries are fairly familiar, and whether you are analyzing flexible wrapping materials or software products, these are familiar modes of analysis to us except possibly for the user purpose. How do you define the user purpose for which a software product is used? What is the appropriate level of abstraction?

Well, software engineering provides us a tool for identifying the user purpose for a software product at what I believe is the right level of abstraction. So, if you look at this, this is called the essential use case, and this is a way of describing the functionality of a software product in terms of what the user intends the system to do and how the system responds to that intention. Does it meet its responsibilities?

So, there are many ways of describing a web browser. You could operate it, you could select items with a mouse, you could use a trackball, you could use voice. At this level of abstraction, those design choices do not matter. The code that supports those designs and implementations do not matter. All that matters is what from the user's point of view is the purpose supported. The precondition matters, and the user intention system responsibilities matter. So, that is the appropriate level of abstraction.

So, what I argue is that the box containing the software and documentation, this Windows 98 item that Microsoft markets, competes in at least two relevant product markets, and both of the relevant product markets that were described in the tying analysis, and those are technically end use segments, one of which is

providing platform software that can be pre-installed to meet the preconditions to run the Windows 98 applications; the other is providing legal and technological support for performing web transactions in the manner that I have described.

The best analogy to this is not self-repairing copiers or cameras but two services provided through one facility. Just as in Jefferson Parish, anesthesiological and operating surgical services are provided on the same operating table but the patient does not own the operating table, the same facility, the code on the CD-ROM, is the same facility through which those services are provided. So, in a very real sense, the service conception of software products is already here even though, as Dean Schmalensee says, this sort of network-centric approach is not quite with us yet.

So, these end use segments are properly conceptualized in terms of the Guidelines as price discrimination markets. As former Chairman Pitofsky points out, Cellophane was probably not susceptible to captive end use segments for -- the end use segment for wrapping cigarettes was probably not captive because of arbitrage; however, DRM in the area of software is very powerful in preventing arbitrage, and in particular, as Professor Felton showed during the trial, the end use

segment for web browsing was particularly captive because DRM was available to reduce the quality or eliminate that functionality altogether.

So, we can extend this idea of a price discrimination market, of course, to quality-adjusted price discrimination markets, and that brings in Professor Felton's analysis.

So, what are the benefits of this approach? Well, I claim that if we define markets in this way, what we end up with is competition recognized to design the product that best supports each software functionality for which a market exists. We come up with the competition to support a given essential use case, to make the system responsibility best meet the user intentions, and this is a classic definition of usability of products in general and of software usability specifically, and the human-centric vision of Michael Dertouzos, another witness in Microsoft.

In particular, in markets characterized by strong network effects, this leads to the recognition of harms to competition in the form of foreshortening of the already limited competitive windows that are available for product competition. It leads to a software developer-centric understanding of freedom to innovate, another slogan from the Microsoft trial, in

that each software developer is free to use the code that is to be executed when a user chooses its software product for a particular purpose, and design choices are made by the software developer, not by courts or monopolists. So, there is further reading on my web site if you are interested.

Thank you.

(Applause.)

DR. WERDEN: Bob Lande.

DR. LANDE: Thank you very much, Greg.

The title of my remarks is Market Power Without a Large Market Share: The Role of Imperfect Information and Other Consumer Protection Market Failures.

There actually are two very different sources of market power in antitrust cases. The first is traditional market share-based market power. Market power in antitrust cases can also come, however, from significantly imperfect information, deception, asymmetric information, or other sources of market failure that are more commonly associated with consumer protection violations.

In antitrust cases, these consumer protection market failures are present, and market power can rise even if no firm has a market share large enough for a finding of traditional market share-based market power.

However, instead of traditional end use consumers being victimized, the victims of this deception or imperfect information are businesses. Since this can result in harm to competition in entire markets, including higher prices, and these harms will not be prevented by competition in the relevant market, they quite properly give rise to antitrust violations.

Now, the consumer protection types of market power have in theory been part of mainstream antitrust for decades, and it certainly is used from time to time in current antitrust cases. The purpose of my talk today, however, is to urge that it play an even larger role in the day-to-day world of antitrust, perhaps almost as prominent a role as this type of market failure plays in consumer protection cases.

At the end, I will discuss some of the implications that could arise for antitrust, and if we grant this source of market power the attention it deserves, in addition to having an effect on how we assess market power, it also could have important effects on related antitrust areas as market definition and entry analysis.

To begin with, all market power requires a market failure. Now, this is true for market power that comes from having a large market share. In the

antitrust world, when we say "market power," we almost always mean market share-based market power that gives a firm the power to raise price, and, of course, a firm can only have a traditionally defined market power if it has a market share of 60 percent or 90 percent or whatever percentage you think is large enough.

Of course, even if it has such a large enough critical market share, it only has the power to raise price for a significant period of time if entry is difficult and certain other conditions are met. Even a large market share, in other words, only gives a firm the power to raise price when there is a significant market failure. Imperfections in the marketplace involving the role of capital or time lags and other market failures can give a firm the power to charge super-competitive prices for a significant period of time.

In addition to that traditional market power, a firm can attain the ability to raise prices from the types of market failures usually associated with consumer protection violations. The most common of these are coercion, undue influence, deception, incomplete or asymmetric information, or unreliable, uncertain or overly complicated information.

Now, this list of what I am calling consumer

protection market failures is really not all that different from the type of market failures that protects a firm's monopoly market share; however, consumer protection problems occur inside the head of the ultimate consumers. That is, the consumer protection problems from deception, et cetera, indeed do occur inside the heads of the ultimate consumers of these products.

However, by contrast, corporate officials also can be victimized by deception or imperfect information. Sometimes this will affect only that corporation, but sometimes it can hurt competition in an entire market. It is crucial to note that these violations can occur even if the firm committing the act in question does not have a monopoly market share. We, of course, prosecute a firm for fraud even if it is not a monopoly. We, of course, prosecute firms for fraud even if 80 percent of the companies in that particular market are honest. The same thing should be done, and sometimes is done, when these consumer protection market failures give rise to antitrust violations. This can happen even if the firms in question do not have a traditionally large market share at the time of the alleged violation.

To show how this is, in fact, a part of mainstream antitrust, I am going to very briefly discuss

three very well-known antitrust cases, Kodak, Rambus and Jefferson Parish. Each involved an alleged antitrust violation by a firm that did not before the violation have a monopoly market share as traditionally defined. Each case alleged, however, a market failure that is more often than not associated with a consumer protection violation, such as overly complicated information, a mistake or unexpected change in corporate policy, third-party payments or deception. Each presented allegations which, if true, could have resulted in antitrust harm.

Let me start with Kodak, because it is almost certainly the antitrust case that most prominently stands for the proposition that market power can arise from information that is imperfect or overly complicated. As most of you know, Kodak involved that firm's requirement that its customers purchase a firm's maintenance service in order to obtain its spare parts. Kodak's tying is of special interest because it had only 20 to 23 percent of the market for sales of copier machines and thus would not be considered to have market power under traditional standards.

