FEDERAL TRADE COMMISSION

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FEDERAL TRADE COMMISSION

HEARING ON:) Matter No.
THE EVOLVING IP MARKETPLACE) P093900
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WEDNESDAY, FEBRUARY 11, 2009

Conference Center
Federal Trade Commission
601 New Jersey Avenue, N.W.
Washington, D.C. 20580

The above-entitled hearing was held, pursuant to notice, at 9:00 a.m.

P R O C E E D I N G S

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MS. MICHEL: We're going to go ahead, and we will get started now since we have so much to cover this morning.

Good morning. Welcome to the Federal Trade Commission, and our second in a series of hearings on the evolving marketplace. I am Suzanne Michel. I am the Assistant Director for Policy in the Bureau of Competition. I'm going to give you a couple of brief announcements, and then we will dig right in.

The first one is a security announcement. In the case of fire, if the building is evacuated, please go across the street, and we'll try to check off and make sure that everyone is out of the building. Hopefully that won't happen.

This project, the evolving IP marketplace, is our attempt to look at the operation of markets for patents and technology and how different legal doctrines impact the operation of those markets. Today we're going to be focusing on patent damages. Tomorrow we will be focusing on permanent injunctions in the wake of *eBay*.

We will be having future hearings on March 17 - I'm sorry, March 18, right? March 18, March 19, April

17 in D.C., and May 4 and 5 in Berkeley. We will be issuing a press release in the next couple of days announcing that and giving an indication of what those hearings will be about.

In terms of comments, our initial comment period closed February 5. I understand the web site was down around that time. It is back up now, so please, if anyone has comments, please submit them.

In the upcoming press release, we will also be announcing we will be reopening the comment period. We do not want to turn away any good input, and in addition, we wanted to give everyone an opportunity to comment on the discussions that you will be hearing in this series of hearings. We will close the comment period on May 15, because at some point you need to buckle down and start writing.

With that, I am going to turn the floor over to Bill Adkinson, who will introduce what we are doing today and the great program that we have lined up.

MR. ADKINSON: Thanks, Suzanne. My name is Bill Adkinson, and I'm in the General Counsel's office, the Office of Policy Studies. We're really excited about today's panel. It's a terrific panel. It's going to be addressing what is perhaps now the most contentious issue in the debate over patent reform, damages in

patent proceedings, in particular reasonable royalties.

We hope that this panel will help move the debate forward by focusing on the legal standards governing reasonable royalties and especially how those standards are implemented in judicial proceedings.

It's our great good fortune that we'll be hearing today from practitioners and economic policy experts who have an extraordinary array of experience in patent damage litigation. Their insights will provide a foundation for an assessment of whether there are problems in either the legal standards or the way they're implemented and also whether there are various reforms that might improve matters. This afternoon we're going to have a roundtable discussing the same issues.

I'm going to be real brief in introducing the panelists. Their very distinguished bios are on the web site, but I must mention that I wince when I think that the bill we would be running up if they were here on a paying matter. We're very grateful that they've taken the time from their work to come here and help us better understand these matters, especially in these really difficult economic times.

We're going to have lead off presentations on data on patent damages, the most current data available

on damage awards and related aspects of patent litigation. That's going to take a half hour or so.

We're going to take a short break then, and then we're going to dive into our panel, and we won't have any further breaks for the rest of the morning. So I'll introduce the two presenters right now.

Professor Paul Janicke is a professor of law at the University of Houston Law Center. He's also the founder of the Law Center's Institute for Intellectual Property and Information Law. He previously was a senior litigation partner at Arnold, White and Durkee. He's authored numerous articles on IP subjects and a case book entitled "Modern Patent Litigation."

His research activities include empirical patent law studies, particularly a web site called patstats.org, which I think we'll hear about a little more.

Then we're going to here from Aron Levko. Aron is the principal and founder of the intellectual asset management practice from PricewaterhouseCoopers in the Americas. He has extensive experience in dispute resolutions, intellectual asset transactions, business valuations and IP portfolio management.

He also has extensive expert testimony experience. He's published and spoken frequently on

intellectual property topics and has lead responsibility for PricewaterhouseCoopers's widely respected studies on patent litigation.

So without further adieu, Professor Janicke.

PROFESSOR JANICKE: Thanks, Bill, very much. It's a great honor for me to be here on a subject that's become very near and dear to me. I've spent most of the last six years doing empirical research on patent litigation subjects, and I'm going to share a little of that with you today.

The context for what we know about patent damages is this: There is about 2,700 patent lawsuits filed a year in the United States. 86 percent of them settle before trial, and about those, we know almost nothing. Nobody has volunteered, and it's very difficult to get settlement data on what has actually happened in those 86 percent of the cases.

8 percent on summary judgment; that is the disposition tool of choice today for contested cases that don't settle. 1 percent of the cases settled during the jury trial. 3 percent -- well, it's now actually closer currently to 2 percent - settled on jury verdicts. So there's about 65 or 70 jury trials that commence every year, and only about 50 of them actually go through to a verdict.

Three quarters of them, by my reckoning, are for the patentee, and it is now down to about 1 and a half percent judgments on bench trials, so you can see trials are becoming, year by year, less and less the disposition tool of choice for contested patent cases and summary judgment becoming more and more the tool.

The Federal Circuit hears only about half of the 400 patent appeals that are lodged there every year. I checked this just last week with the Court, and they say that about 200 cases are decided by panels that actually have law issues, not always patent law issues but some law issues to decide, and the rest of them, the other cases are dismissed perhaps due to settlement, perhaps because the appellant just gives up. It's kind of hard to tell.

So we really only get every year about 90 Federal Circuit cases, including the Rule 36 summary affirmances, that are rulings in the patent law sense that we would call who wins and who loses.

So it turns out, with only about 90 cases per year to go by, not many of them focus on damages, so we don't have a whole lot of case law on the subject in recent times, but we do have, and what I have been collecting on our site, patstats.org, is what juries are actually doing in their verdicts.

Now, understand, we're not telling you the final judgment dollar numbers in these stats. We are telling you only what the jury foreman announced and only since 2005. So Aron's data are much more comprehensive time wise than mine.

I am only looking at January 1, 2005, because that is around the time when people started to say, There's run-away freight trains in patent cases, these juries are just acting crazy. So we decided to take a look and to periodically monitor all the jury verdicts we could find, and we collect them not only from Westlaw but also from newspaper articles, word of mouth, wherever we can get the information. And we go online to Pacer and pull the actual verdict form.

So that's how we assemble it, so a lot of times, the ending judgment of course is going to be higher than the jury verdict because of enhancement due to willfulness, prejudgment interest. Other times the final judgment is going to be a lot lower because of remittitur and JMOL problems the patentee has to face.

So we're just looking at what the foreman announces. Those are the numbers, and if you look at those numbers since January of 2005, and this is current till January '09, in the last month, verdicts are not run-away freight trains usually.

Here I've got them organized from top to bottom over the four-year period. The biggest one was a billion and a half dollars. I might say it got set aside for other reasons, so just telling you what came out of the jury foreman. Then $431 million, $360 -- these are the runs that spur the filing of patent litigation, hundreds of millions of dollars -- but it doesn't take long before you drop down.

By the time you get down to the 101st or so -- we're under a million dollars by the 100th row of this spreadsheet, and then it continues down from there, and then there's a bunch of zeroes at the bottom. The zeroes are of course where the jury came in for the accused infringer. There's about 25 percent of those cases.

So the patentee wins about 75 percent, if he can get to trial; that is, if he can get past the summary judgment hurdle that is the usual track, and for all that period the median is right here, $5,290,000, the median of the winning patentee cases, not counting any zeroes. So if you just say, If I win, if I get past summary judgment and if I win at the jury, what's that foreman going to say, and in this period of time of four years, it looks like the median is just off over $5 million.

You know, median statistics are a small comfort to people who lost up here, and I understand that. There's some of you from this company, for example, you might have an interest in -- oh, here's the same company again, look at that, so their views on the whole subject might be diametrically opposed, and they're not going to be real happy or comforted by the fact that the median is way down here.

So some people say, Well, that's the median of all cases, but it really depends on where you sue. So we said, Okay, let's take a look district by district, in the heavy patent litigation districts, so I just picked a few and color coded them for convenience.

Let's look at this first one, Central District of California, lots of filings there, God only knows why. The results are very bad for patentees on summary judgment. You don't get to trial that fast, but still a lot of people file there. Notice how few trials there have been, jury trials and verdicts, just a handful in a four-year period. What are the numbers? Well, the highest one in that district is $53 million, and it jumps down to $19, $12 and so on.

So the median is somewhere around here $6 million or so, $7 or maybe $8 million, not very different from the overall median, and the highest one is only $53.

Well, since apparently it costs according to AIPLA survey about $5 million per side to get to judgment -- they don't measure until trial anymore because that's disappearing but cost to judgment, $5 million a side, any verdict down here in the three and six million dollar range is probably not going to be considered a victory by the client.

So what about Northern California? A small number of cases there too. They seem to be a little bit bigger than the median, but it's not really enough cases to say very much. Southern California is up and coming in recent years. I am not sure why. It has one big one that as I mentioned got set aside. The two biggest ones in that district were against Microsoft, and then a handful of others, so it doesn't seem like that great of a district to be in either.

Delaware, as Stanford recently, I guess Mark Lemley's announcement recently that that looked like the best district to file in. Now, I concur. There is only a handful of losses down here, and it looks like the median of the wins is in the 30, 40 some odd million dollar range. Well, that might almost justify the $5 million cost of rolling the dice. So Delaware looks like a pretty good district. They're probably the best in the high volume districts. Massachusetts is pretty

good too, only one loss at the jury level, and medians in the $45-65 millon range, but again not that many cases.

I put in New Jersey just because everybody seems to be wanting to sue there lately. They're the number 4 district in the recent -- last year or so. I haven't any real feeling for why. The numbers certainly don't justify going to New Jersey. It takes a long time to get to judgment, not very favorable to the patentee when you get there, so it must be a high settlement rate for pharmaceutical companies I guess, so it's driving that.

Now, here is the big gorilla, the Eastern District of Texas, and here there is a lot of cases. The win rate is about the same as everywhere else, but the median of the wins is substantially higher and similar to Delaware. It's somewhere in the $34-41 million range, so naturally, lots of people file in the Eastern District of Texas, and it is not hard to see why.

There are a lot of trials there because summary judgment in the Fifth Circuit culturally and traditionally was not done very often, so your chances of getting to trial are better in the Eastern District, and I believe that's what's driving the large number of suits there at the minute. The future of that district is another matter for patent cases.

The Eastern District of Virginia, just a handful, not really enough to address, and Western District of Wisconsin because apparently it was a rocket docket. A lot of people seemed to want to file there recently, but the numbers don't really bear out either, so it looks like Eastern Texas and Delaware are your best bet, probably overall Delaware.

So maybe year to year trend for four years, so we looked at what's the median and how do the verdicts line up for the years, and in 2008, just about what we've been seeing, $6-7 million. This is the national median for that year, and a bunch of zeroes as usual.

2007, the median was 10 or 12. This was a good year for patentees. Those who won were able to get a median recovery over $10 million. That's the best that I've seen in the years that we've looked at. 2006, not so good, $4 or 5 million median for the country of the winning cases. If you put in all the zeroes, of course these medians are going to come way down, so we didn't do that, and then 2005 it was even worse, $2 to 3 million or so for the median verdict.

So what do we conclude about all of this? The rules of law are pretty simple. For lost profits we now have what I call Son of *Panduit*. It's the *Panduit* rules without the third requirement that there be no

acceptable non-infringing substitute. That's gone now. You can still get some lost profits even if there are acceptable substitutes, but you don't get them for those units that would have gone to the substitute. So it is an easy rule to state, not so easy to apply, and lots to worry about if you are a defendant in these cases.

Reasonable royalty, for some reason we're still using the *Georgia-Pacific* grab bag where the judge throws the grab bag with all the factors to the jury and says, Do what you think is right. I think this is really where we need to tighten up damages law, and I will talk about that further later.

But the grab bag approach of throwing 15 factors to the jury and saying do what you think, could be why we are getting erratic results. Certainly it doesn't lend itself to predictable results.

So I think that should be abandoned, as I will talk about further, and that the judge should say: Look, just value added is the rule, some portion of that should be the damages, and I'm going to really supervise you when the verdict comes in, in the sense of new trial motions and remittiturs and so on.

It's my belief that if we did that, we wouldn't need any special legislation on this subject at all, but what's happening is if you give people a grab bag and

the judge opts out of it and says the jury did their thing, we're going to continue to have erratic results. I will talk further about these subjects later. Thanks very much.

MR. ADKINSON: Aron?

MR. LEVKO: Thanks, Bill. Nice set up.

Good morning. I'm going to go through some preliminary results of a study that we started actually back in 2004, and we've updated it annually since then. I don't know if you've had a chance to look at the more detailed report that we have issued over the past four years, and we will be issuing an update through 2008 sometime in the spring.

It's based on two Westlaw databases. We've constrained ourselves to publicly available information so that the slicing and dicing of the data can be consistent, non-anecdotal, and be reliable at least to the extent of what's put in the case write-up for Westlaw.

We go back to 1980. We have over 20,000 records. We have some 7,000 or 8,000 man-hours or person-hours involved in this database, and every year we seem to add a retrieval key or something like that.

So what I'm going to go through is a number of things. I will probably define some terms along the way

like what is win, what is a non-practicing entity, our definitions that we have used to compile the data.

Okay, just to kind of set the context up, the patents being issued, the grants, have increased markedly from at least -- we're looking at here in 1991 through about 2003. The increase was about, oh, 4 percent or so a year. But since 2003, a funny thing has happened -- grants have leveled off. And so we have an overall growth rate of 3.5 percent over these 18 years or so, but really it's been almost zero for the last five years.

Meanwhile, patent trials, which had been increasing at over 6 percent a year through about 2004, themselves have leveled off. Now, I don't have data yet for 2008, but over the past three years, it really has declined slightly, so what does that mean?

Well, it means that maybe a lot of these disputes are being resolved outside of trials, in settlements or some sort of licensing with a little bit of a hammer, but that kind of sets the stage for now what is happening when a case is filed.

We're focusing now on the period 1995 through 2008. We selected that because we saw that prior to 1995, there was a general increase in damages, not year-by-year but a trend up. from say 1983 when the Circuit

Court was put in play or 1982.

Since 1995, as you will see in the preceding charts, the median damages -- I say median because it kind of smooths out some of the volatility -- has stayed fairly constant. Just to break apart a little bit what we have in our database during this period, we looked at something like 1,562 cases, and of those, about half or so are resolved at summary judgment, the other half going to trial.

At summary judgment, the vast majority are ruled in favor of the alleging infringer. I've split this really just between patent holder and infringer rather than plaintiff and defendant because I think that's a more reasonable or appropriate way of looking at.

Professor Janicke came up to me before the meeting here and said, Your summary judgment wins for the patentee seem a little bit high. I looked at the data. That's what it looks like, at least over 14 years, but it's still very -- the patentees seem to make out much better at trial, and you will see, when we split it apart, why.

They prevail about 56 percent of the time at trial, only about 19 percent of the time at summary judgment, but that number may be higher for different reasons at summary judgment.

A win, by the way, is defined as any beneficial interest that the patentee derives. It may not be what they've asked for, but if they receive beneficial interest, we've categorized that as a win.

Here are some key findings before I get too heavily involved in the data. First of all, as I had mentioned, median damages have stayed fairly constant, although I will say, and you will see, that the juries have awarded much higher damages from those trials, particularly in the last several years, in this decade, and we are getting higher trends in these damages recently.

Non-practicing entities are also getting slightly higher damages recently, although this is kind of a time lag in terms of the rulings that are currently taking place in the Supreme Court and elsewhere regarding jurisdiction, venue, and so forth, so perhaps in the future we might see non-practicing entities have damage awards tailing off a bit. But there is great disparity between districts, and we've got a chart kind of looking at that.

The use of juries have increased markedly in this decade. Reasonable royalty has now become the more prevalent measurement of damages. We have a chart that looks at how you split apart the damage awards between

lost profits, reasonable royalty and price erosion. But what it doesn't do so much is the frequency of measuring damages. You look at that.

Patentees' success rate is 36 percent overall, dragged down by the summary judgments, but when we get to trial, it's at 56 percent. When you get to juries, Professor Janicke's 75 percent may be a little low, at least looking over that seven or eight years, but right around in the same ball park.

Finally there's three districts that seem to stick out a bit in terms of patentee success rate: The Eastern District of Virginia, Pennsylvania Eastern and Texas Eastern, and those three districts, out of some 90 districts, make up 25 percent of all non-practicing entity filings, and we'll take a look at that, okay.

Into the data. Over the years again from 1995 through 2008, you can see that it's been relatively constant. In the years 1996, 2001 and 2005 we see the spikes in the bars, and the reason why the medians have been up that high is because the lower damage award cases, of less than $2 million, are less in those years.

There weren't any more higher-value damages, just less of the lower-value damages, so it's kind of an anomaly. It's a statistical measure. We've tried to smooth that out, but another way of looking at this is

if you look at damages of greater than $10 million. Again all of these numbers have been corrected to 2008 dollars -- the earlier years have been inflated so that we have a real look at the dollars and not simply a nominal look.

Taking that into account, there are some 122 cases over these 14 years that were greater than $10 million, and something like 30 percent of them have occurred in the last three years. Then if we look at cases at $100 million or greater over 14 years, we see -- what is it, I have the number here, something like 22 cases.

Of those 22 cases, almost half have occurred in the past three years, and I will say 2008 has been a record year for both over $10 million and over $100 million cases, six in fact of 22 just in 2008 alone.

So something is happening to the damages. They are increasing. If you look at averages or if you look at large cases, they have increased markedly in the past few years, although the medians have been staying fairly constant, so you have to look under those calm waters a bit.

We split that information now between juries and bench trial. Bench trial is in the dark blue. The jury trials are in the light blue. You can see a great

disparity, and it's growing. Just to put it in perspective a bit, you can see that the median jury award is now over ten times -- over ten times greater than the median bench trial award over the past several years.

If you look at it by decade, in the '80s and '90s, juries awarded about one and a half times what a bench trial might award. In the decade of the 2000s, it is almost ten times. So something is happening, and that is what's driving some of these not only the success rates but the damage awards.

We split it apart between practicing and non-practicing entities. It's volatile. The practicing entities being the dark blue, the non-practicing being the light blue. There are times when the non-practicing entities have done very well, and they seem to have a slight trend upward where the practicing entities have been fairly consistent.

We tried to again smooth the data so that you could really see what's happening. If we try to do this on averages, it would be all over the place, but there is an upward trend of non-practicing entities. Again this is kind of a time lag because what's happening over the past year won't be really reflected for a year or two down the road.

The use of juries, back in 1995, only about 16 percent of all trials were jury trials, and now we're up 42, 43 percent the past few years, so it's almost tripled.

Now, if we look at the measurement of damages, and we did this by decade, again this is by dollars awarded, back in the 1980s, the reasonable royalty, the middle bar, the mid-blue, was about 44 percent. It's now grown to 54 percent as an allocation of the damage dollars.

If you look at the occurrence, the number of times that measurement of damage has been used, back in the 1980s, it was most likely in the 30 percent, and now it's over 60 percent. So it has occurred almost twice in terms of frequency, and the dollar amounts haven't grown quite the same, so definitely it's the measure and the choice, and there's reasons for it.

One is this capacity issue, non-practicing capability issue. The non-practicing entities, not having the manufacturing or distribution capabilities, are becoming more prevalent, and that tends to be the driving force for the measurement of damages.

Then you have a cost issue. It does cost more to do a lost profits calculation, and there's more involved with having to look at the market, look at

alternate substitutes and so forth.

You get into confidentiality issues of company's themselves not wanting to disclose such key information like their product costs, their profitability, what pricing schemes they use by customers. And then finally, we've got a competitive issue. There is a more global market, and it is becoming more difficult to niche a dispute into just two companies. Even though there is a lot of splitting between the lost profits and the reasonable royalty. Just the competitive angle, the distribution channels, the demographics and the customer.

It's hard to really say only the patent holder and the infringer are the only ones competing. It's just -- that's what's happening, and that's what's driving this kind of movement.

Now, if we take a look again over the overall win rates beyond the damage awards, and I would look at success rate, overall, over 14 years, the patentees have prevailed 36 percent of the time, 19 percent at summary judgment, 56 percent at trial, but there's a trend, and let's look at some of the trends.

First of all, let me split them apart between practicing and non-practicing entities. The practicing entities are much more successful, in any

measure -- overall, summary judgment and trial.

Success rates year-by-year, you can see the median line at 36 percent. There is an upward trend. It dropped off a little bit in 2008, but really in the last four years, it's been above the median over the 14 years, and so the success rates are happening. Why are they happening? Let's split that data up a little bit.

First of all, if we split it up between practicing and non-practicing entities, the practicing entities prevail much more often, but the non-practicing entities in the recent past have been a little more successful. There's a trend upward with that. Practicing entities have always been higher, but their medians have been fairly stable in terms of success rate.

The big change is when you look at trials. At trials now we're looking at 56 percent being the median, but there's a general slight upward trend in terms of success rates with really out of the last, what, seven years, five of the seven years -- or actually six of the eight years -- being above the median.

Why? Well, if you look at jury trials, again the bench trials are in the dark blue, the jury trials being the light blue, jury trials were always more successful for a patentee than bench trials, but even

more so in the past few years, and it's growing, that disparity.

You can see a year-to-year anomaly, but what we can see is over 14 years, patentees prevail at jury trials 79 percent of the time, only 44 percent of the time at bench trials, and the trend is moving. It seems that recently it's moving up, but it's been higher going back.

Again, this is data coming from Westlaw, publicly available and so forth. There may be other factors involved.

If we look at the success rate of practicing and non-practicing entities at trials, again we see the practicing entities generally more successful than the non-practicing entities. However, the non-practicing entities in the recent years have moved up markedly, and again there's a time where that may come back down again.

So all of these factors, increasing use of juries, the non-practicing entities filing more frequently, jurisdictional strategies and venues and so forth, all play a part in increasing success rates and increasing damages.

Very quickly the top three as I mentioned, Eastern Virginia, Eastern Pennsylvania, Eastern Texas,

we rated them based on median damages, trial success, summary judgment success. We didn't have the time, and we do this in our report, we do time to trial and include those in the rankings too, but you can see how they sort down.

The 21 that we show here are where we had districts with the at least 20 decisions over the 14 years, so we don't look at all 90. We look at the 21 that have at least 20, what we feel are some statistical significance in the numbers.

Finally, if we look at the non-practicing entities filings, New York Southern, Illinois Northern, Texas Eastern are the three most prevalent. They make up 25 percent of the non-practicing entity filings again over this 14 year period. The top 10 over half, I guess, 10 out of 90 that we have.

And so quickly, the concluding thoughts are patent litigation is still a good, effective protection. It may not be a cost benefit. There are some issues with that, but it is a way to monetize the patents.

The forum and venue, very important. Juries are awarding patentees higher damages and have higher success rates, and there's a great disparity between the districts. The patentees are winning more often recently at trial, although these are trends, and

damages are also trending higher.

Finally, non-practicing entities, although they're not as successful as practicing entities, have had some recent increases in the damage awards.

Thank you.

MR. ADKINSON: Thank you very much. I should emphasize that there is more data available in Mr. Levko's annual assessment of damages and also at Professor Janicke's web site, patstats.org.

We are going to take a very brief break now. Shall I first introduce the speakers? We'll take a break, but it's going to be a very short break as we assemble the panel, and we're going to come back and introduce the speakers. Thanks.

(Whereupon, a brief recess was taken.)

PANEL 1:
MODERATORS:
SUZANNE MICHEL, FTC
BILL ADKINSON, FTC
PANELISTS:
BRUCE BURTON, Senior Manger Director, FTI
TOM COTTER, Briggs and Morgan Professor of Law, University of Minnesota Law School
ANNE LAYNE-FARRAR, Director, LECG, LLP
PAUL M. JANICKE, HIPLA Professor of Law, University of Houston Law Center
DR. GREGORY K. LEONARD, Senior Vice present, NERA
GAIL LEVINE, Assistant General Counsel, Verizon Communications, Inc.
ARON LEVKO, Principal, PricewaterhouseCoopers
EDWARD R. REINES, Partner, Weil, Gotshal & Manges, LLP
JOHN SKENYON, Principal, Fish & Richardson, P.C.

MR. ADKINSON: I would like to introduce the rest of the panel. You've already been introduced to Mr. Levko and Professor Janicke. In addition, we have Bruce Burton, who is senior managing director at FTI. FTI Consulting, Inc., is a leading expert witness and consulting company. He is leading FTI's technology and intellectual property management practice.

He has extensive experience providing litigation support, valuation and other consulting services focusing primarily on intellectual property, innovation and technology. He's testified frequently on matters related to intellectual property valuation and damage issues, and he's led teams that have assessed or valued over 500 technologies.

We have Anne Layne-Farrar, who is a director with LECG. She advises on a wide range of matters for clients, including competition, regulation and intellectual property issues. She specializes in antitrust matters that have, at their core, the intersection of intellectual property economics and competition policy. She's published articles on a wide range of topics in this area.

Greg Leonard is senior vice president NERA's antitrust and intellectual property practices. He focuses on applied microeconomics and econometrics. He has extensive experience as a testifying expert on IP and antitrust before courts and government agencies.

He's published widely on issues of antitrust and IP, and he's edited a book entitled "Economic Approaches to Intellectual Property, Policy, Litigation and Management," which includes an extensive discussion of intellectual property litigation and patent damage

presentations in court.

Gail Levine is assistant general counsel at Verizon Communications where she handles a wide array of high-tech intellectual property and competition policy strategy issues. She recently co-edited the ABA's handbook on antitrust intellectual property.

Antitrust has been one of her main fields, and among her positions has been work here at the FTC, where she was attorney advisor to Chairman Majoras, and also deputy assistant general counsel during which time she played a key role in the FTC's 2003 report on patent policy.

Ed Reines is a litigation partner in the Silicon Valley office in Weil, Gotshal & Manges. He has an exceptional IP practice. Among many activities, he is immediate past president of the Federal Circuit Bar Association, and he's chairing the National Model Jury Instructions Project. He also teaches patent law at Boalt Hall School of Law.

Finally John Skenyon is a principal in Fish and Richardson's Boston office. He specializes in patent litigation for 30 years. His extraordinary experience includes having been lead counsel in over 100 intellectual property lawsuits. He's also the principal author of a leading book in the field entitled "Patent

Damages, Law and Practice."

So without further adieu, we'll go to the panel.

I greatly regret that I forgot to mention the person who wrote the first article in this field that I read, Tom Cotter. Tom hails from the University of Minnesota and participated in our December 5th hearings and has written widely on this subject, including a book that he coauthored with Roger Blair.

MS. MICHEL: All right. Thank you. For any of you who missed the morning presentation, it is being -- this whole day is being web cast, and the web cast will stay up on the FTC web site. You can go back and catch it later. We're generating a transcript, which will be posted on the FTC web site, as is the transcript from our December 5 hearing.

We are very fortunate to have this group of panelists today. Bill and I will be posing questions to which they will respond. If any panelists would like to respond, just please turn up your table tent, and we will call on you, and we'll see how that progresses.

I want to start with the big question of: Why does it matter? Why is it important to get the damages calculation right? What are the problems with over-compensation and under-compensation?

Ed, first on the draw there? Go ahead.

MR. REINES: Well, I think the important thing to keep in mind, especially when reviewing the statistical charts that we saw, is how many of the cases never get to complaint and never get to trial, so that you really have a magnification process where the anomalous outcomes at trial or fear of anomalous outcomes at trial can drive a whole range of decision-making that's all the way upstream, and the numbers start virally replicating.

So I think the short answer is it's important because not just the outcome of trial for trial's sake but also payments that go on throughout the system.

MS. MICHEL: Tom?

PROFESSOR COTTER: There's a sense in which we can never really know whether patentees are over- or under-compensated. It depends in large part on whether the substantive law reaches the right balance of social cost and social benefit, but I think we have to proceed based on the premise that the substantive law reaches the right balance and that patent law remedies should try to replicate what that substantive law balance is.

So the danger, if that premise is correct -- the danger of under-compensation is that the patentees will have an insufficient incentive to innovate and to disclose the fruits of their innovation if damages are

inadequate. The other side of the coin is that if damages are too generous, if they make patentees better off ultimately as a result of infringement and then obtaining damages at trial, they're taking a substantial risk of over-deterrence as well, that companies that want to use technologies may wind up investing more than is socially optimal in designing around.

They may be reluctant to engage in innovation that might inadvertently wind up infringing some existing patent or patents, so I think there are dangers from both over-and under-deterrence that we would like to avoid.

MS. MICHEL: Aron?

MR. LEVKO: Yeah. Some of the things that have been mentioned. Regarding the effects of over-compensation, first of all, you've struck freedom to practice and reduced the business flexibility. Second of all, you increase the investment costs, and just because of the investment costs, the return on investment is reduced in that regard. Third, as Tom had mentioned, you deter competition. These are over-compensation issues.

Fourth, you increase litigation. That's the honey pot that draws these cases, especially in certain jurisdictions, and finally from an economic standpoint,

you just move resources to less productive means, which is more money going after -- in an over-compensation sense, not going to the highest use.

Regarding under-compensation, as mentioned, you reduce innovation, but it's even more than that. You reduce particularly small business formation which is the job growth in the country. You also reduce return on investment, because you reduce the returns for making those investments on innovation.

Finally you encourage infringement. If an infringer feels that they're going to get a better shake at trial, although there's a lot of cost to that, they may not agree to a commercial license. So extremes on both parts are not good, and so that I think the focus here is to strike a balance.

MS. MICHEL: Bruce?

MR. BURTON: Just to add a few minor points and really focus a little bit on alternatives. If you're being under-compensated for your infringement, you will tend to seek other remedies or other remedies become more important, so you might think in terms of a trade-off between damages and injunctions, injunctions will become more important.

You might find that you'll do more with trade secrets. You will make an effort not to invest in the

lawsuit but rather you'll keep this technology secret, and you will lose the social benefit of the sharing of the knowledge and information from making it public.

Also, with decreased damages, not only domestically, but you will encourage infringement internationally. It's less onerous if you're a foreign competitor coming in and you infringe on a U.S. technology if the penalty is smaller.

MS. MICHEL: The patent statute talks about damages adequate to compensate for the infringement, so what are the goals of patent damages? Is it just to compensate the patentee for the infringement in the sense of the but-for world, or should we have some other goal in terms of deterring infringement? Anne?

MS. LAYNE-FARRAR: I think it cannot just be to make the patentee whole in terms of providing a reasonable royalty, because, of course, not all infringements are detected, so you already have a situation where some infringements will go by unnoticed. And if the reward then is simply to put back what a license would have achieved, you're going to increase that number of people trying to infringe, trying to get under the radar of not being detected.

So it has to have some element of deterrence to it in order to strike the balance that the earlier

speakers talked about, so that we get the right amount of innovation and commercialization and disclosure within the economy.

MS. MICHEL: Gail?

MS. LEVINE: I think that's a really important question, asking what the goal of the damages award should be, what are we trying to do here? It might be a question that a lot of jurors ask themselves when they're asked to calculate the jury award.

