FEDERAL TRADE COMMISSION

THE EVOLVING IP MARKETPLACE

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the Berkeley Center for Law & Technology,
and the Berkeley Competition Policy Center

Held at the
The Haas School of Business, Cheit Hall
University of California, Berkeley
2220 Piedmont Avenue, Wells Fargo Room
Berkeley, California 94720

FEDERAL TRADE COMMISSION

I N D E X

PANEL 1: THE NOTICE FUNCTION OF PATENTS

MODERATORS:

BILL COHEN, FTC

BILL ADKINSON, FTC

PANELISTS:

DAN L. BURK, Chancellor's Professor Law, University of California, Irvine School of Law

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MICHELLE LEE, Head of Patents and Patent Strategy, Google, Inc.

JOHN T. McNELIS, Partner, Fenwick & West

PETER S. MENELL, Professor of Law, Boalt Hall and Director, Berkeley Center for Law & Technology

VERN NORVIEL, Partner, Wilson Sonsini Goodrich & Rosati

LEE PETHERBRIDGE, Associate Professor of Law, Loyola Law School, Los Angeles

KEVIN G. RIVETTE, Chair, PTO Patent Public Advisory Committee

JASON SCHULTZ, Acting Director, Samuelson Law, Technology & Public Policy Clinic

P R O C E E D I N G S

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MR. ADKINSON: Good morning and welcome to the second and last day of our hearings here in Berkeley. And, indeed, the final day of hearings on our project on the Evolving IP Marketplace. We are welcoming public comments on the project. And the closing day is fast approaching. It's ten days from now, on May 15th. So please get your comments in as soon as possible.

My name is Bill Adkinson. I'm an attorney in the Policy Studies Office of the Office of General Counsel at the FTC. It's my pleasure today to introduce the Notice Panel, the panel that will discuss the notice function of patents.

We have an extraordinary group here. Their bios are posted on the website. I tried my best last night to break with tradition and come up with intros that were both -- did justice to the panelists and were short enough and I failed. So I'm going to give our better introductions, but please encourage you to -- if you are going to be looking at

that transcript, or listening to this, peruse the bios, as well. They really are quite -- quite interesting.

The Panel is going to address the extent to which the patent system adequately fulfilled its notice function. For example, ensuring the firms who are seeking to develop or license innovative technologies and attain clear and timely information regarding the existence and scope of relevant patents and patent applications. Specifically, panelists will consider how various patent law doctrines and patent examination procedure affect notice through, for example, affecting the clarity with which claim scope can be determined. Panelists will also discuss the extent to which the sheer number of potentially relevant patents can impact effective notice.

And, finally, we're going to consider what adjustments might be made to the system in light of this discussion.

We have nine panelists who -- we'll start with Dan Burk, who is the Chancellor's Professor of Law at the University of California, Irvine School of Law;

Daralyn Durie is a partner at Durie, Tangri, Page, Lemley, Roberts & Kent;

Michelle Lee is Head of Patents and Patent

Strategy at Google. And she's here despite the fact that she's on sabbatical right now. So we're especially grateful to her for coming.

Peter Menell is Professor of Law at Boalt Hall and Director of our host, the Berkeley Center for Law and Technology. So we're especially grateful to him, too.

Vernon Norviel is a partner at Wilson, Sonsini, Goodrich & Rosati;

Lee Petherbridge is an Associate Professor of Law at Loyola School of Law, Los Angeles;

Kevin Rivette is -- not quite here yet, but will be here very shortly. He is the Chair of the PTO, Patent Public Advisory Committee, and a member of the Intellectual Property Hall of Fame;

Jason Schultz is the Acting Director of the Samuelson Law Technology and Public Policy Clinic;

and, to my left is Bill Cohen, who is a Deputy General Counsel and head of our Policy Studies Office, and is the person who has really spearheaded this effort to do a full and complete effort on studying the notice function.

MR. COHEN: Thank you, Bill.

And thank you all for joining us. I think we should just plunge right in and then probably start with a

fairly general question to get everybody's perspectives out on the table. I think the place to begin is with the issue: How well do you feel the patent system fulfills the notice function? And by notice function, what I'm concentrating on is a enabling firms to identify patent rights that could read on their products -- on products they plan to design and produce. And the provision of information necessary for license things and financing arrangements.

So how well do you all feel that the notice function is being fulfilled? And what I'll suggest is that anyone who wants to comment, you can turn your nameplate up on its side and I'll be able to call on you.

Michelle?

MS. LEE: I speak from the software industry perspective. And, from my perspective, the notice function on patents is not well served at all. That's primarily because many of the software patents are very difficult to understand in terms of meaning and in terms of the scope of their boundaries. This is due to a couple of factors. One is in the software industry, there is a lack of a common vocabulary. And also a lot of the software patents fail to teach of the invention itself. So I'd like to go into a little bit of detail on those two points and particularly

the lack of common vocabulary.

In contrast to fields such as chemistry, and certain areas of electronics, which have a greater degree of shared common vocabulary and terms with well-understood meaning, such as a carbon atom, resister, a DRAM. The software industry generally consists of abstract concepts that achieve a certain functionality. And it's up to the software programmer to make up a term to describe that functionality.

So when I say, for example, that this is a knowledge engine, or a modified software identifier, there's no commonly-understood meaning. And oftentimes when you look to the written description there's no support in the written description. So you are left with are the very broad terms that do not shed a lot of light on the meaning.

Secondarily, in chemical fields, if you provide a chemical equation, or a circuit diagram, or a mechanical drawing, it's pretty clear what is taught in those situations. But for software patents there's little to no teaching of the invention.

Functional claiming is very prevalent in software patents and code is not required. And at best you get a high level flowchart. And most software engineers don't

turn to software patents to determine how to write a bit of code. You might look to a software patent to determine what your competitor is doing generally, but not how to program it or to code it up. So there's not a lot of teaching going on in that space. And so in those two regards there's quite a bit of, well, what I'll call lack of clarity and boundaries in software patents. And there's a failure of notice there.

So I'll stop there and I'll let my panelists continue.

MR. COHEN: Well, that's interesting. And your focus on the software industry, in particular, leads to the further question, which we should consider at the same time in answering how well does the patent system to fulfill its notice function. Does this vary from industry to industry? Think about that as well.

How about Dan?

MR. BURK: Sure. Well, I think Michelle has pointed out that it doesn't vary from industry to industry, in part because and of what she's -- what she's indicated to us, which is different industries have different types of nomenclature, different characteristics. So that's actually not surprising.

We also shouldn't be surprised if -- particularly in the court system and among those of skill in the art, engineers, or scientists who are reading patents there are the difficulties that Michelle describes in understanding technical terminology. You know, district court judges are typically not scientifically or technically trained. It wouldn't surprise us that it takes them a while to figure out what a particular technical terminology means. So that's clearly an issue but not a surprising issue.

The thing I would suggest as a surprising issue to us, and we can see this, you know, when we look at *Markman* hearings, when we look at the process of construing claims in court, is that that's not what the fighting is usually about. All right, we now have a long series of cases where people spend millions of dollars fighting over terms like, "through", "the", "a", "to", "beside."

So aside from the technical problems that you would expect to vary from industry to industry, and you expect to be a problem in a patent system as being administered by -- at least partly administered by people who aren't technical experts, there's the problem of indefiniteness and lack of notice, due to indeterminacy about what you would think would be very common terms that

even a non-technically trained judge would be able to deal with.

Now part of that is just language, right. Language is imprecise. That's why we have law schools, that's why we train lawyers. Lawyers are good at playing word games for their clients. That's what we teach our students to do. So, again, that wouldn't be terribly surprising. But the very nature of the claims I would suggest contains a fundamental problem, which is we often like to compare patents to the meets and bounds of a description of physical property. Real property is the usual analogy.

When we deal with patent claims, though we are in quite a different situation, right. We're not talking about, first of all, language that has a fairly socially-stable determined meaning, like you might have survey data or GPS data, or some other way of describing physical property. You're not dealing with a stable and deterministic type of thing, you know, reis, like a piece of physical property.

You're dealing with an invention, right, which may have lots of embodiments, some of which may not have even been thought of by the inventor at the time the claims were

drafted. So there's an inherent problem of notice within the concept of peripheral claiming itself that we say is now central to our patent system, that is in addition to the problems that Michelle has already started to point out to us.

MR. COHEN: How about Vern?

MR. NORVIEL: So I only work in the healthcare industry. All I do is start small biotech companies. So that gives you my bias. And since we're in Berkeley, I guess I can take a radical view maybe that perhaps things aren't too terribly broken.

And the reason I say that is -- and I think it's very important that we not try to fix things that aren't too terribly broken. We have a healthcare system in the United States that does produce innovation. It is by far the leading innovator in the world. Biotech companies are financed.

I was at Johns Hopkins University yesterday working on companies that are starting. They have -- one of them has a stem cell technology to repair Achilles tendons. The other has a microfluidic technology to help pick the right drug for a cancer patient. These are extremely important things.

In the healthcare industry there is zero tolerance on the part of investors and partners for patent infringement. So I live in an industry where we must figure this out or money doesn't flow. And in fact we can figure this out and companies are financed routinely.

I think that maybe there are some differences perhaps in the way the system is implemented, is what my assertion would be. In healthcare in the Patent Office, things like written description and enablement are extremely rigorously enforced. The laws have been there for a long time. There are lots of foggy situations in biology, but the examiners don't let you get away with it.

So the patent system, -- when we go through and start a company we can go through thousands of patents and we can figure out if there's a problem or not. And investors will put money in based on that.

So we need to be very careful, I think, if we go tweaking the system too much, to make sure that we don't throw out a very important part of our system. It's creating great healthcare innovation. The Silicon Valley high-tech investment actually was beaten out by biotech investment for the first time a year or two ago. So it's creating a great number of jobs in our system, especially

here in the Silicon Valley, San Diego, Boston, places like that. So I think we need to be very careful not to throw the baby out with bathwater here.

MR. COHEN: Now we've heard different perspectives from different industries. Let's try Lee Petherbridge.

DR. PETHERBRIDGE: Thank you. So I think I actually want to actually echo some of Vern's comments and sort of talk about them a little bit more generally. I mean I think that the notice of patents can probably -- the notice function of patents can probably be improved. But I don't know that it's a foregone conclusion or altogether clear that the notice function of patents isn't sort of effectively fulfilled by many patents. Right.

And I think if you take sort of just a general look at things, by some counts there are 1.7 or 1.8 million patents in force. Only a fraction of those are really thought to be of any economic significance. Only a fraction of those produce actual disputes between firms. And, of those, only a fraction involve the filing of a complaint, an infringement complaint. And of that fraction, only a fraction reach a judicial decision on the merits. And, of that fraction, only a fraction are appealed. And of those that are appealed, the Federal Circuit agrees with the trial

court's determination of what the scope of the patent actually is just over two-thirds of the time. All right.

So from that perspective -- and then the Federal Circuit is doing maybe 80 to 120 claim constructions maybe in a year. Right, and so, you know, when you start with 1.7 million or 1.8 million patents, and you are down to these kinds of levels of disputes, you might say to yourself that many patents might actually be drafted reasonably well and they might actually provide pretty good notice, at least in general terms, which might suggest that radical fixes might not be needed and, in fact, may be something more marginal would be appropriate.