The key to the court's decision, of course, was its concern over a possible change in Kodak's policy that had been unanticipated by its customers. Another

important issue is the customers' inability to calculate the life cycle pricing of their copier repairs and spare parts. As you know, due to a lock-in caused by the transaction cost of shifting to different copiers, purchasers became vulnerable to exploitation from Kodak's tying arrangements.

This case is significant because it reminds us that it was possible for purchasers that were businesses, no traditional end use consumers, to be vulnerable to information imperfections. Just because businesses are involved, we should not assume they always will possess information perfect enough to ensure a competitive outcome, or that a market that seems to be competitive would assist in terms of traditional market shares inevitably will supply the necessary information to the marketplace in a timely manner.

My second example is Rambus and similar cases alleging the deception of standard-setting organizations, and I promise, Tom, to be very general about this and say the word "alleged" a lot, okay? Two minutes of "alleged."

A firm that has secured or knows it is about to secure a patent on the intellectual property covered by a standard might be able to misrepresent to a standard-setting organization that no such patent

exists. This could induce the adoption of technology that relies on the patent and thereby greatly increases its value. The firm might be able to wait until the industry has committed itself to the standard and then to assert its patent rights.

The FTC's case in Rambus involved essentially these allegations. The FTC alleged, in effect, that Rambus was guilty of illegally monopolizing the relevant markets even though the company might have had no market power before the deception was made if market power were traditionally defined as requiring a huge market share of a rigorously defined market.

Moreover, it would have been very difficult to determine defendant's market share at the time of the alleged deception -- Dr. Williams talked about some of these issues -- because at the time of its alleged deceptions, its patents, or perhaps some other firm's patents, could have become crucial or could have become worth very little depending upon the actions of the standard-setting organizations.

But even if Rambus' pre-deception market power was uncertain if assessed under a conventional approach, the FTC alleged that it had the power to deceive the standard-setting organization in a manner that gave itself post-deception monopoly power.

Finally, I will talk for just a minute about Jefferson Parish, because this case raised the possibility that market power that can flow from what I am calling consumer protection violations can come from market failures other than imperfect or deceptive information. Now, Jefferson Parish did reject a finding of market power by a firm with 30 percent of the market. It held this was insufficient despite the existence of market imperfections such as high transaction costs, the cost of patients getting to different hospitals, and the prevalence of third-party payments.

So, this case maybe stands for the proposition that there is a 30 percent safe harbor, at least among sellers, in these cases, but it also established that market failures other than imperfect or deceptive information can be crucial to a court's market power determination.

Since I have given you three cases, now let me give you three implications of results that might arise if the antitrust world takes these ideas a bit more seriously.

Imperfect information and all these other transaction costs are everywhere. A crucial issue, however, is how significant they have to be before they constitute a market failure that should affect antitrust

decision-making. These are extremely difficult evaluations, as is the assessment of traditional market share-based market power. If antitrust were to take these principles more seriously than it does today, however, they would have profound effects on the analysis of market power and also the related areas of market definition and entry.

First, market share requirements for market power can change. As I said, Kodak only had 20 to 23 percent of its relevant market. In today's antitrust world, of course, it is almost inconceivable that a firm with double this market share would be found to have traditionally defined market power, yet if the allegations in Kodak were true, competition in the market did not protect consumers adequately, and the harms to consumers were serious.

A similar implication is that we should be more cautious about establishing substantial market share-based safe harbors in the Merger Guidelines and Joint Venture Guidelines and consider using the existing market share screens more strictly.

A second implication is that markets should be defined differently, sometimes more narrowly. Imperfect information can cause more narrowly defined relevant markets because it could effectively prevent customers

from turning to certain potential substitutes. Some customers might not know of an option's existence. If a significant percentage of potential consumers of plastic conduits, student loans, nonfluorescent light bulbs, you name the product, were unaware of the existence of a close substitute, perhaps a close substitute should not be considered to be within the same relevant product market.

Moreover, some customers might not realize that a certain product is a cost-effective substitute, and for other customers, the transaction costs of finding another choice or customers' beliefs about the size of these transaction costs might be so large that the firm in question has some degree of pricing freedom. To investigate these questions, we should attempt to ascertain the information about the products in question that was actually in the minds of potential customers, rivals and entrants. This will tell us whether products could effectively work as substitutes.

All this could lead to markets being defined more narrowly and to larger shares being imputed to the firms within these markets. This could sometimes have the effect of making it more likely that a firm will be found to have market power.

The final implication is that entry analysis

also could be affected significantly. Currently, entry that takes place within two years is considered easy and short term; however, when we compute this period, we should not assume that the would-be entrants quickly spot the profit opportunity and instantly make the corporate decision to enter. This certainly is not always true, yet these factors are not discussed in the Merger Guidelines.

Moreover, the 5 to 10 percent test for entry and market definition would have to be modified, because potential entry and customer reactions to a price rise should only count if they knew the rise was due to market power. By contrast, perceptions if prices rose due to increased costs would allow firms to increase prices without as much fear of entry.

Suppose potentially entering firms did not realize that prices rose due to an increase in market power but instead believe that prices rose due to cost increases. How sure will potential entrants be that there will be super-competitive profits to be earned in that market? If they believe the entire price increase might well have been due to cost increases, they would be very reluctant to enter. So, these market imperfections could mean that a price increase due to increased market power would not cause entry; thus, the

likely test for entry would be affected as well as the timely test.

Now, in conclusion, we all understand that no plaintiff has won an antitrust case at the Supreme Court in more than a decade. Also, the expansionist portions of some of the cases I have cited were mostly discussed only as possibilities, and even those possibilities have been largely ignored by many recent court decisions. Nevertheless, it is true that consumer protection laws' assumptions about consumers' capabilities, vulnerabilities, and needs sometimes should apply to businesses as well. These ideas' potential has not been forgotten, of course, as Rambus and related cases demonstrate, and the more serious consideration would also be consistent with the way that we approach potential consumer protection violations.

It also would be sound public policy to take the potential of this form of market power more seriously. Deception, imperfect information, and other consumer protection problems, when they have market-wide effects and are not likely to be prevented by competition in the relevant market, should give rise to antitrust violations. This is in part because they can cause harm in addition to higher prices, including allocated inefficiency and umbrella effects. Antitrust remedies,

including treble damages, are, indeed, appropriate for these situations.

For these reasons, as the agencies contemplate future dominant firm cases, they should give more attention to the possibility that so-called consumer protection market failures might create market power even in relatively unconcentrated markets and by defendants with a relatively modest market share.

Thank you.

(Applause.)

DR. WERDEN: Alan Silberman.

MR. SILBERMAN: Good morning.

Having listened to the last four presentations closely, I am now fully convinced that I am a thorn among the lilies, and I will start with an obvious disclaimer. I am not an economist, I am not an academic, I do not do research, because at that point, all my biases would be able to be tested against the facts, and it would also, of course, limit my ability to represent inconsistent views for different clients, so I am left to focus truly as a practicing lawyer, particularly a practicing lawyer who deals with problems of distribution, distribution systems, franchise systems and related after-markets.