For reasons that Professor Janicke earlier mentioned the *Georgia-Pacific* grab bag of factors, the 15 factors that jurors are today asked to consider, don't necessarily give them a whole lot of guidance. Sometimes the grab bag of factors is simply presented to the jury, and the jurors have to figure out or sort of divine from that what kind of reward to give.

It would make a lot more sense if the jury was instructed as to what the goal of its damages award should be, what is the governing principle that is behind all of those *Georgia-Pacific* factors and the rest of the sort of economic and social welfare maximizing goal of patent law.

One ingredient of that might be a rule that says that what you get in a reasonable royalty damages award is the technological value of the patents, and by that

of course I mean the value of the patent as against its next best alternative, it's next best non infringing substitute, and that reasonable royalty damages should never include the hold-up value of the patent.

MS. MICHEL: Tom, your thoughts on deterrence versus straightforward compensation?

PROFESSOR COTTER: Well, I think the two are interrelated. As far as I can see this, the goals of patent damages law should be dual: One, to maintain the patent incentive, and secondly, to deter infringement but also to avoid the risk of over-deterrence.

I think as a first approximation, putting to one side the issue of when injunctions are appropriate and when damages are appropriate, just focusing on the damages aspect of the question, I think as a first approximation, compensatory damages, but-for damages, probably serve both goals reasonably well.

If the patentee is assured that he will obtain -- that he will be restored to the position that he would have occupied but for the infringement, that maintains the patent incentive and should be sufficient to deter infringement once we factor in the litigation costs that a potential infringer would have to incur if it uses the technology that it was found to have infringed.

I think in order to deal with the risk of not being detected, there is a role for enhanced damages to play in some cases, and one of the reforms that I would like to see instituted some day would be to make the law of willful infringement or enhanced damages somewhat more rationale by tying damages enhancements to the risk of under-detection. I know there's a wide body of law in economics literature on punitive damages that seems to me could be applied in this context.

As far as compensatory damages are concerned, I think, first of all, if we're dealing with lost profits, as Paul pointed out, the law today more or less I think is rational insofar as the patentee is entitled to its but-for lost profits, those profits that it would have earned but for the infringement. I think that's at least what the Federal Circuit case law is driving towards in that respect.

The law of reasonable royalties I think is much less easy to rationalize because we do have these *Georgia-Pacific* factors, which can be so easily manipulated by the trier of fact to reach virtually any outcome, and I think in terms of trying to rationalize the law of reasonable royalties, again there's really two possible rational approaches, and I think one or the other ought to be adopted or maybe there should be

the option of applying one or the other.

But one, and the one that I think is reflected in Professor Janicke's slides toward the very end that we didn't really get to during the first part of the program and also reflected in Gail's comments -- one approach to reasonable royalties would be to award the patentee the value of the patented invention ex post.

And so John Schlicher, for example, has argued that reasonable royalties should be based upon the profits the infringer made with the patented invention minus our best estimate of what those profits would have been without the patented invention. That's the economic value of the invention ex post.

The other alternative, which is I think somewhat easier to shoehorn into existing law, is to focus on the ex ante hypothetical bargain between the patentee and the infringer and ask: What bargain would the parties have struck ex ante if they were trying to negotiate a license?

I think either measure of damages has its benefits and its disadvantages. One possible problem with the ex post or restitutionary measure of damages is that after the fact, the infringer may be locked into a particular technology, and so if we're asking what profits would the infringer have made, using the next

best alternative, well maybe that next best alternative really never got developed because the infringer, perhaps inadvertently went down a particular technological path. So I think there's a risk of exacerbating patent hold-up to the extent that it happens, whether it's common or uncommon, if we use the ex post approach.

If we try to replicate the bargain the parties would have made ex ante, that's obviously a very speculative sort of enterprise as well, but in some rough sense, it does restore the parties, as best as we can do this, to the position they would have occupied but for the infringement.

So I think there's something to be said for using the hypothetical negotiation technique but trying to make it more closely reflect what those negotiations really would have looked like in the real world.

MS. MICHEL: Thank you. Tom has done a great job of laying out I think the majority of issues that we'll be covering through the morning, as he always does, and I highly recommend what I think to be one of the seminal articles in this area, his *Rethinking Patents Damages* article for anyone interested in this topic.

So Tom has really laid out for us the importance

of creating a but-for world when you're thinking about compensatory damages.

Paul, let's go to you next in the sense of: Is creating that but-for world a sufficient means to create both the compensation for the patentee that we want and the deterrence effect and what are the goals of the patent system here in the sense of how to create that deterrent effect also?

PROFESSOR JANICKE: The goal is in the Constitution, and if I were king, I would tell the jury only that, that the progress of the useful arts is the keystone, and the value added by a particular patent is what they should be looking at.

And just to make clear, I don't claim to have invented or originated this formulation. Lots of people have proposed it, but my idea is to tell the jury that some portion of the value added is what they ought to award in light of the Constitutional purpose.

It's hard to argue when it's in the Constitution, and I would throw out everything else.

MS. MICHEL: All right. Aron?

MR. LEVKO: Yeah. Well, first of all, if you're talking a but-for world, that pertains primarily to lost profits sort of damages. When you get into reasonable royalty, you get into all these analyses and factors and

so forth, but I guess the thing that is -- I guess there's a disconnect here, is if we're focusing on reasonable royalty damages, which I think is the focus primarily of the discussion this morning, connected to economic thought, you really need to connect it more to what happens in a real life situation, negotiations.

In the real life negotiation, you have four primary risk factors that need to be accounted for as part of the valuation of a patent. You take into account the legal risk. You take into account the technology risk: Does the patent actually work? Third you need to take into account the commercial risk, and fourth, the regulatory risk.

In a litigation sense, you've removed the legal risk, so automatically that should increase the damage award beyond fair market value because legal risk, one way of measuring it is you can see, just from my studies, that the patentee prevails 36 percent of the time.

Now, that may be high, but right there the legal risk knocks it down, what, by 64 percent, so you can see that damages probably should be higher than a fair market value by a multiple, and then when you take a look at commercial risk, you got the benefit somewhat of 20/20 hindsight because you're looking at a trial where

commercialization has taken place.

So even though you're trying to set up a hypothetical negotiation, that hypothetical negotiation's based on both known and knowable facts, and some of the knowable facts is the patent is somewhat been commercialized, so that risk factor has been reduced.

And I guess what you need to take a look at is valuation principles. If you're going to bring the legal concept into damage calculations and get past the attempt at trying to frame this up in the form of either *Georgia-Pacific* factors or *Panduit* factors or but for, valuation concepts such as like Revenue Ruling 5960, which is used for business valuation, a ruling like that that frames intangible asset valuation like Ruling 5960 frames for tangible asset or business valuation might be invoked here.

And that's how law can give us a proper ball park to play within rather than simply playing with no boundaries, which is what's happening today.

MS. MICHEL: I would like to spend a little time on lost profits before we dive more in-depth into reasonable royalties. We've done an excellent job of laying out the ground work there.

Greg, any thoughts on this concept of

compensating the patentee in trying to recreate the but-for world?

DR. LEONARD: Well, in lost profits, yes, I think the idea of the but-for world is to return the patentee to the financial position it otherwise would have been had the infringement hadn't occurred.

The interesting thing I think about that is a lost profits award actually has the ability to do some amount of deterrence as well, although it's primarily meant to be compensatory, whereas a reason reasonable royalty award, by its very nature, actually can't be deterrent at all in some sense, aside from the litigation cost.

The reason for that is that if you're a potential infringer and there's some action you could take to avoid infringing, in other words, design around, you're only going to take that action if the probability of being sued and losing and paying a damage award exceeds the cost of that design-around.

And yet the damage award in a reasonable royalty case is exactly tied to the same design-around costs that you were thinking about in the first place, at least if it's done correctly.

So in that sense, if the damage award is just based on that design around cost and you're always going

to take the risk and infringe and see what happens because if you lose, you pay that same amount, and if you win, of course you don't have to pay anything.

So reasonable royalty award I think doesn't have much deterrence value at all, whereas a lost profits award does, at some level just simply because they tend to be larger, but also it's unlinking the damage award from the very costs that somebody can take to design around the patent in the first place.

I do want to go back. This happens in these things, I want to go back to something that was said before.

MS. MICHEL: Absolutely.

DR. LEONARD: Just to this issue of deterrence, I think there's a tendency to think about people who have challenged patents or test patents as perhaps doing something wrong, but we should remember that there is a high probability that in the end that they win.

And do we really want to be deterring the testing of patents? I think the thing to think about there is that, first of all, when we do -- somebody does go forward and challenge a patent and wins in court, they've done a public service. They've removed a bad patent out of the way of people who might want to use that technology to innovate and produce products.

So they've done a public service, and yet it is a public good because if I'm the one to pay to challenge the patent, that benefit runs down to other companies as well, so I think we want to be very careful about deterring the testing of patents through the over-compensation or any kind of deterrence.

Would you like me to just comment on lost profits in general?

MS. MICHEL: Sure.

DR. LEONARD: I think the problems in lost profits, and actually I think the problem is true of reasonable royalty as well, is what the law provides for right now is sort of a list of factors, so in the lost profits side, it's the *Panduit* factors, and on the reasonable royalty side, it's the *Georgia-Pacific* factors, and this is just sort of a list of ideas. Somebody mentioned it was a grab bag, and that's essentially what it is.

What we really need is a framework, conceptually sound and coherent framework that lays out this is how you do it, and the valuation principles or for my point of view the economic principles of supply and demand and other things, if that was really codified and people were held to it, experts were held to it by judges using for instance their *Daubert* gatekeeping ability, I think

we would be in much better shape.

So on lost profits, I think the problem is that the *Panduit* factors, they're stated as sort of necessary conditions. Well, actually they're not necessary at all, you can have lost profits, even if one or more of them aren't satisfied. And the way the language is used is ambiguous, it doesn't really match up well to economic principles.

So really what I would like to do is throw them out and replace it with a basic coherent economic framework that really would correspond well to what's done in an antitrust damages case or a commercial damages case, and we can go through the details of what that would be, but that's my basic thought on that.

MS. MICHEL: I was wondering about panelists' responses to two points raised by Greg. One is that we want to be careful in creating too much deterrence, and also responses to his point that perhaps we should throw out *Panduit*, it's possible to have lost profits without *Panduit*.

Paul.

PROFESSOR JANICKE: Well, first I think *Panduit*'s long been gone from the case law anyway, but the derivatives of it might still be around.

My comment is really a question. Does the

Federal Trade Commission have authority to bring suit challenging bad patents? If we're talking about deterrence, if it's a bad patent that's causing trouble out there, can you fix it or do you not have authority to do that?

MS. MICHEL: It would be a very difficult antitrust theory. I would say authority, that's a harder question. As a matter of policy, I think we would not do that. We would bring an antitrust or unfair competition challenge to perhaps a patent acquired by fraud and asserted.

PROFESSOR JANICKE: So you don't bring declaratory judgment actions just to get rid of what you think is a troublesome patent?

MS. MICHEL: No, I would say that there was not authority to do that. That would be my own personal opinion at this point, let me be real sure about that.

MS. LEVINE: We don't get to ask her questions.

PROFESSOR JANICKE: Curious.

MS. MICHEL: No. It's a good question. How do you get rid of bad patents, and it goes directly to Greg's point about wanting to be careful on the over deterrence, so I understand where that's coming from.

Ed?

MR. REINES: I think the statutory scheme I

don't think permits punitive effects from reasonable royalty or lost profit, and I think that's correct. Like I said, I think the statutory scheme is set up with compensatory damages in the form of lost profits and reasonable royalty, and punitive damages in the form of willful infringement or exceptional case otherwise. And I think that's the right way to think about it.

Picking up on Greg's point, you know, there is a cost to having to litigate just in all the witnesses, all the time of management, and in the cost, so even if you lose, there's sunk costs, unless you can prove an exceptional case the other way. And on Aron's point, in terms of what's the role within the reasonable royalty analysis for some sense of, you shouldn't just be back where you would be anyway if you're the patentee.

I think the legal certainty that you have is taken into account in the current damages model, which is the patent is assumed valid, enforceable and infringed in the negotiation, which is never the case in the real world.

So, I mean, I think that that's where you get that value, but it should never be punitive, and the problem with making it punitive is if people feel like if they challenge a patent that's being asserted against them all the way through trial, not only do they have

have all the overhead of having to deal with that, if they're vindicated, but they also have this risk of sort of being punished with all the ambiguity that's in the system.

And as we all know in the courtroom and the jury system, there's a lot of ambiguity. That itself I think is going to prevent people from just infringing willy-nilly, leaving aside even the willful infringement aspect.

MS. MICHEL: Anne, and I do want to caution our speakers to speak into the mike.

MS. LAYNE-FARRAR: I wanted to follow-up on the deterrence point because I think again here it's an issue of balance. We do want to encourage firms practicing in the downstream market challenging patents that they think are weak so that we weed out the bad patents, but we also don't want to, at the same time, encourage under-the-radar infringement.

So it's a tricky balance I think encouraging challenging of patents, but not encouraging turning a blind eye -- not conducting proper due diligence to find out what you might or might not be infringing, trying to, in other words, get away with the infringement on the quiet because that's a very different kind of behavior and kind of path that you do want to deter -

unlike the public good of weeding out the junk patents that may make it through the system. So how you set that balance I think is a tricky matter.

MS. MICHEL: Do you have any thoughts?

MS. LAYNE-FARRAR: How to solve that problem? If I did, I would have a really great paper on my hands, wouldn't I?

MS. MICHEL: Whether to address the problem, perhaps not solve it, through the calculation of compensatory damages or how we approach those compensatory damages versus enhanced damages.

MS. LAYNE-FARRAR: Well, I think one of the things that can be done on a case-by-case basis is look at what was done before the infringement was discovered. Was there any due diligence search at all? Did the firm seek a license and was unable to come up with reasonable terms? Was there some sort of aborted negotiation process?

Factors like that that might suggest that the manufacturer or the implementer was doing its best to be fair and reasonable, to compensate for ideas that it was implementing that weren't its own, as opposed to doing something like turning a blind eye might have an effect.

And then the point that you mentioned, splitting apart an award, what's a reasonable royalty that just

reflects the value that the patented technology contributes, and then if you're going to add something to that for deterrence factors, be clear and make that a separate element. So that in using those awards and damage awards and reasonable royalties on a going forward basis, first of all, the implementer is paying something reasonable going forward that doesn't count in some kicker factor, but also so that other parties looking at those rates may be wanting to use them as comparables can use the appropriate level too, so that there's a clean split between the ex ante/ex post reasonable and damage's deterrent component.

MS. MICHEL: I want to go to Jack next.

MR. SKENYON: Just a couple things based on what I've heard so far. I feel like I am in a Presidential debate here. I am the candidate from the Greenpeace organization, who got here because the ACLU won some court case.

But a couple things that I've heard here are very interesting and things I have really never thought of quite from that perspective before. And one is this, is Is that I think, what I just heard from Anne hit on, the reason that some damages awards seem inordinately high here, and that's how the case is tried.

She was talking about factors that deal with not

actually the infringement issue or the invalidity issue, but factors that deal with the willfulness issue, what did they do when? What did they do before? Did they get clearance? Did they do these things?

My experience today is that basically most patentees will try the case on willfulness as opposed to infringement, and the recent one that I had, they spent exactly two pages of transcript on the infringement question, and five days on the willfulness question, and I think you can understand why, because they're using that to drive up the damages award.

If you want to fix some things here, just some basic fixes that can be done, where you bifurcate willfulness, and in fact actually bifurcate the damages questions. The basic damages question I think, and I think maybe some of the comments here I thought moved away from it, was what you're really trying to do in damages is award damages.

The patentee has been damaged. That's what you're looking at, not a deterrence. I can't think of a particular case where I've been interested in deterring somebody else for my patentee, and although that is a legitimate factor to consider in these things, and I think when you talk about contribution, trying to value the damages based on the contribution of the patent, I

think you get into an area of unfairness here because the cases could be quite different dealing with the same patent, and I'll give one example, and then I'll stop here, but it would be this.

We had a case that involved a medical device, and the market -- think of the market as divided up in pie, three slices of the pie. The infringer's in one slice, not in ours. We're in one slice, and we have another competitor in the third slice. We're not competing with the other competitor in the third slice. There was a lawsuit -- there was a litigation, and there was a damages award, but we're not head-to-head competitors with them. That's one damage amount to us - that they were using our patent.

The other aspect of this dealt with the first competitor, who's not in our area, but comes in to our area with the infringing device, takes over our area and precludes us from marketing new products. Same patent, but totally different situations in terms of damages here. We're much more highly damaged, the numbers being the same, from the second guy than the first guy.

So if you're looking at assessing damages based on the contribution of the patent, you're actually eliminating the differences between or could be eliminating the differences between potential

infringers, and the position that they stand in can be quite different in the marketplace and quite different in terms of damage to the patentee in individual cases.

MS. MICHEL: Jack, have you seen a change in the way willfulness is litigated since the Federal Circuit's decision in *Seagate*?

MR. SKENYON: Not in terms of how it's actually presented at trial, but in many cases, you don't -- I think now what has happened is more times than not the willfulness case is thrown out by the Judge at the end of testimony as a directed verdict. I never saw that before, but that happens now, but it doesn't matter to the patentee.

The patentee has already put in the bad stuff, the bad evidence, and basically the jury has all heard it, and it will factor into the jury's decision on all the issues.

MS. MICHEL: Gail?

MS. LEVINE: I wanted to go back to some of the comments we were talking about earlier in terms of reasonable royalties.

MS. MICHEL: Can we come back to that actually?

MS. LEVINE: That's fine.

MS. MICHEL: Tom, any comments on lost profits? I want to bring out -- we'll bring out a couple more

points on lost profits.

PROFESSOR COTTER: I was going to say this one thing about willfulness.

MS. MICHEL: Yes, please.

PROFESSOR COTTER: Just as an empirical matter, I wonder how much infringement really does go undetected. Again I think from a purely economic perspective, the only reason why we would ever enhance damages or award damages kickers is to provide an adequate level of deterrence. If we think there are some infringements that are going undetected, then some sort of enhancement would bring the level of deterrence up to the optimum.

I wonder how much infringement really does go undetected or if there's any way even empirically to estimate that. I mean, I don't really see how you would do that, but if there is not a lot of undetected infringement, then maybe there really isn't very much of a role for willful -- for damages enhancements or damages kickers to play in patent law.

I mean, I can imagine that process patents might be fairly easy to infringe without being detected, but how many products, actually infringing products do go undetected? I don't know what the answer to that is, but if it's a relatively small number, maybe then

damages enhancements really ought to really play a small role as well.

MS. MICHEL: Bruce?

MR. BURTON: You asked for comments about lost profits. I just wanted to share some information from doing a lot of cases and see what the panels' experience is as well.

Essentially what seems to be happening in the lost profits cases is there -- although there's still the pro forma addressing of the *Panduit* factors -- essentially what goes on is a determination of whether the patent owner would have made the sales, infringing sales, and essentially you can almost collapse it all down to: Can you go into court and prove that you would have made those sales.

And if you can do that -- you are reconstructing the marketplace, if you can do that, you're going to be entitled to your lost profits.

MS. MICHEL: In that sense, the apportionment issue has arisen in the case law, or was created in the case law in the lost profits context, to try to address the situation in which the patent owner's profit is not necessarily attributable to the patented invention, if that invention was one piece of a larger product.

How does the law respond to this problem in lost

profits? How should the law respond? Aron?

MR. LEVKO: First of all, the question of apportionment of lost profits, *Panduit* factors are fine as a pro forma as has been pointed out by several folks, and maybe even useful. The but-for situation should take into account really not just the market definition, but the market size and segmentation.

Oftentimes an infringer comes into the market, and I'm not pro infringer or patentee because I have testified about equally for both, but I have had several instances where the alleged infringer comes into the market and enlarges the market through advertising, through reputation, through service levels that don't deal specifically with the functionality of the product. Another aspect -- and that isn't reflected all the time in this litigation.

The other thing is that pricing mechanisms need to be taken into account. A slightly different price, lower price or creative pricing might indeed again enlarge the market or get to certain customer demographics that the patent holder didn't have initially.

Crystal Semiconductor is a case in point where just doing an elasticity sort of economic analysis could skew exactly how many units really could be claimed as

lost profits. And then finally the infringer, if they didn't have that infringing product in the market, might have another product.

Grrain Processing is a case in point, and it's not just an alternate design. You could go with the previous model, and then what happens to all the other competition? They don't stay static either. If the infringer was not in the market, who knows if the competition wouldn't have grabbed a market share? So this *State Industry v. Mor-Flo*, which is a good start, isn't simply a static market by trying to pull the infringer out.

Antitrust law tries to take into account somewhat a dynamic market and has various concentration models and so forth. I am not saying that the patent litigation needs to adopt all of that, but certainly a *Panduit* factor is not broad enough.

Very quickly on the question of willfulness: I didn't do the study this year or last year, but two years ago in our database, we did do a study of willfulness, and we found that something like -- it's about over 12 years, about 10 to 15 percent of cases have enhanced damages. The average enhancement was something less than one and a half, so there is some use of enhanced damages, not as much as you think and not in

terms of frequency or amount.

But that's some reflection of at that time whether there was an independent opinion and the behavior of the parties during litigation and so forth, just to put some thought into different aspects of it.

MS. MICHEL: Thank you. So there is quite a bit to think about in doing that lost profits calculation. One of the issues that does come up that's difficult to address is how to assess the lost profits when the patented invention is only a small piece of a bigger product, and the law talks about apportionment and the entire market value rule in the lost profits context.

Do the panelists have any comments on the role of the entire market value in the lost profit context rather than the reasonable royalty context and what kind of senses that rule makes in identifying damages to compensate the patentee?

Greg?

DR. LEONARD: Sure, I would be happy to address that one, one of my favorite topics. Again I think the problem here is that if we took the right approach, all of these problems just disappear or they're taken care of, okay, if we do things right.

So, for instance, if it's a small piece of a patented product or of a product the defendant's

offering, we have to decide what small means, first of all, but the way to do that is just say what would the defendant have done in the but-for world where it didn't infringe.

Now, that may be as Aron was saying -- maybe they had an older product they could have offered. Maybe there's a different way to offer that infringing feature. Maybe the infringing feature could just be dropped from the product, and you offer a somewhat inferior product.

The first thing you have to do is figure out what to do there, and then you say: How would consumers have responded to that, and some consumers are going to have decided not to buy the alternative product or maybe there's no product at all in which case they would all have to switch to something else, but you figure out how many of them would have gone to the patented product.

And again in antitrust we're doing something similar all the time, and so in a merger analysis, we're interested in how close the two merging companies compete with each other. Well, here it's the exact same thing: How close does a patent owner's product compete with the defendant's product, and if the defendant's product were changed or weren't on the market, where would those customers have gone?

So it's very straightforward, and you don't have to get into apportionment or you don't have to worry about the entire market or the entire product. It's simply what would have happened, and I think by actually using these terms and these concepts that really don't have a good economic basis, it actually confuses things, and that's one of the problems that we face when we're in a real one of these cases.

MS. MICHEL: Bruce?

MR. BURTON: Well, I actually took my tent down because you said at the end exactly what I was going to try to summarize, what would have happened, and Aron did a wonderful elaboration of all the challenges, but essentially it boils down to, considering all these factors, what would have happened? What sales would they have made and at what price and to whom?

Those are the type of questions that you have to answer, and that's part of the reason why you're seeing reasonable royalty becoming more prominent than lost profits. It's getting to be a real tough calculation.

MS. MICHEL: Paul?

PROFESSOR JANICKE: I agree completely with what Greg said, and I think where that comes out in terms of your question is the entire market value is really a meaningless cliche that we should get rid of. It

doesn't do anything to help with any calculation on lost profits.

MS. MICHEL: Jack?

MR. SKENYON: First of all, I know there's a lot of interest in this entire market value analysis, but quite frankly it doesn't occur in that many cases to begin with, so I'm not sure how big a problem it is by any stretch of the imagination, but in terms of the lost profits analysis to begin with, I think in any of these damages cases, we are running into more and more problems because of the tendency to go further and further into fantasy land as to what could have happened, what might have happened, what should have happened, and it's endless. It's an endless stream of things.

I think it's better to look at the lost profits cases from the point of view of the infringer sold some products. Their customers bought the products. What would those customers have bought instead, assuming the infringing product is off the market?

And one of the strange things that I don't see in too many patent cases is that the infringer is in a unique position to respond to that. It's their customers, but you rarely see situations where they're introducing survey evidence of their customers

as to what they would have bought instead or anything or any legitimate hard evidence along that line. In fact, the only survey evidence that was ever attempted to be introduced against me in a case, and it was very, very powerful evidence was something that the other side withheld and didn't get it in procedurally.

That at least is concrete. Where we're dealing with the fantasy land issue about what could the infringer have done instead, what could the other people have done instead. I think that -- if you want something that's going to be difficult for juries to grasp or figure out or sort through, I think that's what you're talking about.

MS. MICHEL: Tom?

PROFESSOR COTTER: Mostly I would just want to echo what some of the other panelists have said, that I think that patent damages insofar as lost profits are concerned really ought to, as much as possible, try to approximate the type of analysis that is done in antitrust cases, and that some of these traditional patent law doctrines, entire market value rule and apportionment again as they apply to lost profits really have no place I think in the way we can do things today.

That being said, all damages calculations I think necessarily have an element of speculativeness,

and there's really no getting around that. We do the best we can, but we're never going to know for certain what the state of the world would have been but for the infringement.

But one possible thing if you think about in this context, and Mark Lemley has raised this in one of his papers on damages, maybe there are some cases in which courts are making it too difficult to prove lost profits, cases in which the plaintiff and the defendant are direct competitors, but for whatever reason, the plaintiff cannot satisfy whichever of the remaining *Panduit* factors might be at issue.

So we apply reasonable royalties in that context where they don't really seem to fit very well. It's not a case in which the plaintiff and the defendant would have reached any agreement but for the infringement. The plaintiff wanted to exclude the defendant. Maybe in a case like that, we should bow to the reality that lost profits will have some element of speculativeness, but they're better than using reasonable royalties in that context to perform a function that reasonable royalties aren't really designed to perform.

MS. MICHEL: Greg, and to all panelists, any comments on the point that Tom just made, that perhaps courts are making it too difficult to award lost profits

and any other comment you were going to raise?

DR. LEONARD: I think on that, I would just use the same standard that you use in an antitrust case. Again, I'm not a lawyer but as I understand it, you are allowed some amount of latitude because you wouldn't be in that situation if the defendant hadn't done what they had done, so it's sort of the same thing here I think.

I just wanted to go back just for a minute to the entire market value rule because I think there are two other additional points that are worth raising.

One is how it relates to so-called convoyed sales and how that's changed over time. I think the Court has made it hard to -- the CAFC has made it hard to get lost profits on convoyed sales, even if that convoyed product was sold directly because of the sales of the product that for which you lost sales directly due to the infringement, and I think that is sort of too bad because that is an under-compensation.

Now, I agree, you have to show that there's a causal link, that you would have made the convoyed sales if you had made the other sales. There's no question there's an element of proof you have to make there, but if you can make it, it seems to me that that should be allowed.

And then the second thing is just going back to

that idea of what a small component is, I think two extreme examples help demonstrate this and again how if you look at things from an economic point of view, you don't have to worry about defining something as small or not.

So if you have a product -- I had a case where basically the product was a piece of material wrapped around a metal cage, if you will. It was a stent graft, and the basic idea was if -- the patent addressed the combination of the two -- and so if you didn't have that, the material outside, you really didn't have a product that anyone was going to use.

Yet the other side was arguing, Well, there shouldn't be any lost profits here or it should somehow be apportioned because the metal part of it wasn't really part of what was covered by the patent. Again that's in a way just silly, because the point is if, in the but-for world, you would have had no product, those customers would have had to go somewhere else.

It doesn't matter that the material was only half the product. The point remains that from the supply side, those customers wouldn't have had any product to buy, and so they would have had to switch to something else.

So now there are other cases where maybe

removing the infringing feature would leave a saleable product, and in that case, a lost profits analysis should again just look at the customers who would have, because of the inferior product, switched to something else.

So the apportionment really works through looking at what consumers would have done given the set of available alternatives, and it really requires looking at both the supply and the demand sides, and I think that's another deficiency that comes up when people do lost profits analysis.

MS. MICHEL: Aron?

MR. LEVKO: Yes, just to comment on some of the other folks. Regarding the Court imposing restrictions on lost profits, a lot of that can be gotten around if you get into specific customer information, and Jack had mentioned that he sees a lack of survey evidence. It doesn't take a lot. You don't have to have a survey, but if you talk do a couple, three main customers to find out what they would have done, particularly in an industrial sales setting or a distributor, and to see if indeed they would have tried at least to get two suppliers or would they have stuck to one supplier or whether they've ever bought from this infringer before.

That often reveals some not broad landscape as

to what everybody would do, but certainly enough persuasive measures, one way or the other, as to what their alternatives would have been. Oftentimes you will find that buyers, particularly if they're large industrial buyers, don't want one supplier. They want two suppliers, and so that makes it more difficult to have a lost profits case.

On the other hand, if the infringer really had not been in that distribution channel before or had not had the relationship with the customers before, how can they say that they would have made a sale with something else because they haven't been successful?

So I think plowing the ground a little more deeply, along the lines with what a number of people have said, will get into the economic aspects of whether lost profits indeed are relevant here.

When you're dealing with the entire market value rule, as Greg points out, I've been involved in both sides of that, both in terms of medical instruments, which indeed where you put a notch here or a drug coating there or a slight design change oftentimes gives you a new product, and in fact the patent then really more or less encompasses the entire product.

When you get into other industrial product uses, telecommunication uses, oftentimes the patent itself may

be just a portion of the product. It may be a new wiring harness or it may be some component or accessory to an automotive vehicle. You have to take it case by case.

So the entire market value rule, I mean we're kind of downplaying it a little bit. There is a basis for it, but it's based on really what does that patent do in terms of transforming the product, and if it makes a brand new product like maybe a fuel injection in an engine, makes it a brand new model, well that's the entire product. If it's a notch on a catheter or a drug coating on the stent yes, that's a new product.

But if you're talking about an intermittent windshield wiper or a new type of coating on a component for less rusting, I don't know if that constitutes the entire product contribution. That's a very tough thing, and it may not be manufacturing costs. The manufacturing costs may be fairly limited or even the investment.

It's how if it really economically distinguishes that product in the market to define the market. You're back to that concept of defining the market.

MS. MICHEL: Related to this point of whether courts are too hesitant to award lost profits, under what circumstances should a patentee who makes the

patented product receive a reasonable royalty instead of lost profits? Are there such circumstances? Any thoughts? Jack?

MR. SKENYON: Well, the court actually I think addressed that in the *Rite-Hite* case because that was a case where the patentee made a patented -- used the patent to make one of the dock levelers that it made. I think it was -- I probably get them mixed up, but it had an automatic one with a motor, and I think the patent -- that was the patented one that the patentee was selling, and it made another one that was a manual one that was not covered by the patent.

The infringer actually made only a leveler that was manual that competed with the manual one of the patentee, for which it got -- the patentee got some lost profits damages. The rest becomes reasonable royalty.