On the other hand, I mean so I think some of those figures at least suggest there might not be a major notice-function problem with many patents. But, on the other hand, I think conceptually some conceptual work has shown and, I think kind of convincingly, that there are lots of incentives for patentees to at least be vague, if they can be vague, and to maybe not spend lots of money trying to get patents and not trying to get expensive patents, if you will. And, in fact, maybe the incentives are aligned in a way to try to get lots of patents that are sort of a fairly vague so that there is some uncertainty about the scope. So

I think, you know, conceptually I think conceptual argument sort of pushes back a little bit against what some of the numbers might suggest.

And then I think this is a little bit amplified from maybe another conceptual perspective, which is to say, I think in sort of -- particularly since the *Philips* case, claim construction law has just sort of moved in the wrong direction in a way that sort of is going to cement an approach to claim construction that's going to lead to potentially, at least in the future, more claims that present themselves to judges and ultimately to the Federal Circuit, where they are sort of equally plausible interpretations for both parties.

MR. COHEN: I think I'm hearing lots of different elements, and perhaps to draw it together, would the rest of you -- have you comment on the notice function, in general, if -- you might want to think about helping us understand if there is a notice function, what is its nature? Is it -- are we talking about an inability to adequately identify and evaluate relevant patents because of their sheer number? We've heard a little bit of that, but we've heard a lot more in the discussion to this point already about an inability to understand the likely scope of existing claims. And I

think I've heard a bit of a hint of talk about an inability to project the likely range of claims that would flow from an application. Is it one of these? Is it all of these? Is it something else? Think about that if you address these questions, as well.

Let's try Daralyn, over here.

MS. DURIE: Thank you. I come to this from the perspective of a litigator who represents clients in a wide range of art areas, including pharmaceutical and biotechnology, as well as software and information technologies. And I do think that there is a significant difference, depending on the industry that you are in and how you perceive the problem.

In my experience in the pharmaceutical and biotechnology areas, it is generally reasonably easy to ascertain at least with that universe of potentially blocking patents for a particular technology might be.

I think that patent clearance studies are perhaps conducted less rigorously when you're talking about things like processes, methods of manufacture, purification techniques and things like that, because there is always the possibility of a design around, although even there there might be regulatory implications. But in general, I think

that the reason that it is easier to do that sort of patent clearance work in the pharmaceutical or biotechnology context comes right back to what Michelle started out by saying, a relatively predictable set of terminology that's used and, as was noted earlier, a more rigorous enforcement of written description and the requirements of this specification actually described that claimed invention.

In my experience on the IT side, it is virtually impossible to conduct a meaningful patent clearance, if you're talking about a product has a number of different components and that is complex.

We recently undertook this exercise for a company, with respect to one particular feature of one particular product targeted to one particular company and their patent portfolio. Even that enterprise again, you know, addressing only one feature of the product involved identifying the 160 patents from that company's one portfolio that might potentially be of interest and then trying to narrow that universe down to the patents were there might be infringement issues.

Two the extent that you're dealing with things like chips that you get from vendors, of course, it's often impossible to perform any meaningful infringement analysis.

And then narrowing it down further, not even looking at validity and trying to understand the scope of the risk.

An enterprise like that, again, one feature of one product, looking at one company in a subset of their portfolio runs into the hundreds of thousands of dollars. Extrapolating that out and trying to imagine the cost associated with performing comprehensive patent clearance work on a complicated product in the IT space, then you're talking millions and I think potentially tens of millions of dollars to evaluate a lot of patents, most of which never would see the light of day litigation, because we know that so few patents are litigated.

So you are spending an enormous amount of money with respect to the risk at the end of the day that probably is attendant to only a very small number of the patents that you have to evaluate. But because that risk is a function, not just of the quality of the patent claims but also underlying business considerations regarding, you know, whether the entity is practicing or not, and what their incentives are, whether they would have the ability to fund litigation. Who's holding the patent? Is not even as simple as simply looking at the quality of the claims.

So I think in the IT space, as a practical matter,

I know of very few companies who try to conduct comprehensive patent clearances. And I think that's just because it's not feasible.

MR. COHEN: I'm going to try to get everybody in on this first problem. Why don't we turn here to Jason?

MR. SCHULTZ: Okay. Thanks. So I think everyone has been identifying some of the annoying issues around notice, in particular, information costs and transaction costs, right? I mean, how much does it cost to do a patent clearance, or can you tell what your competitors are essentially patenting? You know, are the claim construction issues so burdensome that you might settle the case.

I mean, so actually I think it's interesting to think about what kind of metrics evaluate notice. If there aren't a lot of disputes, that might be a good thing for notice, as a value there or it might be a bad thing. Because if I can figure out what it costs -- it's going to cost me, or if I can figure out if I infringe, the burden of the information transaction costs are so high, I might settle the case even though I think I have a good case. Right.

So I think the metrics that we evaluate notice on are important to think about in both the information and the

transaction costs space. One of the things that we do at the Samuelson clinic is we represent people who can't afford lawyers. So we take on people who are non-profits, or very, very small pro bono cases, who actually have patent issues. They exist out there. They run websites. There are nonprofits trying to create medical devices. There are, you know, educational institutions who get threats around distance learning from companies that claim to patent that. And these people are in a very different situation than the ones who can litigate. I mean, the ones who can litigate aren't in a great situation, necessarily, but it's a different situation.

And so I want to focus on two things that I think are important to think about. One is, is this information transition cost issue in particular as a temporal matter? When do you have to assess that issue? Right. So do you assess it from a clearance freedom-to-operate point of view? Someone comes to you, wants to create a product, or wants to do something in those. But there might be patents out there. Do you assess it at the point when they get a cease-and-desist letter? And do you assess it then later when you're maybe in litigation, or if you're thinking about a re-examination or an opposition in another country,

something like that?

And I think the notice problem is a little different at each stage. I think the moment you encounter, the problem might change those costs. Because I think Daralyn made a great point about like if you're -- if you're trying to figure it out early on in the business cycle or in the product cycle versus if you are in court and there's an accused device, and you at least have some sense of what claims are being asserted, things like that, it's a different problem.

So that's one thing is the temporal nature of it, I think, changes -- and then particular for the clients I represent because almost none of them can really sustain a litigation. So they look mostly to other alternatives, design-around, re-examines, or -- or if they can get a license for almost no cost.

The second is consistency. And that is that -- I think, one of the problems which we can talk about later when we talk about prosecution too, is does the scope of the claims potentially change over time and what about the applicant or inventor and what they say about the scope of the claims? Then we'll get into that, too. But I think consistency of what the applicant or inventor wants the

claims to cover is an area that needs to be focused on more. Because I think their's a lot of wiggle room and the changes. As anyone who's been in patent litigation knows that changes a lot, what they say at one point versus another.

The last thing I want to say, also I just remembered, is about transparency about the information about the patents themselves. And we can talk about this later, too. I mean, there's been a real wealth of information that's come out in the last five or 10 years that you can get access to in terms of file histories for patents, in terms of when the patents issue, in terms of searching technologies. And I think that's a really powerful area to look at, as well as how much information can we find out at low information cost?

MR. COHEN: Let's take John and then we will return to Peter.

MR. McNELIS: Thanks, Bill. In order to provide a better context of my perspective, I along with my firm Fenwick and West work with companies to create and execute their patent strategies. And we work with a wide variety of companies, both in terms of size and in technologies, from small start-ups, or solo inventors whose sole existence,

entire existence of their company depend on protecting and in developing their intellectual property, to large established companies whose innovations are in a wide variety of areas.

A unique aspect of our practice is that we work in both the life science and in the information technology area. So we see the differences in those areas daily. In one area where there is a huge difference is in the notice requirements.

One example of that is if you're looking to do a product clearance search or a freedom-to-operate search. And when you -- when you look at that, there's three main areas that we look at. The first one is scoping the search. The second one is dealing with the lexicon, as Michelle mentioned earlier. And then also dealing with some of the limitations in publications.

Let me just go into a little bit more detail in terms of the differences between the life science and the information technology area, when you're trying to scope a product clearance.

In life sciences, that Daralyn mentioned earlier, the scoping of the search is much easier to do. There's typically a situation where you're dealing with a handful of

patents that are dead on your particular product, at least when you're talking about chemical compositions. It does get more difficult when you're dealing with processes.

But if you have a diagnostic or a specific chemical or a DNA sample, a snippet, that you're dealing with, you can do a pretty detailed search and be confident that you're finding those patents that are right on top of what you are doing.

Kind of a with a nod to old-time Chicago voting, you want to do searches early and often. And they do that -- life science companies typically do that because of a number of reasons, not the least of which is the FDA clearance and the clinical trials. You're spending millions of dollars developing this product and bringing it to market. You want to make sure throughout every step of the process that you're catching anything that has come out in terms of the interim between searches.

In contrast, in the IT area, a single product can have hundreds of different features and each of those features can trigger hundreds of patents that are of interest.

One example, if you take a portable music or a DVD player. That particular product, if you're going to bring

that to market, you'd have to deal with power supplies, displays, user interfaces, amplifiers. If you're -- you'd have to be doing some kind of decoding. So you would be working with the MPEG standard, maybe the MPEG-4 standard.

We do license clearances for the MPEG-4 standard. There's over 200 patents that are central just to that one standard. So with one feature in one product, you're dealing with 200 patents. You add wi-fi capabilities to that, you're looking at another hundred-plus patents.

So a simple, reasonably simple product, like a DVD player, you're looking at upwards of 500, maybe 1,000 patents that are of interest.

We did -- I'll generalize it a bit, but we did a search for a casino company looking for a new casino product. And we have to scope the problem. We have to identify the number of features that they wanted us to search, because there are too many in a new product to identify.

Ironically, this casino company wanted 21 features for us to look at. We looked at that and we then had to scope not only the features but, because of the lexicon issues, we have to figure out what the best way was for us to do the searches.

You can do some general patent searches with regard to the terms, but there's so many different ways to describe similar features, in particular in the IT area, that one of the strategies we employ was to take a look at their -- the major competitors of theirs. And we tried to focus it on that.

One of the problems we ran into, which I think we'll talk about potentially later, is the assignments are not always in order. Some -- some companies like to play games with the assignments. So we actually have to go and do a search based on specific inventors and then cross-cite specific inventors to try to catch all the elements. We came up with over 3,000 patents just on those 21 features. And we know it wasn't -- we know we didn't catch everything, because we didn't -- we only searched particular companies, we only searched particular terminologies, and so we know we missed everything. And the search, we ended up having to narrow that down significantly. But that's an extremely expensive process in the IT area, where it's a much more manageable process in the life science area.

MR. COHEN: Okay. Let's take Peter.

DR. MENELL: I prepared a presentation. I don't know if this would be the right time. It tries to

conceptualize some of this. But I don't want to --

MR. COHEN: If you can just try to fit it into, you know, just an overview response to how is the notice function working. I understand you have like maybe four slides or something you thought would illustrate this.

DR. MENELL: Yeah, it's --

MR. COHEN: That would be helpful. But -- but we are trying to keep this to a discussion format as much as possible.

DR. MENELL: I agree, and I will try to keep this very concise. And in fact a lot of the elements, I think, are on the table. So the idea in sort of an academic frame is to try to come up with a lexicon for characterizing the nature of this problem. And I do think it is a problem that's -- that's not fully mapped out in terms of the classic reference point, which is what are the market failures that patent law and, in particular, the notice features are attempting to deal with.