In that capacity, I confront a repeated

challenge. I look at Section 2 cases, both complaints and interim opinions and final dispositions by particularly district courts but also sometimes courts of appeal and perhaps more in the great heartland of the country, that is, the area between the Delaware Water Gap and the Pacific Coast where there is perhaps a little more mischief or misunderstanding, let's say, about antitrust than there is in Washington. I look at those cases, and I have a sense, particularly in private antitrust litigation, that labels and key words that are used in Section 2 of the Sherman Act are being used and misused in ways that I find problematic and that the result is both cost to litigants and overall cost to the system, because we are using the judicial resources excessively for matters that really do not necessarily fit or should not fit within Section 2 private litigation.

The sense I have is that we are in this problem because all of our high-level discussion of monopolization, market share, market power, fails to get put inside a coherent structure that can be understood with a high degree of confidence by ordinary people. Now, perhaps that has just excluded everyone in the room, but I believe that that is a key public policy goal, and the ordinary perception of monopolization is

simply you are too big and you do bad things, there must be something wrong with that. Clearly that is not what the last four speakers exactly have been talking about, Bob Lande perhaps to the contrary.

Let me give you some examples of what troubles me, and I confess at the beginning that I focus on things, you know, in an excessively simple way. There are cases that I see that involve unfairness deception that have exclusionary effects. That is sort of what Bob was just talking about. Conwood is a perfectly good example of that. It is terrible behavior. Nobody doubts that it is terrible behavior. The question is, was that a Section 2 case or was it an unfair practice case? Was it a case that the Federal Trade Commission should have taken up under Section 5? There are all sorts of other possibilities other than monopolization.

That is not to say that you cannot have a good Section 2 case where you also have bad behavior. Certainly you can. But if you look at the facts of Conwood, you see extraordinary things where market share is increasing, where there is no exit, where all sorts of data support the conclusion that competition was still ongoing, but you had extraordinary bad behavior. I find myself troubled by those kinds of cases.

The second category, cases where, as we have

already noted, market share does not always indicate that there is exercisable market power. I will give you some examples of things that I encounter. One very simple one is the problem in the distribution system of the wholesaler. The wholesaler represents two, three, four competitors but distributes products to like outlets, so the wholesaler does a wonderful job. The wholesaler has 95 percent of all the sales in a geographic area. In fact, the wholesaler acts to exclude his remaining competition, buys up the other 5 percent or says to the suppliers -- each individually, of course -- says, "I want an exclusive." Now he has got 100 percent market share, but is there market power?

I will give you two answers for that. One is the minute that that wholesaler begins to try to follow strategies of raising price and reducing output and thereby reducing the sales of his principal, he is out of business, because the principal has options. There are no barriers to prevent manufacturers from creating relatively quickly ways around that wholesaler, notwithstanding the fact that he has 100 percent market share. Now, if you have that situation, you do not have market power. The market share there is simply an indication of good performance by the wholesaler.

Another example that is not a wholesale

situation, where there is no barrier to entry, entry is possible within six months. Customers for this product are largely big companies, the Office Max, Office Depot, Staples, this category. The company selling the product does a wonderful job. The customers like it, end users like it, and so on. There is no entry. Entry is possible, but there is no entry, and, indeed, given the performance, even price might even increase a bit. If we look at this purely in terms of numbers, we would say, well, is there a problem there? And yet we all know there is no problem there, because there is some other factor that will ultimately discipline the exercise of market power. So, we have to keep remembering that there are those situations and that they are real world -- they are not econometric models -- they are real world situations.

The third example involves situations where you are challenging conduct as of today when, in fact, the competitive forces that we expect to have had in play were ones that played out a year before, six years before, some other period. Let me give you the simplest example. The franchise situation where for years we went through this discussion, particularly in franchising but in other areas, too, of lock-in as a substitute for market power, but lock-in is nothing more

than relational power created by the contract, and the question then is, was the formation of the contract subject to appropriate competitive forces? And if it was, then we shouldn't have had to worry about what today's market power perception is.

An example of that, you know, go back to Kodak, because in Kodak, Kodak is not able to say that my initial transaction was subject to market power, not only because of problems of life cycle pricing and information failure and so on, but because Kodak did not tell anybody that -- maybe they did not know -- but they did not tell anybody that downstream, we are going to some years later decide that we are going to get rid of the independent service organizations.

So, Kodak is in a position where it is hoist on its own guitar. It cannot argue that, "Well, the time for looking at the proper exercise of market power was back when we first made these contracts." It tries to do that by saying, "Look, I was subject to competition with others," but that was complicated by their own failure. But if you look at post-Kodak cases, like PSI and then the franchise cases like Queen City and Wilson versus Mobil Oil, you find that the courts are saying very clearly, if the information was disclosed at the beginning of the transaction, even to the point where it

is very general -- because in both Queen City and in Wilson versus Mobil Oil, which is Judge Vance in New Orleans, there was the smallest amount of information. There was no projection that said, "Well, you know, because of these restrictions that you are agreeing to and the relations that are created, we will be able to raise price three years later." It just said, recognize this is -- this is the situation.

Now, number four, confusion about relevant markets in measuring monopoly power. I got onto this one in two ways. One is similar to the franchise discussion we have been having where when a franchise is first issued, what is the competitive market that we should be looking at? We should be looking at all alternatives that the individual had for capital, personal time, et cetera. The fact that they bought a widget franchise does not mean that the market is widgets, and the fact that the widget franchisor has 83 percent, 22 percent, 99 percent of a market, is irrelevant to the decision. In fact, that is a good example potentially of a 1/N market where you just take all the various alternatives and treat them all equally. You do not necessarily measure that issue by looking at the market share of the franchisor, because what you really should be asking is a question of what are the

constraints that affect the formation of the contract.

This is just a sidebar on that, if you go to the EU, you see that what they want to do, in single-brand distribution systems, they want to aggregate all the sales at the retail level. That is possibly reasonable in some situations in measuring market share, but it is certainly not reasonable in situations where the retailer or wholesaler or both have the ability to control output and price, and therefore, can actually alter the consolidated market share by their own tactics, and there is no point to impute that upstream.

Again, what is the question that is being missed in all of these situations? The question is, what constraint are we relying on in order to measure monopoly power? And that is really the burden of my entire pitch.

Number one, if we are going to have a coherent way of organizing this, we ought to begin at the threshold by recognizing that there is a semi-safe harbor that we always need, semi-safe because it never excludes the possibility of reasoned inquiry through study and possible action by an administrative agency, but we are not going to have public resources used, particularly in private litigation.

Second, we need to identify and articulate the

constraints that we rely on in each set of circumstances. That is the starting point. What is it that we expect will prevent the undue exercise of power in the future? Once we have articulated that, we can then test whether the conduct at issue affects that constraint. If it does not affect that constraint, as in the wholesale case or a couple of the other ones that I mentioned, we just do not have an issue.

What that leads to, the third point, is what practicing lawyers and businesspeople need, as a crying need, is a decision tree that they can look at that will help them understand a rational sequence of a Section 2 analysis and the points at which certain types of behavior can be ruled out, at least from the standpoint of private antitrust litigation.