So the net effect of that was that the patentee, practicing its invention, because of the facts of the case and how the market divided with the products, was entitled to a reasonable royalty in the circumstances, so I think that's a case, and there are others, that fall in that category.

MS. MICHEL: When talking about reasonable royalties, is the hypothetical negotiation the right construct, the right approach? Is it just the best

thing we can come up with, even though it's not great? Gail, we'll hear your thoughts.

MS. LEVINE: Well, I think the hypothetical negotiation is a useful tool, but there may be better tools out there. Professor Cotter highlighted one earlier this morning where I think you called it the ex post test, right? And as I understand it, the test, the crux of that test, which makes a lot of economic sense, is the test asks for the technological value of the patent, what's the patent value over the next best alternative that the infringer could have used? What's really important if you're applying that test properly is the timing.

After lock in, after switching -- after the infringer has incurred a whole lot of switching costs, if that's present in this case -- the infringer may have a lot fewer substitutes to turn to in an economic sensible way. So it's important to ask, sometimes -- not at the date of infringement necessarily - whether there were next best alternatives and look to the delta between the next best alternative and the infringing option then.

It's important instead to go back before the switching costs were incurred and ask at the time -- it may be, for example, at the time the product was

designed, then what next best alternatives were available, what non-infringing substitutes were then available.

It's like in the *N-Data* case that this Agency brought and settled like a year ago in the aid to public comment the agency said, that was a case about a patent holder who sought from members of an industry standard infringement damages for they're infringing -- a standard that everyone had committed to in advance. And the agency said there that by the time the suit was brought, by the time the demand letters were sent, it had become difficult, if not impossible, for the defendants to switch away from the standard.

The switching costs had I gather run that high, and it allowed the patent holder to demand value that was due to the opportunistic nature of the demand and when it was made rather than the intrinsic technological value of the patent.

It's true in the standard setting. It's true in non-standard-setting contexts too. If you look to the wrong time frame, if you look after the time that switching costs rose, you will allow -- you will not have a reasonable royalty award that's tailored to the technological advance represented by the patent, the economic value of the patent.

MS. MICHEL: Focusing for a minute on the concept of the hypothetical negotiation and what we might call an alternative of the value of the alternatives, do we need a new legal rule to talk about the value of the alternatives, or as in *Grain Processing*, is that just the maximum the infringer would have paid in a hypothetical negotiation?

I'll throw that question out along with any other comments you might have on the hypothetical negotiation. Anne?

MS. LAYNE-FARRAR: Well, I think this follows up on a point made just a minute ago about the value of the patent having a great deal of difference depending on who's using it, so you really can't say what is the value, the economic value of a particular patented technology.

That value depends a what use it's going to be put to and some uses may be highly valuable and others may be trivial, and those two parties shouldn't have to pay the same in reasonable royalties. What's reasonable for those two parties differs a great deal.

If I can just expand a little bit on what Gail said, I agree that when you set these hypothetical negotiations, you want to eliminate the ability of a patent holder to act opportunistically and exploit the

switching costs, but you also want to think about why the license didn't happen before.

And over time, I think this was also raised earlier this morning -- over time, lots of kinds of risks change. When a technology is brand new, you don't know whether it's going to be commercially successful. There's a lot of uncertainty around whether it can actually be implemented as perceived, how it's going to be accepted by consumers, whether it would really be the big success everyone thinks it's going to be.

By waiting to take a license, then implementers may actually get higher or lower royalties, depending on how all that plays out, and so I would want to caution that in setting these ex ante hypothetical negotiations, we don't penalize patent holders whose products end up being successful by enabling implementers who sat on their heels to get the lower royalty that would have happened earlier on when, in fact, there's now all sorts of new uses or the product is a great success.

So I think there's another side to it. You don't want the opportunistic pricing, but you also don't want opportunism on the licensee side as well.

MS. MICHEL: All right. I will move around in this direction. Bruce?

MR. BURTON: What I wanted to point out is that,

first of all, it's really exciting to hear new proposals and different ways to go about calculating damages, but one of the challenges that I see with most any of the proposals that puts a single factor first or makes that the primary one of which then you're going to do some other kind of judgmental adjustment up or down is that it doesn't really recognize the differences in circumstances of the patent, of patent litigation.

I think everyone here has worked on hundreds if not more, thousands of cases, and one thing that I'm continually struck by is they're different, and it's really important to be flexible in your analysis, hold true to some principles but to have the full array of tools available to you as an analysis in order to assess the situation and assess the views of the plaintiff, assess the views of the defendant, look at the hypothetical negotiation, look at the information available to them, the date of the hypothetical, incorporate as appropriate the book of wisdom to understand the information after the negotiations and then consolidate all these myriad data points into sort of a true, or as true as you can be, view of the economics of the situation.

And really that to me seems to be consistent with the notion of compensating -- of what the law would

say. If you're going to compensate for the damage, well, essentially you're reconstructing a negotiation with slightly different assumptions, valid, infringed, enforceable. You're reconstructing that negotiation, and then having factors played out to put the patent owner in a situation very similar to what they would have been in.

MS. MICHEL: Paul?

PROFESSOR JANICKE: I just want to clarify because apparently I gave several speakers the impression that my value added single factor proposal lacked flexibility. I want to emphasize that I wasn't implying that the number or percentage or whatever should be the same for all defendants.

Of course it shouldn't. The value added for the defendant in the particular case is what I meant to indicate by value added, not to say that there was some universal value number attached to a given patent.

Secondly, I get worried about integrating as many factors as Bruce has just outlined, even though they're logically sensible factors that should be integrated, because we're asking 12 people off the streets of Marshall, Texas, to do this. There's really a limit to what juries can focus on in a case.

So that's another reason why I prefer my highly

flexible value added factor, single factor.

MS MICHEL: Greg?

DR. LEONARD: I would just like to briefly say that ex ante versus ex post, ex ante has the virtue of returning the parties to where they would have been if they had agreed that the patent was valid and infringed, and as a result of that, instead of having to proceed forward with litigation, had decided to settle the matter right then and there.

I think that has certain virtues because among other things, it avoids a sort of ex post sample selection problem, which is you would only get lawsuits in cases where the patent -- the defendant turned out to have a very successful product, which I think is not necessarily a good thing.

So if there was a lot of uncertainty at the time of the date of the hypothetical negotiation, then that would have led to a much discounted royalty rate. I think that's something to take into account to set up the incentives properly for litigation and for settlement.

MS. MICHEL: Aron?

MR. LEVKO: I guess going to the framework of the hypothetical negotiation, I think it's appropriate from the standpoint it sets up the right valuation

principles, and if indeed we're trying to tie this exercise into some more rigorous framework and potentially have it within policy of law, I think it should be adhere more to valuation principles, which means that you do need a date of which to agree upon.

Given that date, I agree with some of the speakers that the ransom, or the fact that there's some costs in there that should not be part of this because in a real-life negotiation, it would have taken place probably sometime before the infringement. For calculation, probably at the infringement, but in terms of the construct, probably before there was a lot of sunk costs.

But at the same time, there are a number of risk factors people have pointed out here and I had pointed out before which need to be reflected as part of the valuation. This is a valuation exercise. Damages is valuation. Sometimes we get away from that, and when you do a value exercise, I don't want to use the word speculating, but you're certainly forecasting the future to some extent.

Now, the difference in litigation, you have hindsight. Rather than looking forward, you're looking backward, so some of those risk factors are mitigated, commercialization to some extent, and that is where the

big differences should lie between compensating a non practicing entity and a practicing entity.

A non-practicing entity doesn't really bear a lot of risk out there, other than having the bare patent rights. When you enter into competition in a negotiation, less has been made it seems in the *Georgia-Pacific* factors, for instance, which one of the assumptions are it's a willing buyer, willing seller, and it kind of just blows right past that.

That's not true. That's a big, big factor in a real-life negotiation, and I think it should be a big factor in a reasonable royalty determination in a litigation. If indeed you're dealing with a competitive aspect at risk of losing sales, even though you can't identify the lost profits, it should have a profound impact in the damages part of the valuation calculation.

So going back, there should be a hypothetical negotiation. It should be constructed along the valuation principles. It should be prior to sunk costs because the valuation principle wouldn't reflect that in going forward, and if you're looking forward, you do have some benefit because you're in a litigation sense rather than a real-life negotiation, and that there is a difference between a non-practicing and a practicing entity because of the willingness to license and the

competitive factor.

MS. MICHEL: Ed?

MR. REINES: So as implemented in courtrooms around the country, the hypothetical negotiation is basically a free for all. It sounds like there's pretty much a consensus that that's so, and I think part of the cause of that is the entire market value rule being applied in the reasonable royalty context, because it's sort of displaced or atrophied Federal Circuit law development in the area of: How do we put some boundaries around the hypothetical negotiation? How do we prioritize factors that matter? So there's sort of an absence of law and guidance, and that's especially true on what the base should be.

I mean, you can -- the numbers were 90 appeals a year on patents. I don't think that there is very little damages law for many other reasons other than the fact that there's not a lot of legal boundaries that are being placed on that. I realize that that opens a whole other kettle of fish, so to speak, so I think right now as implemented, the hypothetical negotiation is deeply flawed because there's no real boundaries for how it's been.

One of the things, the projects I've been involved with, Chief Judge Michel put a group together

to put jury instructions together, and one of the steps we've taken is to create a damages instruction that attempts to modernize *Georgia-Pacific*. It's not a cure-all for the weakness of that test, but it at least attempts to try to bring it to the modern age in terms of the obtuseness and the repetitiveness that can be quite tedious when you're in a trial situation.

So that's one step that's been taken, but I think there needs to be some real legal improvement for how it's done.

MS. MICHEL: Tom?

PROFESSOR COTTER: Yeah. I agree with much of what the preceding speakers have said, and I guess here's how I would think of or frame the hypothetical negotiations. What we want the hypothetical negotiation framework to focus on, make it more rational and more predictable, is to ask: What is the projected economic value to the defendant of using this technology in light of the other possible alternatives they could have used before the incurred the switching costs?

I think that's really the question we ought to be focusing on in trying to replicate the hypothetical negotiations, and that raises two issues that I just want to briefly point out.

One is: Should there be a discounting then for

the legal risk, as I think Aron and maybe Greg mention indeed? I think that actually is not a good idea, and here is one area where I think the existing case law is actually - I won't say surprisingly rational, but I think the existing case law actually gets it right.

The existing case law says in trying to reconstruct the hypothetical negotiations, we will assume that the parties were negotiating based on the assumption that the patent was valid and infringed.

That actually makes sense, and this was actually pointed out in a paper by Steven Callas and Jonathan Putnam back in 1997, which I'm pretty sure is right, and here their hypothetical goes like this. Suppose that ex ante, the plaintiff and the defendant both believe the defendant will derive a million dollars worth of benefit from using the patented invention as opposed to the next best alternative.

But let's suppose as well that both parties agree there's an 80 percent likelihood of validity and a 70 percent likelihood of infringement, so there's a 56 percent likelihood that if the case went to trial, the plaintiff would win.

Based on that, you discount for the legal risk, the expected value to the defendant is one million dollars discounted by 56 -- so it's $565,000. That's

the amount we would expect the parties to divide up in these hypothetical negotiations.

Now, if the defendant were to walk away and uses the technology and plaintiff files suit, goes to trial, the plaintiff in going to trial recognizes that there's a 56 percent chance that they'll prevail at trial. So if at trial the plaintiff prevails and we award $560,000, the plaintiff's expected earnings from going to trial is only 56 percent of $560,000. We're under-compensating the plaintiff. We're discounting twice for the legal risk.

So to prevent that, the law currently, rationally says, When we do the hypothetical negotiation calculation, we'll assume patent validity and infringement. The legal risk is already taken into account by the fact that the plaintiff had to go to trial to vindicate its rights.

The other issue, the entire market value rule, I agree that there's a sense in which it's just a complete category mistake to apply that in the reasonable royalty context. But I think it could potentially play a role in the following sense. If we really are trying to replicate what the parties would have done ex ante, one methodology they might have applied ex ante is to agree that the defendant will pay some kind of running royalty

based on actual sales of some final product.

So if that's the methodology that best replicates how the parties themselves would have valued a patent license, I don't think there's anything particularly offensive about using the end value of the product as the royalty base in this context.

The problem comes in the application where courts and juries are not exercising much judgment in determining what the royalty rate is. The royalty rate based on the -- the royalty rate that you would be multiplying by the end value of the product might be very, very small, and that is something that I think we need to provide some guidance on: What's the applicable royalty rate, if we're going to use the entire value of the product as the royalty base.

MR. REINES: Suzanne, I just want to say something real quick on that. Just in the world that I see and dwell in, there's a lot of products where the revenue numbers can be so huge, $50, $60, $70 billion, even annually, and to expect someone to say if something is the twig on the twig on the twig on the twig on the twig of a multi-featured box, to expect a jury to sort of embrace sort of a .00000001 rate and still make a hundred million dollars or whatever it is is not - that is not really the real world that I see.

You really have to control the base if you want a rational outcome in those situations. Once $80 billion goes up -- and a lot of times the cards on which the patent inventions are sold separately, so it's not like you don't have an invoice price that you could say is, which is a small fraction of it. So I really think that exaggerated base can be a very big problem for a rationale outcome for the reasons I just stated.

MS. MICHEL: How should we go about determining what the base is then? Gail, and any other comment you were planning to offer?

MS. LEVINE: It's a good question. I think the more important question though should be what the base times rate equals, right? If you start by looking at that number, you're going to be I hope coming up with an economically sensible result, so the question as we've been talking about before is: What's the value added? What's the economic value of the patent for this defendant over against the next best alternative?

If this patented technology allows the defendant to sell the product for a dollar more than he otherwise would have, then it's a dollar per unit. The delta would be a dollar per unit.

MS. MICHEL: The unit is the base.

MS. LEVINE: Right, unit is the base, but the

question to start with isn't what's the base. The question to start with is: What is the economic value of the patent? Once you've got your economic witnesses, once you've got the jury all focused in that direction instead, not on the question of what's the base, I think you're going to come up with a lot more -- less unpredictable, more economically rational jury verdicts.

MS. MICHEL: Ed, your thoughts on how this would work in court?

MR. REINES: I mean, I just don't see the system rejecting the whole concept of rate multiplied times base, which is sort of -- in a sense you're proposing everything will be lump sum, that there's an assigned dollar value which keys off of a margin, which in your case is a dollar in your hypothetical, and certainly one side can argue that. The other side is not going to argue that.

The plaintiff is always going to attempt to put the huge revenue number up on the screen, and it really is unringing the bell. There's just a lot of smart people. If you get a number up on there that's $60 billion and someone says, if you give them a hundred million, you're giving them barely any of it. It doesn't take into account the fact -- there's 50 cards in the thing, then it's one circuit on one of the

hundred cards and that doesn't include the whole other, that's just a card going into the big box, and plaintiffs will routinely -- I've never seen a plaintiff not claim entitlement to the overall box as the revenue amount.

And you just can't un ring the bell, so the right question is Suzanne's, which is, OK, how do you -- unless we come up to a different -- where someone says, you're absolutely prohibited from doing that, you just assign a dollar value, which I don't think that's a world on the horizon.

What's the base? How do you regulate that? I think there's two flaws there. The first flaw, and I'm glad to see there's been discussion on this in Congress and elsewhere is having some sort of gatekeeping, some meaningful gatekeeping so that people are looking at these questions flexibly: Is this reasonable? Is this within the range of reason pretrial? Because once you get that situation, you will get the development of law.

There's sort of an absence or there's a total absence of law, and so one of the benefits that I see of a gatekeeping, like a real procedural teeth in to say -- to have a judge make findings and conclusions just like they would in other situations, not the conclusion but

is this reasonable? Does this get past the court to go to trial? Then you generate law and get sort of in this situation you can't do this, and in this situation you can't do this and we start creating boundaries which are much needed. There are also needs to be I think substantive law change accompanying that because of the absence of substantive law.

But in terms of base, it seems to me that there needs to be some sense of the closest unit that's priceable in the vicinity of the claimed invention. I don't purport to have magic how that's doable. I think what defendants aren't as effective at doing as they should be is finding invoice prices for components.

So if the accused infringer is buying a sub-component, there will be a price associated with it, right, because the big problem is if you're just selling a whole big box for one price, you start having an absence of alternatives for base. There either is no base or it's this big over-sized base. How do you deal with that?

I think looking at the cost side more often, just to give yourself a base, which is when they source this or when they source that: What are the numbers? But it's a challenge, and I think we need just more case-by-case decision-making and substantive change to help fuel

this.

MS. MICHEL: We will come back to the gatekeeping issue and explore that in-depth. It's a critical one.

For this round of questions, I would like the panelists' response to how to go about this reasonable royalty calculation. What is the role of the entire market value rule? How do we look at the base? How should we get the royalty rate or do we do a lump sum?

MS. LEVINE: Just to be clear, I'm not saying that all verdicts forevermore must always be lump sum. The idea though was though that the base should depend less on considerations, and I think Ed raises some very practical considerations.

Just putting out big numbers for the sake of big numbers isn't what we're aiming for here.

The goal should be instead to look for a base that makes economic sense. You can have fights between experts as to what happens. It happens, as Greg points out, in antitrust cases all the time. What the relevant market definition is is a very similar question here, and we can have debates about it, but at least let's all work under the same economically sensible rubric in trying to figure that question out.

MS. MICHEL: Anne?

MS. LAYNE-FARRAR: Yeah. I would like to start with the discussion of the base and point out that I think you need more than just the invoice price. You need a price that's easily observable by the patentee and that cannot be manipulated.

So, for example, if a potential infringer is purchasing multiple components from the same source and those prices can be shifted so that the overall package is the same, they could make a deal, let's lower this price on this component, and then I have less to pay in royalties. So you need to think about how the firms are going to respond to: If this price is used as the base, what is their reaction going to be?

I think that's one of the things that drove the use of let's just look at the whole box because that's the price that's set by the market that the consumers are willing to pay.

I recognize the problems of putting the big number up. Certainly from an economic or a mathematical standpoint, as long as that component is used in a fixed proportion in the good, the base is irrelevant. You can always adjust the royalty.

If from a practical standpoint juries don't like to see those small numbers, maybe we need to work on

better instructions for them to understand that those aren't under-compensating, those little tiny royalties, because it is far easier, and certainly from an enforcement standpoint this is a big issue, particularly internationally where you have manufacturers say in Asia who under report on a regular basis.

And it's easy to under report if the prices aren't transparent, aren't posted in some public forum, whereas end market prices are, and it's far harder to get by that enforcement problem when you're using a publicly posted price as long as the royalty is adjusted to reflect the different base.

MS. MICHEL: Bruce?

MR. BURTON: Two quick observations. First on the base, the way we often look at it is you first follow the contribution of the technology. So what is it that it does? What benefit does it impart the product and at what level?

Then you look for the closest approximate level to where the base is, but -- I'm sorry, to where the benefit is, but obviously at a higher level of accumulation than lower.

So you first understand how the contribution is made. Then you mimic that and how the device is constructed, and you pull out an intermediate point

that makes sense as a base issue. That's one way to look at it.

Just a comment on sort of the best method of determination. I perhaps am a traditionalist because I see a lot of merit in a hypothetical negotiation, *Georgia-Pacific* approach. I think the flexibility in the gathering of data points is really central to doing a thorough and complete job, and perhaps the focus is: Why does that go astray? And there are some reasons it seems historically that sort of jump up that says: Here's some challenges you have to be alert to.

I'm not saying that these things are wrong. I think there is a place in a reasonable royalty entire market value. I think there are times when that is the right base to use, and you'd be unwise to view that. But there's also a lot of room for abuse in an entire market value rule. There's a lot of room for abuse in comparables.

A lot of comparables just plain aren't comparable, but it's hard for a jury to really see that. They don't work with technologies day in and day out, and even judges often don't, and it's very challenging to understand when someone puts forward something that's a comparable, why it is and isn't, and that can be an area of significant abuse, particularly if you haven't

matched your base, your royalty base, with your rates, so you're seeing comparables at 5 percent when you should be 1/10th of 1 percent on this particular base.

Rules of thumb, dangerous. It's only happenstance and luck if a rule of thumb is right in a particular circumstance, and yet people put rules of thumb forward as if they're gospel. It can be very misleading to rely on a rule of thumb that is not particularly -- that rule of thumb, again just like the entire market rule, could be right, but boy show us right by connecting to the product and the economics of that situation.

Then I would also posit that it's a challenge when people don't consider all the factors, and I don't mean factors in the sense of *Georgia-Pacific* factors, but all the relevant economics, because people will hone in on a particular aspect, totally ignoring the greater environment, in which that data should be interpreted, and by doing that you can get very misleading results that can be hard to refute without a lot of work and a lot of explanation.

So I'll just leave it with that, that it's not so much in my mind the methodology as some of the ways some of the tools within the methodology are applied.

MS. MICHEL: Paul?

PROFESSOR JANICKE: Yeah. I think the reason we got into the whole issue of base is because we got into the hypothetical negotiation, and at the time we first got into that, most licenses were -- almost all I think were negotiated based on a base and a rate.

Well, I am told by people who do a lot of licensing that the modern trend is to have no base in real licensing, but to license on the ground of so many cents or so many dollars per unit. That's apparently not the majority of licenses yet, but it's growing fast, and big companies seem to like it better.

So I am optimistic that in a few years that is the way real licenses will almost all go, and there won't be any base for hypotheticals anymore, and we wouldn't have to answer this question because the hypothetical negotiators will not think and speak in terms of rate and base, but just how many cents or how many dollars per unit makes sense to them.

So if that will go away, then we don't have to do any more work on it.

MS. MICHEL: So then the hypothetical negotiations should mirror real life?

PROFESSOR JANICKE: Yeah.

MS. MICHEL: Or why else would people choose that?

PROFESSOR JANICKE: It's supposed to, according to case law anyway, and real life changes the style of negotiations and what people would really do if they were willing, then what we do in the courts should change to match that.

MS. MICHEL: Why is the unit not the base if it came within a few cents of a unit?

PROFESSOR JANICKE: Base only matters if you're going to do a rate times base calculation. If you're going to do it five cents a unit, there is no base. There is no rate. They agreed on five cents a unit or $2 a unit, and base drops out of the calculation in the real license negotiation.

I'm told various numbers, but some people say 40 percent of real licenses now are not based on rate. They are fixed amount of money per unit. I don't know. It is certainly growing rapidly though.

My second point on this was: Are you going to ask today anything about the problem of royalty stacking in the software industry? Because that is an especially difficult problem for reasonable royalty thinking. And by stacking, I mean the problem that if you come out with a software product of any considerable size, you are going to have to deal with 50 to 150 patents.

MS. MICHEL: Can the hypothetical negotiation take that into account and should it?

PROFESSOR JANICKE: I'm at a loss as to how, because in an actual case, frequently the defendant doesn't know how many other hammers are out there about to fall on him and so on, but experience of the software companies seems to be uniform, that you come out with anything, and you're besieged with -- I'm assuming everyone is in good faith on both sides.

So they didn't know about these patents. They didn't see how they would apply to their product, which is what they say in court also, and the plaintiffs say, we're not particularly arguing about willfulness, but when we saw your product, we saw, Ah-ha, one of the routines in your software is covered by my claim 7, so nobody's trying to do anything underhanded at all.

It just turns out seemingly all the time that there is a huge number of patents to cope with, and if you start giving 1 percent to each one, the products will lose profitability in no time, and yet you can't account for all of the other ones in a given litigation.

I find it an exceedingly unsolvable problem.

MS. MICHEL: And defendants might not necessarily want to argue: Yes, but I'm infringing a hundred other patents too.

PROFESSOR JANICKE: That wouldn't sell too well, and they wouldn't know about a lot of them, but from the settlement, since 86 percent of the cases are going to settle, they've got to be thinking, what else am I going to have to deal with on this product, so that the product can remain profitable?

And there is a large unknown that they have to deal with, but frequently a company like Microsoft, by the time they have to make this decision on whether to settle the case, they're aware of maybe 25 other patents that are a problem or that their owners of those patents say are a problem and probably another 25 percent that haven't surfaced yet, so what are they to do in a reasonable hypothetical negotiation world?

I think that is the main reason that's driving the Business Software Alliance to try to get probably an overly-specific definition into the patent reform statute. I don't think that's a particularly good solution, but I confess, I don't have a good solution.

MS. MICHEL: Jack?

MR. SKENYON: A couple things on this issue. First of all, the hypothetical negotiation scenario is, first of all, not the only way that you can compute a reasonable royalty damages. The Federal Circuit has approved at least one other way that's entirely

different or almost entirely different, and what Tom had proposed here, that could be asserted too, calculating of damages that way.

The risk you would run would be that the Federal Circuit has not approved that way of calculating damages, so if you're faced with that at trial, and it was $10 million either way, you would probably go with the *Georgia-Pacific* factor knowing that wouldn't be an issue on appeal since the Federal Circuit's familiar with that and has proved that.

That said, I think the hypothetical negotiation scenario is looked at generally in the wrong way, and the way it is is this: Is that the statute itself sets the minimum value of damages as a reasonable royalty. That's the only mention of reasonable royalty that there is in the statute.

I think that legitimately is the royalty that you would pay if you sat down with someone who wanted to license your patent, there's no threat of litigation, and just came to some agreement. I think that's the minimum.

What I think that is is factor 15 of *Georgia-Pacific*, and I think the other factors in *Georgia-Pacific* can be used to drive up that rate, and I think that's how you should look at it. Once you've

driven the rate up, you can use some of the other factors to drive it down again.

Basically I don't think it's proper to look at the hypothetical negotiation scenario from the view of: Well, what could have happened, what should have happened, what might have happened, what we could do. I think that's where we run into some problems here, and one of the problems I think that Ed pointed out, which is a very important one, at least in some industries is the base problem here on this, is that if you approach it this way and you come up with a royalty number, the question is, not the royalty number. The question is the base it's applied for.

Georgia-Pacific is really setting the royalty rate, not the base necessarily. The base, if you stop and think about it, is supposed to be what the infringing product is, and in Ed's scenario, which is a fairly common one where the problem lies is, is that suppose in one case the patent covers the little circuit he mentioned, but suppose in another case they've gotten a claim that deals with the whole system, of which that patented circuit is part.

So now what's the base? If it's the infringing product, we're talking about the whole system, even though only a little part of it is really important in

terms of patentability, so I think my suggestion would be here is that, first of all, keep in mind what the hypothetical negotiation is really supposed to be about. Don't put too much into it.

There are *Georgia-Pacific* factors, I do not know what they mean. There are *Georgia-Pacific* factors that I cannot find a case anywhere at any time that has turned on that particular factor.

So all it is is just a general guideline, and there are other ways to do this here, some have been approved by the Federal Circuit, that might be more appropriate in a particular case. And if you wanted to approach this from that point of view here, that the answer on this base question may be that you want to install a rule, if you will, that maybe the *Georgia-Pacific* application is not to be used in certain cases, or to have the judge formulate which one is, because otherwise I think the problem is absolutely insoluble on this base issue, which is a critical issue I think, as Ed pointed out in some industries.

It doesn't come up in other industries but it does in the software and electronics field.

MS. MICHEL: It is interesting that you say there are *Georgia-Pacific* factors for which -- you have never seen come up. How common is it then to include in

the jury instructions just a list of all 15 factors, and if we do that, do we risk not giving the jury good guidance?

MR. SKENYON: : I think the reason the factors are all listed is because there's a propensity for the district courts to adopt form jury instructions, and each form jury instruction on damages that I've seen that deals with *Georgia-Pacific* will include all the factors. Because potentially all the factors could be in there -- very little interest in crossing out ones that don't seem to apply when you get to that stage in the litigation.

But I'm not sure that the jury actually makes a decision on damages in any case by going through all the *Georgia-Pacific* factors. I just don't believe it. I think when the jury makes a decision on damages, it has actually very little to do with the damages presentation to begin with.

What I think happens is this: Is that you have a verdict form that includes -- there's an infringement question, and there's multiple claims usually that you have to decide, and then there's probably maybe a willfulness question. Maybe there's invalidity issues on various things, and my belief is that as soon as the jury starts deciding against the defendant in one, it's

easier for them to rule against them going down the line.

So by the time you get to the damages question, which is the last question, they're not rowing in the defendant's boat any more. They are firmly in the plaintiff's camp, and if the plaintiff put down a number of $15 million based on the moon being made of green cheese, I think the verdict is going to be $15 million.

In most cases, I think that's what happens is they spend very little time, I'm being a little bit flippant as to what the juries will do -- but I don't think they spend very much time on the damages issue at all. I don't think it's a question of guidance of the jury.

I think it's a question of pre-loading with the judge some limitations on the damages that can be presented in a particular case, because I think once you get to the jury, I think if they're going for the patentee, it's hopeless, and in a lot of defendants' cases, I don't even put on a defense on the numbers simply because I think it's a waste of my time.

PROFESSOR JANICKE: *Georgia-Pacific* factor 16.

MR. SKENYON: Nothing I say is intended to amend *Georgia-Pacific* and associate me with it.

MS. MICHEL: We have two very significant issues

on the table at this point. One is how to think about the base. The other is how to deal with the *Georgia-Pacific* factors, how to deal with juries and the fact that perhaps the jury is not doing the complete analysis there.

Greg, let's go to you.

DR. LEONARD: Just on the base, I think that in a real world, the parties negotiate the terms of the license, including how the royalty will be paid, so they could decide to have a lump sum or a per unit or percent times a base.

I think a good way to think about in one of our hypothetical negotiations what the base should be is to look at what parties have actually done in similar situations in the real world if that exists. A lot of times those bases that are chosen are going to be based on the factors that Anne has already identified. You've got to worry about whether there's manipulation possible and that sort of thing.

Of course that then leads to possibly the perception base that, gee, this base is huge and a royalty rate of .000001 percent is just too unbelievably small for a jury to award, so in that case I think what happens, and maybe this is where we're headed, is I think the jury can only get to a 1 percent number on that huge

base if the plaintiff's expert is allowed to get up and say 1 percent.

So it seems to me that's where the judge has to step in and not allow that kind of testimony, and at that point the jury, unless they go off on their own, which I guess they're allowed to do that, but if they only hear two numbers that are very small, my guess is they're going to choose on of those numbers or something in between.

So I think in the end the base problem is going to be solved by essentially constraining experts to testify about things that actually make economic sense. And if the jury doesn't hear outrageous numbers, then they're not going to award an outrageous number.

MS. MICHEL: Aron?

MR. LEVKO: Since we've heard a lot about economics, let me add in there auditability, and we've kind of not touched on that point.

Regarding the base, if this is supposed to -- that is, litigation, the hypothetical negotiation is supposed to simulate real life negotiations in a license agreement, you've go to have that to be auditable, and so on a basis of accounting. That's why oftentimes it does go to a unit basis rather than a base dollars which can be manipulated.

So in that regard, it does make a difference how you call unit or dollars or time or whatever. Those are all bases. The numerator, I guess the rate could be a dollar per unit or certain a dollar per time or levels to be reached upon which lump sums are provided. All those things are auditable, so let me just clarify that.

If it's going to emulate and simulate a real-life negotiation, that's how those contracts take place. Now, also a lot of them take place, if you're going to do a lump sum, you need to do discount rates if you're going to do that. That hasn't even been discussed.

Discount rates are going to have all sorts of fanciful factors to be considered because take a look at business commercial litigation, all the discount factor gyrations that go in front of juries.