The classic problem for which patent law exists is to provide for appropriability. And I won't dwell on that, but the problem has been commented on throughout this two-day conference, is that we want to provide incentives. And, when innovations are easily observable, then it's going to

be important that there be some extra-market way of appropriating.

Now in thinking about the problem for this panel, it strikes me that in solving this first externality problem, we're creating a second externality problem, which I'll call a notice externality. And the characteristics of this externality is that someone who's trying to build a new business or create a new technology has a very high overhead, because of the problems that have been talked about in the context of particularly IT.

And I would say that it really, you know, is a clearance problem. And you could characterize other areas of assets as having clearance problems, but these are quite distinctive. And they're distinctive in part, and I don't think it's just a vocabulary issue. I agree completely with what Michelle and Daralyn commented on. But chemistry maps more like a two-dimensional space.

We've got periodic tables. We've got molecular structures. Once we move outside of those areas, it's not simply vocabulary. There -- I mean we would have to make dramatic advances in how we understand software and innovation relating to these very abstract conceptual innovations in order to really have parity with these other

areas.

So we can talk about direct costs, and Jason and others have talked about that, really the straightforward search and validity assessments. And then there is this cost which John just referred to. It's the unknown-claim cost. The cost where you can't easily find the art.

So we could -- I'm going to use the metaphor that Dan began with, which is the real estate metaphor. Okay. So if my neighbor and I are deciding on what to do with the border between our properties, we can for about $600 hire a surveyor who's going to come and give us what is a very reliable measure of where a boundary fence can be built.

But if we compare that to intellectual space, the footprint of ideas,- and I've represented that was a lot of lightbulbs, is not two-dimensional, it's multi-dimensional in ways that trigger these costs. And we see in the different systems different ways in which we try to manage those search costs. In the land context, we do it through registries. In the patent system we've got now searchable indices. We have Google's product, with have the Patent and Trademark Office product. But those are very rough tools in terms of being able to do -- I mean what we would like is to have another Google product, is Google maps. Okay.

We want to have really taxonomical advances. And if we look over in Europe, I think they put more emphasis on trying to come up with ways of -- of finding it. But, you know, this is an area that the Patent Office and people concerned with this problem should be very focused on. I mean we should have much more science of the taxonomy of patents if we're going to deal with this issue, and we put no resources into that problem. It's really -- you know, the only resources we have now are Boolean search capabilities. But, ideally, we would be coming up with the equivalent of periodic tables in the IT fields. We would try to deal with these fuzzy, overlapping boundary issues as a way of making the patent system tractable. And that only solves half of the problem, though.

Even if we had good maps, the other problem which has been raised here is the claim-construction problem. Lee highlighted it very well. We have what I'll call validity costs, which are even if you found all of those parcels that potentially encumber your business, you still have the problem that the opinion letters and claim-construction processes are really indeterminate.

And I can tell you from a lot of experience in judicial education programs that it is almost comical. I

did a program last week in Minnesota with 12 district judges where we argued three *Markman* cases, mini *Markmans* to three sets of judges in groups of four. And we asked them to evaluate, you know, which argument they found more persuasive and to estimate their confidence level: High, medium, and low. Okay. So on two of them the judges had either high or intermediate confidence level. And, among the three panels, they split evenly. So they were highly confident, and they came out differently. On the third, which is a very complicated technology, they had low confidence and they also split evenly.

So, you know, that tells you -- I mean part of the reason we did is was just to help the judges realize that you shouldn't feel badly when you get reversed by the Federal Circuit. When you do this exercise, you're going to see that it is a highly indeterminate -- it's really risk management. This is not defining boundaries. This is helping clients manage risk, which is a very difficult problem.

So what are some things we could do about this? And I just will put up a menu of issues and maybe --

MR. COHEN: And we will probably discuss most of them as we move forward.

DR. MENELL: Yeah, although some of these are a little crazy. You know, I'll put this out here, because I came out with these ideas really using the economic frame. How do economists talk about internalizing these kinds of problems or reducing these externalities?

Well, one thing, the economist always come up with first, which is always the least feasible, is pricing it, taxes. But we've already heard -- even yesterday, we heard -- I think it was Marshall Phelps said, you know, maybe we should have differential incentives here.

Well, one way is that the application fees could -- and I know people out here will say this is ridiculous, but it's just an idea. We could actually have different application fees in different arts, based on some rough metric of what we think these costs are. And that I think would have a deterrent effect, is if you're going to file a patent in an area that you're not really sure is worth filing, well, you should bear some of the costs you're going to impose on other people who have to navigate that patent. Now that's very hard to do, but at least one thing that we've heard here is that that price could very feasibly -- you know, I mean we could make a categorical distinction between chemistry and IT.

Now one of the things we could do with those taxes -- or from other sources, is we could subsidize innovations in taxonomy I mean, the classic subsidy solution and, it seems to me, we ought to -- given the problems that this panel has already identified, we ought to pay money to -- to help companies reduce -- this is a problem where government can do it better than an individuals. I mean there are some private solutions. I'm sure there are title search companies that, you know, are emerging and provide. But there is, as Daralyn explained, you know, when a company comes to you, you're still going to have to do a lot of the legwork yourself -- and if there were some ways of doing it.

Then a lot of the issues, I think, have at least some benefit, if you improve examination, that's a general solution, obviously higher quality and higher speed. Part of the problem is given that you can't even know about some of these patents, and so after your --

MR. COHEN: That is a topic we will return to.

DR. MENELL: Okay.

MR. COHEN: So if --

DR. MENELL: I won't come back to that.

Opposition, bounty systems, peer to patent. These are all things.

And, in terms of doctrine, for me it -- and I -- I'm -- I'm not even necessarily the mainstream here. I think 101 would actually have -- and dealing with 101 in a way that I think constrained patentability, particularly in -- in the software arts and business methods, would reduce this problem, given the a lot of the problem is focused in that area.

What Dan mentioned this idea of peripheral versus Jepson-type claiming, I think makes a difference, because it -- it helps to better define what people are -- are claiming, rather -- I mean, peripheral claiming is, I think, adding some of the vagueness here. There are some doctrines, description doctrines, indefinite doctrines, that can play some role.

Now here is -- I think is somewhat outrageous proposal. But I kind of like it and will be interested. I don't know why we have 18 months delay on publishing.

Now one of one of the reasons that I've heard is that the Patent Office is so slow, that that's a reason to give companies a little more flexibility. But in an ideal world we wouldn't have a delay in publishing applications. One of the places -- one of the cost that you have of delaying publication is when you get into litigation. You

know, a lot of the battles over the protective order and how you're going to deal -- I mean, if someone thinks that they're claiming something, maybe we should ask why they should be able to keep that secret for some period of time. Why should that --

MR. COHEN: Again a good idea, but what --

DR. MENELL: Okay.

MR. COHEN: -- I think --

DR. MENELL: Okay.

MR. COHEN: -- we should get to --

DR. MENELL: Okay. Doctrine of equivalents, another area that introduces vagueness and the independent invention defense, or limitation of remedies, have the benefit, in this context, of reducing the problem from another direction. So it basically gives companies that follow a certain procedure some greater ability to operate in a space that has the properties we've talked about.

I'll leave it there.

MR. COHEN: Thank you. You've set out many of the topics that we'll be touching on throughout this -- today, plus a few things that I don't think we would have thought of. So that's very helpful.

I think maybe, Kevin, you haven't yet contributed?

And then we can move on.

MR. RIVETTE: Oh, I never contribute.

MR. COHEN: Let's get everybody on the -- with their views, first.

MR. RIVETTE: Assuming facts not in evidence.

So I think, from my perspective, one, I would go back to what Vern started us off with: Yeah, we got problems, yeah, there are issues. But let's not throw the baby out with the bathwater. The system works.

If you take a look at what Peter was just talking about, with the issues of the messiness of the process. Well, you know that the whole legal system is messy. We don't have a system that's precise in that regard in the legal system.

With regard to notice, I think we probably got more notice now than we've ever had in -- in the whole system. I actually went around the world in the early '90s and picked up all of the patent data and created the first patent database. And with that, we use natural language and semantic analysis and visualization to actually avoid some of the taxonomy problems. But I do agree with you, if you want to follow any money to the Patent Office, I'm 100% behind you. We need every single penny we can find.

I think that the -- you know, the issues around claims, definitions and structures, we should probably touch on extensively, because I think a lot of these can be solved in those manners.

I think the assignment database that you mentioned actually has to be something that we fix. But I guess overall I look at it and, yes, it's been tough to do clearances. It's always been tough to do clearances. All you got to do is go back and look at steamboat patent wars, sower -- sewing machine wars, you know, electrical motors, when everything had to be done with the -- going to the shoes and looking through every single patent.

So I think this is a messy process, but I don't see a process that's -- it's better at this point in time. So I think there are some things we can get done. But I -- I do agree with Vern, throwing out the whole system, or radically shifting it, is probably going to cause more problems than it's worth.

MR. COHEN: Okay. We've heard an array of thoughts on the issue. And let's try to take it a little further at the level of generality and then move into individual issues.

I guess what I want to ask is if there is a notice

problem, or to the extent that there is a notice problem, is it something that's best addressed up front, by making claims and potential claims during the prosecution process, better understood, more easily found, and better understood, or is it something that's better addressed, after patent issuance through various forms of -- various mechanisms that could be used after the issuance? What are the considerations that bear on whether you would want to -- whether we need to tackle this early or better off waiting?

How about Dan?

MR. BURK: Well, let me -- let me begin to answer that by -- by underscoring. An initiate, I think, came out in the first round of questioning and that Peter had started help us thinking about, which is if this were simply a terminology or nomenclature issue, we would expect this to work itself out over time, right. The chemical arts have been around for a couple of hundred years as a -- as a discrete science. As Michelle and Vern pointed out, they have very stable nomenclature developed by international bodies like IUPAC. And we could just say, "Well, you know, the IT is having some -- industry is having some growing pains, hasn't been around all that long, comparatively. And so, you know, as time goes on maybe this will work out. In

fact, you know, I like the idea of -- of investing in some information science. But you might even expect the private sector to work that out, right?

I mean if I could figure out a way to do what Peter calls a periodic table for information technology, or easy access for information technology, I could put a whole bunch of out-of-work philosophers to work, doing ontology for me and I'd probably make a whole lot of money from people like Michelle and others, who -- who are having trouble.

So, you know, we could expect may be things to work themselves out if it were just a nomenclature problem. I think something that was not highlighted in the last round, but which was there was it's not just a nomenclature problem, right. But it's the nature innovation in different industries. And we're talking about the chemical arts. We're talking about usually pretty discrete inventions. All right. We're talking about a molecule, or a family of molecules. But when we're talking about semiconductors or other IT products, we're talking about things that have lots of components, each of which may have multiple patents on them. And so we're talking about, you know, composites that are very different.

And -- and the question is, you know, can those bolts of be addressed in the same system, part of the problem is that's a moving target. All right, I -- I wouldn't try to predict the nature of innovation, even in the chemical arts. Maybe we'll have multi-component inventions in biotech and in chemistry, as time goes on.

So, as you say, where do you address that? Obviously, I have an opinion on that. I've, you know, written a fair amount with Mark Lemley about this. In fact, we have a book which is now available at fine book-sellings everywhere. And the title is *The Patent Crisis and How the Courts Can Solve It*.