Last, I believe that going along with this is a need for continued and if not increased competition advocacy by the agencies, which means not only being able to guide courts and counsel in terms of where there are problems, where there are not problems, and the methods by which we test that, but also considering amicus briefs in district courts, helping to guide courts in dealing with problems that are plenty complicated, as you obviously know from the last four presentations, and even to the point of recognizing that

there may be cases for primary jurisdiction where district courts ought to be taking Section 2 claims and referring them to the Federal Trade Commission and asking the Federal Trade Commission to parse certain basic questions. That will obviously require increased funding, increased personnel, but I think is a direction we ought to be considering.

Now, please understand, I do not want to chill or limit the scope or depth of any of the inquiry that the other speakers have suggested. What I do suggest that we do is take one step back and try to frame our discussion of Section 2 of the Sherman Act with plain speaking and commonly understood language if not also common sense.

Thank you.

(Applause.)

DR. WERDEN: All right, we are going to take a let's say 10-minute break right now, then we will come back for a discussion among our panelists.

(A brief recess was taken.)

DR. WERDEN: Okay, let's get started. We are going to spend just a few minutes, I hope, giving the speakers the opportunity to say anything that they are just aching to say given the remarks of any of the other speakers. I know at least one of our panelists is

aching to say a couple of things about the Microsoft case.

DR. SCHMALENSEE: Let me just say a word, if I may. Andrew is, of course, right. The way to define software products is functionality and rights. I find it interesting that Microsoft is blamed for being "it is only code" since the number of times I was told, "Do not call Internet Explorer a browser, it is the browsing functionality in the Windows software product," which, of course, no one ever said out loud.

In that case, I would say both sides were inconsistent as between code and functionality, and I do not think that is why there was not a market, a satisfactory browser market, introduced. The Government just did not bother to put up a witness who said, "This is the browser market." Had they done that, I think despite the confusion, there would have been a market. In any case, the whole tying analysis and the question of removal of code and the commingling error that was made was because of the confusion between code and functionality.

The proper question was, was it a violation of tying browser functionality to this product, regardless of how you did it, and should Microsoft have provided a way for consumers easily to have disabled the

functionality? You can get to the core questions without the code confusion, and Andrew has the right way to put it, clearly. It is about functionality.

Apple's operating system and Windows both provided browser functionality out of the box. They did it in different ways to the end user. It shouldn't matter.

DR. WERDEN: Anybody else dying to say something?

Okay, Bob Lande.

DR. LANDE: Sure. I would like to take a challenge to step back for a second, ask the larger question, hopefully express it in easy-to-understand terms.

What is antitrust? What is consumer protection? That is, you have got cases like Conwood where there was coercion, and is that an antitrust issue or should we let some other area of law deal with it? How about a case like Kodak? Is that antitrust or should we say, "No, this is not antitrust, let consumer protection law or something else deal with it"?

I will give you a proposal for how we tell the difference between antitrust law and consumer protection law, and this a plug for this article which I will sell you at marginal cost, I think, or marginal -- whatever,

you can have a copy for free if you want it.

We propose that antitrust is about distorting options in the marketplace, an artificial distortion of the options that competition otherwise would have presented, whereas a consumer protection violation detrimentally affects consumers' inability to choose from among the options presented by the marketplace.

So, in a case like Conwood, if the torts were bad enough to affect competition in the marketplace, that is, they did not just destroy a couple of racks of a, you know, competing brand of cigarettes or smokeless tobacco, but it was enough to affect competition in the marketplace, then it is going to be affecting choices in the marketplace, and it certainly belongs in the world of antitrust.

Tying is sort of right on the border. It affects choice in the marketplace, because it says, if you want to buy one product, you have got to buy the other product. On the other hand, the Kodak-like violations certainly are consumer protection as well. So, tying is right in the middle, but something like Conwood certainly belongs in the antitrust world.

DR. WERDEN: Okay, thank you.

We are now going to have a round of questions to the panelists which the other panelists are invited to

comment on as well and on the answers given thereto, and we will go down the line here starting with Dick.

I enjoyed and pretty much agreed with everything you said on assessing the competitive effects, but mostly what you have told us is this is tricky. That is true. You implied, if not actually said, that error costs can be high and that errors are likely because it is all pretty tricky.

If I have got you right, then, I am wondering, so, what do we do about it? And I will put to you, is what we do about it to minimize the extent to which judges and juries have to actually figure out tricky questions by structuring a process to minimize the need to do that, for example, with market share safe harbors, conduct-based safe harbors, and burden-shifting approaches, in order to put off as much as possible as much tricky analysis as you can put off?

DR. SCHMALENSEE: I live in fear of unstructured rule of reason proceedings because they do put you into coin-flip country, so I am a fan of either clear rules or putting structure on the inquiry where we know how to do it. My comments pointed to some of the areas in which I do not know how to do it. If you say that the real question is, "Boy, this is a bubbling caldron of technological competition, there is a lot of innovation

going on, will it continue? Can you count on that happening to discipline short-term power over the next five-ten years?"

There are things I would look at. I would look at spending. Are people spending money to try to displace the leader? Unfortunately, those data are not always available. I do not know how to compute meaningful shares. People make mistakes. Not all technologies succeed.

Yes, I would like rules and I would like structure on the analysis where possible. There are some areas where I am not sure I know how to impose good rules, and I am afraid in those areas, you have to let dueling advocates duel. It does not make me comfortable, and I hasten to add, the recipe is not that the Antitrust Division and the Federal Trade Commission should avoid intervention, because that is wrong, too.

DR. WERDEN: Okay. Well, it seems to me the way people actually do these things is when the facts are so hard they cannot figure stuff out, it all comes back to what they believed before they looked at the facts, and if you read judicial decisions, I think that is what they are all saying, too. So, when you have one of these bubbling caldrons of technology, are you supposed to believe that the market will fix itself or are you

not supposed to believe the market will fix itself?

DR. SCHMALENSEE: I think the easiest thing and the most plausible thing for judges to do -- and this was certainly done in Microsoft -- is to say, "This is all hypothetical. You are telling me that things might happen, but I am going to make the assumption that the world as I see it will persist. Absent, evidence that entry barriers are low, this is what it looks like, and I am going to deal with it on its face."

That is probably better on average as an assumption than the opposite, which is, "I assume that these are just fleeting bubbles of market power that will soon go away because they have gone away in the past." As I say, bursts of innovation do tend to be limited in time, but, of course, an assumption that they will be short lived will occasionally be quite wrong.

DR. WERDEN: Thanks.

Any other panelists want to comment on that?

MR. SILBERMAN: Yeah, let me just go back to dueling advocates first. Dueling advocates is a bad model, because in litigation, when two advocates duel, they do not get hurt. The ones who get hurt are the clients and perhaps the economy. The advocates love it. I enjoy dueling, but I think -- and I was with you up to the point where you said minimize the need for tricky

analysis and then say but now we should do that by safe harbors and presumptions.

I know this requires major change, but I think you have to structure it by, A, getting a whole set of questions that are too tricky and too difficult and too uncertain out of the courts. You have to make the standard for Section 2 violation a higher degree of certainty and then leave open the remaining inquiry. Some issues, like functionality, where it is clear that something is an effort to improve functionality of a product, I think we just cancel the inquiry.