So we haven't even addressed that in lump sums. I don't want to begin to do that, but that needs to be reckoned as well if we're going to do a hypothetical negotiation.

The issue of stacking is one part of what I call the broader context of the dynamic marketplace; that is, is it one patent out of 10 that really drives the products? Then at what point do you lose any profitability? That is part of the market definition

and part of what indeed is the incremental margin approach towards a royalty calculation, be that on a rate basis or a dollar or unit basis, so that fits in nicely with what we've been talking about, but it's all a component thereof.

Okay. Regarding the *Georgia-Pacific* factors, let me clue you in. When I do -- and I have testified a lot, I'm into the triple digits, *Georgia-Pacific* factors are influencers on the rate. They don't have anything to do with the base. And I don't do a calculation on rate based on *Georgia-Pacific* factors.

I use basic valuation and economic principles called market, income and cost and variations thereof to determine a royalty or to determine a damages amount. Now, where the *Georgia-Pacific* factors come into the analysis is what are the various factors that either drive up or down the rate? And they can go either way. Those factors can go either way, and there are a number of factors that are not included in the *Georgia-Pacific* factor analysis that should be included.

We've already touched on a few of them today, one being the financial positions of the parties, whether they're practicing, non practicing entity, competitor, non competitor. Even though there's a discussion somewhat in *Georgia-Pacific* factor analysis,

it's not the bargaining positions that are truly addressed, although that has a profound influence both on real-life negotiations and should be in the litigation.

The business plans, that is, most businesses look at a patent or a product or a development as a ticket to the next stage of development in their business, and so what are those business plans? How are they accounted for in terms of doing a royalty negotiation? Is it a potential option for them to get to the next stage in development?

That's not reflected in the *Georgia-Pacific* factor analysis, and then we've talked about already the fact that just because you get into a royalty situation doesn't mean there isn't any lost profits. You just can't prove it conclusively.

So if you do get involved into a negotiation, there could be a risk of losing sales by licensing someone, and that's not reflected really in the *Georgia-Pacific* analysis.

So what I'm going to say is you need to have, in terms of determining a royalty -- whether you split it by rate and base or whatever mechanism, those damages should be on the constructs of a valuation principle, an auditability principle, and the idea is to illuminate and

simulate negotiations taking into account the legal risk factors or the lack thereof.

When you do *Georgia-Pacific*, those are guidelines, and there's many other factors to consider.

MS. MICHEL: Ed?

MR. REINES: We've heard a richly diverse array of tools and techniques and methodologies for reasonable royalty analysis from the creative group we have here, and I think that presents the problem, not the solution.

All of that is probably viable in courtrooms that we have. I mean, I don't think anyone said anything that a judge would necessarily preclude from going in front of the jury.

I think the problem that I've seen in at least my personal experience is when you bring in limine motions against damages experts on theories, maybe some of the theories we're hearing here, on the grounds that that is inconsistent with common sense or the legal standard, the normal reaction that you get is -- the stronger your motion, the more the judge looks at you and say: Well, great, you'll have a great cross examination, that should be a lot of fun for you.

And if there's a problem at the back end, I have all the tools of a post-trial resolution to clean things up then. And on a rare occasion when you get to that

circumstance, hopefully you avoid that the vast majority of the time.

Then it's sort of, Well, the standard is whether the jury had any basis for doing this, and I might as well just let it go up to the Federal Circuit and they can determine it. And that's not always true. There's a lot of district judges that are earnest in what they do, but the problem is that there's not a set of rules that empower them to make the kind of line drawing that I think everyone senses needs to be made. Because there's products to be sure where the patent is the whole product, and the royalty should be huge.

There's no question about it. You haven't been litigating cases if you don't see that, so it needs to accommodate that. At the same time, it needs to accommodate the stacking situation that comes up in a variety of fields, largely in the high tech field.

An example I want to give in that -- the type of practical problem -- is if you want to show how many patents cover the product to demonstrate the stacking product, you would have to go through all of your cross-licenses, so if Microsoft cross-licenses Apple or whatever it is, that's how many patents that can arguably be asserted one to the other.

No judge is going to let you -- sometimes you're

allowed to touch the concept that there's a lot of patents in the general field. But no judge is going to let you get into the fact of -- here's other patents that actually cover this -- because of the sense that that's satellite litigation. What do you do, *Markman* hearings on 15 other patents?

So you can't really ever demonstrate that, and then of course I think maybe the central problem in distorting the situation, not in every product in every field, but in the problem area, is you spend two weeks of these jurors' time pulling them out of their day-to-day life and you focus them only on this one feature, and everyone is talking about the prior art to this feature and all the attempts at solving the feature.

And even though the alleged infringer's counsel will have a full opportunity to say, but it's marginal, but it's minor, you spend two weeks talking about something, and there's just no way to undue the fact that it's going to have an exaggerated impact on people.

So I think you need to have a flexibility such that it's not one size fits all, but you need to have real rules so that it's not whatever some of these great expert witnesses that are up here say: You know, the way I look at it, it's like antitrust. There needs to be

some filtering of that.

Right now I just don't think we're in a position where we're getting that.

MS. MICHEL: Thank you. Go ahead.

MR. ADKINSON: There was some discussion earlier about industry average licenses and comparable licenses indicating that they weren't perhaps the best. I wondered if the panelists could just give us a quick general idea of how often that evidence is coming in in their experience and whether it can be effectively limited through *Daubert* motions.

MR. LEVKO: Well, first of all, if you use an industry average, that's very, very broad. You need to be much more specific in litigation. You need to have publicly disclosed information. I've had -- I faced these surveys where they say industry averages or broadly a survey, who responded to this survey, and what were the conditions?

Are they exclusive or nonexclusive? Are there a field of use restriction? None of that is in these industry averages. You need to go to real-life license agreements. Then you need to pick them apart for the terms. You need to pick them apart for the industry. You need to pick them apart for the stage of development of the technology, take into account the stacking.

It is not that simple. That is why when you're trying to legislate something, you're getting into some very dangerous grounds. That's why I get employed on these things.

MR. ADKINSON: John. Or Jack. I'm sorry?

MR. SKENYON: Me? When someone calls me John, it's usually my wife, and it usually means that I'm in trouble. The first line to me once was: John, did you feed the baby pizza? No.

This is one area where the Federal Circuit has had some very clear guidance on this, and basically they are not very fond of industry averages or licenses that are in the industry for several reasons, and one primarily is you're not dealing with the exact invention that you're talking about here.

The other reason is a practical evidentiary one in that Rule 408 will preclude the use of these things because you're trying to use them to set value, and Rule 408 of the Federal Rules of Evidence says that you can't do that if it's in the settlement of litigation or threatened litigation, so any license agreement that was entered into because of litigation or the settlement of litigation or threatened litigation should be out under Rule 408 anyway.

That leaves you usually with a very, very small

number of licenses if you can get them, that you could possibly rely on, so I don't think that usually is an effective factor at all, and generally speaking, I don't see it too much in too many cases.

MR. ADKINSON: Paul?

PROFESSOR JANICKE: Jack just said if you can get them, and in my other life as a litigating patent lawyer -- this is old-time stuff because I've been on the law faculty 16 years now, but in my other life, perhaps due to a lack of talent or imagination, I could never get the licenses that I wanted to collect. Everybody brought all kinds of protective orders and motions to quash the subpoenas, and it became a battle unto itself.

So getting that kind of -- I agree it would be great, but getting hold of it for me at least was a very difficult chore, and I was very unsuccessful at it.

MR. ADKINSON: Anne?

MS. MICHEL: Anne?

MS. LAYNE-FARRAR: I was actually going to talk about some other things.

DR. LEONARD: I was just going to say I actually do see it maybe more than you might, either the comparable license -- I mean, I was just involved in a case a couple months ago where the other side's expert

had a list of supposedly comparable licenses from a four digit SIC code or something and then took the average and said: Well, this is the right number.

My analogy for that is nine and a half is the average men's shoe size, so I think what I'll do is I'll open up a store, and I'm only going to sell size 9 and a half shoes, let's see how well I do. It's totally ludicrous.

I think actually all the damages experts sitting up here agree with that, but I think even more dangerous though are the rules of thumb because there you have this claim that that's what people actually do, which I actually think is not true, and there's this unfortunate published paper that maybe soon I will be addressing, but that the claims that, oh, this really looks well and that sort of thing.

So I think it is very dangerous, and I think *Daubert* should be used to get rid of it, and I think there's a saying which I think is actually true, which is that it's never actually done. I guess I would put a question out to the lawyers: Why isn't *Daubert* used more in IP cases?

It's used almost as a matter of course in antitrust cases.

MR. REINES: I think the motions are

brought. I think the judges and just trial management -- this is just my anecdotal, this isn't like the good professor, a systematic empirical analysis -- but is that the judge's feel they'll let it go, they'll see what happens at trial.

So the first thing is, okay, I don't really have to make this decision now, let's see if it all turns out as bad at trial. An then you're at trial, it's reined in in it's worse excesses, but still flows in, and getting something out like industry averages is basically -- I mean, that's so far from anything you would be ever able to get out of -- you would be able to strike.

And then it's sort of, well, we'll see what the jury does, and if the jury is a runaway, then I have my ability for remittitur and all, kinds of post-trial tools and it's just this creep that happens.

Then you have the creep phenomenon, which is: Okay, the jury just spent two weeks of their lives working on this, who am I really to second guess what the value is? There was sort of a lot of information thrown up there, and the Federal Circuit can fix it if it's really abusive.

And you just get that sort of a creep. That's, A, and then B, you have a lot of justifiably nervous,

one might say paranoid, in-house counsel who don't want to have to live through the jury seeing $60 billion up on the screen for one millisecond because of their reporting requirements and everything else, and they don't want to have to worry about a post-trial motion – no really don't settle it now because the judge is going to fix it all.

I mean, it's just -- that's not real, that's not real, so that doesn't -- that's the structural -- to answer, that's the structural things that I see. I don't know if Jack may have similar or different experience.

MR. SKENYON: Pretty much the same I think with that.

MR. LEVKO: We've done an empirical study on *Daubert* motions. We don't have it specifically for an IP cases, but we have it for financial experts, and we do this every year. We also have another report that we released on that, and it seems -- I'm trying to recall the numbers, but something less than 50 percent of these cases have *Daubert* motions.

I think it's something like the high 30s or 40 percent or something like that, and then we have eliminations that are around one-third, 30 percent or 33 percent. It's below 30 percent. The plaintiffs are

limited more often than defendants. They're up I think probably closer to 40 percent, and the reasons primarily -- there's three basic screens, one being the qualifications of the experts, the second being the reliability of information, the third being the relevance of the information.

And it's the reliability of the information that seems to be the one that trips up the most, reliability in terms of accepted practices, in terms of the analysis. The relevance of the information sometimes is also a factor, but when attorneys screen experts, they're focused on the qualifications, and that for some reason is, of the three, the lowest that trips up or screens out experts.

And this is broad for all financial experts, gets into all sorts of business commercial litigation, so I don't know the specific number for IP.

DR. LEONARD: I bet if you looked for IP, you would find it was much less than 30 percent. I don't think I've ever seen it in all the cases I've ever worked on. And I think the reason is because there isn't a framework that you're supposed to use that then you can compare what somebody has actually done against that. Whereas in other financial cases, I think there is much more of a generally accepted framework.

MR. ADKINSON: Anne, you have been waiting patiently?

MS. LAYNE-FARRAR: I just wanted -- there were so many interesting comments around the panel, and there were a couple I wanted to follow-up on, and I'll be as brief as possible.

One is the idea of that more and more licenses are moving to this dollars or cents per unit. That works in a pretty static market when you don't have prices going down or going up, but for example, in electronics products where prices fall and tend to fall pretty predictably and can fall dramatically when you have a fixed amount per unit, then on a percentage basis you're paying more and more and more for the IP as the product becomes less and less relevant and maybe gets obsolete and is replaced by the next greatest thing.

So I've actually seen some problems with that kind of licensing in that kind of market because of course the party who wants to renegotiate is the one who's manufacturing, and the party who doesn't want to renegotiate is the patent holder.

If we use this contributed-value approach that a lot of people round the panel seem to buy into, then that solves some of the problems that we've also talked about, for instance, royalty stacking. If you're

talking about compensating a patent holder for the contributed value, then you don't have to worry about all the other components because you're just getting the value of that one component that's being contributed.

Yes, it can be difficult to get to that contributed value, but that gives you more impetus then to strive for that kind of framework. And also we should recognize that within an industry where you have patent holders, who are long-term market players that are in this industry, they have every bit as much interest in solving the royalty stacking problem as do the manufacturers. If the market collapses because of a stacking problem, those patent holders aren't getting paid anything.

So it's very much in their interest as well. It's only these sort of short-termers, maybe people leaving the market, the bad actors, if you will, who have more of a short run view that that becomes more of an issue.

The long term industry players, even if they're non-practicing entities and only have upstream R&D very much care about solving the royalty stacking problem.

Which brings me to the final point I would like to make, and that's on the non-practicing entity. I think it's dangerous to say all these are willing

licensees. We should only give them reasonable royalty. They don't face any risk. I think if you're talking about am R&D firm who's chosen to specialize upstream, they very much face risk.

They're putting a lot of dollars on the line in their R&D, and if they don't get compensated for it, that could remove a valuable player from a market who maybe has a comparative advantage in doing the R&D and the upstream stuff as opposed to implementing it downstream.

So I think it's dangerous to view them too dismissively. And also in the context of a dynamic market, if you restrict them entirely say with a category rule, no injunctions, they only get reasonable royalties, no damages, that kind of thing, you can hinder that player's ability to negotiate reasonable royalties in the future with other parties because they say: Aw, you're a non-practicing entity, I know that if I bring you to trial, you'll be treated differently and I'm going to be okay.

So I just wanted to follow up on those few points.

MR. ADKINSON: Thank you. I want to pick up I think on your second point a bit and hope that that works with what Tom may have been thinking about, which

is another area in what is demonstrated in court is if you're not using the licenses and you need more of the analytic approach, we could go to considering the value of the component or the value of the patented item.

What I want to ask first is how the panel -- what the panelists can say about how difficult it is to present in court the sorts of evidence that will enable a jury to get a handle on what is itself another difficult question, trying to understand perhaps an unusual technology, advanced technology, and how perhaps a component of that technology contributes.

So from your experience, how do you go about trying to present to a jury how -- what the value of the particular technology is, and is there a mechanism you think is especially useful?

MS. LAYNE-FARRAR: I would say -- briefly, I'm sorry. I would say yes, it is a useful mechanism in that one of the things you can do is try and put things in context. You don't want to go down the 150 patents that are in all the cards in the box. That's overwhelming and mind numbing and too difficult for anyone to comprehend, but you can talk about basic components: This product is divided into three areas, and the patent reads on area one, and if we focus on area one, it's a big or a little piece of that, so in a

broad framework I think you can do that.

MS. MICHEL: Related to that, if anyone has a comment and plus whatever else you were going to say, please, you talked about the product, the patent reading on one component of the three components.

It's very possible to have the inventive feature is the circuit. The circuit is incorporated into the chip, but I've written my claim to be a computer incorporating a chip having the circuit, and so the claim rates on the whole computer, but the inventive feature is the circuit.

This raises some particular problems in terms of how are you going to set the base, how are you going to set the royalty, and establishing what the added value of the invention was, and if anyone has thoughts on how to go about that along with your other comments. Aron?

MR. LEVKO: A couple things Anne brought up. First of all, I guess in regards to looking at a non-practicing entity and the danger of dismissing their risk, part of -- I should have included and I thought I talked about it in my presentation, how we define non-practicing entities.

We put Universities, for instance, in the practicing entity aspect. If you have a licensing program and a track record for licensing, which by the

way is another factor that's not reflected in the *Georgia-Pacific* factors, that goes towards I would think strengthening, the arguments, if not the economic analysis and valuation, for patents because that shows a track record of success and from a valuation standpoint, reduces some of the risk factors that I've previously discussed.

The second thing is in regards to how to allocate on the base or the value, the royalty on a particular feature or patent within a total product. I think we've been dwelling a lot -- and I'm going to take it from real-life experience -- on functionality, that is, what does this patent do, how does it improve over the prior art, how may it be used by the user and so forth?

I think what I have found useful, besides the functionality, is looking at the sales history of products before and after the patent's introduced, taking into account the potential degradation of sales without the innovation. Levels of investment, to what extent any rational business would want to invest in these additional features and wanting to have a certain, at least minimum, return on investment.

Oftentimes that additional investment on this feature on that patent or that whole functionality is a

way of looking at the incremental benefit to be derived because that's rationally how capital expenditures get approved. I was a controller in a business, and that's how we do things.

You look at profitability; that is, how does that change the profitability or contribute to profitability overall by adding this feature of this patent and so forth? How is it sold? How is it advertised? How is it promoted? Is it a feature among several features? And we can take a look at the materials and so forth and see if it's even mentioned.

Then finally, is it a platform for business growth? This is the option concept. Does it get you into a ticket to the next generation? And oftentimes a value has to be something more than simply a straightforward valuation but needs to take into account some option of use as that. So those are some other thoughts regarding how to develop a component.

MS. MICHEL: Greg?

DR. LEONARD: I was going to add to that. That was a great list of ways to go about doing it. Another way from an economist's point of view, we're pretty good at relating consumer demand for product to the particular attributes that the product has.

So what you can do, for instance, is say well,

if the infringer had to change the attributes of its products in order not to infringe, we can use one of these models of consumer demand to estimate what the demand would have been in the but-for world, but again if you have to offer an inferior product, your demand for the product will fall, you would sell less, and that will be part of the incremental value that the patented technology gives you as the infringer.

I also want to mention this briefly, but there also could be a price effect too, so if you're offering an inferior product, you might not only sell less but you might also have to lower your price, but these are the kinds of things again that economists are really good at doing. And there are other ways, in addition to the ones that Aron mentioned, of looking at and trying to place a value on the actual incremental effects on the infringer of having access to the patented technology.

MS. MICHEL: Paul?

PROFESSOR JANICKE: Suzanne, your question was very perceptive about claims and how in patent law terms almost all claims realistically are comprising-type claims. And if we proceeded in the way as you suggest, where the real thing devised, let's call it, is the circuit and that's claimed in claim one, and then claim

19 has the circuit connected to the module, connected to the computer, connected to a network, connected to the Internet, connected to the universe and so on, the claim really can't be the base.

I know the courts have not seen it, but your question has seen it, and lot of lawyers have thought about it. I don't know what should be the substitute. Maybe the old-fashioned idea of the gist of the invention or the focus of the claim or something saying that the claim is really addressed to -- but talking about the claim covering for the reason you suggest is not take good way to do it.

MS. MICHEL: How about the specific contribution over the prior art? No reactions? Is that what that language in the statute was trying to capture? Do you have a thought on that?

MR. REINES: Yeah. I think both of your questions really frame things very nicely, so on this point, and Paul's, so I'm facing right now a patent that's on a local area network, so it's concrete. It's a local area network, and it's about minor functionality in one node, so it's one node. It's a local area network with one node that has this one feature in a 1,000, 3,000, 10,000 feature device. That's the reality of the situation.

So the question is how to solve that, right, given the time of day we need to do that and especially with your question? I think it's a really twin approach. So there needs to be a substantive rule, and I think value over the prior art or value over the alternatives -- seems to be some coalescence around some form of that and there's fine tuning and flexibility necessary in that, but something along those lines - coupled with some procedural reform.

I think you need both, so that you actually get the decision. You force decision points which forces the development of a body of law that can say when you're in a pharmaceutical situation, you don't apply -- it's okay to do it this way.

When you're in this software circumstance -- and obviously you don't do it necessarily by technology per se, but just normal case law development, in this situation you would never be permitted to do that. And so I think we've talked a little bit about gatekeeper, but something where you force district judges pretrial to issue a written thing that creates boundaries on what's going to be acceptable to the judge, coupled with something that ensures that the focus is on value add as compared to 15 factors in an archaic test.

One thing, it may be in the shameless plug

category, but Chief Judge Michel put together this committee with Judge Ward from Texas and Judge White from the Northern District of California, Judge Saris from Boston and Judge McKelvey from Delaware, and we've put together these modern rules, and they're not a cure-all for anything, but there are improvements attempted, especially in the royalty factors and other areas.

And those are available in the Federal Circuit bar association web site, and they're in the comment period right now. The comment period closes on February 20. With such a great audience that we have here, I use this to solicit further input into that as an attempt to modernize the damages analysis.

MS. MICHEL: Thank you. Tom?

PROFESSOR COTTER: Yeah. Just to echo I think what Aron and Greg were saying, I think the real focus ought to be on the economic realities and not the vagaries of claim drafting.

So if we're trying to either estimate lost profits or to reconstruct this hypothetical bargain relating to the reasonable royalty, we ought to be focusing on what would have motivated people in the real world to reach a certain figure or what the actual consumer demand for the product with and without the patented feature might have been. None of this really

hinges or bears any necessary correlation to the way the claims are drafted because that's so manipulable -- how narrowly or broadly the claims are drafted.

I do think, however, the Patent Reform Act that didn't get through, but that portion of it that focused on comparing the patented -- the contribution over the prior art and estimating royalties based on that, I'm not sure that's really the way to go.

I think it's Schlicher again I think that made the point -- maybe it's really a timing issue here because that really focuses on what the potential value of the invention was at the time the application was filed, and I think really the timing issue we've mostly focused on today is what is the economic value of the invention at the time the defendant choose to go down a particular technological path.

That could be fairly wide gap, so I'm not sure that we ought to be focusing on the contribution over the prior art in estimating damages or royalties. I just don't think that's the right fit.

MS. MICHEL: Gail?

MS. LEVINE: I agree with a lot of that, and in fact I will never again speak after Professor Cotter because he always says everything I'm thinking. Maybe if I can amplify one or two points.

The economic test, the test about the technological value, it's value over alternatives, takes a lot of pressure off the claim game, right. It doesn't reward clever claiming as much as perhaps other tests would, and that's an attractive feature of it because it returns us to the economics, what a business person actually thinks and does.

Bill, you asked earlier: How can a test like the economic test, the technological value of the patent test, the value over alternatives test can be actually implemented in the courtroom? And I think that's a very good question. All of these things are in varying degrees difficult to prove, but what's the alternative?

The alternative is this grab bag of factors, this very unfocused determination. That's untenable, and we don't have to wait for a test that can be executed with mathematical precision, right, just something that returns courts -- and returns parties to a test that is more economically sensible is what we're aiming for.

And frankly the test for looking for the next best alternative, figuring out the difference between the non-infringing substitute and the patented technology isn't so dissimilar to what courts already do in the lost profits.

MR. ADKINSON: I want to make sure we're leaving Bruce with something that he thinks is reasonably manageable.

MR. BURTON: Well, it's an interesting situation because it is very similar to work that's already done, and in my mind, it's an important approach and whether you view it as the next best alternative or some variation of improvements over prior art, those are relevant things to consider, and I don't have a problem with considering those things as relevant.

I get a little concerned when, if we're talking about, for instance, starting there and then making -- that sort of sets our range, and then we have to work within that range, and it may work often. It may not always work very well.

So I guess I'm an advocate for flexibility. I'm an advocate for being able to bring the right tools. For instance, you might look at something that is contribution and it was used by the infringer, and the infringer made a million dollars. Well, that's great, and then you're going to use other factors and decide how much of that -- what portion of that you're going to allocate to the infringer gets to keep and what the patent owner gets to get.

Well, maybe that patent owner had other

alternatives that were very significant. Maybe they were on the verge -- this is just made up of course, but on the verge of an alternative license that got precluded because of that. They lost tens of millions, okay.

If you have a perspective that restricts your ability to broadly look at the circumstance, that's my only concern is I don't want us to lose this ability to be flexible, to look at multiple points and make judgments.

MR. ADKINSON: Thanks. Greg?

DR. LEONARD: Yeah, I was going to raise something similar because there can be, in a situation where the patentee has not, for whatever reason, made a lost profits award but is concerned at the time of the hypothetical negotiation about competition from the infringer. It can very well be the case that sort of minimum royalty that a patentee would have been willing to accept exceeds the maximum royalty that the infringer would have been willing to pay. That does come up occasionally in cases, and it is a bit vexing to try to decide what to do.

Although my own personal answer is that the reasonable royalty should be set to the licensor's minimum willingness to accept in that situation for the

compensation purposes.

MR. ADKINSON: Jack?

MR. SKENYON: Just a quick comment on the idea of getting away from the claim language itself. Dealing with a claim that has computer, all its parts and the real key pieces of that little circuit that's in the claim. In terms of the litigation, you would have to have a *Markman* hearing that would deal with a number of the limitations in the claim. You would have to go to trial and prove infringement, that all the limitations were met by the accused product.

The invalidity case would have to be based, if it's an anticipation case or obviousness case based on all of the limitations in the claim, and then when that's all decided and it's all decided in favor of the patentee, then you get to the damages issue for the infringement, and we're deciding it based on something else. We're deciding on some little piece of thing or why it was issued from the patent office to begin with.

So I think there's some philosophical problems with that. I think there's practical problems with making that element of proof here of why it was issued from the patent office and what it is, so I see some difficulty with that approach.

MS. MICHEL: Ed?

MR. REINES: I just want to make a minor point on Greg's situation, which is when you have, for very good factual reasons, no overlap in what the hypothetical licensor or licensee would agree to because of external things to their particular reality. One argument I have seen from accused infringers is we make almost no profit, so therefore we wouldn't possibly give away more than our profit.

And to me that's sort of one of those spurious arguments because obviously if someone is losing money but they're taking market or they're using your intellectual property it doesn't create a zero.

So I think one of the challenges is: How do you deal with the situation where the ends don't meet? And that shows how difficult the process can be.

MS. MICHEL: Aron?

MR. LEVKO: I have a case. I testified and went through the CAFC, the Golight case –

MS. MICHEL: Yes.

MR. LEVKO: -- in which I was the expert, and in fact the patentee got more in royalty than the selling price of the defendant and that's because of the circumstances. That's the difficult thing, I can go through that, of trying to prescribe a certain procedure, law, what have you, because as Bruce pointed

out and others have pointed out you need to have some flexibility.

For instance, in this case Wal-Mart was the defendant. I don't want to cast aspersion against Wal-Mart, but in this case it was shown in court, and that was outside of that ruling, that they had taken a design by a manufacturer, taken it overseas and introduced the product at about one-quarter of the price of what the manufacturer patentee had been selling at.

And in the course of selling that, they claimed lost profits and so forth and so on and wanted a royalty of 5 percent on their reduced price. Well, when you get into a market and disrupt it like that, when you go overseas, to be shown -- as proven in this particular case -- to infringe a valid patent, then the royalty should not really reflect the defendant's financials because that's not the economic position that the licensing negotiation ought to be based on.

That it an extenuating circumstance and I bring that up because there's lots of extenuating circumstance that's I can't fathom to try to cover here. Just be careful when you do a legislation that tries to prescribe a calculation.

MS. MICHEL: Okay. Ed, and I think we will start -- these will start being the last comments, so

please respond.

MR. REINES: This is very short to that, which is another frontier of this whole area is open source software now, but Lord knows what else will be open sourced where there's no -- there's no base. There's no revenue, and I think my sense is we're seeing more and more where people are open sourcing other people's things and saying: Aren't we great, we give this away to everybody by our services and support and whatever else? So that presents a whole series of issues around base, so I agree on the flexibility.

MS. MICHEL: Anne?

MS. LAYNE-FARRAR: Also very briefly, in the open source you may open source the component that has the patent in it and get your money off of the complimentary goods, like a service and say, well, the patent doesn't read on my service. Well, you priced it that way precisely to get around the patent licensing.

And another scenario would be like an intermediate good where the intermediate manufacturer indemnifies follow-ons, so in that case you may want to charge more than the price of that wholesale good because that person is passing on rights to others, perhaps additional rights than he or she is using.

MS. MICHEL: Any final comments from our

wonderful panelists?

Well, thank you very much. This has been an excellent panel. We will break for lunch now and return at 1:45. We have Judge Sue Robinson from the District Court of Delaware, who is well known as a patent jurist, will be here for a keynote speech, and then we will have an industry round panel, and we will see you then, I hope.

(Applause.)

(Whereupon, at 12:23 p.m., a lunch recess was taken.)

AFTERNOON SESSION

(1:49 p.m.)

MS. MEYERS: Welcome back. Thank you for coming back this afternoon. We'll go ahead and get started now. We're doing the afternoon panel on damages law as part of the FTC's series on the evolving IP marketplace where we will have our industry roundtable, but before that, we will have Judge Robinson talk.

So it is now my distinct pleasure to introduce The Honorable Sue L. Robinson, District Court Judge of the United States District Court for the District of Delaware.

Judge Robinson has been a member of that court for 20 years now. She served as Chief Judge of the court from 2000 to 2007, and she also served on the Judicial Conference of the United States from 2002 to 2003.

The District of Delaware is noted for hearing a large number of patent cases and other complex commercial cases. Judge Robinson has presided over many patent cases and has been at the forefront of patent jurisprudence. She has developed thoughtful and engaging opinions and demanded high standards from those practicing before her.

If you will indulge a shameless plug for

tomorrow's topics, among her opinions include several post *eBay* opinions that demonstrate this level of both theoretical and practical vigor and have taken great strides in developing standards in the wake of the Supreme Court's opinion in *eBay v. Merck Exchange*.

These opinions have required proof from evidence on the record, and they have helped extend the analysis and boundaries of the post-*eBay* injunction cases.

Further demonstrating her commitment to the practice of law, Judge Robinson organized a group of lawyers in 2004 to form a panel to draft the first default standard for electronic discovery. In addition to Her Honor's career on the court, she served as an Assistant United States Attorney for the District of Delaware, which demonstrates her continuing commitment to the public service.

She was an associate with the firm of Potter, Anderson and Copper. Judge Robinson earned her J.D. in from the University of Pennsylvania School of Law and her B.A. from the University of Delaware.

So with that, I will let her come up.

(Applause.)

THE HONORABLE JUDGE ROBINSON: Thank you very much for that very gracious introduction. It's a privilege as well as a challenge to be speaking to such

a knowledgeable audience today.

When I was first asked to participate in this proceeding, I wasn't sure what I could contribute to a discussion on the standards for assessing patent damages and their implementations by courts, although I've been on the bench actually since 1991, I was a magistrate judge before that, and during my tenure, I have marshaled hundreds of patent cases and tried 65 at last count.

Nevertheless, my experience with damages is limited, and let me explain why. Starting in the mid 1990s, the number of patent filings in the District of Delaware began to grow exponentially. At about the same time, judges had been directed by Congress, through the guise of the Civil Justice Reform Act, to set firm trial dates at the outset of each civil case.

As a result, it became apparent that the traditional ways of scheduling and trying cases would not accommodate our docket of no fewer than 20 multiple week patent trials a year.

In order to maintain a firm trial date for all of our cases, patent as well as our other civil and criminal cases, we could not allow patent trials to last indefinitely. We had to impose limits on lawyers so that trials would start and end predictably. My

colleague, Judge Farnan, began the experiment of timed trials in 1991, and we have never looked back.

In this regard, however, it stood to reason that if we were going to limit the trial time given to lawyers, we should limit the issues to be tried during the limited number of hours allotted for trial. The question then became how to separate issues for trial in a fair and efficient way.