And the question, going back to Peter's economic framework is, can you institutionally -- do you want someone to try and figure this out before the fact? You know, ex ante, which is what the Patent Office examination process tries to do, or do you want to try and sort it out Ex-post, after the fact, which is what the courts and maybe something like a post-Grant opposition, type of procedure would do.

Our view is that you can only sort it out after the fact, first of all, for practical reasons. Lee pointed out that, you know, we don't fight about most patents, because most patents aren't worth fighting about. So there

needs to be some sorting process to figure out which ones you want to fight about.

And, number 2, you need to figure out where things have gone, right? That's much easier than figuring out where things are going. Patent examiners are not crystal ball gazers. The Patent Office doesn't see a large part of the patent system, which is the infringement and analyses that we've talked about.

And so, you know, we can discuss this more, but for reasons that I've articulated elsewhere, it seems to me that the court system, or maybe some type of administrative post-grant position system is the place you have to figure out what -- what you're asking.

MR. COHEN: We've got a voice for after the fact. Let's try -- let's try Lee.

DR. PETHERBRIDGE: I think for me the answer to the question is not either before or after the fact. I think -- I think that the -- I think marginal improvements can be made sort of all over the place. And so I think, for example, there are legitimate things that can be done after the fact. I think that there are legitimate things that can be done ex ante that -- that I think might be valuable to do in terms of gathering information and trying to head off

some of the information costs that -- that actually develop through prosecution.

And I think you can also use rules, legal rules, that are in place, that sort of operate both before and after the fact. And then so they sort of -- they provide sort of the -- the framework for the way in which these analyses are conducted, rules like perhaps getting rid of the doctrine of equivalents, for example, things that would cause people to have to take certain steps and incentivize people in the proper ways, sort of all along the process of not only obtaining patents, but also in making decisions about patents, after patents have issued.

So, I mean, in general terms I think the answer to this question is -- or I would refrain the question as saying it's -- it's not really a before or after thing, it's a -- it's sort of from all -- all angles, kind of a thing.

MR. COHEN: Michelle?

MS. LEE: Yeah. So this is an easy answer for me. I mean, clearly, the earlier the better. I mean, if our goal is to create patents that provide notice, we need to be writing patents with clear scope, from the beginning, during prosecution, doing everything that we can so that the public is on notice of what monopoly right is being granted.

That's a very, very strong right. And it should not be granted with vague scope and vague claims.

So I think it is incumbent upon the Patent Office and the applicant to define that very specifically, to have enough support in the specification to describe it in enough detail so that people reading it know what it covers. And litigation is a very, very expensive way, far on down this road. You hit inadvertent infringers, right? Businesses have invested a lot of money in providing the product into the market to stream. And to deal with that issue, in litigation, after a product has launched, is tremendously costly for society, plus it does a disservice to the public and to subsequent inventors, who come along later on, who claim inventorship over an aspect that the first inventor or claimed they had coverage for, but there wasn't quite enough detail in the patent, to begin with. So I think early notice -- fixing the problems early on for notice is critical.

MR. COHEN: Daralyn.

MS. DURIE: Well, I don't disagree with any of that. But I come to this from the perspective of a litigator, who often gets brought in after the dirty deed already has been done. So while I agree very much with the

need to consider the issues '86 ante, I want to talk about some of the things that come up after the fact.

I want to start by saying that while it is true that litigation in general is messy. I think the messiness of patent litigation is different in kind, not merely different in degree. Patent litigation is, we all know, extraordinarily expensive. And I think that the amount of money that people are willing to invest in the enterprise speaks volumes to the uncertainty of the outcome and its unpredictability. That unpredictability is manifest, particularly in the area of claim construction. And it's not just a function as was indicated as sort of the need for -- for language to evolve. But I think it's a function of the fundamentally poor fit between language, on the one hand, and what it is that we're trying to describe, on the other.

I was a graduate student in comparative literature before became a lawyer. I often say that was the best possible training for claim construction. And I'm not joking, because I think it is the very rare case where there is not a potentially dispositive claim construction issue that absolutely could go either way and where you could not find a judge to go the way. And it's because I think it is

less true in the chemical area, because if you're talking about a formula for molecule, you know what you're talking about. There is a tight fit there between the chemical structure and the thing you're trying to describe.

When it comes to the English language, and if you're trying to describe this, you know, it's -- there's a much -- there's a much greater amount of imprecision in the fit between the words and the thing that you're trying describe.

I think you'll a way to remedy that is to try to focus much more on the written description as a guide to claim construction and not have it simply be something that comes into play after the fact when you get to validity. Because claim construction, again from the litigation perspective, is an even playing field. And to the extent that the scope of the claims is truly constrained by the invention that's described, you have a lot more predictability.

Validity, the other hand, is much more often a jury issue and is just -- and, you know, the deck is stacked. There's a presumption there. And so to rely on written description as the ultimate sort of policeman, rather than claim construction, I think does a disservice to

the process and also increases legal fees, because it comes significantly later on in the process. Go ahead.

MR. COHEN: Vern.

MR. NORVIEL: So maybe I'm going to start with what I can perceive to be a misconception, which is life science's chemistry. Nothing can be further from the truth. I would say that maybe five or ten percent of the patents that are dealt with in life science or chemistry, they definitely are much more clear. And they're not the issue.

If you're clearing a technology like, say, DNA amplification, or sequencing technology, the clearance studies are very massive. In amplification or sequencing, you're probably talking 8,- or 10,000 patents that you have to clear to start a company.

So the issues actually are the same in life science. I -- I disagree with that to some extent. And the terminology is extremely rapidly evolving. I would say, again, to be honest, more rapidly than in software, you know, human adult stem cells were invented 12 months ago. And there's already proliferation of technologies around that. So I disagree with that assumption.

That said, I still believe that the difference is that we have a Patent Office both here and in Europe, I

would say, that where the examiners are extremely well-educated. They don't let you get away with anything. Most of them are Ph.D. level scientists. They actually do understand what's going on in world.

The industry actually makes an extremely strong effort to try to even keep the examining corps well educated. There are seminars routinely in the Patent Office, in life science, where a scientist will go back and, for example, talk about stem cell technology so as to make sure the examining corps doesn't miss something.

That said, and mistakes are made occasionally in -- in life science as well as other places. And I am in wholehearted agreement the after-the-fact review by opposition, or whatever, is extremely helpful. And the system works just fine in Europe, in life science. And if something did slip through that was vague, you know, that it would be hopefully dealt with more rigorously in that situation.

So again, I think we need to be very careful not to make huge changes. I actually agree with, believe it or not, the concept of a media publication. I think that's a ruse on the part of the Patent Office, frankly.

And almost all patents are filed electronically

now. I doubt that -- and I think -- and we do need to keep a small place aside for small inventors here. But certainly all patents filed by life science companies, I'm aware of, are filed electronically. So there's no reason it couldn't be published immediately. And in fact in life science, most cases are filed at the same day that something is published.

So in any event I'm not opposed to that. I think that would be just fine. And I think we need to be very careful to do -- tweaking things like that, as opposed to massive change.

MR. COHEN: John.

MR. McNELIS: Real quick. The issue as to whether -- and whether this should be done upfront or after-the-fact, as we've heard, it should be a combination.

There should be more interaction with the examiner and the patent attorney with regard to 112 first issue. If you have a claim set out, as Michelle said, we need to make sure the specification is clear and the claims are clear as to -- as to the scope of the protection that is being sought. I actually have seen the Patent Office improve on this issue in the past nine months. Although I think's being looked at more closely with regard to the Bilski and 101 issues. We are seeing at least the examiner's taking a

closer look at the specification, which wasn't always done in the past.

MR. COHEN: Okay. I'm going to move us forward so that we can cover as many issues as possible. What I try to do at the end is to give everybody a chance to make any comments that they really felt they had wanted to. They may have had their sign up before, they didn't get called on. If there's something really important, at the end, you get a chance to get your comments on the record.

Let's start moving onto individual issues. And what I think perhaps a place to start would be with various mechanisms that might improve notice from existing claims.

And the first one I'd like to take up is indefiniteness, which is something that's been receiving greater prominence in recent months. My overall question is what's the appropriate reach for the indefiniteness factor in patents? Does it have application for all forms of ambiguity that affect breadth? In general, is it -- is it appropriate for addressing issues of overbroad claims. Anybody want to start?

Lee.

DR. PETHERBRIDGE: So -- so I think that -- that indefiniteness is -- is a tool that probably works better in

the hands of the Patent Office than it does afterwards. I think, for some reasons that -- that Dan suggested -- and I think it's maybe his opening comments, which is that, you know, attorneys at Law school and a they learn how to create ambiguity in documents when needed. And I think what can happen is that if you have a -- say a strict indefiniteness requirement that exists after patents issue, you know, you can't change the scope of claims and you're basically stuck. And people will be able to -- to create ambiguity, create situations that appear -- or create the appearance of indefiniteness. And I think that once a patent issues, you have to, of course, be fairly liberal, with respect to -- to tolerating some amount of ambiguity without invalidating patents for indefiniteness.

On the other hand, when you're at the Patent Office will can amend the claims. They can make representations in the prosecution history about the meaning or scope of terms and limit things in ways that provide the flexibility that doesn't exist, preissuance. So I think indefiniteness is a valuable tool and one that maybe could be developed more. But my own sense of it is that I wouldn't like to see it applied too much more strictly than it is by courts at this particular time.

MR. COHEN: Jason

MR. SCHULTZ: Yes. So I just have a brief comment here. I think whenever -- so I would agree, generally, that we can do things both in the Patent Office and in later in the courts and other stages, such as administrative post-grant.

But the key for me in the Patent Office, I mean just given everything that we've all heard about what examiners -- the stress they're under and everything is, is can we increase the information and lower the information costs without increasing their transaction costs and the applicant's transaction costs.

And I think when it comes to indefiniteness the question of reasonable interpretations, I think, is a high transaction-cost question, right. I mean figuring out what's reasonable, what's not. I mean I think indefiniteness only goes so far. But I do think that the problem there is either inconsistency or lack of definiteness.

So I think getting definitions, you know, making sure there are definitions where there need to be definitions and also locking in the applicant or the inventor to those definitions so they can't later change in

context.

I mean there's some flexibility. I agree, there's some things you're just not going to define as a periodic table. But I think when -- for instance, in a notice of allowance, when it's a key element of a claim that is over the -- you know, distinguishing the prior art. I think getting some definiteness there especially, or in other places, where it really forces the then patentee to be consistent and having some notice there, I think, will be key.

MR. COHEN: Peter.

DR. MENELL: Well, I'm going to tie this in a little with the theme of the last question, which is the sort of ex ante versus ex post. And I think this is a good illustration of part of the challenge. I'm going to take all of the above, as many have. But in this area I can say from a lot of experience that what you're getting from district judges is basically a novice. I mean in certain districts you're going to get repeat-player judges, but most judges are not going to have nearly the experience.

And a doctrine like this I really think requires, you know, some spectrum of experience. And so I think the Patent Office is a place where you want to inculcate the

values involved here.

Now I think in the biomedical fields this is less of an issue, because the people investing in those technologies want to have as strong a claim coming out of that office as possible, so that they can justify all of the clinical testing and very high expense that they are going to experience. And what we know from yesterday's panels, in the IT industry, they're just trying to build up big portfolios and they're not very focused on this issue.