I mean, you know, Henry Ford originally did not put headlights on the Model T, and then he put headlights on the Model T and made a design decision that was integral to the car. Now, I guess we could have applied a tying analysis to that, but we were all convinced I think that that was integral to the function. Microsoft was probably less convinced, but that does not mean that we should be turning judges and juries loose on that very difficult question.

DR. WERDEN: I would only comment that what you are describing there is precisely what I mean by a conduct-based safe harbor. The conduct of putting headlights on the Model T is conduct we could place in a safe harbor and never inquire as to whether that is a

good thing or a bad thing for consumers.

MR. SILBERMAN: That one I would agree with, and that would avoid also the semantic gamesmanship of having to -- how you describe it. I mean, we did that years ago with McDonald's and the alleged tie of the real estate and the franchise, so we taught everybody to say, you are not offering a trademarked franchise and then requiring that they rent real estate. You are offering an operating rights contract in which, of course, in order to operate, you need to have both real estate and intellectual property rights.

Okay, that was creative, but it is a waste of resources for lawyers and clients to be devoting their time to that kind of wordsmanship. So, I agree with you on some things, yes.

DR. WERDEN: Okay. Dick has a look of bemusement. Do you wish to comment?

DR. SCHMALENSEE: Well, I am just bemused that you know for certainty that adding headlights to cars or perhaps air conditioners to cars or perhaps spellcheckers to word processors or graphics features to spreadsheets are procompetitive, but adding browsing functionality to Windows was anticompetitive. I think competitive effects are a little bit hard to determine.

DR. WERDEN: Well, if your point is it is hard

to know how to draw these lines, you are absolutely right. It is a hard problem.

DR. SCHMALENSEE: Then we are in agreement.

MR. SILBERMAN: Okay.

MR. WILLIAMS: So, what is a conduct safe harbor then? I mean, if Microsoft -- I know that they contemplated -- I do not want to speak for Dick, but I know they at least contemplated putting virus protection into the -- and my guess is, I am not -- I do not work for Microsoft, but my guess is they decided not to do it because they probably thought they would have an antitrust case on their desk the next day.

DR. WERDEN: In some countries.

DR. SCHMALENSEE: They would have had a private case.

MR. WILLIAMS: They would have had a private case certainly. Again, I do not work for Symantec, I do not work for Microsoft, but I am just going to take a wild guess that Symantec would have sued.

DR. WERDEN: Well, the Microsoft Court of Appeals in the en banc opinion drew a distinction which is not easy to draw but can be drawn between entirely new products and product design issues. It said, right or wrong, that the issues that it had with Microsoft were about product design, not about new products, and

while this is a tricky line to draw, it could be drawn, and then you would end up litigating about which side of the line you were on rather than something else. Is that a productive exercise or an unproductive exercise? That is the question.

DR. SCHMALENSEE: That is a tricky line.

MR. WILLIAMS: So, what did the safe harbor buy you?

DR. WERDEN: I just told you what it bought you. It bought you litigating about which side of the line you were on rather than about whether consumers were better off because Microsoft did X, Y and Z, which would be hard to figure out, of course.

MR. WILLIAMS: Yeah.

DR. SCHMALENSEE: But I do not understand the distinction between -- well, I would have to go back and read the Court of Appeals' opinion, but I thought the Court of Appeals in its first opinion basically said product improvement is not a violation.

DR. LANDE: Right.

DR. WERDEN: Well, let's not talk about what the Court of Appeals said in Microsoft.

Mike, question for you.

MR. WILLIAMS: Sure.

DR. WERDEN: I see that we get antitrust issues

in technology markets with some frequency, but I am not so sure I see that we need to assign market shares to analyze these things. So, can you give us something more specific, what you have in mind about why a court would feel the need to figure out what the market shares would be in order to assess a competitive issue in a technology market?

MR. WILLIAMS: Well, I can give you -- I would like to give you a good one from the Rambus case, but ERS was -- we were the consulting experts for the Complaint Counsel, so I probably shouldn't talk about that.

MR. KLOTZ: Can you illustrate it with UNOCAL?

MR. WILLIAMS: Well, I do not know -- the short answer is no.

DR. WERDEN: Was not UNOCAL's share 100 percent?

MR. WILLIAMS: Well, no, I think that is right. I think UNOCAL's share was 100 percent.

DR. WERDEN: Then an easy question.

MR. WILLIAMS: Okay, well, assuming there are examples where -- for example, again, by way of full disclosure, I probably should have said on the Gemstar/Echostar case, I along with David Sibley and Roger Noel were the experts for Echostar, Pioneer and Scientific Atlanta. That was a circumstance where

Gemstar at least allegedly had monopolized the technology for interactive program guides, but they certainly did not have a 100 percent market share.

Now, there was -- Janusz Ordover was Gemstar's expert. There was a big debate about what their market share was. He thought it was maybe one-third of the market, I thought it was closer to two-thirds, but it certainly was not black and white. It certainly was not a circumstance where anyone could look at it and say it was 100 percent. I mean, even the plaintiffs did not allege it was 100 percent. It was a more traditional fight about whether it was one-third or was it two-thirds.

DR. WERDEN: Are you talking about our case now?

MR. WILLIAMS: No, no, no, no, I am not talking about the -- I am talking about the private case between Gemstar, Echostar, Pioneer and Scientific Atlanta, where Gemstar sued on patent grounds, those three companies countersued on antitrust grounds, and there was a fight. Does Gemstar have a monopoly position in the IP technology market? And everyone agreed that they did not have 100 percent. So, then it was a fight, what was their share?

DR. WERDEN: It seems to me in cases like that one and others, the really hard problem is one that you

did not really talk about, and it is that you do not know exactly what the intellectual property right means. That has not been decided yet. You do not know, for example, whether some other technology is infringing.

MR. WILLIAMS: Well, that is right, and, I mean, again, not to focus too narrowly on the Gemstar case, but in that case, Gemstar had sued every company that had come out with a rival interactive program guide. They actually had lost all the cases, but they announced that they had over 200 patents and they were going to keep suing people one at a time, and --

DR. WERDEN: And if I recollect, there was considerable doubt about whether they were right in all of this.

MR. WILLIAMS: It depends on who you ask, I suppose, but --

DR. WERDEN: It always does.

MR. WILLIAMS: -- you are right. I mean, at the level of, you know, what exactly was their technology protecting, if Janusz was here, he would say there was a big fight, for example, Gemstar did or did not have blocking patents, okay, and they took a very fine line and said, "We do not have blocking patents, but it is impossible to make a commercially operational IPG without violating our patents." That was their

position.

So, now you ask, well, what exactly are they protecting? Well, the plaintiff's position certainly was that they monopolized a market for the provision of intellectual property, the only intellectual property that can be used to actually make a functioning IPG.

DR. WERDEN: Okay, thank you. Any panelists, anyone have any comment on any of that? No? That is fine.

Andrew, I am not sure where your analysis is actually taking us. The concept of a price discrimination market, of course, is at least a quarter century old, and it does not get applied all that much, but it certainly is applied by the agencies in merger analysis quite a bit. So, when it comes to monopoly cases, I took your suggestion to be that it applies in exactly the same way, but would a court be a little more skeptical about a price discrimination market in a Section 2 case?