Although this is not true in every patent case for every judge in my district, for the most part issues related to damages, with the attendant issue of willfulness, are separated, to be tried if at all once liability has been finally established by the Federal Circuit.

The decision to postpone trial of all damages issues is based on several fundamental principles. First, because injury is presumed if a valid patent is infringed, liability can be tried without reference to damages.

Second, trying damages to a jury who already has the responsibility of determining infringement and validity may be unduly burdensome, especially if the case involves complex technology or multiple patents, parties and/or prior art references.

Third, and I believe most importantly, both the

court and the market are better served if the parties, with their superior knowledge of the market in which they are operating, determine the practical consequences of the court's legal determinations.

Now, because I'm supposed to talk to you for more than three minutes, I am going to elaborate on my three principles. As you all know, proof of infringement is a two-step process. The court has to construe the asserted claims. Then the jury has to compare the elements of the accused product, and of course we could be talking about the steps of an accused method with the asserted claim limitations as construed by the court.

If the jury finds by a preponderance of the evidence that the elements of the accused product are literally the same or equivalent to the asserted claim limitations, the patentee has proven infringement. So long as the patent is not invalidated, the patentee is entitled to no less than a reasonable royalty as damages.

In other areas of the law, a very different analytical framework applies. For instance, a plaintiff suing under a negligence theory has to prove not only that the defendant violated a standard of conduct, but further that plaintiff was injured and that his injuries

were proximately caused by defendant's negligent conduct.

Similarly, a plaintiff pursuing antitrust claims must prove injury in fact, that the injury was proximately caused by the defendant's violation of the antitrust laws, that the defendant's illegal conduct was a material cause of plaintiff's injury, and that plaintiff's injury was an injury of the kind that the antitrust laws were intended to prevent.

Because the fact of injury is not an essential element of the cause of action of patent infringement, but is presumed once infringement is proven, a jury in a patent case can determine all issues related to liability, infringement and validity without ever hearing a word about injury or the resulting damages.

This fundamental substantive difference between patent and other civil cases lends itself well to making patent trials procedurally unique. Patent cases are also amenable to a difference in process because of their complexity. Juries in a patent trial are expected to understand, to at least a minimal degree, technical evidence about difficult subjects over which very bright scientists might reasonably differ.

Layered over this pure science are the litigation tactics of the lawyers in the courtroom,

which are just as likely to obfuscate as clarify the issues to be tried. The temptation to inappropriately use evidence on damages to sway a jury's view on liability is certainly not unheard of, and I think it was referred to today in this morning's panel.

Indeed, like the claim construction exercise, and I have the feeling some of you have heard me say this before, a patent trial involves science, distorted by the limitations of language, further distorted by the trial tactics of aggressive members of the patent bar fighting over their client's market share. Bottom line, whenever you mix science with business and legal issues, all seen through the prism of litigation, the end product is bound to be complex.

Then think about the hypothetical negotiation and whether that artificial, legal construct really resonates to a typical juror, who has no information about the parties or the market within which they're operating except what they've learned in trial.

Jurors are precious resource, members of the public taking their time to resolve the disputes of businesses when businesses have failed to do so. One of my jobs as a trial judge is to respect and protect the jury's time by making the process efficient and understandable.

If liability can be determined without the added complexities of damages within the context of a timed trial, it follows that damages should be bifurcated and the judgment on liability entered for purposes of appeal pursuant to Federal Rule of Civil Procedure 54(b).

The question might be posed at this juncture, only because I need to fill some time, whether discovery on damages should also be bifurcated, and I suggest that there are two different but both reasonable approaches to this question.

On the one hand, damages discovery tends to generate discovery disputes because so much of this material relates to the most confidential information a business has. Damages figures have to be updated after appeal anyway, so why not take 60 to 90 days of focused discovery after liability has been finally established by the Federal Circuit?

On the other hand, I understand from Judge Thynge, our magistrate judge who has probably settled more patent cases than any other settlement officer in the country, or at least judicial officer in the country, that settlement of a patent case is virtually impossible without some damages discovery.

A patentee has to know not only how an alleging infringing widget works, but how many are being sold in

order to discuss settlement intelligently. Moreover, if the patentee is seeking a preliminary injunction, damages discovery is required at the outset.

Regardless of when damages discovery proceeds, it is beyond dispute that discovery in a patent case imposes a tremendous burden on the parties. Document production, especially electronic discovery, and depositions of employees can cost businesses millions of dollars in terms of lost hours of productivity and professional fees.

As a trial judge, I am cognizant of these costs and at least try to take into consideration when I make decisions that impact the litigation -- and at least try to take these costs into consideration when I make decisions that impact the litigation and trial processes.

For example, I have imposed limits on when document production can proceed and on when motions for summary judgment can be filed so that clients stop pursuing unreasonable expectations and lawyers stop turning hourly fees.

The tension between cost and reasonable litigation goals is reflected best in what I call the *Daubert* epidemic relating to the Supreme Court's opinion of that same name issued in 1993. I have to say I had

some prepared remarks, but after the remarks this morning, at lunch, I wrote down some more on my table cloth, so I might not by as polished here.

In my view, *Daubert* was supposed to protect the litigation process against bad science, not to determine which expert's analysis fits the economic realities of any particular case best. I've had cases where the parties have exchanged *Daubert* motions on every single expert witness, witnesses who have impeccable credentials, and whose analysis reflect fairly unremarkable principles.

Nevertheless, because the experts disagree substantively, motions are filed to have the judge preclude the experts from testifying at all, as opposed to testing the merits of the expert's opinions through the rigors of cross examination.

Now, this is especially true with damages experts, generally economists who build their expert opinions on a series of assumptions based on the evidence of record. Arguably if one assumption is incorrect, their theory falls apart like the veritable house of cards.

In this regard, however, and my apologies to any economists who are still here, but my view is that economic theory is basically all relative, that there

are very few absolutes that can be applied, and the economic landscape in my view looks very different from the perspective of a patentee versus the perspective of the infringer.

To have a judge shape that landscape based on lawyer arguments without hearing any of the evidence from the people who have the evidence to me undermines the right to a jury trial, and I truly believe that -- well, I also find it interesting that the lawyers expect the Court to make these determinations. They don't say anything about their clients who actually know the economic realities putting any self restraint on the experts that they've hired.

So in my view, with due respect to the litigators who spoke about how -- and I know I've heard -- it's never happened in my court, I've heard that judges, I take it at the urging of litigators, spend days on *Daubert* motions.

I believe that that is contrary to both the case itself and to the true economic realities that the parties have a right to present to a jury. Enough about *Daubert*. Back to my three principles here.

Having shared my view that the fact of damages is irrelevant to the issue of liability and therefore adds an unnecessary layer of complexity to an already

complex jury trial, it follows that damages should never become the tail that wags the dog in trial. Again, let me explain. Although the owner of a valid patent has substantive legal rights, it generally takes a business dispute to generate patent litigation.

Now, I respect the fact that patent cases are really business cases and that litigation is but one weapon in a company's arsenal of competitive armaments. Nevertheless, when business decisions are driving a party's litigation strategy, a case can spin out of control for the simple reason that the court is rarely informed of the business parameters in which its operating.

Both aspects of a patent dispute, the legal and the business, need to be resolved. In reality, however, the court is better equipped to resolve the former. It follows that the court should use its limited resources to do just that. After all, businesses generally have the means to resolve their disputes. However, they need the motivation a court decision affords to focus their means on an amicable solution.

Of course, having judicial officers available for mediation, both before and after the trial on liability, leads to the best results. In the settlement arena, unlike the courtroom, the issue of damages is and

should be the engine that drives the exercise. Unless a patent owner is seeking only injunctive relief, a good settlement officer can generally fashion creative ways to honor the patent owner's substantive rights while accommodating the parties' business needs, depending on the dynamics of the market and of their business relationship.

A jury can't do that, and indeed neither can the trial judge who does not have access in the normal course to the type of business information made available to a settlement officer. And that's how it should be. If parties to a business dispute cannot resolve their business problems without resorting to litigation, let the courts do what they do best, finally determine substantive legal rights.

On the other hand, once the Federal Circuit has made its final legal determination, let the parties have the first opportunity to do what they do best. Understand and quantify the market consequences of the Court's decision. I suggest that the logic of my reasoning is supported by the fact that very few of my cases come back for a trial on damages.

A quick look at the Federal Circuit's precedential opinions issued last year likewise indicates that the subject of damages is generally not

the focus of most of these opinions.

Before I close, let me say a few words about injunctions. Since the Supreme Court's 2006 decision in *eBay*, it is much more difficult in my view to justify granting an injunction at all, let alone prior to the Federal Circuit's final say on liability.

Starting with the premise that injunctive relief is not meant to be penal in nature, I have come to conclude that injunctions are really about market share and are best suited to protect those patentees in two-party markets, most often emerging markets where they compete head-to-head with the infringer.

I find the imposition of injunctive relief more problematic when a patentee does not compete in the market at all or when the infringer is one among many competitors in a market, the point being that if the patentee's market share will not be substantially affected by enjoining the infringer, then surely the patentee is not suffering irreparable harm by allowing the infringer to continue its business pursuits. Under those circumstances, money damages may well constitute an adequate and appropriate form of compensation for infringement.

My final thoughts for today: I recognize that I have talked more about process than about substance. I

suggest that there is good reason for my doing so. As a trial judge, I write on water. My legal analysis is not correct unless and until the Federal Circuit says it is, but the Federal Circuit's decision is only as good as the record upon which it is based, and that is my primary job as a trial judge, to make sure that the litigation record reflects a fair, efficient and predictable process so as to engender confidence in the outcome by the business community.

This is especially challenging in times like the present when market forces are driving business disputes to litigation, but the third branch is receiving neither the resources it needs nor the respect it deserves for its role in maintaining a healthy, competitive business environment.

I suggest that the separation of issues, especially of damages, is an effective way to use the Court's expertise without undue burden on its limited resources.

I thank you for your time and attention.

(Applause.)

MS. MICHEL: Thank you, Judge Robinson, for those very thought provoking comments. We'll ask the panel to come up now, and we would like to hear their reaction, so we will get some of that during the panel.

(Pause in the proceedings.)

PANEL 2: INDUSTRY ROUNDTABLE DISCUSSION

MODERATORS:

BILL ADKINSON, FTC

SUZANNE MICHEL, FTC

PANELISTS:

KEITH AGISIM, Associate General Counsel for Global Intellectual Property, Bank of America

PHILIP S. JOHNSON, Chief Patent Counsel, Johnson & Johnson

JACK LASERSOHN, Partner, The Vertical Group

GARY H. LOEB, Vice President for Intellectual Property, Genentech

BRYAN LORD, Vice President, Finance and Licensing and General Counsel, Amberwave

TARANEH MAGHAME, Vice President, Patent Policy and Government Relations Counsel, Tessera, Inc.

KEVIN H. RHODES, Chief Intellectual Property Counsel, 3M Innovative Properties Co.

DAVID SIMON, Chief Patent Counsel, Intel Corporation

MARIAN UNDERWEISER, Intellectual Property Law Counsel, IBM

MR. ADKINSON: Thanks very much. We're reassembled with a great panel. It's going to be an

industry roundtable to discuss patent damages, in particular reasonable royalty awards, and the concerns that were raised in this morning's panel from the practical perspectives of these particular industries.

The representatives that we've assembled are going to talk about how patent damages affect licensing, business strategies and innovation in various sectors of the economy. In particular, they're going to discuss, from the perspectives of their own industries, whether damage awards in patent cases promote innovation and promote R&D. They're also going to examine various proposals to revise standards for damage determinations.

We have a great panel and limited time, so I'm just going to give the name, rank and serial number. Their impressive bios are on the web, and the nature of their work will be evident from the discussion that ensues. I do want to express our gratitude for them all coming here during these times.

We're arranged alphabetically starting just to my left here. Keith Agisim works for Bank of America as associate general counsel for global intellectual property.

Phil Johnson is chief patent counsel at Johnson & Johnson.

Jack Lasersohn is a partner at The Vertical

Group.

Gary Loeb is Genentech's vice president for intellectual property.

Bryan Lord is vice president, finance and licensing and general counsel, at Amberwave.

Taraneh Maghame - is that close?

MS. MAGHAME: Close enough, Taraneh Maghame.

MR. ADKINSON: Thank you, sorry not that close, but Taraneh serves as vice president, patent policy and government relations counsel at Tessera.

Kevin Rhodes is chief intellectual property counsel at 3M Innovative Properties.

Dave Simon works as Intel's chief patent counsel.

Marian Underweiser works at IBM where she is intellectual property law counsel.

Thanks very much. We look forward to the panel.

MS. MICHEL: All right. Let's dig in. I know this group has a lot to say on this topic. They were invited because they've all been very involved in the issue over the last couple of years.

Let's start with the big picture. Why is this issue of patent damages important to your company, and you can turn up your table tent, and I'll call on you, but this might be something that most people would like

to comment on, and I'll just remind panelists to speak into the mike, and we'll pick it up on our transcript. Thank you.

Would anyone like to go first? Marian, I'm looking over there, sorry.

MS. UNDERWEISER: Okay. Well, thank you, first of all, for having the panel and having me here.

MS. MICHEL: And as part of --

MS. UNDERWEISER: I appreciate it.

MS. MICHEL: If it works as part of this issue, you can address why over-compensation and under-compensation might be problems.

MS. UNDERWEISER: Sure. Well, IBM's perspective on this is a balanced one. We look at reasonable royalty damages both from the perspective of patent holder, who has a significant IP licensing business. We make over a billion dollars a year licensing our IP. We also make a hundred billion dollars a year selling products and services, and so we're subject to a lot of adverse assertions of patents.

So for us, it's really more of a question about the whole IP market, the licensing market. We don't want to have to litigate. We would like to be able to have an efficiently running licensing market, and what does that mean?

Well, the court-awarded damages are effectively providing a benchmark for licensing and settlement negotiations, and collectively they're making up this marketplace. And for the marketplace to work, there has to be efficiency there. There can't be friction. There can't be a whole lot of transaction costs, or what you end up having is a problem getting -- your products are going to cost more than they need to cost.

Collaborations may not occur, and you won't have the innovations making their way into products, and in the case where parties decide to go forward but they can't agree, then they end up litigating and litigating is very costly and diverts funds away from where they can productively be used.

So what do we see? We see a problem in our industry where there is this sustained high level of patent litigation. There is the opportunity for inflated awards, and this to us means that there is too much diversion away from where things should be operating efficiently in the licensing market into litigation.

And at the same time, the parallel conclusion you can draw from that is that the standard and reasonable royalty damages is not providing the kind of certainty that parties need to be able to negotiate

those deals upfront.

So what we think would be a good way to approach this is to focus the damages analysis in a way that is somewhat more objective, right? And that would be -- and a number of the panelists touched on this this morning, but that would be to focus on the economic value of the invention: What did the inventor really contribute? What's that economic value, and that's fair to the patentee? It compensates the patentee for what was contributed. It doesn't over-compensate the patentee for what wasn't contributed.

The way we think would be -- we have some guidance from a recent case. It's a recent case that was on the issue of patent exhaustion, but we have some guidance from the *Quanta* case with the standard of essential features, and I can talk about that some more as we go on.

But that was a case where the Court was also focused on what is the value of a certain product that was being sold, and I think that gives us an objective standard, so that it is fair and that provides participants in the licensing market the ability to make decisions upfront so that innovations can make it into products before parties end up with a dispute they can't resolve.

MS. MICHEL: All right. Dave, do you want to comment on why damages is so important to Intel?

MR. SIMON: Yes. Unfortunately, Marian went first and we tend to agree, so I'll augment a little bit.

MS. MICHEL: Now, you're in alphabetical order, by the way. That's not the computer end.

MR. SIMON: Both by -- actually we won't go there.

From our perspective, it's important to both -- to compensate the right way. It's clear if you under-compensate, you set bad incentives for innovation. If you over-compensate, you set bad incentives for innovation also.

Similarly there was a speaker earlier who kept talking about you have to punish people because there may be infringement under the radar. If do you that you -- if you start putting deterrence into this, you start setting all sorts of problems by adding that.

I think the one thing particularly with non-practicing entities that has to also be put into the system is the costs in the system are very much -- when you have a non-practicing entity versus a practicing entity, the cost in the system are very much slanted.

Now, when you're a defendant, your counsel

refuses generally to work for a contingency fee. For some strange reason we haven't been able to get anybody to do that. Similarly, when we have to produce documents, we're talking about literally, electronic document production now for us is millions of dollars in every single case, frequently the same documents, but every single case, huge costs. And many of the entities shows up, Here's my document. It's the file wrapper. It's the patent, and that's about it.

They're of course on contingency fee, and there has been a whole phenomenon capitalizing on that as, A, shown by, if you look at the statistics we saw this morning and you sort them by industry, it's clear that, for want of a better term, I'll use the term tech industry because that's what people tend to use, the damages are significantly higher, between four and six times higher.

And in addition to which what we're seeing is that's where the non-practicing entity litigation tends to be. Where they're very much viewing it as this is a way to -- if I get, if I'm lucky I strike it rich, and that creates a whole bunch of incentives, disincentives in the system, which just aren't frankly benefitting innovation.

It's even getting to the point that getting 30

or 40 million dollars out of one company can be rather hard in litigation, but what we now have is the number of defendants has gone up dramatically in the last few years where you now have 5, 10, 15, even 30 or 40 defendants in a patent case, and in some districts you get -- I understand why the judges do this, you are getting 40 hours total trial time in a week or two week period.

Trying to try a case with that many defendants is of course unmanageable, and the thinking is not that they're going to take that many defendants to trial, but the thinking is they're going to get a couple million dollars from each of the defendants until they get down to a manageable number, and then those last two or three or four unlucky souls are going to be the ones that go to trial.

And it becomes a very economical situation to do this from a plaintiff's standpoint, so as a result, what we see patents that are supposed to be -- being used for innovation are actually being used for lots of other purposes, and I think it's because at least in our industry, the system tends to over compensate the patentee.

MS. MICHEL: Thank you. Kevin?

MR. RHODES: Thank you. First of all, thank you

for inviting me to participate this afternoon. A little bit different perspective. First of all, 3M is balanced on this issue as well. On the patent owner's side, we currently own about 6,000 U.S. patents used to protect our investment in research and development, which totaled nearly 1.4 billion last year so we have a long-standing commitment to the patent system.

Now, why do we disclose our inventions in order to get a patent or I should say try to get a patent? We do that because we think they will provide meaningful protection for the investment in R&D that leads to those inventions, for the following investments and commercialization for those inventions that we commercialize, and to protect the commercial products that we put on the market from infringement.

So in my view, the damages award is part and parcel of that protection. Typically when we go into a patent infringement litigation, and we have a steady diet of plaintiff-side cases, in fact more cases are on the patent owner's side than defense cases, we don't get preliminary injunctions.

Preliminary injunctions are rare, and so you have a situation where you have two or three years of infringement before hopefully you can get that permanent injunction, and in the post-*eBay* world, I think on

Professor Janicke's web site, 69 percent now of cases in which permanent injunction is asked for, it's entered.

So hopefully we're going to get that permanent injunction, but even if that doesn't come for two or three years into the litigation, we want to have some type of meaningful compensation, and let's not lose sight of the fact that damages is compensatory in nature, some type of compensation for that infringement, whether it be reasonable royalty or lost profits or most commonly a combination of the two.

So I do believe that there's a compensatory aspect. I also believe, from firsthand experience, that damages too low eliminate the deterrent function of meaningful remedies for patent infringement litigation.

We have seen -- over 60 percent of our sales are outside of the U.S. We've litigated patents all over Europe and Asia, and we see what happens in legal systems where there aren't effective remedies for infringement. Essentially infringement becomes a cost of doing business. It's cheaper to free ride on someone else's R&D and pay the slap on the wrist penalty than it is to do your own R&D.

So there is a deterrent feature to damages that I would not want to see undermined if we start taking away remedies one by one, permanent injunctions and then

lowering damages.

On the other hand, we market over 50,000 products and services. Despite our efforts to clear those products and our corporate IP policies say that we won't infringe the valid enforceable IP rights of others, we have a steady diet of defense cases.

We know what it's like to receive allegations of infringement of one component of products with hundreds of components, and so we try to remain balanced on the question of damages. But what we have found through our experience -- and I'll disagree with most of the panelists this morning. What we have found is that the 15 *Georgia-Pacific* factors really do replicate what real world licensing negotiation outside of the litigation context, the types of issues that are discussed in those negotiations.

And they provide much needed flexibility for all the different industries we're in, the fact patterns that those cases generate, the different business models to monetize IP, and without that flexibility, I don't think damages can be boiled down to a single test or single factor.

I think it's unrealistic to think that if we move to a standard like economic value, we would ever have any agreement. I think what Judge Robinson just

said is apt, and that is that then we just have experts on either side arguing over what the proper economic value is. I think it's Pyrrhic to think that by changing from a flexible test to a less factored test, if you will, that we get added certainty.

I was also struck by some of the statistics this morning. We heard this morning the median damages awards have remained remarkably consistent over the past 15 years and declined in 2008 to what looked to me like, from just looking at the graph, was maybe the lowest level since 1998.

So it strikes me, I wonder when we're talking about changing damages laws, if we're talking about a solution in search of a problem here.

MS. MICHEL: Okay.

MR. RHODES: But the awards are very erratic. Well, erratic is another way of saying there's some big numbers on those slides, right, but we don't know anything about those cases. What were the inventions? What were the accused products? What were the sales of the accused products? You look at any body of law and you will see a disparity in awards of damages, so I don't think patent law is unique.

I don't think any alternative system is going to give us added certainty, and I don't think the case has

been made by data that damages awards are out of control or that juries aren't looking at the proper economic factors in making damages awards.

MS. MICHEL: Thank you.

MR. RHODES: So in my view, there is no need to abandon the body of law that's been developed over decades in favor of new rules. Especially in this time, those new rules have unsupported justification and just unknown economic ramifications, and I think that is not -- this is not the time to be making those kind of new rules.

MS. MICHEL: Thank you. Taraneh?

MS. MAGHAME: Yes. Tessera, which I'm sure many of you have not heard about, doesn't have a name recognition as my three panelists here, but we are a technology company in the Silicon Valley. Our core technology relates to the packaging of semiconductor chips.

So initially when we developed this technology we did manufacture it. We did actually do packaging of the chips. Being a small company, having a small manufacturing plant in Singapore, there wasn't enough capacity for us to meet the demand for our innovative technology, because basically what we were able to do was to create the ability to miniaturize these chips with

the packaging in order to be able to put them in our very small kind of handhelds and other consumer electronics.

So our customers were really one of the main reasons why we turned our business into a licensing model. They needed additional sources for this technology. They needed us to license it to others who could more efficiently manufacture and who had more capacity to manufacture.

So basically there was a shift in our business. We took our home-grown technology. We sold off our manufacturing plant and we turned our business into a licensing business, and since that time, we have signed up over 50 companies, major companies, as licensees.

Now, that accounts for a certain percentage of the market. Now our technology is widely adopted, and there are still companies out there that are not willing to pay our standard royalties. And our royalties are not -- it's not a situation where we have to establish a value, we don't establish economic value. We don't establish kind of what is the inventive feature here.

There's over 50 licensees already. We've been -- we've built over a billion dollar company, a 1.2 billion dollar company using this licensing model. So we are forced into litigation. If we cannot negotiate

licenses with people that are holding out on us, if we can't take our repeatedly-tested patents that have been tested in the courts, tested in the ITC and say: You are infringing because you use the same technology all our licensees do and you need to pay us -- there isn't another choice other than to litigate.

So we keep hearing about these outrageous costs of litigation for companies -- what we call the megatech companies who are pushing for this kind of reform, 50 million a year, 60 million a year. Well, I think I can tell you that last year, we spent more than that on our litigation, so our little company has to spend more than that while we're still in litigation.

So the costs are not one-way, but one thing that strikes me is that in all of this discussion, first of all, we don't talk about what that amount of money for the megatechs means in terms of their revenues and their profits. I can tell you, like I said, we're a 2 billion dollar company, 1 billion dollar company. Spending 60, 70, 80 million dollars in litigation in one year is a heck of a lot higher percentage than the $50 million that a company spends defending itself on the number of patent litigations they may have in any given year.

But the other thing that I don't hear about is, for example, IBM, big licensing company, a lot of cross

licenses. Do we ever put a value on those cross licenses because if you have two what people like to call practicing entities going at it, and they end up settling, what do they do? They take cross licenses. What is the value of those cross licenses? Has anyone actually sat down and said --

MS. MICHEL: How do these issues play into why the damages are important to your company?

MS. MAGHAME: Because when we talk about damages and people talk about over-compensation, they say -- first of all, again I agree with Kevin that we don't have the data to show this, but they talk about these outrageous damages, which the data this morning didn't show that in my opinion, and we look at numbers.

But if the same lawsuit was between what you would call practicing entities and there was a cross license, I think there should be an attempt to assign some value to that cross license and compare that to the amount of money that exchanges hands in a situation where a company's product is its IP, and that IP is being asserted against someone who is willfully infringing it.

Then the other aspect of this is we talk about a deterrent effect, and David was saying how that just creates all sorts of other problems. I guess I don't

really know what those other problems are, but when we're talking about deterrent effects, we're talking about willfulness.

When someone has been found to infringe and the patent's been found valid, that's when we're talking about enhanced damages so we need to keep in mind at what stage we're talking about this. It is necessary to deter willful infringement, and if that's what's being done -- and we even saw from the numbers this morning, that that's not really occurring on a regular basis.

I think the average was that there was maybe 12 percent of cases where enhanced damages were given, and that was one and a half times, perhaps even though they're allowed to be trebled.

So again I keep coming back to this question of: Where do we see the over-compensation and where is the data that shows that we need to do something about this quote, unquote, problem? From our perspective, we need to have the ability to obtain appropriate royalties for our technology that we've spent hundreds of millions of dollars developing.

The only way we can do that is through litigation, if we cannot come to an agreement with folks that are using that technology, and having the flexibility to determine the amount of damages is

absolutely necessary.

The other thing that struck me this morning --

MS. MICHEL: Actually, why don't we move on because we'll come back, and we'll have an interactive discussion on a number of topics.

Bryan, could you tell us why for your company Amberwave, the issue of damages is important?

MR. LORD: Sure. First of all, a little bit of background on Amberwave. It's probably the case that most people at this table have a legal department that is larger than the size of my entire company. We're a 25-person research and development company in Salem, New Hampshire. We were spun out of MIT back in 1999.

We've raised 91 million dollars in venture capital to basically bring to market a suite of technologies that are in the domain of hetero-integration of advanced materials. That's a mouthful, but essentially what that means is you take different elements that are on the periodic table, all of which have different semiconductive properties, and you put them together in special ways.

Those special ways can help semiconductor chips run faster, use less power. They can make solar cells more efficient. They can make LADs that some day will replace light bulbs above us more efficient and

brighter and more pleasing to the eye.

So what we did in contrast to Tessera is raise this venture capital dollars. It really was the classic university professor and a frat brother turned venture capitalist who got together over coffee and decided to found the company based on this material science technology.

And unlike Tessera, we actually decided from the outset that the flexibility of the licensing business model made a lot of sense for the company. Being a venture-backed company, it made no sense to raise the 500 million dollars or the 5 billion dollars to actually go into production and manufacturing.

And instead, as our world is becoming increasingly disaggregated, not aggregated, we're actually disaggregating in our economy, it made sense for us to stick to our knitting and focus on being a research and development shop.

So for us, damages really is the fallback that the venture capitalists asked about when they decided whether to make an investment in Amberwave, so we get that your technology has got some promise. We get that you've got some smart Ph.D.s. We get that we've got money.

What happens if you bring a product to market

and your sales guys do their job and somebody on the other side of the table says, in the licensing business model, thank you for teaching us about your technology, we're going to go ahead to use it and don't call us, we'll call you? That's what damages really relates to. It's really what is the -- as some people in the field call it a BATNA, what's the best alternative to a negotiated agreement.

And if you think about the Amberwave story, it really matters to everything, from that entrepreneur, that scientist at MIT deciding whether this was a risky enough or safe enough pursuit for him to go forward, whether those venture capitalists really had enough confidence in the intellectual property that was going to be generated to put that capital to work, and frankly whether those employees, me being one of which, said is this the place where I'm going to dedicate a hundred percent of my human venture capital to this enterprise?

So patents really matter. Patents really protect that joint investment, and I think we ought to see more of the Amberwaves at the table and talking about how patents are important to them that compliment the very important issues that some of these large and well known companies also talk about.

I also will make one additional point. Beyond

just the IBMs and Amberwaves as well, I think it's worthwhile for us to take note of where we stand as a society. This debate really started back a couple Congresses ago at least, 2005, and it's been portrayed as tech versus pharma, as tech versus trolls, as good guys versus bad guys and whatnot.

And there is a very, very serious economic debate going on that's trying to pour billions, if not trillions of dollars into the economy, to get people back to work, to get people to take risks and to bring new technologies to the marketplace, and it seems crazy to me that we are also having a conversation about how to reduce the negotiated value of intellectual property in today's day and age.

So I would encourage all of us also to think about the counter-incentives, the disincentives that I think we might be perpetuating by really continuing the debate that happened and started a long time ago and quite frankly ought to take place in a different context today.

MS. MICHEL: Thank you, and Gary, why are damages important?

MR. LOEB: Well, damages are important on both sides of the equation for Genentech. We're the target of IP lawsuits about 60 percent of the time, and we are

the enforcer of IP about 40 percent of the time. So I guess like some of the panelists, we actually feel like we're sort of a little bit in between the two camps that Bryan talked about a little bit, that have sort of dictated the patent reform debate.

We're sympathetic to the concept of patent hold-ups because there are a variety of cases that have bubbled through the system on things like research tools or such where either the patentee is trying to claim a reach-through royalty on a product that doesn't actually practice the patent, or somehow the patentee has gotten claims to sort of a reach-through claim -- where they've covered the entire product by expanding the scope of their claim, but really focusing on the inventive step in their invention.

And actually one of the key biotech cases that went to the Supreme Court dealt a little bit with the issue, the *Merck v. Integra* case, where you ultimately had what was deemed by the Federal Circuit opinion that was ultimately -- that is no longer in force -- what was deemed as a reasonable royalty of $15 million that was essentially approved in the Judge Newman dissent where you had -- against Merck which had never gotten a product to the market, had never made a sale, had just had investment in development of tens of hundreds of

millions of dollars in a product, and so you had debate.

Ultimately that damages award of $15 million, I think was reduced to $6 million, but still that's a pretty hefty sum when even today, five years, four years after the fact there's still no product from Merck out on the market, so who knows if there will ever be a product out on the market by the time that the patent expires.

So we're sympathetic to the concept of patent hold-ups, but at the same time we're very invigorated about the concept that we need to be able to enforce our patents and get the proper remedies for our patents, and that's driven in large part by the long product life cycles in biotechnology.

We have eight to ten years before we ever get a product to market once it's actually left the lab, so the whole clinical trial process is such that, if we can't rely on our patents to protect against competition and to provide a reasonable return on our investment, then the hundreds of millions of dollars that we invest in development are really at risk sort of during the whole time.