And so I think through some sort of rulemaking procedures it may be possible to have the Patent Office change some of those cultural norms.

And so that's, I think, the best place to start in thinking about this question: What is it the Patent Office can do to kind of call attention to this issue and try to create clearer claiming upfront. And, you know, I mean courts may or may not play a significant role if the PTO does that.

MR. COHEN: Okay. Kevin.

MR. RIVETTE: Okay. So from the point -- from the Patent Office's perspective, what's occurred since the mid-'90s is we've got a situation where we keep getting less and less information on prior art. And the applicants don't

have to transverse it, which was the practice prior to that. So it's harder and harder for the office to figure out what is the invention. The applications also tend to get more complex and they are getting longer.

Okay. So the -- the issue on definitions. I'll throw something out, which is why don't we put in a definitional page and make it a requirement in the actual patent, so that we lock down some of these things. So they're -- the Markman Hearings more over morphing of terms than just the term; how does it change over time?

I think we've got another area which is we actually, at the Advisor Committee, did a long study on some of the issues that are concerning applicants. Most of the applicants found that they got a lot better result, and what we found was that we got a lot better patent at the end of it if we actually had a pre-first office action interview. So the -- so the applicant would sit down, they'd get to your point. Applicant would sit down and talk to the -- the examiner. Because once we get into that process, it's -- you know, people take positions. But if they can sit down to figure out what the invention is, that seemed to be going -- going well. We've done a -- a first trial of that. And everybody wants to go further with it.

On the -- I think there are a number of issues that we could do the office. We could actually start requiring, number one, that the patents come in electronically. Right now they're coming in electronically, only in PDF, most of the time. I think that the hue and cry out of the AIPLA and other practitioners was pretty loud. But I think we should really think about bringing it in in a textual format. I think we should have small apps inside the office that actually review these for statutory requirements. A 112 checker -- I designed one in 1991 -- would be something that would add to one definition side. We could then define what we need to define. Two would also add to consistency throughout the application.

So these are sort of things that I think we can -- we can actually do at the office that would have significant impact on what the -- the quality coming out.

One of the things we did with the -- the last meeting of the Advisory Committee, and we had it open to the public. And we discussed quality measures. I think that the office absolutely should be looking at third-party, independent reviewers of quality.

So to the points here of: Why aren't we talking to the judges? Why aren't we having a system where we

review every single patent that gets held invalid? I mean, it's a real simple problem. I mean, it's a decision tree. Was it held invalid it because we found something and some library that we're never going to find? Okay, fine, you know, that's not the Patent Office's problem.

However, if we find that we are missing misinterpreting the law, or that there weren't statutory requirements met, we should be looking at that. We should find a way to put a connection back into the system to correct it. We don't have that right now. We don't actually review our own Board properly, our opinions. And we don't review other patent offices. So there's got to be a consistency worldwide, not just with our office. And I think there are ways to do that.

So you wanted some specificity. There's some specificity.

MR. COHEN: I'm going to talk on Michelle. But as I do that, I'm going to try to give a little bit more meat to the indefiniteness issues so that you can all be thinking about it as Michelle is responding. And that's the fact that in court, it's often been viewed as a doctrine that tries to identify whether a claim is insolubly ambiguous. And yet more recently at the PTO and then in their *Miyazaki*

opinion, but from the Board they talked in terms of an indefiniteness problem if a claim is amenable to two or more plausible constructions.

Where do you think we should be heading? Is it appropriate to have different standards in the PTO and in the courts as they review that? Think about that.

Let's get Michelle's response to what was already on the table.

MS. LEE: So I just actually have a very brief follow-up on Kevin's point. I was intrigued by his notion of a definitional page because in some sense that would help tremendously. But currently, right, the terms that are used in the claims should have support in the written description.

MR. COHEN: Right.

MS. LEE: So the question is: If you put it in a separate section of the patent, does it make the examiners and the applicants really define the terms are being used? And if the answer is yes, I'm all for it. But currently, under the system, you should be doing that, right? You should be defining the terms, so --

MR. RIVETTE: Well, you -- the problem I've seen in them is they define the terms, but as the application

goes through multiple stages, those terms get muddy. They have --

MS. LEE: Right.

MR. RIVETTE: -- four or five different definitions in there, slightly different, not a 100 percent different. And sometimes they aren't even there properly.

MS. LEE: Right. So then could you amend the definitions as you evolve, or would that be changing?

MR. RIVETTE: The spec?

MS. LEE: Yeah.

MR. RIVETTE: I think you've got to do it to begin with. But then you're going to, you know, potentially amend it in the actual file wrapper. I mean, that's how, you know, the interpretation thereof. And that's the intrinsic versus extrinsic. But it gives you a starting point.

MS. LEE: Fair enough.

MR. COHEN: Anybody else on indefiniteness issues?

I don't see any takers. Let's move to claim construction.

In the claim construction area, Judge Rich (phonetic) has been quoted as stating that the function of claims is to enable everyone to know, without going to a lawsuit, what infringes the patent and what does not. He

added that this may be a more of a theoretical thought than what actually happens in practice.

And I guess what I want to ask you is measured by this standard: Are claims today's successful? Anybody want to --

MR. BURK: Did you want the laughter to start now or afterwards?

(Laughter.)

MR. COHEN: Let's start with Lee.

DR. PETHERBRIDGE: I'll start with sort of the general -- well, maybe sort of back this up for a second and say whether claims today are successful -- or are successful or not, I think, is a somewhat different question than the question of whether claim construction is in a particular good place. And so I'll start by talking about claim construction, because I think claim construction is a problem and I think that what -- and I think, you know, to the extent there -- we could look to may be that the institution that created this problem, I think it is in large part arguably put at the feet of the Federal Circuit. And the reason for this is the *Philips* opinion, which I think is entirely unhelpful.

I think the *Philips* opinion says essentially, or

sort of reverses a pattern of evolution or development in Federal Circuit Law that was starting to try to say, "Look, there are actually is a right way to go about claim construction. There's a framework that you can apply to claim construction and sort of reproducibly sort of processize doing claim construction.

So this actually, Peter's point earlier, sort of, you know, cause me to think this -- and I don't want to suggest that Peter necessarily thinks it -- but the idea that you might want to develop taxonomy and in other sorts of tools for assessing the scope of patents in certain areas where maybe taxonomy is not as well developed, it strikes me it's a similar problem to what you have with respect to claim construction. Because if you have a claim construction regime like we have now, that I think is promoted by the *Philips* opinion, which is you can do claim construction however you want, in any particular case, and all that really matters that you thought hard about it, and the Federal Circuit agrees with you at the end of the day. That's not helpful, I think, to developing the law and evolving the law in a way that sort of allows for claims and the doctrines of claim construction to be more effective at producing clearer and more reproducible claims, going

forward.

Now, to suggest -- I don't mean to suggest ever that you can perfect clarity or there'll never be an ambiguity in claims. But I think the process of doing claim construction can be improved. And I think *Philips* is a step in the wrong direction and, in fact, cements the kinds of problems that lead to the indeterminacy that you get in sort of the average patent case, where you have equally plausible interpretations on both sides, by the individual parties, that aren't resolved by the law and actually just have to sort of be picked at the end of the day by -- by a decision-maker, who is -- who is right because of their final, for that reason.

MR. COHEN: Let me push you a little farther on that, with your views on Philip. Is it a problem with the uncertainty as to how we use intrinsic evidence? Is it a problem with -- with of -- uncertainty as to how we use extrinsic evidence? What -- what are you getting at?

DR. PETHERBRIDGE: Well, I think -- sure. So I can build on it a couple of ways. I mean, I think in some respects *Philips* presents a problem because it discourages the use of extrinsic evidence in a way that might unhelpful, because it might be in those kinds of situations, situations

where you sort of have a lot of ambiguity or maybe you'll resort to extrinsic evidence might be more helpful.

But more than that, right, I think the real problem with *Philips* is that *Philips* doesn't say how to use intrinsic evidence, or how to use extrinsic evidence. *Philips* just says, "Look at the patent, think hard about it and think carefully and reached the right decision." Right, and I think one of the things that the Federal Circuit was doing before *Philips*, whether it had gotten to the right place or not, I -- I -- you know, is I think a matter of debate. But it was at least moving to a place where they were developing a framework for how to go about doing claim construction, how to give weight to different portions of the specifications or so people could reproducible and reliably put information into specifications if -- if they wanted to and courts could have a sense of how to -- how the -- how they -- how their claim constructions were going to be reviewed and whether or not they were doing it in a way that was likely to be reproducible -- or I -- I'm sorry -- likely to be viewed favorably by the appellate court, at least in terms the process by which the claim construction was done. So to sort of sum it again: the problem with *Philips* is that it doesn't say how to use intrinsic

evidence. It doesn't tell you how to use the extrinsic evidence. It just basically disrupted a pattern in evolution of the law that was starting to try to give information about how to use these different forms of evidence.

MR. COHEN: Let's see how others react. Vern?

MR. NORVIEL: So -- so I didn't think we should try to learn from what's working and try to fix the other areas from that. I find it actually kind of funny that some of the biggest complainers about these problems, to be honest, companies like IBM or Microsoft, you look at their patents and there are tens of thousands of them, and they have no definition sections in most or any of them.

But again if we look at a biotech patent, it's not required by the rules, but it's almost routine if there is a definition section. So I think we can learn from that a little bit. I do think that -- I would point out I think that there actually are courts in a sense that are even more rigorous and more careful, which I refer to as the "court of Sand Hill Road," which is when you're about to ask one of these VCs to cough up tens of millions of dollars, they look at this extremely carefully. And if there are two possible interpretations, you probably aren't going to get your

money.

But we have again a system where the examiners are not letting you get away with two possible interpretations. And even when there is two possible interpretations, you can look at the file history, usually -- and the examiner has usually had a back and forth about that. So you can kind of figure out where things are, even if you just look at the claim and are not able to.

I do think that it is important that it be all within the file history, because if you start to look at external records, even in biotech, there you can probably find five different people to say five different things, if you look hard enough outside of the file wrapper. So I think it's -- I think it's very important for it to be all right there. And that's the examiners fought with you and you've made it very, very clear what you intend, and probably right from the get-go.

MR. COHEN: Peter.

DR. MENELL: Well, I'm going to, I think, offer a different perspective than Lee on the Phillips decision, although I'm not going to praise -- I think the decision clarified some issues. And I don't think that it's caused dramatic new problems. But I don't think it's improved the

predictability claim construction.

But I think, partly, it's not by emphasizing intrinsic evidence. I think that actually was a good part of the decision and that we want people filing applications to really put as much effort as they can into writing a spec that will provide the answer down the road.

The difficulty I think is that there are a lot of games that different industries play. And this is another area where Dan's idea of inter-industry differences really plays out. I think that -- that in certain industries, biomedical, I think they do want the clarity that Vern was talking about. And they really put that effort in up front. And the emphasis on intrinsic evidence is consistent with that being a way of creating more clarity, better notice.