DR. CHIN: Well, my point on market definition based on price discrimination was to ground this in the existing approach. The agency guidelines do support the definition of price discrimination markets, and by extension, quality-adjusted price discrimination markets, and this should counter the intuition that it

might be seen as improper to see the same item, the same box of Windows 98 participating in two distinguishable relevant product markets, as I argue it actually did.

So, on the substantive point of where this is taking us, if I could sort of return to our discussion of the line-drawing, one special feature of the web browser software product market -- or actually, there are two. One is sort of its ancillarity. The features that a consumer would be interested in in getting a desirable web browser were very different than the considerations that would apply to the choice of an operating system, particularly if you are considering when the installed base was formed several years before the existence of the web. So, that ancillarity speaks to the kinds of information deficiencies in the market that, you know, result in the installed base opportunism that really was attacked by the tying claim.

The other feature -- and this is a special feature of the browser market, in particular -- is its role in providing meta information about all the content on the web, which include viruses and everything from viruses to immensely valuable information products, and to the extent that the computer scientists refer to it as a web agent, it really does stand in the position of an agent in terms of providing that meta information

about the value of transactions that a user might participate in on the web.

So, that is very specific to the web browser sorts of information imperfection that I think pushes browsers towards one side of the line, but it is things like that, it is things like whether there is temporal deferment of the purchase of the tied product, these sorts of things that might provide some guidance as to where to draw the line.

DR. WERDEN: Dick?

DR. SCHMALENSEE: Just a quick response.

I think this points in large part to the absurdity that is now generally recognized of having a per se tying law, particularly when it applies to product design. We could have this argument all day long. I would counter that every other operating system provided a web browser; they just did it differently. So, it is hard to say that it is inessential in any commercial sense.

Its a general matter I am very nervous about, using the tying law or any other law as a way to let courts at product design decisions except in extreme cases. There certainly are cases where product design has been used as an exclusionary device, and I am not saying one would never want to get at design decisions,

but boy, is tying law ever a blunt instrument for this. "Have market power and you cannot add a feature" is not a good way to address issues that are occasionally posed by product design, and I would emphasize "occasionally."

DR. WERDEN: Of course, the Court of Appeals saw things pretty much the way you do on this question, did not affirm liability on the tying claim, held that the per se rule would not apply in this case, and said you guys figure this out, and it died.

DR. SCHMALENSEE: But it remanded in a way that the Government could not effectively pursue the claim, because it said you can do tying, but you cannot define a market for the tied product. How could that work?

I think we still have this issue in tying law that there is not a distinction between product design that puts two features together and bundling by contract, so to speak, and to my mind, that is a very important distinction.

MR. KLOTZ: But how do we tie that back to our issue today, to our issue of market power and market definition?

DR. SCHMALENSEE: I am not sure we do, but it came up.

DR. WERDEN: Bob, did you want to make a comment?

DR. LANDE: It was a bit overtaken by the remarks, but I just wanted to say that it was the exclusionary features of Microsoft that bothered some of us.

DR. SCHMALENSEE: No, that is the issue.

DR. LANDE: Exclusive dealing arrangement, a very different issue, of course.

DR. WERDEN: Yes, okay. While you are up, Bob, a question for you.

DR. LANDE: Sure.

DR. WERDEN: Your discussion, unless I missed it, never drew any distinction between market power and monopoly power between Section 1 cases and Section 2 cases. Do you believe that the kind of market power you were talking about is sufficiently durable to constitute monopoly power and to give rise to a Section 2 violation?

DR. LANDE: Sure.

DR. WERDEN: You can stop there if you want.

DR. LANDE: Okay, okay.

DR. WERDEN: Okay.

DR. LANDE: Yeah. In other words, for antitrust to worry about market power or monopoly power, it has to be durable, and we could quibble over do you mean two years, do you mean some other figure, but whatever the

relevant figure is, if it is not at least that figure, then it is de minimus and trivial and we do not worry about it, of course. Can imperfect information, deception, give rise to that kind of a problem? Sure.

DR. WERDEN: Do you think it --

DR. LANDE: Oh, in your Section 1 versus Section 2, I only talked about Section 2 because that is what I thought we were supposed to talk about, but --

DR. WERDEN: It was.

DR. LANDE: -- in Section 1, it happens all the time. Think of the advertising restriction cases. Lawyers cannot advertise, dentists cannot advertise, all that kind of thing, durable problems in those markets created by information problems.

MR. KLOTZ: But does that analysis enter the question when the court is looking at does the firm have monopoly power or does that monopoly power, as you are defining it, enter in the competitive effects analysis?

DR. LANDE: If we are trying to figure out whether other products, other firms compete with the products in question, and how long does it take to enter the market, then I think these issues of deception, in the case of Conwood coercion, imperfect information, would play a role in how long does it take firms to enter the market, what competes with what, what do

consumers think competes with what, that should all be part of the process.

DR. WERDEN: Anybody --

DR. SCHMALENSEE: Just a quick reaction.

I think it is worthwhile thinking about information, but I think you cannot paint with too broad a brush. I mean, it is well known that all consumers do not have to be informed for prices to be affected. Depending on the situation, it may be adequate for a small number of informed customers to switch patronage and drive prices into alignment.

That said, it may be possible to discriminate against ignorant customers for a long time, and one may want to worry about that. It is an interesting phenomenon that when generics enter the market, the prices of brand name, formerly patented drugs, tend to go up, not down, suggesting power against uninformed buyers, but I guess my sense is that these are probably not typically phenomena that give rise to the level of power that one talks about for a Section 2 case.

All of the Rambus allegations sound like something that, could potentially give rise to Section 2 levels of power. I am not involved with the case, and I am not familiar with it. I am not a fan of the Kodak decision, and, I am glad it has not had the impact many

of us feared. So, I think by and large, these things do not get you to the Section 2 level of monopoly power, but, you know, one wants to keep an open mind.

DR. WERDEN: All right. Let me turn to Alan Silberman.

You mentioned franchising several times and mentioned a line of franchising cases which almost uniformly have found for the defendant franchisors in these tying and other scenarios, and it seems to me that the courts have generally said, "The contract defined the rights and responsibilities, you knew what the deal was when you signed the contract, and if you got exploited, it was your own fault, you should have negotiated your way around that." It seemed to me that these courts were saying that this might be different from other cases because there was a formal contract defining all these rights and responsibilities.

Do you have a similar view, or do you think that there is nothing different about the franchise cases than about other lock-in type scenarios?

MR. SILBERMAN: Number one, they got it right in those cases with the possible add-on that it may not have been the contract, it may have been also the disclosures made at the beginning coupled with the contract, but they got it right. So, there is no reason

to think about lock-in theory as a source of market power in franchising or other distribution relations.

Then the question is, can that analysis carry you into other kinds of cases and can you then say, "Well, if, in fact, we are dealing with relational power where we have a sense that there was a competitive process, shouldn't we stop there and not worry about the alleged anticompetitive effect today and simply direct people to deal with these issues at the inception of relationships?"