And often because of the *Merck v. Integra* decision at the Supreme Court level, you can't actually test your IP against a potential competitor until

they've actually launched because the whole process of clinical trials is insulated from infringement, so you have a period where maybe you know someone has a very similar product that's potentially practicing your IP, and you're both sort of in development. Maybe you launch, but you can't find out until they launch if they really infringe your IP because you don't have a ripe case or controversy because there's no actual infringement.

So we definitely think that once you actually have a case with someone who hasn't taken a license, you need to be able to enforce your patents and be able to get appropriate damages with respect to them.

So therefore we're very concerned about some of the proposals on the patent reform front with respect to inventive contribution or essential features or predominant feature, particularly predominant feature. Because you look at a biotech product, we just have a product. It's not a computer that's preloaded with software that comes with a screen.

I mean, we just have a product, and it's often very difficult to say that a very important contribution -- that maybe the main reason you got FDA approval -- is the predominant feature of the product. It's not a particularly meaningful analysis with respect

to a lot of pharma and biotech products, so we worry about a tailoring of the economic value rule or the reasonable royalty analysis that sort of excludes a whole area of technology.

And then the other thing, we worry about just in general is trying to over-tailor the whole approach to damages. I think I largely agree with Kevin that the *Georgia-Pacific* factors are working reasonably well, and maybe with apologies to Judge Robinson, I think sometimes it does involve more oversight by a judge to make sure that they continue to work well.

And just before I close, I just want to bring up one case where we actually faced a theory that was going to the jury where a very reputable economics damages expert was going to say that every time you have a negotiation, the parties will always meet in the middle, and you should always get 50 percent of the profits of the party based on the total number of licenses taken at the time.

That almost made it to the jury, and it was based on a sort of obscure theory of the mathematician from A Beautiful Mind, and coincidentally, A Beautiful Mind had just won the academy awards, so it was on all the jurors' minds, so we brought the *Daubert* motion to try to get that theory stricken.

Ultimately we didn't have to go there because we invalidated the patent, but I do think that damages experts, maybe more than some other types of experts, are willing to go out on pretty extreme lines and that a lot of money is wasted in the whole damages expert battle, and often they have very little or not very recent real-world negotiation experience.

And you would think that that would be a key component of a true damages expert, not economics degrees from Oxford, but I've actually negotiated these licenses, and you don't find a lot of those people because those people don't really want to take sides.

So with all that said, I think we continue to feel that flexibility is crucial, and we worry about over-tailoring the statutory remedies for damages, but yet where -- I think that we do see that there needs to be some oversight, and whether that takes place at the judicial level or with some statutory fixes I think remains to be seen.

MS. MICHEL: Okay. And, Jack, you work with start ups, and why is getting damages correct important to start ups? I think related to this question in this context is, I'll come back to some other panelists about, is why are damages, as opposed to injunction, well, not more important.

How does the role of damages and how you value your patent relate to how you value injunctions in your patent, especially -- and, Bryan, I'll come back to you on this -- in a business model that might depend on exclusivity?

MR. LASERSOHN: Thank you for inviting us, first of all. I'm in a slightly different position than many of the panelists because I'm not a patent lawyer. I'm a venture capitalist and really a business person, and I'm also here not representing a single company. I'm representing the National Venture Capital Association and all of the venture capital community in this.

The simple answer to your question is that damages are absolutely critical to the process of venture capital funding the innovation economy. There's just no other way to say it. It is one of the most important components of why we have the innovation economy that we have in the United States compared, for example, to other parts of the world.

There are other reasons, but the patent law of the United States, and in particular the way damages work historically, the way injunctive relief has worked, has been a key component. I'm sure we're going to talk about this a lot more, so I won't go into a lot of detail, but damages, the way you determine royalties,

the way you determine lost profits in appropriate cases, the ability historically to have injunctive relief in most cases, all of those together permit inventors, have permitted inventors to capture the full economic value of their inventions.

In turn that has allowed us as venture capitalist to provide capital to those inventors to develop the inventions. If you do not allow inventors to capture the full economic value of their invention but some hypothetical, arbitrary amount less than that, which nobody has ever been able to actually adequately describe, the amount of venture -- the amount of things that will qualify for venture capital financing -- will decrease.

Somebody said on the first panel there are very few actual laws of economics. I agree with that. There are almost no good laws of economics as we have learned recently, but one of the real laws of economics is that if you decrease returns, you will decrease investments. I mean, that I can guarantee.

So the reason that damages are so critical as one of the elements of the innovation system is that it does, together with other components -- injunctive relief I can tell you is arguably even more important in many cases, and the fact that injunctive relief is less

available is a huge issue for us. It is a major factor for us now in the way we think about funding companies as compared to how we thought before *eBay*. But damages, injunctive relief and other things are simply absolutely critical.

Bryan made a point before, told the story about his frat brother meeting with the scientist. I always tell this story. I mean, my experience is that when I meet an entrepreneur, there are usually three people at the table. There's the entrepreneur, the business person. There's a scientist and an engineer, and there's a venture capitalist. There's Bob Swanson and your founder. There's Bob Noyce and Arthur Rock. The entire semiconductor industry was created by venture capital. The entire biotechnology industry was funded by venture capital.

And you know, then there's the venture capitalists, and we talk about the -- there are two pieces of paper. There's a business plan that talks about the transistor and integrated circuit or splicing genetic engineering or something else, and there's a market and all that. And we go through all of that, and inevitably, the next question is: Is there another piece of paper on the table? And the other piece of paper is a patent.

If you don't have a patent or some other way to enforce your IP -- and IP broadly defined, trade secrets are IPs, but we're talking about patents. As much as I love the idea, my answer is 99 percent of the time going to be, I can't finance that. There's just there's no way to protect me from the enormous asymmetric power that other competitors have in the market versus my little pip-squeak start-up. I'm sorry. Some of these pip-squeaks grow up to be big companies. Anyway, that's what it matters to us.

MS. MICHEL: Thank you. Phil, why are damages important to Johnson & Johnson?

MR. JOHNSON: First by way of introduction, and maybe you know this, hopefully you're all wearing Band-Aid brand adhesive strips or use baby shampoo, Johnson & Johnson baby shampoo or Roc or Neutrogena or some of those other consumer products of ours.

But actually we're much more than a consumer products company. Collectively our 200 companies are the largest medical device manufacturer in the world. We're the largest healthcare company in the world. Our companies collectively are the third or fourth largest biotech company in the world and the fourth or fifth largest pharmaceutical company in the world.

We are plaintiffs and we're defendants more or

less in equal numbers, but unlike many companies that you hear in this debate, if you pick up our 10-K and you look, we have material patent litigations that are listed both as plaintiffs and as defendants.

We have litigated and do litigate against people at this table. Some of them, Kevin, we've paid damages many times the sales of our product to. Thank God that's dropped off the top ten list by now.

MR. RHODES: Thank you. Yes, unfortunately.

MR. JOHNSON: But I find myself thinking about our business as being very much like Jack's discussion of venture capitalists. We have more products to develop throughout our businesses and our different industries than we can afford to fund.

Right now, this is a time -- and we're not immune from the economic realities of what's going on. This is a time when there are a lot of reasons not to take risk. There are always a lot of reasons not to take risks, but there are especially now a lot of reasons not to take risks.

The patent system is the reason that we invest 7.7 billion dollars a year in R&D, and when we sit down, we're very much like what Jack says, yes, we listen and we hear about the technology too. It happens to be maybe an internal team, but sometimes it's not.

Sometimes it's someone like Julio Palmaz who came to us with the idea for the first coronary stent, or sometimes it's a venture capitalist, or sometimes it's a pip-squeak company that's now substantial.

But in any event, we're looking at a number of things. We're looking at technical feasibility and technical risk, and in some of our areas, especially pharmaceuticals but not just pharmaceuticals, they're huge risks.

Then we're looking of course at the ability, if we go out into the market, to have exclusivity. In some areas like in pharmaceuticals, if we come out with a new drug, we might have five years of data exclusivity, but you can't begin to finance a billion dollar drug development project over 12 or 14 years on five years of exclusivity.

So it's all about the patents, and then we look at what's happened in the marketplace over the last -- or in the legal community. It's harder to get patents, much harder to get patents, much harder to enforce patents, much harder to get injunctions if you're successful, and finally you come down to whether if you do win, are you going to collect damages?

And then let's assume that you are wildly successful, and after six or eight or ten years of

litigation you do get a judgment. There are unending appeals, but not to worry, you're collecting 2.33 percent in post-judgment interest or for the 10 or 12 years beforehand you're getting prejudgment interest, but we have never once collected prejudgment interest that equals the average cost of our capital, which is probably what you look at and what we look at.

It's always lower, and I'll tell you, there isn't -- we've had some good wins, thank God. That's why I'm here. Otherwise somebody else would be here, but there isn't a single one of my business leaders, if we get a good win, that would say: You know what, I'm in the same place that I would have been if the infringement hadn't taken place. Not a single one.

And now we have *Seagate*, and regardless of what might have happened about enhanced damages a few years ago, there are no willful infringement damages now after *Seagate*. You heard it here first, but what we heard this morning is right. These cases are being dismissed on summary judgment in the face of deliberate copying and in the face of negative opinions, in the face of other things that used to be slam dunks on willfulness.

So what's the concern? My concern is that a patent, unlike what you might think of just as an investment -- to me a patent is jobs. We spend 5 to 10

million dollars in R&D in order to produce a patent, on average. Where does that go? We're not building Taj Mahal research labs. It's necessary to have research labs, but R&D money is mostly jobs.

They're good jobs. They're jobs of Ph.D.s and highly trained people and ancillary people, and they're jobs, and there are a lot of jobs, and then when you get a patent and if the patent is enforceable and worthy of having more capital invested in it, it's more jobs, and if it produces a business, it's more jobs than that, and eventually one day you grow up to be Intel, like David's company did or like Gary's company did, and you have a real growing economy.

We're talking in patent damages about whether we're going to put the brakes on people who might take risks, and I think this is exactly the wrong time to be talking about putting on the breaks. I think we ought to be hitting the gas.

MS. MICHEL: Okay. And, Keith, why patent damages are important to your company?

MR. AGISIM: Sure. I'm with Bank of America, a very popular company these days. Despite that, I think we also take a very balanced approach to patents and damages in general. We do a substantial amount of research and development internally, hundreds of millions

of dollars a year. Most people don't realize, but the bank employs tens of thousands of engineers to develop the technology internal to the bank.

So not only do we have our own IP, the bank has relationships with 99 percent of the S&P 500. One in two consumers have some sort of banking relationship with the bank, so for us, the patent system has to both work for us in our industry, but it also has to work for our clients, the people that bank with us and have financial relationships with us.

So when we look at the damages issue, you know, it's an important issue, but I think it's important to put in context with a lot of the things we saw this morning -- in terms of forum shopping and venue and some of the quality issues we have seen at the PTO and some of these damages numbers we've seen. It's a holistic probable with the patent system, in that damages is an important and essential feature, something we'll talk about more today, but it's not the entire issue. It's one piece in a larger puzzle of overall patent reform that's needed.

Let's turn to damages itself. I think we've heard a lot here about needing proper incentives and investments, and I think it's important to keep in mind that the damages, at least as it relates to reasonable

royalties and lost profits, are supposed to be compensatory. It's going to compensate for your harm, no more, no less.

There are other mechanisms in the law to deal with punitive damages, to try to create and modify, incentivize people of certain behavior, injunctions and maybe that's the place that needs to be looked at. There's attorneys fees, costs and there are other mechanisms within the law to deal with that, but the damages themselves are supposed to be compensatory.

When you look at what's happening there, from the bank's perspective, we see a system that's broken. We saw this morning that non practicing entities on average get more money in damage than competitors do. That doesn't seem to make a lot of economic sense.

We also see -- which is a big issue for us -- is that we often get sued as an end user, something that someone else makes, we incorporate into online banking so people can log on, not have their identify stolen. We get sued on that feature.

The damages against the end user are substantially more, and that's what the non-practicing entities go after, than the manufacturers of these products, the exact same technology. Again I don't think that makes a lot of economic sense.

So you talk about what's the effect of at least in our view what are large excess damage awards? Well, I think we heard this morning -- I think the panel this morning had a consensus that you don't see a substantial increase in litigation. If people are over-compensated, that's going to drive more litigation, and that's exactly what we see in the financial services world.

A professor at Harvard Business School, the professor did some studies. He found that financial patents are 27 times more likely to be asserted than non-financial patents. Those numbers are orders of magnitude more than some of the most litigious areas of patent law such as pharma and biotechnology, so we far exceed the number of lawsuits.

If you look at growth rates for our cases in the financial services world, we're two times sort of the growth rate in technology, about four times the growth of overall patent litigation in the United States.

So if you ask in terms of: Is over-compensation happening? Again if you go by what the experts, the economists say this morning, if there's over-compensation, you'll see an increase in lawsuits. We're seeing it in the financial services world. Just look at the proliferation of non-practicing entities. If it wasn't a viable business model or you didn't get an out-

sized return for it, you do something else, it's a proliferation.

So to give more perspective, I think damages law, at least as it relates to financial services is broken and needs to be fixed. We talked a lot about -- people have talked about jobs and the role innovation plays in that. I think it's important to keep in mind too that with increase in cost, with increased innovation, that's less products that we can introduce or any company can introduce. You have a lot of over-compensation.

That doesn't normally affect the bank, but again we're an aggregator of technology. We're an end user of technology. We develop our own, so that is a huge cascade effect of the entire economy, thousands of suppliers. If we don't bring a product to market, that affects thousands of suppliers and thousands of jobs.

I think the other just closing remark here, the last thing I would point out is that speaking about banks in general, not Bank of America per se, but banks -- certain capital ratio, which again is -- it's something to learn about in the banking industry lately, but so just as a ball park rough industry average, for every dollar that gets paid to non-practicing entity, that's $10 that they can't lend out to businesses and

consumers to help the economy grow.

MS. MICHEL: I thank you all for very much for giving us this perspective to understanding the importance of patents in your companies.

We will now go to the system where I would ask you to turn up your name cards if you would like to answer. We talked a lot this morning about the role of damages as being compensatory to put the patentee in the position he would have been in had there been no infringement.

Any comments on whether that is the goal of the damages system, whether the goal stretches beyond that, and if so, depending on what you think the goal is, how should law approach it?

I'm going to take this -- Phil.

MR. JOHNSON: It's absolutely the goal of the damages statute to simply be compensatory in the absence of enhanced damages from willfulness. No question about it. The debate revolves around whether or not in fact it's compensatory, and I don't think that any of the debates I've heard from anybody at the table, as much as we've disagreed on other things, question that that's the goal of damages. I even see David nodding.

MS. MICHEL: I wanted to start with something I was hoping there would be agreement on. Jack?

MR. LASERSOHN: So I generally agree with that, but I would add that if you go a layer below that, when you say to put the -- that is compensatory, to put the patent holder in the position he would have been in had the infringement not occurred, that is another way to look at the question of economic value; that is, what economic -- what has that cost the patent holder from an economic value point of view because ultimately those are two sides of the exact same coin? And I think that the answer to one is in fact the answer to the other.

They're the same answer effectively. Whether you call it compensatory or some other word, that is in fact what you're attempting to seek to find in both of those cases.

MS. MICHEL: Okay. Kevin?

MR. RHODES: Yes. I do believe generally that the goal of damages law should be to be compensatory. I don't think it is. I don't think whether its lost profits is determined under *Panduit* or reasonable royalty under *Georgia-Pacific*, I don't think by the time there's a remedy for infringement, even in the best case, even in the case where the patent holder gets a permanent injunction, gets lost profits for maybe some kind of market-based analysis of lost profits plus a reasonable royalty, you're ever put back into the

position as if the infringement had never occurred.

By the time of a final judgment and a damages award and an injunction, the infringement has changed the marketplace, whether it's reputational for the patent holder, customer relationships, pricing structure. You're never put in a fully compensatory position as if the infringement had never occurred.

So when people talk about over compensating or under compensating the patent holder, I come back to: Compared to what and based on what facts? It's very factually specific. I do think the goal ought to be compensatory with one additional layer on that. I think that we do run the risk if we take away too many remedies from patent holders, so permanent injunctions, decrease damages, you do lose part of the deterrent affect against infringement.

It's something that Professor Cotter was talking about this morning, especially in the context of undetected infringement. Is there going to be more incidents of undetected infringement if the remedies available to patent holders are too low?

MS. MICHEL: Bryan?

MR. LORD: I want to touch just a little bit on the over-compensation issue. It's been put forth that if there's over-compensation, we'll see an increase in

litigation, and the logical then conclusion that we're supposed to make is that: Well, therefore if there is an increase in litigation, then there must be over-compensation.

The two don't -- as all us I think as logicians might know that that's not necessarily a truism. In fact, there's certainly other explanations for that phenomena that may be the case. One might be the fact that there's more infringement. If there's more infringement, there might be more litigation.

In fact, as we know in some industries, and there's a famous situation where a Microsoft attorney was found to have been instructing his internal clients to say: Do not look at patents it, do not read patents. In fact, ignorance is bliss is the quote that I recall.

Well, if that's the case, it's likely to be the case that infringement increases in situations where you're training your people to ignore and be blissful about your ignorance of patents, so that certainly is a possibility. The other possibility is that we could have increases in patents which might call for an increase in litigation, and in fact, we know that that's been the case.

And frankly for all of us who believe in, as I think all the panelists do, innovation, we ought to

celebrate the fact that we have more patents in our system rather than less. We would be having a very different panel discussion if we were trying to figure out how to resurrect an innovation economy where there was not a lot of patents being filed, so that's a good thing, and we might expect then some litigation to flow -- to proportionately increase with that.

In fact, that's the last point on a proportionately case when we can look at all kinds of numbers, and of course statistics can be manipulated as you like, but if you actually look at the number of lawsuits per patent, it has roughly been the same amount -- 1.5 percent of all patents that have been issued over the last 20 years have been the amount of litigation that's ensued.

So we've seen actually a very flat amount of litigation for patents that have been issued over the course of the last 20 years, and that actually suggests, as I think Kevin said, that we might be looking for a solution in search of a problem here.

MS. MICHEL: Marian?

MS. UNDERWEISER: Thank you. What I think I've heard from a lot of people on the panel are issues surrounding speculation generally speaking, that what people are concerned about is the ability -- I mean, to

answer your question, yeah, absolutely. Reasonable royalties and lost profits, trying to compensate the patentee, and that's what they should do. They should be compensatory.

And I think that we're all recognizing that in patent litigation, there is risk. There's risk and there's cost, and so you don't want to end up having to litigate because there's uncertainty associated with what you end up with from either side of the equation.

And so part of the problem is to push the disputes to be resolved before you get there. So in order to do that, I think what you want to avoid is issues within the context of litigation that are speculative and are hypothetical and that are unknown. And that's why it's helpful to have something of a more objective standard, because I think that from what I'm hearing from the panelists -- if we could all agree somehow upfront, licensor-licensee, on what the value is and actually come to an agreement to where both sides of the table know that if they do end up in court, that this is where the valuation is going to go, they have an idea about that, they’re more likely to agree up front. That would be better.

You wouldn't worry about how do I get my interest and how do I make sure that I really was

compensated and how do I figure out all these other contingencies to make sure that I really am compensated?

So the point of having more objectivity is avoiding that.

MS. MICHEL: Dave?

MR. SIMON: Yes. So that is precisely the issue. I don't think anybody disagrees that this is about adequate compensation. Sometimes the disagreement is about what is adequate compensation, but we have a really serious issue of you have a test that is in essence a grab bag for whatever -- that frequently comes pretty close to whatever a jury comes back can be supported under because you can choose all, some or none of those 15 factors.

And then the Federal Circuit has told us that they won't overturn a jury verdict unless it's monstrous, which creates an additional problem for the District court judges who, I know they want to do justice. On the other hand, I know the last thing most district judges want to do is to re-try a patent case. I could be wrong on that, but that's --

THE HONORABLE JUDGE ROBINSON: That's wrong.

MR. SIMON: I won't say his name, but I once had a District Court Judge threaten to whip out a gun if we brought the case back to him, and I know he kept one

under the bench.

But going back, the real problem is the current legal system is a standard that permits just about any argument in many instances, not all but many, and for example, everybody was talking today about a running royalty. I can tell you the least likely way to get Intel to agree to a license is to come in and talk to us about a running royalty.

Just by example, it takes us ten years to develop a semiconductor process, four years to develop the product for our leading edge processors. Each of those represents about a 4 billion dollar investment, and then we have to build plants that each involve about a 3 billion dollar investment, and we are very aware that -- we know where the patent damages awards are and we know where they aren't.

They're in the United States, and it is a factor that we do consider about plant exercises, where we're building our plants. Not withstanding that, we just announced yesterday that we're putting up 7 billion dollars worth of new plants in the United States in the next two or three years.

But the point that I want to make is that this is really -- about we make an incredibly complex product, as many people do, but when we looked at it, we once

said -- we stopped counting at 1,500 of our own patents in our product, and yet when you go to trial with this grab bag of factors, the trial, as Ed Reines has said this morning, is about the patent in suit.

You get at best, depending on the district, 40 to 80 hours to try the case. You're going to be talking about the patent that's in suit, about the validity, the infringement, the damages, and maybe you'll get to spend a little bit about the atmospherics of your business, but the result is you have a huge over-emphasis on that patent in many instances.

So what you've done is you've created a huge amount of uncertainty, and whether you're looking at the threat of an injunction or not looking at the threat of an injunction, when you're looking at the huge potential damages theories, and we've had people come in with 5, 10 billion dollar damages theories, you have to take a step back and say, what's the rational act here.

The rational act is that you will try to settle these things, and you will try to settle these things in my view at what's -- if you really had to do a negotiated a bargain between the parties of what we would have paid at the time. If we had a choice to pay this much to use this patent, and we almost invariably have another option at the time we were doing our design decision, we

would have made the other option. We would not pay those type of money.

MS. MICHEL: Okay. Taraneh?

MS. MAGHAME: Going back to the point of compensating the patentee for damages to be compensatory, I mean, one of the things that the patentee does not get back is its attorneys fees, for example. I mean, it's now spent millions of dollars enforcing its patents and they may get a damages award that some may say is too high, some may say is too low, but in almost all cases it does not recoup the millions of dollars it had to spend to get to that point.

So if you assume that that royalty that's established at the end of this trial is the same as it would have gotten absent a trial, then it's out of pocket by quite a large amount of money, so there isn't fair compensation in that instance. And going to the point that was being discussed with respect to value, obviously no two patents are created equal.

If there's a number of patents covering your product, each patent will have its own contribution to that product and will have its own value, and depending on who you are, that patent is going to be valued differently, not just in terms of a patentee versus an accused infringer, but it seems like there's a lot of

discussion around who owns that patent.

If it's a NPE, does that make that patent less valuable? Did less work possibly go into that patent because it's now being held by an NPE? I'm not sure that that's the way we should be looking at it.

The patents should be looked at with respect to whether they're good patents, bad patents, valid, invalid, infringed, not infringed. The owner of that patent is not a part that equation. Now, we talk about the increased litigation by NPEs and the fact that they're getting these larger damages awards.

I think it's pretty much well accepted that there's been a large number of entities that have been created recently that are able to assist individual inventors who, by the way, based on statistics that were discussed at the last hearing, they get -- 60 percent of the patents are given to individual inventors. They're able to help them monetize those patents.

They don't have and we don't have the billions of dollars to establish the types of plants that David was talking about, so because you have more avenues for the NPEs to be able to monetize those patents, you are seeing more of those patents out there. You are seeing more litigation around those patents.

The numbers go up. To the extent that the

patents are in industries where there are a large volumes of products, you're going to see larger numbers of products, so there's really nothing surprising about the trend now. And if our goal is to say we want to reduce the amount of litigation so we're not going to want these NPEs to enforce those patents -- rather than determining whether those are actually good patents that read on these products -- that's not the right way to go, and there's no over-compensation or under-compensation or compensation at all. We're just basically valuing a patent based on who the holder is.

MS. MICHEL: Okay. Jack?

MR. LASERSOHN: So just with respect to the point about how risky litigation is, again the risks in litigation are wildly asymmetric. The risk to a small company is not only that it loses the actual litigation, but that it never makes it through a litigation. It doesn't have the money. It cannot raise money while it's litigating very often, so innovator companies will do almost anything to avoid litigation.

The obvious thing that all of our companies, venture-backed companies do, and every venture capitalist will tell you this, is we desperately try to negotiate deals with larger companies either to acquire our companies or to pay a royalty.

The problem is that the answer is often simply no because the larger companies recognize the asymmetry of marker power and economic power and very often see litigation as simply a competitive tool in business; that is, they can afford the litigation. We can't.

So I think that it is not a fair -- it is not fair to assume that innovators and patent holders seek litigation and don't see the risks of it. We see it very, very clearly.

MS. MICHEL: What does that mean for damages law?

MR. LASERSOHN: Well, the point of damages is that you only go to litigation if you think you can recover enough damages to justify it, and so that -- I mean, when we have discussions about should we litigate something, the question always becomes: Is it worth it? The litigation could cost $5 million. If you're going to get a million dollars worth of damages or a tiny, tiny royalty stream, for example, at the end of a very long and risky litigation, in many cases our answer is: It's just not worth it, don't bother.

So damages controls the circumstances in which we actually litigate, and again, to the extent that we believe -- to the extent that damages are reduced, which is really what we're talking about here. I mean there's

a lot of obfuscation about what should be and what shouldn't. It's really a question of: Let's reduce damages. The proposals about different standards is let's reduce damage awards.

The effect of that is -- will be for certain to reduce the amount of investment which, by the way, creates jobs. 12 percent of the current employment in the United States, 19 percent of the GDP, are venture-backed companies. Most of the new jobs being created in the United States come from small companies, not from large companies, with notable exceptions. So that will ultimately -- absolutely damages will ultimately affect job creation and investment and innovation.

MS. MICHEL: Is anyone arguing that damages should have a kicker, some sort of going beyond making the patentee whole for these reasons?

Okay. I'll take that as a no. Phil, your comment?

MR. LORD: In seriousness, unfortunately that's not the context of this overall debate. You could have a debate. This is part of my opening comments about saying which way should be move the lever. Increase awards for damages, decrease awards for damages, and there would be very rationale economic justification for increasing the awards for damages as well.

So I'll pipe up. I understand unfortunately this agenda has been set in a context that says take it as stipulate that damages are too high, let's figure out what to do in order to reduce it, as Jack just talked about, and I think that's too narrow of just a description of the economic realities that we all are in this innovative economy.

MS. MICHEL: Phil?

MR. JOHNSON: Ed mentioned this this morning, but didn't really go into it. It's very hard to figure out what's happening by looking at the cases that are selected to go to trial. I mean, there are thousands of cases and probably over 20,000 cases in that sample that we saw this morning.

We have very few that actually ended up in high damage awards either way. What we did see is if you're a patent owner and you go to trial or you press your case, you have a two-thirds chance of getting zero, and then if you do win it's a little less likely than average that you won't get enough to cover your attorneys fees.

So that's not all that exciting, but there's so many cases out there and so few go to trial that what's happening is defendants and plaintiffs are collectively deciding which ones to try. What's surprising to me is

that the damages numbers have stayed relatively flat because over that same period of time -- well, that was 15 years. I think back everybody thinks about their own company, our company's revenues are twice -- more than twice what they were ten years ago.

So you would be expecting if they had grown simply with the growth of business, and business has grown in the last 10 or 15 years, you would be expecting the amounts of the awards to go up at least in proportion with the inflation or the GDP or whatever, and that to me suggests that something is at work that is actually diminishing the relative value of awards rather than enhancing them.

MS. MICHEL: Keith?

MR. AGISIM: Thanks. I just want to respond to a couple points that have been raised in this discussion. The first one relates to some comments about the person, the patent holder isn't relevant to the damages discussion, and I think that that really illustrates part of the problem, that damages are not based on economic realities but this mythical negotiation.

Defendants and defendant's economic conditions, the size of the company, their profits, those are sort of the favorite tactics you see from patent holders,

explaining why -- what one penny per unit or one penny per transaction is perfectly reasonable. I think if you're going to look at the economics of the defendants, you also have to look at the economic position of the patent holder.

And I think some of these start-ups that we've been talking about are different than sort of the true non-practicing entity. Their whole business is the business of infringement. They don't want people to not infringe their patents as a start-up company may. Start-up company doesn't want the infringement. They want to build their own market, create their company and create jobs.

Your typical non-practicing entity wants you to infringe. If you're not infringing, they go out of business. So I think it's a completely different dynamic that needs to really be addressed as we're looking at what appropriate measure of damages are.

MS. MICHEL: And perhaps we should distinguish between non-practicing entities who are innovators and seeking to license out their technology versus patent holding companies which seek to license broadly.

I take it your comments pertain more to patent licensing company that seeks to license broadly?

MR. AGISIM: Yeah, I think it's very context

specific, but there's a whole -- there's scores and scores of companies that basically go out and buy up patents from bankrupt companies or individuals, and they try to go and find people to assert against, so that's largely what I'm talking about.

MS. MICHEL: All right. Oh, let's -- okay. I want to move into a more substantive discussion -- I didn't mean that -- a discussion of the substantive legal rules is what -- but please don't take the tents down, and work in any comments you want to make there, but trying to understand how important lost profits damages versus reasonable royalty damages are to your company and whether -- let's start with lost profits, you think that lost profits -- if it's important in your industry and being done appropriately? Is it working? Are the right kinds of damages being awarded? Okay.

Phil? Thank you.

MR. JOHNSON: When I'm collecting, absolutely not. No, the fact of the matter is you're talking about competitor lawsuits with lost profits damages, and they are always extremely important on both sides, whether you're the defendant or the plaintiff, and actually as we heard this morning, although they're complicated and sometimes hard to prove, which means that sometimes

people will default over to a reasonable royalty, where you can prove them, they usually are amongst the most accurate of the damages.

Frequently you have good data from both sides of the equation because the infringer will have -- one thing that every business does is they keep track of how much money they're making, how much profit they're making with what they're doing. You frequently get a good look at both sides of the equation as a result of the discovery, and it isn't -- while there isn't a wild disparity, margins are what they were and sales are what they are, and there can be disputes over the contribution.

But frequently I think that generally -- I mean, actually generally we settle quite a few, as Judge Robinson indicated, against competitors where liability is clear and where the market share information is clear so I think they're very important. But let me go on to say that it's a rare case where you have a two-supplier market, where you don't also have reasonable royalties in. Because when there's a three supplier market and you're suing one of your competitors or four or five or six supplier market, then reasonable royalties are always a component of your case.

And it's always a component of your case as a

back up because you can never be sure that your lost profits case is actually going to be sustained, and you give it to the jury, and if the jury decides you're not entitled to lost profits, then it defaults to reasonable royalty.

MS. MICHEL: Yeah. Gary?

MR. LOEB: I agree with Phil wholeheartedly that in competitor situations, the last profit analysis is working well. We're starting to see the lost profits analysis abused a little bit in sort of non-practicing entity situations where the lost profits analysis becomes sort of one step removed: Well, if you had entered into a license agreement back then, that would have given us more legitimacy and we would have got more profits as a company and could have got more investment.