The IT industry doesn't do it that way. But then in *Philips* you have this unbelievable passage. There's a paragraph that begins with -- I think it's the phrase, "In most cases." And the Federal Circuit goes on in that paragraph to say, "That in most cases it will be clear from the context that the patentee, you know, is either using these as specification embodiments as illustrative or as limitative. And the one thing that we know -- and I'm surprised the Federal Circuit would write it, in that that's

not true in IT, and maybe some other contexts. But when you're writing the claims -- or when you're writing the spec you want to have it both ways. You want to play this game.

The other peculiarity -- and just we take as a lot more time than we have, to really get into all of the nuances of claim construction, but if you don't put in many embodiments you might get broader scope than if you put in a lot. Now that is exactly the opposite of the way we do things in science and engineering. When you write an article, it is usually, you know, considered a better article when you have more examples. But in the claim construction area, by trying to keep it as simple as possible, then you can later argue to a court saying, well, you know, we don't really limit this very much so we get very broad scope.

So I think it does come down to the values in the Patent Office and, you know, are the examiners going to say, you know: I don't really think you've defined very well what you've invented here. And, you know, until you satisfy some standard, which would be hard to make it a clear standard. But at least some level of comprehension: We can't issue this patent.

MR. COHEN: Let's get Kevin up here.

MR. RIVETTE: Well, you started this off with Judge Rich's idea of "Let's make this so people can understand it." These are business documents, these are not legal documents. And, yes, I think it's a great idea to have the legal discussion. But I think we should also focus on structural issues. You know, the one-sentence rule? Well, that's an interesting concept. You know, we've all become the experts around semicolons and colons and dashes and M dashes. And if you don't have a secret decoder ring and, you know, the handshake, you don't get to do this.

So to Judge Rich's point I think we've got to look at this from a different perspective. Have you ever gone to court or have you ever had an analysis done that didn't tear apart the claim and build it in a way that was actually interpretable by real human beings? And I am going to suggest I've ever seen it that way. So burn, or anybody else here, when you guys tear apart your claims and you're going to go to your client, you don't leave it as a one-paragraph, three-page -- or, you know, a one-sentence, three-page discussion for them. You tear it apart and you say, you know, this is what it is here, and this what it is here, and this is what it is here.

I think we should take a long hard look at

redefining how claims are actually structured. I think that would go a long way to solving some of these problems, because when I go back -- and everybody can disagree with me if they want. But the issue around a sentence, the one-sentence rule was more about trying to limit the size of these things. Well, it didn't work. And all it did was confuse people. Maybe it's time to reevaluate whether or not the structure is the right one.

MR. COHEN: Let's see, we can take this a couple of directions. I think the way to go right now would be -- I just would want to recall what we heard from one participant at one of our hearings in Washington. And she argued that in light of the inherent ambiguity in claim construction, it's more important to have a clear determination early on as to the claim's meaning and deference to that initial determination than to try to hone the rules of claim construction.

Another participant responded that it was critical to get claim construction right. And that even in a *Markman* hearing that might still be too early to appreciate the context in a way that's necessary to construe claims correctly.

Which view of the world would you take? Which

would you advocate that we strive for -- for early interpretations or strive for the absolute correct one, irrespective of the timeframe?

Daralyn.

MS. DURIE: It depends to some extent on what is at stake in the case. In general, I am a fan of early. But that is because I represent a lot of relatively small start-up companies, where the cost of litigation is simply prohibitive. You can't litigate -- it is extremely hard to litigate a patent case for less than $2 million. Most people will tell you that the norms are more like 4,- or 5,-. There are a lot of companies for whom that is simply not an amount of money that they have to spend, particularly when you couple it with the business impacts of the overhang of the litigation on the ability to raise more money and on interference with customer relations.

I think in those kinds of cases it is critical that there be a mechanism, early in the case, before you spend enormous amounts of money on discovery, to get some determination on the merits of the case. And that this sort of ultimate perfectness of that determination is less important than that there be one. And that there be one in a timeframe and with an expenditure of money, that is

actually creates a viable mechanism for the resolution of disputes.

I agree with Peter's point, bad patents can be harder to defend against than good ones, because they are more imprecise, and they are more susceptible to many different interpretations.

So it's not -- you can be confronted as a small company with a bad patent that has relatively little intrinsic value. And the combination of the litigation cost and the other business risks can really create an unmanageable situation. So in most cases I think early.

MR. COHEN: Um-hum. Jason?

MR. SCHULTZ: Yeah, and I -- I'll agree with early. Again, in terms of I think very strategically and surgically you can find certain places where I think you can have helpful or early determination. So for instance, and looking at the intrinsic evidence, to focus again on sort of more transparency and more consistency, because I do think that people change their story when they get into litigation, often. I -- I think that things like interviews are an interesting place to look, right. So, I mean, how much information do you ever learn about what happened in an interview, in the -- you know, between the examiner and an

applicant? Very little.

And so, for instance, I mean, considering whether they should be recorded and part of the file history, or not. And, you know, should the file history be published? If an application is published should everything in the file history be published, you know, as it's done, if it's all electronic?

These are things actually that I think you could argue, well, maybe that will have a little bit of a chilling effect under the discussion that applicant would have with the examiner. But on the other hand, I think the public notice part of the record, part of it is very important, because in some ways it will get the applicant to commit to some language in some definition that I think will help as part of intrinsic evidence in claim construction later. I think that you will even get some commitment there and some transparency there.

The other thing I was going to say is that I think in claim construction there are -- there are different levels of determination that get made better. Some are sort of easier to deal with early on and some are not. So for instance, there's some basic arguments that you see over and over again, is the preamble limitation. Right. Is this a

Section 112, paragraph 6, claim or not?

Those are some things I think that also could be defined in the prosecution. I mean, similar to definitions of terms, I think you could have a checklist and say, "You know, like can we get some, at least, initial consistency on this?" And if the applicant commits to it, then that makes at least the cost of litigating that in the claim construction, lower. I mean, I just couldn't tell you from private practice before I came to the clinic, that there were cases where, you know, hundreds of thousands of dollars were spent on whether the preamble was a limitation or not. So there is some categorical areas where I think in prosecution you can also get some definition.

MR. COHEN: We're coming up on the time we normally take a break. What I'd like to do is to try to finish up our discussion of claim construction and then break for a few minutes.

When I started out talking about the hearing in Washington, I threw in as a preamble that the participants had argued about -- premised for argument on the inherent ambiguity in claim construction. I'm wondering if anyone wants to pick up on that, if anyone has views on that, and if they have views, what the implications might be.

Dan.

MR. BURK: Well, I think that's a great question and I want to answer it, playing off of Kevin's comment a minute ago, "These are not legal documents, their business documents." Actually they are very odd documents, right. Because they are clearly legal documents. We're talking about claims which are supposed to define the rights of the patent holder. They are business documents to the extent that businesses rely on them to try and figure out what they can and cannot do, as Michelle has talked about, and Daralyn was talking about. And they are supposedly technical documents, right.

We talked about the public notice function, but we know it's the fact that it's addressed to those of skill in the art, right. And so it's not addressed to the public, generally. Supposed to be addressed to those who know the technology. But the reality is, as we've heard here today, is that they are legal documents, as a practical matter, because of what lawyers fight over and play word games with. And if you don't want them to be legal documents, you know, that lawyers play word games with, if you want them to be business or technical documents, then what I'm hearing is we need to focus on what the inventor actually invented.

This goes to Daralyn's comment about let's focus on the written description, and let's have a definitional section, and let's think about what the inventor actually created. In fact, it goes to Peter's comment about maybe a peripheral claiming is not such a great idea.

Maybe we need to focus more on Jepson, or what we used to call central-type claiming: Tell us what you invented. That would give us some early idea of what the patent means, is what you actually invented. And, yes, there will be some quibbling later on, and some fighting when infringement happens. But if you can shift the focus to what was invented rather than to what lawyers would like to make the words mean, then they could be technical documents, then they could be business documents rather than legal documents.

But as long as we think of them in terms of legal documents of what lawyers are going to play word games with, the ambiguity that we've talked about all through this session so far this morning is going to be there.

MR. COHEN: John.

MR. McNELIS: Just an issue with regard to the claim construction but the interaction with the applicant. One area we do have, we talked about a post-grant opposition

period. Essentially we have something very similar in our interparties re examination process, although there are problems with estoppel.

The ability to go and at a much lower cost, go and have both parties in a litigation go and work with an examiner and then try to get a better definition of what the claims are and what additional art is out there is a nice procedure that is often used these days to go and try to get better clarity on the claims without having to deal with the huge cost of litigation, as Daralyn had mentioned.

MR. COHEN: Lee.

DR. PETHERBRIDGE: Yes. I'll just sort of finish up, I guess, by maybe dividing from Dan a little bit on the merits of central claiming.

My feeling is that claims are going to be inherently ambiguous. I mean, so there is always going to be some amount of ambiguity. I think that it can be improved by things that hopefully we'll talk about after the break. But I think that central claiming is not necessarily very helpful in providing ex ante kinds of notice, the kinds of notice that we might think is necessary to sort of concentrate investment around patents and the like that. And then I also think that -- that I can't remember the

other thing that I think.

(Laughter.)

DR. PETHERBRIDGE: So I'm going to stop, but I'll remember it after the break.

MR. COHEN: Okay. Well, we'll try one more set of questions before the break -- or one more. And this is probably something that Daralyn might have some reactions to.

Sometimes in courts you hear them resolving claim disputes by speaking in terms of giving a claim the narrowest reasonable reading. To what extent is that really the current practice? And do you have any thoughts as to whether a more uniform and wide-spread resort to that type of thing might improve notice?

MS. DURIE: I do not think that is the current practice. And in fact I think that sort of supposedly doctrine that probably is at the very bottom of the list of claim construction doctrines, in terms of its enforcement, is the idea that claims should be construed to preserve their validity.

I've certainly talked to judges in the Northern District of California who said they don't follow that all. That they simply view their job as coming up with the best

construction of the claim language, leaving validity considerations entirely to another day, and leaving 112 considerations entirely to another day, as well.

And so I, as you probably gathered, do think that importing into the claim construction analysis, some sense of trying to have there be a meaningful fit between the claim's scope and what actually was described as being the invention, would go a long way towards reconciling what I do think is otherwise just an inherent ambiguity in the English language. And if anyone doesn't believe me on this point, I propose a little experiment, which is, you know, take two people -- you need three people to do this. But have -- you know, have an object -- have somebody describe it, without showing what it is. And have two people illustrate what it is that they think is being described. And then show the object in question. I would predict that very few of you -- but you accurately could reproduce this, if the words to be used didn't include water bottle, simply because of the imprecision that's inherent in language.

MR. COHEN: Yeah, let's go to Dan and then lead with -- to wrap up.

MR. BURK: Well, I agree with Daralyn, if it hasn't been clear already that you can, you know, never get

rid of the imprecision. But what you can do is create doctrines and structures that ameliorate it.

So we've heard repeatedly this morning that we're concerned about patentees who are playing games with the Patent Office, who would like to leave things as open as possible, and see what happens later. Lawyers and patentees who play games in court.

This is not unique to patent law, right. We can -- we construe contracts all the time. We construe statutes all the time. And we have rules that create incentives to do certain things in those situations. For example, there's an old rule that construe contracts against the drafter, when their's ambiguity. Now we might not want to think about whether your question leads us to some defaults, right, some doctrines that create incentives not to play games in the Patent Office, or not to leave things, as Peter pointed out, as ambiguous as possible, to see what advantage you can get later.