There I think there is room to take that line of thinking and apply it more clearly in other cases, and certainly I think lock-in theory, I do not encounter people, you know, really arguing lock-ins anymore as a source of market power, but essentially to stop the anticompetitive rhetoric in cases that is purely based on, well, either look what you are doing today or a plaintiff claiming I have a civil right to be in business for some segment of your business. In other words, you have designed the product in a certain way, you have succeeded, and now I want to claw back a little part of it for myself.

In all those situations, we should be simply responding the way the franchise cases do and say, "The transaction was properly subject to competitive factors,

they were not impaired at the time the relationships were established, and therefore, end of inquiry."

DR. WERDEN: Anybody have another view to add? No?

Okay, we are going to do, as we sometimes do in these cases, put up a couple of simple propositions.

Okay, we are going to start off simple. Since we talked a lot about technology, and we like to start with things we can agree on and then move from there -- consensus is good -- so we start off with the proposition, "Innovation is a powerful force in enhancing the well-being of consumers," and I doubt that we are going to get a dissent on this, but we can quickly move on if we do not.

Okay, not hearing any dissent, so, now what? So, it seems to follow that antitrust analysis in the Section 2 area should be concerned about protecting the innovation process. Can we all agree on that as well? Okay, good.

Okay, then the question is, well, how do you do that? That is the hard one, okay, and, of course, this line of logic leads some people to say, well, that means you need to intervene a lot, and it leads other people to say, no, no, no, that means you should hardly ever intervene. Anybody care to weigh in on that debate?

Yes, Alan?

MR. SILBERMAN: No, you do not put barriers in front of people who are attempting to innovate by later saying, "Well, you know, you guessed wrong," or, "It did not really specifically enhance the well-being of a consumer." It is the process. So, the principle ought to be that where the evidence is that you are trying to innovate and you are trying to, in effect, build a better mousetrap, you are doing what we expect competitors to do, and if you succeed, you should get the reward, and if it turns out that you were somewhat mistaken and there was not a direct consumer benefit, the only time we should be very concerned about it is if there is some collateral effect from what you are doing that prevents some other kind of competition.

DR. SCHMALENSEE: Yeah, I think the issue is not intervene a lot or intervene a little; it is intervene with care, because this is a process we do not understand terribly well, and avoid obvious pitfalls. The most obvious pitfall is "the competitor, having been urged to compete, must not be turned upon when he wins." That is a natural impulse and is to be resisted not in the face of any possible conduct but is to be resisted since the reward for innovation and major innovation is typically monopoly power for a time.

DR. WERDEN: Bob?

DR. LANDE: I agree with everything that both former speakers said, but still, there is a difference between innovating yourself and trying to prevent others from innovating. There is a difference between running faster to race and putting stumbling blocks deliberately in front of competitors, but, of course, if you are just running faster, then God bless you, and that is wonderful with everybody.

DR. SCHMALENSEE: I have no dispute with that statement.

DR. WERDEN: Before, Mike, you chime in, I think we do all agree with that statement, but the question is, so?

DR. LANDE: Right, right.

DR. WERDEN: Do you have anything to add?

DR. SCHMALENSEE: The answer is yes.

DR. WERDEN: So, what do you do about it?

MR. SILBERMAN: Be cautious.

DR. WERDEN: How do you draw the line?

DR. SCHMALENSEE: Carefully.

DR. WERDEN: Okay, we have one answer.

All right, we will turn it over to Mike.

MR. WILLIAMS: Okay, I wanted to suggest one thing that Preston McAfee and I have talked about from

time to time, and again, I am not going to talk about the Rambus case, but my point is going to be related to the Rambus case, and that is a conduct that is -- so, I am not an attorney, but so far as I understand it, it is perfectly legal, and that is submarine patents, where a company knows it has a or believes it has a patent that covers what another company is about to engage in, stays silent until the sunk costs are made, all the investments are put in place, and then it holds its hand up and says, "A-Ha, I gotcha."

Now, from an economist's perspective, that seems at least arguably like anticompetitive conduct. I mean, so far as I know, it is perfectly legal, but it is certainly not procompetitive. In other words, it is just an odd phenomena that somebody can have intellectual property, keep it hidden, not -- well, hidden in the sense that it is public that they have the patent, if somebody, you know, looked hard enough, but it is hard to find everybody's intellectual property.

There is I do not know how many millions of patents that are out there. They know that what they are doing is going to cause an enormous disruption of somebody else's business. They keep quiet, they wait until all the investments have been made, and then they cause havoc, and so far as I know, it is perfectly

legal. So, I just wanted to suggest that to me that is that is just what I would regard as not very procompetitive conduct.

DR. WERDEN: I think we might all agree that that is not nice, but I think we probably all agree that is not in the antitrust laws business.

MR. SILBERMAN: Right, it is not part of the antitrust laws business, and if we had the right email inside the company that laid out this procedure, I expect that you would have a great tort remedy, and in certain states in this country, you would get to a jury and you would get a punitive damage verdict that would make treble damages look puny.

DR. WERDEN: That would be an interesting case. If you have one, then that is nice.

DR. SCHMALENSEE: Just using quasi-rents --

MR. SILBERMAN: My phone number is...

DR. LANDE: You do tort law, too?

MR. SILBERMAN: That is all antitrust is, is tort law.

DR. LANDE: True.

DR. WERDEN: I do not think we are going to all agree on that one.

DR. SCHMALENSEE: No, no, we are not.

DR. WERDEN: Okay, next -- and last -- of these

propositions -- we only had two. "A competitive foremarket precludes monopoly power in the aftermarket."

This one might be more controversial than the last one. This, of course, was basically what Kodak was saying in the Kodak case, and the Supreme Court sort of kind of said, "No, we don't think so," but a lot of people say the court got that one wrong.

DR. LANDE: Well, I mean, Alan and I sort of disagree on this one. We each addressed the issue, and I think we are going to have to agree to disagree on this one.

MR. SILBERMAN: Well, I am going to give you a little different view of this, and this is a private and maybe practical analysis, but I believe that the discussion in the opinions was framed, unfortunately, by the way Judge Schwarzer handled the issue in the District Court. That is, Judge Schwarzer, being a great advocate of summary judgment, strong-armed the issue, an issue that should have required proof, and said instead, "No, it can never be. There is no case in which, given a competitive foremarket, there can ever be downstream monopoly power under any circumstances."

Well, that is wrong. It was wrong, and had he allowed the parties to develop a record in the trial court on that issue, then the issue I believe thereafter

would have been clearer, because my guess is that Kodak's position was correct, but it was a position that requires proof.

DR. WERDEN: I do not think you mischaracterized what happened, but I would add that on opposing summary judgment, the plaintiff was perfectly permitted to lay out whatever theories he wanted to lay out and stick in whatever economists' affidavits he wanted to stick in and make whatever allegations he wanted to make about market power in copiers and micrographics and kind of passed on all of that.

MR. SILBERMAN: Um-hum.

DR. WERDEN: But not in the Supreme Court. In the Supreme Court, he had evidence and arguments on all of these points, including, Bob Lande, that Kodak had monopoly power in both copiers and micrographics with a market share of over 70 percent.

DR. LANDE: Really?

DR. WERDEN: Really.