So it's sort of this causal chain of lost profits in a non competitor setting. I think that's a little troublesome and should be sort of avoided, and we're starting to see allegations like that, but just in the general realm where you have a competitor, I think everyone agrees that's sort of the heart and soul of a lot of the patent disputes that we have and that you need to be able to be fully compensated, whether or not a reasonable royalty, lost profit, some combination of both, especially in sort of a post-*eBay* rule.

MS. MICHEL: All right. And is lost profits available in a three or four supplier market? Phil, what's your experience with that?

MR. JOHNSON: Yeah. It's available but to a lesser extent because you have to show that you've actually lost the sales and therefore lost the profits, and when there's another or several other suppliers in the market, you have to deal with the issue that first of all, you probably won't collect more than your market share because the defendant will say: Well, if we hadn't infringed, these sales would have gone to the other suppliers and they would have purchased the other technologies.

So you have to fight it out. It becomes an even harder case. The more suppliers there are, the more substitutes there are, the more interchangeability there is, the less likely it is you end up with a good lost profits case.

MS. MICHEL: Jack?

MR. LASERSOHN: Yeah, and I would add to that actually, while I think lost profits works up to a point, for many of our companies, they are always making the transition, often during the litigation or in their history, from being a non-operating quote, unquote, company to being an operating company, and they're very

tiny, and there's always the argument: Well, you couldn't have been in the business anyway for the list of 15 different reasons, or as Phil just said, nobody's going to -- the other competitor took your share because nobody wants to buy from a pip-squeak company in the sector, et cetera, et cetera.

So actually in our part of the world it is difficult in many cases to make a lost profits case stick.

MS. MICHEL: And in your world, do many of the parties you're dealing with have products? Isn't that the reason that there's no lost profits?

MR. LASERSOHN: I'm sorry?

MS. MICHEL: Do they have a product? Do you need to have a product to have a lost profit?

MR. LASERSOHN: Yes, but you don't need just a product. You have to prove but for the infringement you would have sold something.

MS. MICHEL: Yes.

MR. LASERSOHN: An example would be if you're a medical products company, for example, you might have a product, but the defendant would say it doesn't matter, the doctor won't buy from you anyway because you're a pip-squeak, so there are things other than having a product that you actually have to prove.

MS. MICHEL: Sure. My surprise was that in these early stages, that the company had a product at all and that lost profits did come in, but it sounds like you're talking about slightly later stage companies there.

Kevin?

MR. RHODES: I would just add briefly on the question of recovery of lost profits in a multi-player marketplace. As Phil said, it is possible to get lost profits with the market based analysis, with the more full analysis breaking down the competitive situation in the marketplace.

If there are three or four competitors it can be done. What we found though is sometimes markets get so fragmented that you couple together the chances of actually getting lost profits -- the amount of proof and expert discovery that's going to entail, the detailed disclosures that will require us to make on our own product lines and their profitability -- at some point you reach diminishing or no returns, and it's not worth going for in that situation.

MS. MICHEL: So the issue of whether to pursue lost profits is also a litigation strategy issue?

MR. RHODES: Indeed, and we've had cases where we had a product. There was direct competition, and for

some of those reasons I just mentioned, we decided not to go for lost profits but rather for an injunction and reasonable royalty damages.

MS. MICHEL: Phil?

MR. JOHNSON: The strategy of going for damages at all is frequently a litigation decision, or how much time to spend more often on damages, especially for defendants. If you think you have a good case on the merits, many trial attorneys think that you don't want to spend time standing up and putting on an elaborate damages case, for fear that the jury will get the idea that you think you ought to be paying something, because in order to put on a damages case, you have to assume that you're going to lose and then talk about how much you're going to pay.

So many times, especially for defendants, and I think Jack mentioned that this morning -- he said he didn't put on damages cases. Really, what you're seeing is you're seeing situations where that was a strategic decision to emphasize liability, and some of the cases that produce aberrant results are explainable when you go back and look at it because they didn't put on damages experts. They really didn't put on a damages case or they didn't put on a credible damages case, very abbreviated because they made a strategic decision that

they were going to win on liability and then were surprised that they didn't.

MS. MICHEL: For those of you who are sometimes defendants, what are your reactions to the thought -- Judge Robinson's comments about bifurcating? Phil? Do you think that's a good idea, a bad idea? And also what's your experience and how often that happens?

MR. JOHNSON: I think it happens more and more, and I think the experience is generally good. I really don't think that the plaintiffs gain all that much by making a lot out of damages in a complex case.

I don't care what your invention is. It's very complicated for the jury, and what they really don't want to give up, the plaintiffs don't want to give up any willfulness attributes or willfulness evidence if they can avoid it, but now after *Seagate*, that's frequently dismissed and not allowed during the liability portion of the trial anyway.

So I think the biggest downside is it prolongs the proceedings. If someone is a small company and/or someone is hoping to collect money and doesn't want to give a below market rate loan to their competitor, it puts off the day of reckoning and the day of collection probably by another two to four years because there will be another trial.

There will be at least one more appeal, and it will take you that much more time for you to get your paycheck if you're the plaintiff, but other than that, if you're talking strictly on the merits it's probably a purer way to address the issue.

MS. MICHEL: All right. Reasonable royalties, how should they be calculated? They are out there. Is the hypothetical negotiation just the best of all terrible alternatives or is it actually just a good idea? Marian?

MS. UNDERWEISER: Well, I think that the hypothetical negotiation model is -- as I think some of the panelists discussed this morning, I think it is a useful tool in certain contexts, but I think that fundamentally the problem with the model is that it's used as this baseline, this hypothetical negotiation, and it's inherently a construct. It's inherently speculative.

So part of the advantage of looking for a focus, which was also discussed a lot this morning. If something -- again as a starting point but looking for a focus to the invention, what is really the economic value of the invention, and to focus on that first - instead of trying to reconstruct this kind of hypothetical environment -- is that you're really more

focused on the substance of what was contributed just to start with.

So I think the inquiry gets lost in the context, and it doesn't mean that the contextual issues are not important or that they won't affect the royalty calculation, but if you can look at the invention to start with, you can use that to help you with these other tools, all right.

So if you had, for example, a question about non-infringing alternatives, something that was discussed this morning, well, won't it help guide the fact-finder to understand in the first instance what that invention is? What am I focused on here? What am I supposed to be focused on? If I know what the invention is, then I ought to be able to value this compared to what that closest non-infringing alternative is.

And I could give a mechanical example. I mean, if you have -- if you have a device that I would call a separable device, right, so let's say you have an invention where -- you have an invention for use in any kind of vending device, right, so it could be soda machines or it could be washing machines or it could be anything where somebody puts money in and something happens.

If your invention is separable to that

component, you have created a new device that takes bills instead of just coins, then you can compare that to other purely coin operated devices that could be used in lots more machines.

If you have instead an invention that actually makes the washing machine run differently, right, actually makes one of these tools run in a different way, well now I can pay by the minute or I can pay for an hour or something like that, you've changed the operation of this machine, and now you may want to consider: Well, okay, maybe if I am looking for a non infringing alternative, I have to look at a different product, but by starting with something substantive like that, you can use some of these other tools to figure out how to calculate a royalty.

MS. MICHEL: Okay. Dave?

MR. SIMON: So from my view, the hypothetical royalty negotiation frequently is used as a tool for somebody to get in economics that they otherwise couldn't get in because they literally make it up saying this is the way we would negotiate it.

For example, there are some, I'll try to dignify it as much as possible, pseudo-academic publications for damages experts where they've tried to go out and collect industry data and say, Here are the typical

royalty rates in these industries. Now, first of all, it's very hard to figure out that the industries are because let's just say there's a big difference between Bose's headphones or Bose's loud speakers and Intel microprocessors, but nonetheless, I think they get lumped into the same place.

In addition to which, when you read the articles carefully, they say, Well, a lot of these things -- it's a little hard to say what the real number is because there's floors and there's ceilings. Now, a 5 percent royalty where you have a ceiling of a million dollars a year is a big difference from a 5 percent royalty where there is no ceiling.

So as a result, a lot of this is used as a way -- as a vehicle in my view to get stuff in that really has very little bearing in the industry. We keep hearing about the royalty base and the running -- and what percentage to apply to the damages. That's not the way we negotiate licenses at Intel.

Our view is it's an inappropriate way to deal with it in our business, so as a result, it's a very different -- it's a very different model. Yet everybody uses this as a vehicle to try to say it would have been a running royalty rate.

MS. MICHEL: The alternative being a lump sum?

MR. SIMON: The alternative presumably being a lump sum. What was the value of this at the time we made the decision and balancing the risks of using that approach to the other approaches that were available to us. It's rare that in our industry there's only way to do something.

MS. MICHEL: How successful is that as a litigation tactic to say in the hypothetical world, we would have only ever paid lump sums, so let's talk about that?

MR. SIMON: We have yet to figure that out.

MS. MICHEL: That means it hasn't worked yet.

MR. SIMON: It hasn't worked and it hasn't not worked.

MS. MICHEL: Okay. Got it. Keith?

MR. AGISIM: Thanks. I think the hypothetical negotiation can work. Obviously I don't think it's a one size fits all solution. It's really very context specific.

There's one aspect of it I wanted to comment on is the hypothetical negotiation is supposed to occur the day before infringement begins. So there's an artificial construct, and I think -- and again the day before infringement begins, most company's marketing department have sort of grandiose visions of the world. Otherwise

it wouldn't launch these products.

I think once place where it falls down is I don't think there's enough clear rules around again, what really happened, right? It's not just artificial day before infringement, but real world, what happened? There should be more analysis, more reliance on actual economics of what occurred during infringement.

As we heard this morning there's enough assumptions, enough hypothetical and theoreticals built into these damages models from the experts as it is, that to the extent real data does exist, I think that's something important to factor into these analysis.

MS. MICHEL: Gary?

MR. LOEB: I just want to go back to a few of the comments that I've heard on sort of the reasonable royalty analysis and the hypothetical negotiation. It is inherently speculative, but I haven't heard an alternative that is any better, and I think that this concept of what is an invention, what is the invention really or the inherent contribution or what are the essential features of the invention or product, creates sort of a mini patent office review procedure in the middle of a trial or court proceeding that is largely going to be how well does the invention translate or inspire a layperson or a judge to think: Oh, that was a

really cool idea.

And it's not going to be any less, or any fairer to sort of go down that approach. It essentially creates a mini grading system of it is a grade A patent, this is a grade B patent, this is a grade C patent. And if we wanted to do that, by sort of saying well this invention has two essential features or this invention has three essential features, all of which are embodied in the product, I think that's a dangerous path to start going down.

I think the reasonable royalty in the *Georgia-Pacific* analysis allows you to take in the entire range of factors and doesn't try and distill the invention in a way that might -- that I think doesn't necessarily give it the force that it deserves.

And I guess I want to make one point about the aberrant awards where you have an invention that's a very small piece of a larger product and the fear that that's going to really create a huge reward because defendants aren't allowed to spend much time talking about their product, and I think that's a very real concern.

I think that sometimes the defendants end up talking a lot about their product in the context of secondary considerations of non-obviousness and sort of

the commercial success of their product with respect to their own patents or to be able to sort of talk about those types of things, if they are a practicing entity of their own patents, and sometimes they're then able to present a lot of evidence on their own infringing product, but it's the rare case that that happens.

So then you can end up with these situations where you have aberrant awards, but it's just the ability to make sure that that issue is properly vetted to make sure the reasonable royalty analysis works. And I guess I want to sort of raise a question with respect to sort of a company like Intel that has enough money that you could always do a net present value analysis where if the reasonable royalty is low enough, it's going to be exactly identical to you from a cash basis as a lump sum.

Maybe it's a really low reasonable royalty. Maybe it's one that you're embarrassed to say before a jury, which is .000015 percent or something like that, and maybe that's the problem with why you're saying it's a non-starter, but you always have both royalty base and royalty rate.

So it doesn't seem to make sense that -- all a lump sum is doing is sort of saying the royalty rate here is so low that is it worth the transactional effort

of keeping track? But it always seems like there's some rate that could approximate whatever that lump sum is going to be.

MS. MICHEL: Do you want to respond, Dave?

MR. SIMON: Okay. So by the way, as part of my response, I disagree with the statement that you make that there aren't grade A, B or C patents in terms of economic value. I think absolutely there are clearly patents that are more valuable and patents that are less valuable.

In terms of what -- the reason why I say it doesn't make sense to take a running royalty is we look at it as -- there are a couple of different -- in many instances we have lots of options of how we're going to do something, okay. There are benefits for using a technique and there are disadvantages of using a technique in almost every single case.

They're going to get relative performance for certain things and not for other things, and we're hoping that we're going to project four years out when we do these designs decisions, that we're going to guess for the right place for the market, and we haven't always guessed right.

That's the way we're looking at it, and if somebody comes up and says, I want -- let's take the

example of the Microsoft versus AT&T. That 1.52 billion dollar judgment, and let's not forget that .02 there because that's 20 million bucks, was a .5 percent royalty rate for a decoder, one of several decoders actually. There's two decoders, one of which didn't work.

And if Microsoft had been presented a choice of you can use this decoder and pay a .5 percent running royalty on PC sales, which is what that was, or not use it, it's really simple. We won't use it. We don't need it. There were other ways to do that decoding.

From our standpoint we look at these things, and if you tell us it's going to cost us .5 percent running royalty or .1 percent running royalty, almost invariably there's a cheaper choice. That's why running royalties don't make sense typically in our business because there's almost always another choice of what we can do.

There may be -- they may not be quite as good. They may have certain other -- they may have certain disadvantages. They may have certain advantages, but the idea that we would say, we are going to take a revenue stream on a product that literally has, like the Supreme Court has said, thousands of patents in it to any one patent just doesn't make sense to the business.

MR. ADKINSON: Bryan?

MR. LOEB: I think another thing that we have

sort of stipulated to in this discussion and sort of overlooked when we talked just about damages is the fact that if we're at damages, we have concluded that infringement has occurred, and we ought not simply overlook that fact.

Infringement is not supposed to occur. We're supposed to have a system that actually disincentivizes infringement from occurring, and when it does, then have certain circumstances that we have spent a lot of time talking about here to address that situation, but I think we have a public policy arena, and I think we're all in agreement with this, that we're supposed to be driving towards, first of all, compliance with the intellectual property laws and working towards non infringement and then dealing with cases after the fact when that happens.

I thought about this, thought about today's presentation actually when I was getting a cup of coffee this morning, and if you think about the preposterousness of this objective standard and the outcome of that, I would love it if I had walked into Starbucks today and I had taken a sip of coffee, and they said to me: Excuse me, sir, but that's 3.95 for your cup of coffee. And I said, Well, it's just water and beans, there's really nothing in it, that's all

you've done is really put water and beans into this cup, I think it's worth about a nickel.

And they said, No, it's worth 3.95, and I say it's a nickel, and then I say, I'll tell you what, how about if we find somebody else to try and come up with an objective standard for what this thing is worth?

Somewhere I guess in between perhaps is the answer, but at the end of the day, Starbucks should have the right to say, You don't get that cup of coffee. It's up to you whether you want to walk into my store, drink the cup of coffee or not, and I think it's the same argument about infringement.

We ought to start with a public policy regime that says don't infringe, and if you do, then we'll find out a way to reconcile the differences between the parties.

MR. ADKINSON: Jack?

MR. LASERSOHN: Yeah. I think that in the final analysis, the search in all of these conversations for damages is ultimately to find the economic value. I think that is really what is going on.

My impression of the function of the hypothetical negotiation is to put a process in place for the jury to actually find that economic value. That's what the -- that's what the hypothetical

negotiation is all about.

It says: Okay, we want to find the economic value and the jury says, Well, how, and you say, imagine that you were negotiating at the time, what would you have agreed on? That is the economic value, and the answer then is, well, what should I consider, and then they pull out *Georgia-Pacific* and their 15 different thing you should consider.

Well, as a famous physicist once said, you said simplify things as much as possible but no more, and unfortunately, this is complicated. Every single company in our portfolio has a different situation. Every single competitor is different. Every environment is different.

We heard this morning that in the Wal-Mart case where they cut the price by 75 percent, and so the actual royalties were greater than the selling price. There are models, business models now where people give away software for nothing in order to collect a service fee.

So every single -- Intel doesn't want to pay a running royalty, okay. That would have been part of that hypothetical negotiation. We will under no circumstances pay a running royalty. Well, if everyone else pays a running royalty, that may or may not have

been persuasive as an argument.

I just don't see how if the ultimate search is to find the economic value that you can simplify that to some formalistic approach. It is complicated, and the hypothetical negotiation, at least to me, when I again as a non-lawyer think about it from a common sense approach, how would I do that, I would say: Well, imagine you were negotiating. And that's in fact as I understand it what the law is.

MR. ADKINSON: Taraneh?

MS. MAGHAME: I think Jack said about 80 percent of what I was going to say, is that the whole hypothetical negotiation needs some parameters. After all, it is what one side is willing to pay and one side is willing to take.

So David's point about what he is willing to pay comes into play in the hypothetical negotiation situation, and all these other factors, the *Georgia-Pacific* factors also come into play because the ultimate goal is to determine economic value, and there's no reason why that economic value can't be put into a lump sum royalty context.

It doesn't have to be a running royalty. The parties could agree that this could be a lump sum royalty, so saying that we're not going to pay running

royalties so we can't use these factors, I guess if that's what I heard, is -- they don't go together, because you could really come up with an economic value that's a lump sum royalty that fits into this hypothetical negotiation context.

MS. MICHEL: If the overwhelming consideration of a company in the hypothetical negotiation is the cost of alternatives, should that -- that should be taken into account though?

MS. MAGHAME: Yeah, that would be one factor that's taken into account, the alternative, the commercial success of that alternative versus what you actually ended up using, but we can't lose sight of the fact that this company has been infringing these patents as Bryan was saying for a number of years, and we can't just turn the clock back and say: Okay, well I would have chosen something else, so I'm going to set the value on this.

They did choose to infringe. Whether knowingly or unknowingly is not the issue, but there is that fact that we need to take care of and then we need to take care of the going forward part of it at that point.

The fact that injunctions may no longer be available in a lot of instances complicates that part of it even more because now we're talking about the

possibility of compulsory licensing, what kind of rates do you set for a compulsory licensing type scenario.

Courts have not decided that yet. We've seen I think one or two instances where they've tried to do it, but it's even more difficult to set a reasonable royalty going forward now because of things that we discussed this morning in terms of changes in the economics, but at least in that respect, you know what's happened in the past.

If you can -- if you need the flexibility to do a market based evaluation, and the *Georgia-Pacific* factors with possibly further guidance from the Court, allow you that flexibility.

MR. ADKINSON: Marian?

MS. UNDERWEISER: Thank you. I'll respond to some extent to what was said before about looking at an objective standard like the one that IBM is proposing to use, the standard in *Quanta*, the economic value of the essential features of an invention.

The first thing that I want to say is we can't -- I don't think we can give up on some level of objectivity, some level of public notice, essentially because otherwise we don't promote the ability licensors and licensees to be able to efficiently agree in a licensing negotiation. But more importantly, I think I

should explain a little bit better why the analysis in *Quanta* was relevant and what the Court was doing there because the Court was making a real-world economic decision.

The court was looking at a situation where a product was sold and asking the question of whether that product sale exhausted the patentee's rights. What does that mean? That means once the patent is exhausted, the patentee can't assert the patent anymore against that product, so against downstream buyers or users of the product, it can't be asserted anymore.

So the Court's making a decision about the scope of the patent right with respect to the product that's being sold and it has a complicated problem. It's a product that had certain characteristics that -- a microchip is sold. Does it exhaust a system covering a system that includes -- it's a component system but it includes standard and common items.

So the question the Court was answering was whether or not this sold product embodies the essential features of the invention, and it's a value question. Was the patentee fully compensated for that patent when that product was sold? That's the question, so if the patentee was fully compensated, that's a good way to see where the economic value of the invention is.

The other thing I should point out here is that the Court recognized in response to an argument by the patentee that this is a standard that is substantive. It's based on the type of invention. It's not just a one-dimensional analysis. When faced with an invention the patentee raised the issue of the Aro case, where the Court was evaluating an invention that was a combination invention you could call it, where all of the elements of the invention may have been in the prior art, and the inventiveness was in the combination.

And the Court said: Well, that's not going to be subject to the same analysis. There the invention is in the combination, I can't break that up, so the Court's recognizing that there are these different situations that can be encompassed by this, that the Court can make a substantive analysis of the invention, that the Court's going to have to do that if it's faced with this issue, and that the Court expects the marketplace to be able to cope with this and to be able to read the characteristics of a product and understand how it relates to what this invention is.

MS. MICHEL: Is your *Quanta* argument that even where the claim is to the whole computer, if the inventive feature of the patent, the reason the patent office issued it is encompassed in the chip, we just

have to worry about compensating -- coming up with damages based on the chip?

MS. UNDERWEISER: Yeah, sure. That's part of it. That's part of the concept here -- how do I focus on what's going on, and part of it is absolutely to make a substantive evaluation of that claim, so if inventor has come up with a significant invention, then regardless of whether they claim it very precisely or expansively to include standard or unrelated components, that patentee should still be compensated with significant royalties, whereas if an inventor comes up with a minor improvement, that inventor should -- would more appropriately be rewarded with limited royalties regardless of whether the invention is claimed precisely or expansively.

MR. ADKINSON: Kevin?

MR. RHODES: Yes. Well, Jack captured my first point better than I ever could have hoped to have, and that is the idea that there is this objective standard of economic value and this entirely subjective set of *Georgia-Pacific* factors, and they aren't both trying to get to the same result is not accurate.

The *Georgia-Pacific* factors are trying to replicate what type of dynamic there would be between the patent holder and one wanting to use the patented

invention, presuming willingness on each side, and it does mirror a lot of the considerations that take place in actual licensing negotiations, so I think it does provide the flexibility and the grounding and economic reality that one needs to do a proper damages analysis.

Further to that, the idea that the economic value is more objective I don't think is realistic, and we're still talking here about an inherently adversarial process by the time we get to litigation. We're not going to get the plaintiff and defendant sitting down agreeing on what the economic value is.

They're each going to hire experts. They're both going to come up with different evaluations of what the economic value is, and then it's going to be up to the jury or judge to decide, so which type of framework do we want that adversarial process to proceed under? One that has a host of factors that replicate real world licensing negotiations, including perhaps, if the defendant or the plaintiff, whichever side you're on, does not believe in running royalties, or do we have one that's been boiled down to a single factor?

I should point out that economic value is embodied in a number of the *Georgia-Pacific* factors. I think number 9 off the top of my head is the patented invention as compared to earlier or prior products and

what the added benefit is, so it's flexible enough to deal with that, but it doesn't constrain the analysis.

Now, I said at the outset that I was balanced, and I did find a point of agreement with my neighboring table here. I do think there is room for improvement on these industry comparables that David was talking about or the rules of thumb that we talked about this morning.

I think to the extent we're divorcing the damages analysis from the facts of a particular case and trying to rely on these rules of thumb or comparables or the like, I do think the courts could help judges and juries or the courts could help juries in that analysis.

I do, however, think that the tools are there. I think Rule 702 of the Federal Rules of Evidence, I think *Daubert* give the courts the tools to do that. I know there's been some legislative proposals on gatekeeper. I think legislation could help on the gatekeeping function, although the point was made this morning, with which I agree, legislation is a blunt instrument. Look at Section 284 of the damages laws right now, it's very general.

Intentionally we have decades of case law and decades of fact patterns that we need to tailor, decisions, common-law development of tort, and I think

that's the preferable way to do it. I don't think legislation can encompass all the different fact patterns you get with different industries, different business models of monetizing IP.

MR. ADKINSON: Well, let me press you and Jack on one item here. This morning, there was pretty broad agreement on the panel that the *Georgia-Pacific* factors were well as considerations, even for negotiations, but that throwing them before a jury was the problem, that it just enabled the jury -- could support any decision the jury would get to.

So that in the right hands they could be useful tools, but are they good litigation tools for a jury trial?

MR. RHODES: With all due respect to Judge Robinson, I do think there's a role for the Court as a gatekeeper in that process. I think that by way of careful analysis of motions in limine, really working through the factors perhaps at the charge conference, the *Georgia-Pacific* factors that go to the jury should mirror what the evidence was that was presented at trial.

So I do recognize there could be a problem if 15 factors are presented to the jury. It's not clear which are really supported by the evidence, which aren't, and

I think that judges can help juries in that regard.

MR. ADKINSON: Jack, I'm going to give you –

MR. LASERSOHN: I completely agree with that. NVCA has supported the gatekeeper -- expanding and redefining some of the gatekeeper functions as well, but the question is: What's the alterative? And it isn't at all obvious to me that an even more obscure alternative would actually help the jury more.

I mean, I have to be careful how I say this, but the problem in, for example a case, as I see it, of *Lucent* for example, is that juries are mathematically challenged. In granting a half a percent royalty, they in fact thought they were granting an incredibly tiny little royalty.

In other words, they got the principle right, which is that this is a tiny little component. There were lots of alternatives, et cetera. To them a half a percent was a little, teeny-tiny royalty, when in fact it should have been ten to the minus 18th, and that's not -- that's just beyond --that's a fundamental problem I think with the jury system.

But what the alternative is, which is to say economic value of the essential feature? I mean, I think the results would be even worse. You need to have more control over the juries, which *Georgia-Pacific*

attempts to do, say, Look, here are a check list of things you really should consider as opposed to one very broad and I think completely obscure formalistic approach.

MR. ADKINSON: This morning we had the question that a decimal point could mean the difference between a $10 million award and $100 million award.

MR. LASERSOHN: Good luck explaining that.

MR. ADKINSON: Taraneh?

MS. MAGHAME: Yes. Well, I just raised that. There were other people in front of me.

MR. SIMON: So just responding back. I mean, there are a couple things that people tend to forget about *Georgia-Pacific*. Judge Ron White from the Northern District of California was on a panel with me a few years back. I forget whether it was at the ABA or AIPLA and he just said, Look, this is one case, *Georgia-Pacific*, and it's dealing with a very specific product. Yet this is something that for whatever reason has come to be used, and I frankly don't find it very helpful.

I'm paraphrasing. I'm apologizing, but that was in essence what the judge said, in addition to which everybody loves to talk about how *Georgia-Pacific* has all these factors. Everybody forgets that the Second

Circuit actually reversed and vacated the District Court decision because it was a judge decision. In reaching that decision the district court forgot to allow the fact that the plaintiff -- or the defendant, the accused infringer, would in fact in any reasonable negotiation have ended up with a profit.

And the District Court had allocated all the profit to the plaintiff, and the Second Circuit said, That's wrong. The Federal Circuit by the way glances over that point too. They have repeatedly said that's not the guidepost for us.

So as a result we've moved away from what originally had some economic underpinning to something that now is in my view slanted the table very much in a compensation -- in the we must compensate factor.

And I think we need to really look at this is supposed to -- this is a business tort. It's about value. It's about economics. We heard I think all the economists say these don't really help us very much. We can use them to reach almost any result. That's a fundamental problem that I think we need to rethink what we're doing.

MR. ADKINSON: Phil, how about you?

MR. JOHNSON: We negotiate hundreds of licenses a year, and when we sit down to negotiate, we use

methodologies that are very much like the *Georgia-Pacific* factors. We don't call them *Georgia-Pacific* factors. Our business people are looking to what it would cost to pay. We both pay.

We pay hundreds of millions of dollars in licenses, license fees to others, and we collect quite a bit as well, but when we sit down, we are looking at those factors that are mentioned in *Georgia-Pacific*.

To us, the hypothetical negotiation is a good proxy for what business people do when they sit down and negotiate. I agree with Kevin in the situation, and I think that the situations are so varied that it would be impossible for anybody to come up with a single rule that would specify what the appropriate royalty would be in any given context because of variations in technology, risk, marketplace, marketplace variation, regulation, a whole bunch of issues, many of which were mentioned this morning.

To me the biggest concern about the people who are proposing a simplified rule is that as part of that, they would wish to preclude the other side, whichever side they're on, from presenting what they think fair damages are from their standpoint, and there isn't just one view of it.

Yes, I agree, David should be able to go in in

his cases and explain why a lump sum royalty for a given feature is the appropriate approach and why he had alternatives at the time in the benchmark time period and in the hypothetical negotiation when presented with the feature which is the subject of the dispute. He should be able to say: Had we had a negotiation at that time, rather than pay you more than X as a lump sum, I would have done something else.

I think that's entirely appropriate, but if the other side wants to come in and say: No, you wouldn't because here's what your chairman said at an analyst meeting about how they would beg, borrow or steal in order to get this feature into your chip, they ought to be allowed to do that.

MR. ADKINSON: If it's a question of putting in what they view as comparable patents and the royalty rates associated with them, should there be any restrictions on that?

MR. JOHNSON: To me every invention is unique and every situation is unique so I have a lot of sympathy for people who are objecting to industry standard rates or rules of thumb or the like without an awful lot of foundation, and I do think that here's where the judges can be of assistance because they can hear the motions to exclude during the trial and make

either -- exclude it from evidence or give cautionary instructions or work on the jury instructions because they may have little or no weight in many situations, but in some situations where there's a regular and established royalty perhaps they do have weight, so it's a touchy area, but I have -- I have sympathy for that.

MS. MICHEL: Marian?

MS. UNDERWEISER: Thank you. One thing I want to clarify is that when I talk about using a standard like the economic value of the essential features, it's not meant to be the only factor that a court would consider, right, but it informs the analysis of damages. It doesn't dictate its complete valuation.

That said, I think we could all agree that what the inventor -- what the patentee should really be compensated for is the value that's added by the patent. That's really substantively the fair and the correct answer, and in looking at a substantive test, using that to focus the initial context of the inquiry, rather than saying that the most important thing about my damages inquiry is the hypothetical negotiation, by trying to refocus the court on what was invented, you're looking at a substantive question that should not be obscure to the court.

What could be less obscure or relevant than

asking what was the value or what did the inventor really do? What is the substance of what was contributed by the inventor? So I think that while a lot of these other considerations that exist in the case law are absolutely still relevant to the analysis, it doesn't mean that you lose focus on the invention.

Now, that said, because there are other relevant factors, and I think a little while ago we started talking about I guess what I would call judicial management. Damages is a complex question, so while we would like the standard to provide guidance and licensing, it's also recognized that as you go through the process, there is a lot of relevant evidence. There's a lot of evidence that both parties are going to want to present.

And there was a recent case, recent *Cornell v. HP* case where Judge Rader was ruling on a motion in limine actually, so a lot of what we're talking about in terms of really good judicial management, and in this case he was excluding evidence relating to EMVR because it wasn't sufficient. He didn't meet the right threshold.

And I think it is important with all of the possible factual evidence that comes in for the judges -- for a judge to be disciplined in that regard

for a couple reasons, one of which is it helps the jury. It helps the fact finder, but the other reason is that it provides a certain level of public notice.

If the judge actually rules on the record regarding what works or doesn't work in terms of admissibility of evidence, then again this is another piece of guidance for patentees and licensees, so you can say, okay, I understand. I understand what works and what doesn't work in this context so I think that would be a very helpful thing to encourage.

MR. ADKINSON: Gary?

MR. LOEB: I have three quick points hopefully. One, I agree with Dave on one thing that there's lots of instances where Genentech doesn't want to take running royalties either. One of the key ones of those is research tools where our actual product doesn't practice the patent, and that's the thing I mentioned in my opening comments about reach-through royalties and reach-through claims.