And what happens if we construe the patent against the patentee, if we think that there's been deliberate use of ambiguity to claim things that weren't actually invented. So we might want to think about, you know, how to structure those kinds of doctrines to create the right incentives,

rather than perverse incentives, which I think we're discussing.

MR. COHEN: Now let's end up with Lee.

DR. PETHERBRIDGE: Yes. So I -- I agree with that. And I think that, you know -- I think the rules that that call for sort of the liberal construction of patents are old rules that probably came into existence and actually thrived in the time of central claiming, which we don't really have any more, at least in many forms. And I think that the advent of peripheral claiming suggest that those rules maybe ought to be abandoned in favor of a stricter interpretation of claims and that patents ought to be subject to rules, like contra preferendum and rules that are used to construe contracts against their drafters.

And I'll -- this sort of add to the final point, which is the notion that we want to give inventors rights in the things that they invent is very appealing. And this goes back to sort of the central claiming point that is sort of surrounding this. But I think the concern is that it elides the question of still figuring out what the thing is that the inventor invented.

And, you know, the way we figure it out in the patent system is we look at words on paper that were put

there by attorneys, or patent agents, or inventors. And whether those words are claims, whether those words are words written in the description portion of the patent document, they are still words put there. And strategies exist and sentence exists to put words in there. And if we -- you know, if we get rid of claims, or we go back to central claiming, well then, I think you might expect more ambiguity in the description portion of the document then you're getting now. At least now you can put in specific examples and draft claims that claim things in sort of a genus type form.

But if we get rid of claims, well then we're sort of back to having to look at some other portion of the patent documents, some other word but there by attorneys, or by agents, or in some cases by inventors -- excuse me -- to figure out what the invention is, again to give the inventor rights in the thing that they invented.

MR. COHEN: Thank you. Let's break for 10 minutes.

(Recess taken from 10:36 a.m. to 10:50 a.m.)

MR. COHEN: Okay. With the time remaining, we've got a little more than an hour, I'd like to try to cover three large blocks of topics. One would be picking up where

we left off. I'd like to move into the examination process and try to think about ways that notice might be improved through tinkering with aspects of that process.

A second large block of issues that we would like to touch on would be the availability of notice from application, what we can learn there, what we understand will emerge from the application when it's all finished. And then, finally, the whole set of issues that revolve around numerosity of patents and problems posed by inadvertent infringement.

So let's turn to examination. I guess the general question is: Are there ways to meaningfully improve notice through the examination process. Particularly I'd like to focus on the possibility of additional communications between examiners and applicants that might establish a better record that would help to narrow or remove the ambiguity.

Daralyn.

MS. DURIE: Yes. I think that's absolutely a good idea. I think in order for it to be effective it needs to be coupled with some clarity on the back end of about how statements in the prosecution history get used in claim construction. And I've always had the view that statements

in the prosecution history are really relevant to claim construction in two ways. One is an interpretive guide to what the words in the claims mean. And the other is of the source of the disclaimer. But I think many courts really focused on the Federal Circuit language, talking about disclaimer and think that statements in the prosecution history are relevant to claim construction only if they do meet that standard of being a clear disclaimer of claim scope, rather than being used like this specification as a way to understand what it was that the applicant and the examiner understood the claim scope to be.

MR. COHEN: Good. I see Lee's sign has -- he's written in a theory. You'll probably want to talk to that.

MR. LEE: Yeah, sure. So I'm at -- I think there are things that can be done. And this goes back to our question from before the break about, you know, places in which you could make some adjustments and get some improvements. And then, really, the thrust of the piece that you cite on the -- sort of the fifth page of the questions there, positive examination, sort of addresses this particular point. And -- and really the sort of a -- there is two sort of arguments made in the paper, one of which is -- and I will sort of overstate this to just to

give it some affect. One of which -- one is to say patent examination in some respects are to stop worrying about obviousness, ought to stop worrying about validity, because, at the end of the day as we now know, that's essentially just a judgment call. All right? And what patent examination on to do is refocused more on trying to assess and put information into the record. Not so much assess, but as to put information into the record that's useful and relevant to define the scope of the claims.

And the way the article talked about doing this is it suggests having in the prosecution history a claim chart where applicants, you know, I mean, it can be filled out in many different ways.

One way is to have the examiner do it, come in, and interpret the claims, put it into a claim chart and make sites or references on that claim chart to art or portions of the written description that might shed some light on what certain claim terms mean.

The other way to go about it is -- is to allow the applicant to do, and then allow the examiner in to just sort of work off of that. But what it does, I think, is ultimately focuses the discussion on that the applicant and the examiner have during a patent examination, more

specifically on the boundaries of the right that the patentee seeks.

And I think you can do this, first of all, I think the paper certainly make the argument that you do this in a way that's relatively cost-effective. And you can certainly do it by taking some, I think, of the energy away from trying to make judgments about obviousness, which reasonably people can sort of ultimately disagree on at the end of the day.

And so I think the way this claim chart could sort of work, in the prosecution history, is it could really be sort of a living, breathing document that sort of helps show the evolution of the understanding of claim language throughout the course of prosecution.

And then sort of build on the point Daralyn made, I think that there ought -- there have to be rules about how to use this information in the future. But I think they have to sort of come in the future, which is to say this allows a whole other substrate, right, upon which claim construction law can develop and evolve that doesn't exist at this particular point. It particularly doesn't exist after the *Philips* opinion where there really are no rules, right

This is a whole new source of information that could exist and could be used to develop claim-construction law into all different kinds of new directions. And so I think that's really the strength of that kind of an approach.

MR. COHEN: John.

MR. McNELIS: One aspect of this is the natural tension as a patent practitioner of trying to have a clear, concise patent, but also trying to have the broadest scope possible for our -- for the clients, for the patentee.

And so there are a few things that we can do that would help that. And Kevin's idea and the actual implementation of the pre-first action interview is a wonderful idea. Getting the interview -- getting the examiner and the patent attorney in a room or on the phone to talk about what the invention is absolutely speeds the process forward.

And so, essentially, you're eliminating one office action by going through that process because you both get on the same page and you start talking about what needs to be done and what the issues are.

The claim chart, that sounds like it would be very helpful, but when I think about that from the aspect of

trying to preserve my client's rights, I can see that that would require a lot of effort on the part of the examiners to enforce that so it doesn't just become a sham and essentially become, 'I'm going to take a definition and a term that I've had in the specification and I'm just going to copy and paste it into the claim chart.'

And I would be concerned that that would be the natural tendency for that to occur in that way, unless the examiner was given more time to examine applications which, of course, would then cost more money for applicants to file their applications.

So I think those are some of the tensions that we see.

MR. COHEN: What would happen if it were the examiner who first drew up the claim chart on key issues, trying to use language that he finds helpful, and then it became the applicant's obligation to point out if the applicant disagreed with anything that the examiner put in there? Would that be a more useful way? I could understand it would be more costly, but would it be more useful?

MR. McNELIS: It would be more costly. And I'm pretty sure every applicant would make major changes to the claim chart. But it would at least -- it would create more

of record in terms of what the examiner was thinking. So there is -- there is some good -- there is some benefits to doing that. But, at the end of the day, I would basically start at a blank sheet and start over and put in the terms that I'd want to see there.

MR. COHEN: Um-hum. Jason.

MR. SCHULTZ: Just a few quick points. I think that the record and examination can serve for a later litigation. But, also going back to kind of freedom to operate and clearance, especially for some of the innovators that I've represented and particularly in the open-source software movement, people who don't generally patent and don't really -- can't really afford to litigate, they will look and they will go and they will themselves pull the file history. Right, and, you know, they'll just be coders who are interested and curious in looking through things. And they want to learn kind of what happened, and it's mystifying in some ways to them.

And so I think bringing more clarity to the dialogue that happens and so I think a pre-office action interview, if it's something that they can get ahold of, even themselves before they have to come to a lawyer, could be incredibly effective in helping them.

So I think making, again sort of a more transparent interaction and one that might even have lower transaction costs, right, so to transcribe interviews is heavy, but to record one and post it as a file, as a sound recording, may not actually be that bad.

The other thing is that, I mean, coming up with a claim instruction could be burdensome. But, at a minimum, and you see this in claim-construction charts, citing to where the -- to the points in the specification that should be used to define the term, right. Just I'm talking numbers here, right, this column, this line number, this figure.

Again, from a transaction-cost point of view, that could be pretty simplistic. And, again, people play some games, but I think you could at least get them some basic data there that when people see it, they have some sense of -- of how much gamesmanship is going on.

The last thing I'll say too is that in terms of this dialogue, I think the way in which the patent examination process has been set up traditionally is that the only interactions are really adversarial interactions. And going to a more interview-type system allows you to get away a little bit from that. It's like if the only thing you ever hear from the Patent Office is, 'We're rejecting

you for all these reasons,' it does create, you know, this kind of adversarial sense.

So, for instance, I could see possibilities for examiners to just have questions in written form that they could issue to the applicant, saying, 'I have a question about these things.' Or some other way to elicit information that again, you know, if there's a simple answer, it comes out. Is there's a more complicated answer, they can then dial about it.

MR. COHEN: Michelle.

MS. LEE: I think anything in terms of a conversation between the applicant and the examiner that gets to the issue of what is old and what is new and the reason for allowance is critical.

And then once you've had that conversation, getting that on the record is even more critical, because that at the end of the day is going to determine the scope of the claims, notice, and all of that.

So when we talk about things like -- I mean, as Jason mentions, my number one issue is we should have a system that is more likely the European system, whereas you have language in the claims point explicitly where in the spec there was support.

And then on the issue of interview with examiners, absolutely, get better records of it. Right now I can't tell you how many file histories I look at I know an interview occurred. I know what final outcome came out. But I have no reason why that was the final outcome. So clearly more record on examiner interviews.

And then on the issue of claim charting, I mean that has been used, and I've seen it. It's a requirement in the area of accelerated examination. And in the couple of cases I've looked at, those have been pretty useful. Now it may be subject to gamesmanship. But I do like the notion of the examiner actually preparing the first shot at it and then putting it on the applicant-defendant to say why that is correct or incorrect.

So taking all these steps -- and I would add one more. And that is Jepson-type claiming. Put the old stuff in the preamble, put the new stuff in the claims. And the MPEP, I guess, currently encourages the applicants to use it, but I don't think it's used that often. So the notion of let's think about really distinguishing what is new, what is old, and presenting it clearly in the file history and in the claims themselves.

MR. COHEN: Let's go to Peter.

DR. MENELL: This came to me in the last few minutes, so it may not be well thought out. But --

(Laughter.)

DR. MENELL: But as long as we're going to have these interviews, and given what the Federal Circuit has said in the most authoritative claim-construction decision, that in most cases it will be clear whether the spec -- whether the embodiments in the spec are illustrative or limitative, we should ask that question in the interview.

I mean I think that anything that the examiner can do, or the process can do to nail that issue down, given that that tends to be the critical issue when you get to claim construction, would be beneficial. And I think we have in some ways the imprimatur of the Federal Circuit.

MR. COHEN: So we've heard a little bit about claim charts. We've heard a little bit about to designate -- or explaining whether examples are illustrative or not; other possibilities that would seem might be requiring written statements as to the purpose of claim amendments.