DR. LANDE: I got the 20 and 23 percent. I think I got it from the District Court opinion, but --

DR. WERDEN: You may well have.

DR. LANDE: -- I could check that, but anyway, so it changed by the time they got to the Supreme Court?

DR. WERDEN: Nobody ever decided what the

relevant markets were.

DR. LANDE: Right, right.

DR. WERDEN: And the plaintiff, who might have had a live claim that there was a market in which Kodak was a monopoly, chose to make that argument only in the Supreme Court.

Anybody else want to weigh in on aftermarkets, any related issues?

DR. SCHMALENSEE: I think --

DR. WERDEN: I think we have dealt with them --

DR. SCHMALENSEE: -- "preclude" may be -- I would almost go there. I would say establishes a very strong presumption, a rebuttable presumption, but a strong presumption. Not market power. When you say market power -- monopoly power, yes. I will give you market power. I do not think it establishes a presumption there, but as to the level and durability of market power that rises to monopoly power level with competition in the foremarket -- it can happen but I think there is a strong presumption of against.

MR. KLOTZ: You are suggesting there is a difference between market power and monopoly power. Where are you drawing those lines and where do others draw those lines?

DR. SCHMALENSEE: Well, I think it is a

difference of degree, not of kind, and I do not have a firm doctrine in my head as to where the line should be drawn. I think it has to do with the extent of power over price and the durability of power over price, but they are both about power over price.

DR. WERDEN: If the law were as you would have it be, then what is it that a plaintiff would do in opposing summary judgment in one of these cases in order to say, "A-ha, this is the exception"?

DR. SCHMALENSEE: Introduce the kind of evidence that would be required to show monopoly power, period. Well, there is a danger in talking when you have not thought through a subject, and this is not one on which I have spent a lot of time, but I think the presumption is that competition in the foremarket makes even considerable short-run power in the aftermarket have less durability than one would want for a Section 2 claim.

Now, I mean, if the things last 100 years and you are locked in forever you can surely make a durability claim, but a short-lived capital good does not strike me as having that level of durability.

DR. WERDEN: And do you have any view you are willing to share about where you draw that durability line? Is it two years? Is it ten years?

DR. SCHMALENSEE: No.

DR. WERDEN: No view you mean?

DR. SCHMALENSEE: No -- no thoughtful view, no. I have not thought about it.

DR. WERDEN: Anybody want to weigh in on durability?

Bob?

DR. LANDE: It really comes down to what do we consider de minimus; that is, maybe in the best of all worlds, if we were omniscient intervenors, we would roust every little bit of market power that lasts even for a month, but you say, "Well, look, hey, that is ridiculous. We are imperfect. The world does not work that way." If it is less than two years, forget about it, there is nothing you can do about it given that every case takes five years. You just have to have a de minimis standard and you forget about it.

So, if we said 10 percent for two years is de minimus, okay, let's just forget about that as a practical matter. If you think we should draw the line a little different, you know, reasonable people can disagree, but two years, 10 percent, seems like a reasonable de minimus standard to me.

DR. WERDEN: Well, is de minimus really the right concept here? We are talking about monopoly power

now.

DR. LANDE: If you were to say do I like it if I have to pay 5 percent more for a month due to a merger? No, I do not like it, but as a practical matter, the world's not perfect, you cannot intervene everywhere, we are never sure, et cetera, et cetera, so if it is less than 10 percent for two years, I am willing to say let's forget it.

DR. WERDEN: But my question then is, are you suggesting that the law should view Section 7 and Section 1 and Section 2 all in the same terms, or should the bar be higher in a single-firm conduct case, which the Supreme Court has said that it is higher?

DR. LANDE: Now, if you mean a per se violation -- as you know, if you fix prices, we do not --

DR. WERDEN: No, I do not.

DR. LANDE: Okay. Are you talking about mergers then?

DR. WERDEN: Mergers, rule of reason Section 1 cases.

DR. LANDE: Merger is supposed to be prophylactic. It is supposed to have a lower standard than for monopolization.

DR. WERDEN: Okay, forget about mergers then,

because you have got a point there. So, let's just talk about the Sherman Act. The Supreme Court has said there is a significant difference -- some people say they are wrong, I guess -- between Section 1 and Section 2 on the standards for intervention. They say this is clearly part of the scheme Congress contemplated, and we are going to carry that scheme out.

DR. LANDE: But you are not talking about the per se cases?

DR. WERDEN: No.

DR. LANDE: So it is rule of reason Section 1 versus Section 2?

DR. WERDEN: Yes.

DR. LANDE: Should there be a different standard for market definition, market power, monopoly power?

DR. WERDEN: Well, again, we keep coming back to market versus monopoly power, how durable it has to be, and what is the standard for intervention? I think -- we will put this to the panel, but I would hope there is a consensus that to be a monopolist, even as the law defines that term, requires a whole lot more than merely to possess the market power that might be required for a threshold showing in a Section 1 case.

DR. LANDE: Sure.

MR. WILLIAMS: Greg, can I -- the FERC I know

has asserted I believe monopoly power in hourly electricity markets, and that is not very durable.

DR. WERDEN: I do not know why they would have any occasion to even use the term, and if they did, it would not really have any consequence, because they are not enforcing Section 2 of the Sherman Act.

MR. WILLIAMS: Right, but they certainly have tried to -- they have defined relevant markets that consisted of very short time periods.

DR. WERDEN: So have we in the Department of Justice in merger cases defined that, but --

MR. WILLIAMS: And if you --

DR. WERDEN: -- these are conditions that recur over and over again forever.

MR. WILLIAMS: Exactly, exactly, that is the question.

DR. SCHMALENSEE: If you always own the peak market in LA for 20 years, the fact that it is of fairly short duration does not matter. It is the long duration of control.

DR. WERDEN: And, of course, if it was one hour, then the de minimus standard might kick in, and you say, "One hour? Come on, that is not what we are worried about."

DR. SCHMALENSEE: Give me LA for one hour.

DR. WERDEN: I said "might."

All right, well, I will give everybody one last chance, and if there is nothing more to be said, then we will call it a day.

DR. SCHMALENSEE: Wow.

DR. WERDEN: Okay?

All right, then we stand adjourned. As I said at the outset, the next round of hearings on remedies issues will be I believe March 25th and 6th -- no, 28th and 9th -- later this month. Look it up. Anyway, later this month. Stay tuned, watch the web sites. About a day before the hearing, we will post something.

(Applause.)

(Whereupon, at 11:58 a.m., the hearing was adjourned.)

C E R T I F I C A T I O N O F R E P O R T E R.

DOCKET/FILE NUMBER: P062106

CASE TITLE: SECTION 2 HEARING

DATE: MARCH 8, 2007

I HEREBY CERTIFY that the transcript contained herein is a full and accurate transcript of the notes taken by me at the hearing on the above cause before the FEDERAL TRADE COMMISSION to the best of my knowledge and belief.

DATED: 3/12/2007

SUSANNE BERGLING, RMR-CLR

C E R T I F I C A T I O N O F P R O O F R E A D E R

I HEREBY CERTIFY that I proofread the transcript for accuracy in spelling, hyphenation, punctuation and format.

DIANE QUADE