The ability to get -- reach the royalties is something that's now just sort of bubbling up the system with respect to biotech and pharma. Reach-through claims are an issue of what is patentable, and I think that that's -- I think that a little bit of what I hear from Marian and Dave is the tail wagging the dog with

respect to: Well, maybe there's bad or less significant patents and so let's change the amounts that people can get for all patents because there's some bad seeds out there.

And I think if you're really going to go down that path, the way to deal with it is to look at what claims are being allowed and issued, and maybe you shouldn't get a claim covering the entire product if all you did was make single change to a decoder, and maybe the problems -- so my second point is maybe the problem with 1.52 billion dollar damages award isn't maybe the royalty rate but the royalty base.

Maybe you should have looked at hypothetically what the decoder would have sold for, not what the computer or the software program or whatever else would have sold for. So it involves more involvement of the judge to be flexible on what the appropriate royalty base is, but it's much more feasible than asking a judge to look at whether an invention was minor, significant or essential.

I mean, some of our most important invention also involve four nucleotide changes to the variable region of a heavy chain of an immunoglobulin, and for inventions that aren't accessible to -- judge's, they're using computers these days so they largely get

that technology. They have to come up to speed on biotech in the course of a case, but patents are presumed to be valid, and they're looking at very specific issues of enablement and written description and obviousness in light of what was done previously, but they're not in a position to say: Oh, this was really a big leap over what was there before.

That's the reason why most patent examiners in the biotech field have Ph.D.s in the area, and they're flawed. The patent office is flawed, but to ask a judge or a jury to go down that path in addition to all the other things they have to do in evaluating a patent I think is really inviting mischief.

MR. ADKINSON: What do you suggest trying to figure out the value of the decoder? Is that similar to what you're talking about in trying to figure out the value of the specific invention?

MR. LOEB: It was the decoder -- I'm not familiar with the patent in the *Lucent* case, but it was a patent involving a decoder.

MR. SIMON: It was a patent involving a decoder of audio information.

MR. LOEB: Right, so you would look at a royalty base of what does the decoder sell for, and then maybe you get .5 percent of the value of the decoder. I mean,

and maybe the jury should never see the bigger sales, and unfortunately that's maybe a *Daubert* issue, which we don't necessarily want to deal with, or maybe it's just an evidence 702 issue or whatever it is, but I don't think that putting the judges in the position of trying to reevaluate how much of a leap this invention is is a good use of judicial resources.

MS. MICHEL: How do you identify the economic value of the invention without thinking about how significant the invention was? Gary, do you understand my question? If part of the goal here is to decide what the economic value of the invention is and to compensate, doesn't it matter whether this is a minor advance with several alternatives or a major advance with no alternatives? No, why? Phil? No, I went to Gary? No.

MR. JOHNSON: Because some of the greatest technological advances are commercially valueless and some of the most valuable from an economic standpoint advances may not rise to the -- obviously to be patentable, they have to meet the patentability standards, but they may not be valuable in comparison to the technical advance that they represent because think about I don't know, gene splicing, when it happened it was scientifically fabulous and commercially valueless

for a long, long time.

Other things are very small advances that put some technology or a product over the top to make them fabulously valuable.

MS. MICHEL: That would be an economically valuable patent then?

MR. JOHNSON: Yeah.

MS. MICHEL: The gene slicing, an example would be helpful here to understand how you could have a very economically valuable patent that did not make a significant contribution as compared to the prior art.

The gene slicing example, why is that -- why is that not commercially valuable? Is it because there's not infringement? Is it because there's not a product to protect the infringement?

MR. JOHNSON: Well, at the time it was invented, it wasn't commercially valuable. It took years before other things happened, further development, and then it did at that time become commercially valuable, but it was not at the time it was invented as opposed to -- think of my favorite, which is -- I don't know if it's patented or not, but in hotels, I spend a lot of times in hotels, is the curved shower curtain rod, and it's great, and it's in every shower apparently in every hotel in America.

MR. LASERSOHN: He must go to different hotels than I do.

MR. JOHNSON: Technically perhaps not the biggest leap, but commercially, I'm assuming very commercially successful. Now, every invention to be patentable has to still at some level meet the inventive standards.

MS. MICHEL: Let's go back to the shower curtain idea there. Are you suggesting because it's commercially successful there should be very high damages then, even though it's not technically much of an advance?

MR. JOHNSON: Well, whether they're high damages or not would depend on all the *Georgia-Pacific* factors, among them whether the infringer was selling a lot of them and when they decided to do it, and once every hotel room in the country already has one --

MS. MICHEL: It's not cost.

MR. JOHNSON: Well --

MS. MICHEL: Or not capturing different costs.

MR. JOHNSON: People may not pay much for one now that every hotel already has one. There are all kinds of factors, and so it would depend on the circumstances of the case.

You can't just say: Well, because it's popular,

and the other thing, inventions change in value a huge amount during their lifetime. Like in the gene splicing, a classic area is in AIDS drugs. You get a new protease inhibitor that works for highly experienced patients who are running out of treatments.

It's very valuable, but then after awhile, after it's used and AIDS develops a resistance to it, it becomes less and less valuable, and then the next new thing comes along, and that's what's valuable.

So you have to value the invention, and we generally value the invention at the time the infringement begins, and eclipsing technology is one way that most patents and most inventions lose value because of the next generation of technology comes in, and then nobody wants the last one.

MR. ADKINSON: Keith, you've been very patient. Thanks.

MR. AGISIM: Sitting next to Phil you have to be.

MR. JOHNSON: This is about our 25th panel together.

MR. AGISIM: Listening to everything that people are talking about I think it does -- *Georgia-Pacific* may play a role in figuring this out, but ultimately I think it comes back to you need to create an objective

standard. People have talked about wanting enhanced gatekeeping. Well, if you want enhanced gatekeeping, gatekeeping against what?

It has to be some sort of objective standard, and I think we all agreed earlier in this conversation that damage is compensatory and so what are you compensating for? You're compensating for the economic value of the invention, and depending on when the infringement is, that value can change.

It's like people's houses now. People's houses -- their values change a lot. The beauty of the house hasn't changed but the value of that house has. The economic value of that house has changed over time, and so it's the same thing here. You need to provide an objective standard, which I think would be the economic value.

Then the question is: Of what? I think we're talking about *Quanta* and sort of the essential features, of avoiding the problem you would raise, and you raised this morning of the computer comprising, and so I think if you have the objective standard, you're able to implement a lot of the gatekeeping that people have talked about, and I think when -- from a gatekeeping perspective, there's so much they can do pretrial, and that's important.

But I think there's also sort of a post-trial component. We saw this morning on some of the statistics where the awards from judges were substantially lower than the awards from juries. We assume that the judges are the ones generally getting it right that tells us that there's some discrepancy when they're hearing the same evidence. There would be a discrepancy in what they come out with.

I think the problem is now there are no mechanisms, there's no standards upon which -- the standards are too high so judges can't correct those issues when they do come up, and so I think some of the gatekeeping functions need to address that.

A potential solution of that area is to create more of a -- sort of more of a record to help the district court judge post-trial and on appeal, sort of we're all back in school, show your work. It would be great if you had the jury sort of show their work around damages, how do they arrive at it, how do they figure it out?

MR. ADKINSON: Thanks, Keith. Taraneh?

MS. MAGHAME: First of all, I think it's -- I don't know how many people here know this. I think it's worth pointing out that this huge judgment that we keep talking about, the 1.5 billion dollar, was actually the

one that was actually set aside, so I hate harping on something the judge itself found was not supported by the evidence and immediately set the judgment aside.

So with that said, there was also a suggestion that possibly because that was -- the judgment was in error and it was based on a royalty base that was too high because it was the whole price of the computer, maybe we should consider perhaps the selling price of the decoder.

That reminded me of something that was said this morning about the invoice price, and I think that's a totally wrong direction to be headed in as well. There is no correlation between an invoice price or a selling price of an item and what that economic value would be. The value of something that is sold at the time of sale could be very different from the value that the seller -- that the buyer gets from it by combining it with a product.

MS. MICHEL: Just I want to clarify that. They were talking about what the base side would be, not what the whole economic value would be, and why can't you get the economic value you want out of the base by adjusting your royalty rate?

Is it fair to just point to -- to say that that's not the economic value there in the decoder if

what they're really talking about is the base, not the whole economic value?

MS. MAGHAME: Well, I guess you could do it that way. What I'm saying is then you're artificially building a formula here because the sale price of the decoder could bear -- it's possible that it bears no relation to what the economic value ultimately should be, so that could be a factor that is taken into account, but there needs to be the ability to adjust the royalty rate to appropriately reflect the economic value at that point.

The other point about economic value is we keep -- several people keep saying this is an objective standard. I'm sitting here trying to think how is this an objective standard? Why are we saying determining economic value is objective, because how do we do that? In order to determine the economic value, you still need to go back and rely on those other subjective factors.

Whether you want to call them the *Georgia-Pacific* factors or whatever it is, you need to look at evidence in order to determine that economic value, so it is not an objective standard. It's the ultimate end result of where you want to get, and the objective standard for gatekeeping. Well, you can have objective standards for gatekeeping.

You could -- and we've talked about that I know at length in the patent reform debate and made a lot of proposals as to how judges can determine what evidence has been presented and what factors may be supported by that evidence and sent those factors to the jury. That's a possibility.

But I don't see that any of this can be labeled objective per se, because you still have to have the flexibility, and the flexibility is part of the subjectivity of this determination to start with.

MR. ADKINSON: Gary?

MR. LOEB: I think actually will agree with Dave on the point of the decoder, and maybe he wouldn't go as far as I would go, but on the issue of not looking at the entire value of the product all the time, I think that there is some middle line with respect to the royalty base, and I'll go back to the curved shower curtain example because maybe that's one that we can all understand.

Do you get a royalty on the cost of renting out the hotel room for having the curved shower because you claim -- because some clever patent attorney claims a hotel room that includes a curved shower rod in their hotel? And in that type of problem, should the judge have the ability, even if the claim ultimately says the

hotel room that includes this curved shower rod -- should the judge have the ability to say, well, really the invention here relates to the curved shower rod and your royalty base that should go to the jury is the cost of the rod, not the cost of the hotel room.

And I think that the judges should potentially have flexibility on that standard. I don't know that there's a lot of situations where that applies, but there's certainly some situations where that applies and you can sort of see that, but it's much more effective to come at it and much more understandable to come at it from that way instead of trying to grade the economic value of particular inventions and to say that some are class A or class B from an economic value perspective.

MR. ADKINSON: Bryan?

MR. LORD: Two points. One, the question was asked earlier how do you know if there's value. The very simple answer is: Was there infringement? If the technology has been used, it's I think a rational assumption to conclude that there has been value derived.

Most rational organizations do not add elements to their technology offerings because they add no value. Most add them because there is some value, so I think we can sort of stipulate to the fact that, as my comments

were earlier -- if in fact we found infringement we should be able to conclude that there was some value that was derived by that, no matter how -- we can argue about significance, insignificance, rate-based and the like, but I think we should be able to assume that by implementing, a user of the technology has concluded that there's been value there.

The second point, going to this objective standard item a little bit, I'm a young guy, and yet I'm going to say I can remember when kind of comment, and this whole debate, if you all recall, started back I think it was 2005.

The most important issue that was being raised by the proponents of the patent reform legislation now was injunctions. Do you remember we had the whole issue about Blackberries and the like? And that issue went away as we all know. *eBay* was passed by the Supreme Court, and that fell off the legislative radar screen.

Yet that was far and away the most important sort of sky is falling type of scenario. If you remember Blackberries might have been taken away from legislators that was really driving the legislation.

After that case occurred, most people I think would assume it's pretty difficult to get an injunction, if not possible to get an injunction, these days. We

could comment on the strategies of that from a negotiating perspective, but let's assume that it's pretty difficult to get.

Then we moved into this era of apportionment. Apportionment was the buzz word of the day for a long long time, and suddenly apportionment was sort of a dead end. That didn't curry favor. That was certainly, as Jack described, an effort to simply reduce the damages amount, after we got passed the injunction issue to say, how do we reduce the damages amount from a legislative solution. Apportionment was advanced, and obviously that didn't advance.

Here we are doing exactly the same thing with just different -- a different name. This objective standard, the economic value of the feature is an entirely subjective just by a different standard that basically changes the negotiating dynamic once again, and this is a marketplace. This is a marketplace where there are buyers and sellers, and we ought to drive towards willing buyers and willing sellers as our standard and that is subjective.

It's in the eye of the seller, and it's in the eye of the buyer and a negotiation that comes to derive that value. To suggest that we're going to have some sort of an objective standard I think is faulty.

I'll point out a situation in the apportionment debate. If you recall, some folks talked about, imagine if there was a situation if someone had, I don't know, like a delay switch on a windshield wiper. Would we really consider that to be something where you should actually get royalties on the end value of the car? We talked about apportionment being a good example on how to solve the delay feature on the windshield wiper.

And lo and behold, whatever it was 18, 24 months, a movie comes out about the delay wiper on windshield wipers, genius, right? And it talked about this inventor who came up with the delayed feature on the windshield wiper and how all the car companies were ignoring the inventor and clamoring for a way to put this windshield wiper into their car to drive the sales of their next year feature on their automobiles.

There was big shows, and we have windshield wipers that delay, buy our Buick instead of that crummy Ford because you don't have a delay feature on your windshield wiper, so we've got cases -- Hollywood has taught us about cases where incremental improvements actually drive sales of end products.

And it's another example about how today we would think it would be preposterous that there be an objective standard around the value of a delay feature

on a windshield wiper, but there was certainly a day where that inventor should have been entitled to have a negotiation with Ford or with Chrysler or GM and say, here's my invention, would you like to have the competitive advantage of adding it to your product. And I think that's what we can't lose sight of.

MR. LASERSOHN: So I would like really to agree strongly with what Bryan just said and expand on it a little bit because in fact that is how innovation occurs. It occurs in this very incremental way, tiny little improvements where the goal isn't sort of to get paid some abstract value for how many hours it took to make the invention, but rather to get the economic value.

It's interesting that every single case that we've just talked about here can be looked at both ways, so let's go back to the shower curtain example, and the point was: Well, what's the value of that? I could buy it from somebody for X price here if somebody offers it cheaper. Well, it is possible that people actually changed which hotel they would stay at on the basis of did it have the shower curtain or not.

Now, I have no idea if that's true, but that is -- that is one of the ways to think about economic value, which is actually the way that most innovators

think about it. They are not looking to get paid a tenth of a billionth percent of a royalty on compensating them for their time. They're looking to capture the economic value that the invention has on an entire marketplace.

Now, Phil is probably too modest to use this as an example because it's a Johnson & Johnson example, but in the case of coronary stents, the addition of a molecule to the drug coating the stent -- the addition of a molecule, a change to a molecule to the drug coating on a stent could affect and did affect the likelihood of that stent becoming thrombotic or non-thrombotic, and that complication was only 1 percent, so you're talking about affecting something in the market that maybe only had maybe a 1 percent change, but basically it was a commoditized market.

All the other stents were roughly the same. The introduction of an invention like that could shift -- where the drug coating or drug itself cost virtually nothing in terms of -- could shift a billion dollars, a billion dollars of profit to the company who licensed it, so it only becomes a question of: Who is entitled to that profit?

A company that choose to do it and infringed and made the extra billion or the inventor? That's really

what it comes down to, and in that case I would argue the inventor's entitled to that, not the infringer. If it shifted the entire market, the inventor is entitled to that because his invention caused that to happen.

Now, it gets vastly more complicated because you would say: Well, you have to have a stent business, and you have to have licenses for stents and all sorts of other things to do it, which gets into this hypothetical negotiation, which is: Well, you're right, I couldn't get the whole billion dollars, but look at how much this one little tiny change meant in terms of economic value, let's negotiate.

I don't think you can simplify it beyond that. Every example that you could come up with, including the MP3 player in Microsoft Windows, had the potential to become that kind of effect. Would people buy an operating system without an MP3 player? The answer today is no. I mean, you would actually not buy such an operating system.

So these -- talking about sort of a hypothetical how big is the invention or how important, how many hours it took, how smart, was it a genius who did it is not the point. It's the economic impact that it has.

MR. ADKINSON: Marian, how does this correlate with what you were saying before?

MS. UNDERWEISER: Thank you, yes. I think we have to distinguish here that it is not a one-to-one linear relationship between how inventive is the invention versus how much economic value it has. I think it's clearly true that an invention will have value that depends on its context, how it's used, how it's implemented.

So, for example, you can have a significant technological invention that is way before its time and is not used until after the patent expires. It ends up garnering for the patentee nothing, so the point is you do need to distinguish between those two. They're not going to necessarily correlate with each other, but that doesn't mean that you can't discard the question of: Well, what was the invention?

And once you figure out what it was, you can ask these other questions: Well, is it the basis for market demand, for a larger product? That's when those questions became relevant, but in order to ground the question, you have to start with trying to determine what really is the invention here.

MR. ADKINSON: Phil?

MR. JOHNSON: Well, what the invention is is what the patenting process is all about. We spend an awful lot of time in the patent office arguing over the

appropriate claim to be the definition of the invention, and the invention could be an improved hotel room, and it could be that -- and I doubt people are booking because of the shower, but it could be that the data would show that people have a more pleasant experience in the hotel, and that hotels find that if they install these shower curtains, that they have a lower vacancy rate.

I would guess -- I don't know what they're sold for. Maybe it's quite a lot, but I know that whatever they're sold for, the inventor is sharing the value of the shower curtain with the hotel chain. If they weren't, the hotel chain wouldn't be installing them in all these rooms. That's as with all -- as with all inventions, the inventor who prices his invention to try to garner 100 percent of the value, if it's a billion dollars, and keep it all for himself has an invention that is never adopted. You must share it down the road.

I think that a far better way than to try to dissect a claimed invention into its sub-parts is to compare it with its closest non-infringing alternate, which Gail suggested this morning, and I would agree. In our hotel room case it would be the hotel room with a straight shower curtain or who knows, some other type of shower curtain if that was closer, that was non-

infringing, and then to compare those values.

Whether it's at the sale of the shower rod or at the hotel room, may be a matter of the convenience of the parties negotiating the deal. They might do it on a lump sum. They might do it on a per rod basis, or they might do it on a percentage of the drop in vacancy in the hotel, but these are things that routinely happen in the business world in different business models.

And the law shouldn't try to impose an artificial approach to -- in thinking of one thing in mind, and when there are an infinite number of circumstances for which no single rule will fit.

And just a final comment, *Quanta* had nothing to do with valuing an invention. As Bill Rooklidge points out, it had to do with how much of the invention an inventor could sell, and still retain control of unpatented products downstream, and when the inventor sold essentially all of the invention except some trivial items that weren't included. The Court decided it would be unfair to allow the patent owner to control downstream commerce.

It had nothing to do with it arriving at what the invention was worth. Valuation and what it was worth, the royalty percentage, was not part of *Quanta* at all, and to take some dicta out of that and try to

pretend that the Court opined on the value of inventions is simply not what the case says.

MR. ADKINSON: David?

MR. SIMON: So a couple points. First of all, I want to be clear that I agree with both Jack and Phil that sometimes it would -- could be viewed as Oh, gee, you change three or four molecules or you changed three or four little things, can make a significant difference in the value of what is patented.

However, I do think trying to use the artificial constructs, since the United States does not require a Jepson format claim of trying to put everything that's in the prior art up in the preamble and only permitting in the body of the claim what is new and non-obvious, you really do have a problem.

There are articles written saying write claims to cover systems because you can claim a bigger royalty base. That makes no economic sense to me, that the patent attorney's decision on how I write the claim is what's going to determine what the royalty base is. I just think that's wrong.

And I would also respectfully disagree with Bill and Phil's reading of *Quanta*. I do think what the Court was saying is: Look, here we're looking at this, it's in essence double-dipping. We're not going to permit this

type of double dipping because we can look at this and we can say: Look, the addition of the memory, the addition of the other things -- I forget what the claim was, although I should know it better than I do. I think we had some involvement in that case.

And I do like to kid my colleague who was involved in the license about one of the Justice's comments about the license, but anyway going back is that was saying: Look, we can look at this, courts can look at this and say this is not permitted because we can look at this is and that's not what you invented. You didn't invent the memory. You invented what in essence Intel sold.

Whether that's right or not I won't comment.

MS. MICHEL: Marian?

MS. UNDERWEISER: I echo the remark about *Quanta*. I do think that the Court was regarding additional recoveries duplicative.

The other point I wanted to make was that I think that I actually agree with Phil's example, and I think that this was an example -- it's very similar to the example I used before in talking about non-infringing alternatives.

The issue is not to -- I don't think we discard the learning that we have from so many years of trying

to determine what's appropriate for damages and the economic value of an invention. It's that by focusing on the substance of what was invented, focusing on the essential features, I think that informs using many of these other tools, so that's how you can tell the difference. That's how you can figure what the closest non-infringing alternative really is.

MR. ADKINSON: Kevin?

MR. RHODES: I disagree with the notion that the invention is something different than what's claimed. I think the claims define the invention. That is a question of claiming. If there is a perceived problem in how claims are drafted, that's a different question from that of damages.

When it comes time to determine how to draft your claim, and say there's a strategic element there certainly, but part of it is the more elements that you're adding to the extent you're claiming the hotel room with the curved shower curtain, when then I guess condos don't infringe, right?

So there's a balance here that we're reaching, but once that balance has been reached, and the claims have been issued, I think it's a wrong approach to think that we can dissect the claim into its elements and then inject a second validity analysis into the damages

calculation.

As to *Quanta*, I mean, the essential features of the invention sound a lot like prior art subtraction to me cloaked in a Supreme Court case, so now it has the premise of having more validity, but I echo what Phil was saying. *Quanta* had nothing to do with actually ascribing value to an invention. It did have to do with double-dipping.

Whatever that value is, where in the value chain does the patentee exhaust that value? It didn't talk about what the invention is worth, much less dissecting the invention and what are particular elements of that invention worth. And I think the idea that we would get better, more objective damages law by going through the entire liability phase of the trial, then we come to damages, and we essentially re-create validity to determine what is the essential feature or the novel aspect of the invention.

And then of course since that analysis leads to zero values for combination claims, so the Post-it note for example is worth nothing . The Post-it note adhesive was old, it had been separately patented. Paper of course was not new. You get no value.

But the Court was careful to distinguish Aro and say, this doesn't apply in the sense of combination

claims. Now, we have another layer of complexity. Is it a combination claims? Well, most claims are. Maybe this is. Maybe this isn't, so the idea that we're going to get to a better end state comparing the law to date to where it will be with this more objective standard I think is a fallacy.

I don't think it's going to add any objectivity. I don't think it's going to simplify, and I don't think it's going to have any effect other than to lower damages awards, which may be the intended effect.

MR. ADKINSON: Thank you very much, and I guess I now -- the phrase layers of complexity resonates. We really appreciate all of your thoughts.

I would like to have you go around and give one last set of thoughts, anything you're thinking about, the extent to which there's a problem, and if so, what you think might be done it or whatever other thoughts you might have.

MS. MICHEL: Last chance for comments. We're wrapping up.

MR. AGISIM: We did talk earlier, in our industry, there's a clear problem. I think it's well articulated, well documented.

In terms of the solution, I think you need an objective standard. I think it should be based on the

economic value. If damages are not based on the economic value, then there is something wrong. What are they being based on? So I'm not sure where the -- why there's so much fight over that, but I think regardless of what the standard is, you really need to have gatekeeping in a significant way that can deal with it both pretrial and post-trial.

MR. JOHNSON: One of the problems with non-practicing entities from my conversations with my counterpart in the tech industry is that they are being held up, if you will, by the cost of the transaction involved in litigation, that is the 3 to $5 million, and they are being coerced to settle without regard to the merits of the claim.

Whatever we do, we should do something to discourage people from bringing frivolous actions and taking advantage of the fact that uniquely, as many have pointed out, in this area frivolous cases can impose such a burden on the defendant that they can extract large amounts of money from them.

I don't know if loser pays is the right way or what else is involved, but something needs to be done to stop people from abusing the system at that level.

MR. LASERSOHN: I'll make two quick points. The first is that I don't think anybody disagrees that

economic value is the core idea that we are searching for, but that is very different than economic value of an essential feature or economic value of the invention over the -- contribution over the prior art. That is not the same thing.

So I think that that is the core of our disagreement because that is a fundamental change, fundamental change in the damages system. It will have unintended we think very adverse consequences, and we should be honest that it is in fact a proposed major change in the way we think about this, number 1.

Number 2, during the stakeholder meetings, I think NVCA was actually very sympathetic to the possibility that there were outlier situations. I mean, every system produces black swans as we all know now, and it is very possible that there are true black swan situations out there, real outliers where some truly insignificant component leads to ridiculous damage awards because the jury is somehow incapable of keeping complicated thoughts in their mind.

For example, the problem of how do you make the royalty rate low enough against a larger base to make the economics work? They just can't do the math perhaps. In those situations we proposal, let's deal with the outlier, that our friends in software, for

example, are worried about.

If there are cases where there is -- the contribution of the invention is truly insignificant, has really insignificant economic value, doesn't shift the marketplace, it doesn't save a lot of money, it's just a different font for the letter F in Microsoft Word, that could be cut out as a special case. That's the way to deal with what is perceived to be some sort of black swan type outcomes here, which we would in fact be happy to support.

MR. LOEB: I think one of the interesting issues raised in some of the positions of Dave and Marian is in some ways we're incentivizing innovation for really expensive products if we're allowing these, and we're not incentivizing innovation for things like forks where you can't claim something that's really expensive in connection with your innovation.

So I think that's sort of a fundamental policy decision that: Is there some sort of bad situation that arises from that. And that's where I sort of sympathize with these patent claims that try to claim more than what they should with respect to the invention, but I do think that coming at it from a damages standpoint is very wrong-headed.

I think that we haven't actually seen a whole

lot of really bad damages cases, and most of those that we have seen have either not been upheld or can often be explained through specific litigation tactical decisions, so I think there's actually surprisingly few.

I think actually one of the reasons for that is that thankfully patent cases are in federal court, and I think the quality of justice you get in Federal Circuit is maybe a little bit higher than what you get in state court, so we don't see the type of runaway case that you see in products liability or other situations like that.

So I do think that the way to come at this is really more from a patent reform system. Are there things to the patent system? Do we need to open up post grant opposition proceedings so that patents that seem really obvious can be challenged early on, so they can't be held up against companies that might practice them, or things like that that are ways to deal with most of the issues? But I don't think the right way to come at most of this is from a damages perspective.

MR. LORD: So I'll agree with Jack again. I think everybody agrees about the intent here to look at economic value. It's a question of what nuances have been put on that term. Paul Romer's a pretty

influential these days economist, and he talked about the fact that innovation policy is the single most important policy matter that our country faces these days.

What he did was he contrasted between two different circumstances. One where there's a decreasing returns to scale type of regime, it's sort of zero sum, winners, losers, and frankly it echoes a lot of this debate here: Who should win, who should lose, what should be the spoils?

That's fine, we can have that discussion, but Romer really talks about this increasing return to scale regime. It's part of his emerging economics view, and he distinguishes the old regime with the new, and the difference is ideas, and he talks about how important ideas are in the paradigm of the old, which is decreasing returns to scale, and ideas which are increasing returns to scale.

Those ideas he talks about fundamentally need to be protected for all the reasons that Jack, and I hope I, have talked about. You need to encourage people to take risks. You need to encourage entrepreneurs to take risks with their time and venture capitalists take risks with their money, and the difference between whether we protect ideas or decrease the protection for ideas is

the difference between whether we live in an economy that has decreasing returns to scale and is finite or whether we live in an economy that has increasing returns to scale, and actually has limitless possibility.

MS. MAGHAME: I agree with a lot of what's been said here, and I think my company is a good example of one that was willing to take the risk, and the reward was there, and in today's climate -- I mean, I don't know if 15 years ago we had the same debate now, whether the company would have taken the risks it did, but there are a lot of companies out there who are licensees who are happy that we did this so we need to have the reward system there.

Looking at this at a higher level, on a global scale, really the only thing we have right now in our economy is the competitive advantage that we have because of the knowledge base, because of our intellectual property. That's really the competitive edge we have over the rest of the world.

And starting to attack it from all angles is going to allow us to lose that, and where does that leave us? I think Judge Rader just said this two weeks ago at a conference that I was at is: Let's take the discussion a few levels up and talk about how can we

establish IP laws such that they will promote competition, and they will help us with our economy?

And I think that's what we're all talking about here is how we can do this so as to not create a bad situation for us, not to damage ourselves?

Now, a lot of issues came up over the last few years that people said needed to be dealt with, and if you look at the history of what the courts have done over these years, they've dealt with just about every one of those issues. We had issues about injunctions. *eBay* took care of that.

We had validity issues with patents. Are there bad patents out there? Then we got *KSR* with the non-obviousness standard being strengthened. Exhaustion, *Quanta* recently came down dealing with that. We've got willfulness and *Seagate*. Venue issue, *MedImmune* to some extent has taken care of that, so the Courts have really been able to deal with these issues.

At this point to step in and say, we need to legislative reform damages standard I think is unnecessary, particularly since as we've discussed several times here, the data is not there to support the statement that there is a problem.

Yes, there are outliers. Courts have dealt with some of them. There's outliers in every area of the

law, but we could seriously damage ourselves by coming in at this point and saying we need legislation to fix a problem that really doesn't exist and why don't we let the system fix itself the way it has with some of these other cases, and let's focus on the patent quality.

I mean, that's what this all boils down to. When we're talking about NPEs, we're not talking about companies -- at least I don't think we're talking about companies like Tessera who spent hundreds of millions of dollars developing technology that is valuable to the industry.

We're talking about bad patents. That's what I always understood it to mean, whether you call it troll, NPE, whatever you call. It we're talking patents that should have never been issued, so let's focus on issuing the quality patents. Let's focus on making the PTO function in a way that allows us to do that.

MR. RHODES: I think the other panelists have made my points very well, so thanks again, Bill and Suzanne.

MR. SIMON: I promised in an effort to get everybody out of here that I would pair myself with Kevin, so I will pass on.

MS. MICHEL: Good enough.

MS. UNDERWEISER: Well, I'll be brief. I think

that it is important to recognize that our intellectual property is a very significant asset of companies today in the United States and worldwide, but certainly with the economic crisis that we're facing, it's very important that our treatment of intellectual property encourages innovation.

And in addressing this issue, the thing that I think we really need to focus on is how to encourage the development of innovation, how to encourage its implementation and products, and how to do that by improving the IP market, by improving the efficiency in how companies come together to trade IP rights.

And so that's why it's important to be able to come into a licensing negotiation and have both parties understand and be able to agree on the value of an innovation, and that's the goal for the proposals that I have described I think at this point and what I'm proposing.

But that's the goal of those ideas is to make sure that this market functions efficiently, so that innovation is encouraged and makes it to consumers who are looking for it.

MS. MICHEL: All right. Thank you, everyone, for your participation and your energy and your interest.

As I mentioned this morning, we will continue to accept comments through May 15. I believe the web site was down last week for submitting comments. If anyone tried it, it's back up, and also feel free to contact us. We would love to hear from you. Thank you.

(Applause.)

(Whereupon, at 5:10 p.m. the workshop was adjourned.)