We've heard a little bit about the idea of requiring a page of definitions. A variant of this might be requiring the identification of a dictionary or designating a dictionary as a default dictionary in the absence of a

designation by the applicant. There are lots of possibilities.

Would people like to comment on any of them, in particular, as to whether we're likely to get something useful from it? For example, would receive the same type of gamesmanship that you were concerned about if applicants were asked to provide the purpose of their claim amendments? Would they give a useful response?

John.

MR. McNELIS: Generally, I think they would if the examiner pressed them on it, if the rejection was clear in terms of the prior art cited and the attorney needed to make a clear adjustment, if the examiner forced the issue in terms of asking why every specific amendment was -- why every specific amendment to the claim was in fact put in, I think it could be the -- the patent practitioners could be forced to actually provide useful information.

MR. COHEN: Um-hum. Kevin.

MR. RIVETTE: Yeah, on the gamesmanship I think you're always going to have it. I mean you have it in contract law, you have it all -- all over the place.

The issue of trying to nail down the definitions, I think just tends to limit that. I think that if you can

get a set of definitions that the examiner and the applicant actually agree on, from there you can then discuss gamesmanship later in court, if that's what's necessary.

But it actually makes it easier if we -- you know, as I've seen it, if you present this in a business context to the people that have to make the business decisions. If they've got a set of definition that they can go back to, they can make better business decisions instead of having, you know, four or five different places it shows up with slightly different nuanced interpretations.

So I think you're -- you know, I think that anything we can do to get more lockdown on what those definitions are will be better.

MR. COHEN: Um-hum. Vern.

MR. SCHULTZ: So dating back to when I was on the PPAC actually and through, I think, even the conversations today, I think there is one -- stepping backward step, there is one issue that I think we really need to wrestle with which is I believe that our system is probably such that it's much too cheap and the Patent Office is simply not paid enough to do a good job.

MR. RIVETTE: Yup.

MR. SCHULTZ: I think this goes to --

MR. RIVETTE: Hear, hear.

MR. SCHULTZ: -- the concept of hiring really top-quality examiners that have great scientific backgrounds in the field that they're asked to be dealing in. I think that it would allow the examiner to do things like make darn sure the terms were defined every single time and not let them slip through.

And so I think the -- and, again, I think stepping back again to my concept that we need to be careful not to do something that is completely untested, the European system works pretty darn well. And it's, frankly, way more expensive. I also think that it would then sort of statistically reduce the amount of chaff, I guess I would call it. I think Michelle worries a lot about these patents that are filed that probably shouldn't have been and really are not wheat but chaff. I think that if we had a system where the cost of getting a patent, from a government and administrative point of view, bore some relationship to what it cost to actually deal with it effectively, I think we'd end up with a much better system. And I think it's been proven out to work reasonably well in Europe, where it works much better we would all agree, I think.

MR. COHEN: I think I'll try Jason and then Lee.

MR. SCHULTZ: I just have a very quick point. I wanted to throw into the pile of things we're looking at the notice of allowability, which is usually the final statement that the examiner sort of makes about why the prior art was overcome or whatnot.

And, to go to Michelle's point about, you know, you'll see that an interview happened and then you'll see that the claims were allowed. And then it's like you don't understand what went on there in that situation. And -- and I think that any -- and part of it, I think, is that there are almost no standards really for the notice of allowability. You're supposed to make a statement. The statement is often just a sort of proforma, like it overcame the prior art. Or often you'll get one element that they'll single out and said this was not in the prior art, with a very little explanation.

So I find that also that, in particular, that stage, and I think what you see there is that there's this talk about, well, you basically wear down the examiner until the examiner gives up. And that's often what I feel. I just intuitively feel that's where the examiner gave up. And so some focus there I think would be useful.

MR. COHEN: Lee.

DR. PETHERBRIDGE: Yes, sir. I just want to sort of follow some of these -- these points about cost and allowability and things like that as they pertain to positive examination, as they pertain to having, say, claim charts in the file history.

I mean I think, you know, we've talked a lot about sort of getting information for these claim charts from -- from places in the -- in the patent document, in the written description where this information is cited. And that's certainly a place it can come from, right. But certainly there's a cost to doing this, right. And I think if you -- if you sort of go to an electronic filing system, this can be done more quickly.

And this information doesn't have to just come from, say, citations in the patent document. It can come from scientific literature, you can cite scientific articles that defined or described terms, or show relevant experiments that demonstrate the principles you're trying to describe with your claims. You can cite to patents in the field. If the examiner happens -- maybe one of the things examiners are familiar with are similarly-situated patents. And they might have an understanding that -- they may know patents they could go to sort of get information to help

them describe these terms. And they could cut and paste and put these things into these claim charts in ways that if -- if say they got claims that weren't well defined, in the first place, they could -- they could quickly do this without having to necessarily go through a whole lot of rigmarole in terms of -- or a whole cost effort in trying to come up with some definitions to start out with.

I was just thinking as I was listening to Jason talk about notices of allowability. I think, you know, right now, at least the way I recall the law is that they don't have any real legal effect, right. So I think the concern with notices of allowability -- and Michelle has expressed this as well about having them being uninformative -- is I don't think they are very well -- you know, they're not meant to be informative. They're not well thought out. And I'd be concerned that, you know, if we somehow started to use them, we'd have to really put a lot of effort in to making sure that, you know, what the -- what the examiner wrote down was somehow, you know, really -- really salient material to the patentability concern. And that actually might be problematic.

MR. COHEN: Well, it's interesting. You talked about the -- what do you think, to have an actual legal

effect? It sort of takes us back to where Daralyn started us off.

How would these changes in examination mechanisms to try to give greater notice play out when you went through the -- the court system? Is it likely to be a matter that would require deference? Would it instead be interpreted as part of the -- the prosecution history? Would it ultimately hold up in -- in a sense that would give a desirable certainty?

I don't know if Dan was going to be talking to this, but if you're up.

MR. BURK: Well, I can talk to that, I guess.

MR. COHEN: And whatever else you were going to --

MR. BURK: Yeah. This is sort of a metacomment, which I think goes to your -- your question and to the previous conversation. And I'm sorry to be a little bit of wet blanket here, but the conversation we're having reminds me of nothing so much as the conversations that have gone on for my entire career about reforming the Federal Rules of Civil Procedure, right. And periodically every few years we come back here and say we're really going to fix discovery to where people give truthful responses and it really lowers the cost of litigation. It really fixes things.

And we tweak things. We find out that the game is different, but it's still a game. And a few people have said, you know, we could do these things and there will still be some gamesmanship. I think it goes back to something that Jason said about transaction costs and cost, right.

People who are trying to get patents have a certain amount of time and energy to spend getting patents. And the Patent Office has a certain amount of time and energy to expend doing examination. Realistically, we're not going to get huge influxes into the budget of the Patent Office, so we get something, a very different institution than we have right now.

And so the question we have to ask at a fairly high level is where do you want to encourage people to spend that time and money, right. And we can kind of pushed it around to different places. And some of these suggestions will push it one place. And some will push it other places. But it's going to net out to be about the same, is my guess.

And so the question is would we rather have them spend it on one activity than another. One very real possibility is that we end up spending more money on the -- on the back end, right. You know, say, well, we won't spend

quite some much time playing games with the Patent Office. Then we'll play games when we get to litigation, right.

And that's when we get your question about do we need to put in place some type of either administrative-law type of direction or can the courts fashioned this themselves to say, well, how should you really look at this, you know, what was done.

And we're beginning to see some progress in that direction, starting with *Zirco* as to, you know, what the relationship between the courts and the Patent Office ought to be. But that's still pretty ambiguous, right. So either some development in judicial doctrines, looking at the Patent Office, or some direction from Congress as how to how to look at information coming out of the Patent Office would -- would, I think you're right, be enormously helpful there.

MR. COHEN: Daralyn.

MS. DURIE: I very much like Jason's suggestion regarding the notice of allowance and trying to have a clear statement in it that actually delineates what the basis for allowance was, rather than simply reciting all of the claim limitations and stating that combination was novel over the prior art, which is not particularly helpful.

I am concerned that in the absence of more

explicit guidance it would not get much traction with the courts, because it's a statement by the examiner, not a statement by the applicant. And there'll are a lot of courts I think who really because they view the prosecution history through the lens of disclaimer consider statements by the examiner to be much less relevant.

To Lee's point, though, I mean if the response to that is to say, well, we don't really care so much what the examiner thought, what does that do to the presumption of validity? I mean isn't what the examiner thought and the reason that the examiner allowed the claims actually the touchstone of what we care about? I think it is.

MR. COHEN: Let's take the three signs that are up and move on. Let's hear from Peter.

DR. MENELL: I'm not sure this is what Dan was getting at with his comment about the Federal Rules of Civil Procedure, but I will say that there has been a procedural sea change in patent litigation over the last decade that really traces to a grassroots movement begun in the Northern District of California and the patent local rules. And I think any lawyer today will acknowledge that that has dramatically improved the consistency. And that process has now spread to more than 12 districts around the country.

These are the districts were a lot of cases are being heard. And even lawyers who are litigating in other districts have basically internalized that process.

So I think that there is room here for changes in the examination process to create a little more consistency in terms of what judges have to do with the claim-construction stage. And so my -- I think that the answer, the straightforward answer to your question is that you would see these effects. They're going to be delayed just because there's a five-year period in between applications in the Office now and litigation. But there is no doubt that this would be a relatively low-cost investment. And it goes right to the heart of what we are trying to accomplish.

Another somewhat tangential benefit of focusing on this is that we have this peculiar language in the *KSR* decision, I think generally correct language, saying that the presumption of validity perhaps has less importance when there's new art introduced later. And so that's all in the spirit, I mean of telling judges that the Patent Office is reliable for what they look at; and having in some ways greater commentary by the examiners, you know, should be given some -- maybe not deference in a chevron sense but, you know, some degree of consideration could help.

And, you know, we could go further and make it more of a deferential process, at least for art that the examiner considered. But those I think are the ways in which you improve administrative and judicial interactions.

MR. COHEN: Let's take Kevin and then John.

MR. RIVETTE: To Jason's point about transparency, I agree with you for almost all of the Office actions, that we should be very much transparent; that's the examiners probably should be putting more in there and not just checking off boxes.

With regard to the -- you know, let's say we did go to an initial interview prior to first office, I would suggest that we not make that transparent. Because at that point what we're really doing is trying to wrestle to the ground what it is we're talking about. And if we really do step in and make that transparent, my gut is what you'll find is that everybody lawyers up real fast and it really doesn't -- it doesn't solve the real issue, which is can we get at least get within, you know, horseshoes and grenades of what this thing is that we're dealing with.

MR. SCHULTZ: Can I respond just for --

MR. RIVETTE: Yeah, yeah.

MR. SCHULTZ: I mean I completely understand.

That the chilling effect that I was --

MR. RIVETTE: Right.

MR. SCHULTZ: -- sort of sensitive to. The problem that I struggle with around that, though, is then we pretend that the specification in the application that they submitted is the invention. Right? So it's like we are struggling with -- and if we're talking about notice, right, and we sort of go back to this -- I mean, this is what we've published. We've published the application, right? And it just -- it makes me -- it's like, well, I want to get the examiner and the applicant closer together to make it efficient. But, at the same time, if there's a notice function being played by the documents that were filed previous to that, then I feel like we're actually kind of at odds with ourselves. And so I just don't -- I would ask, well, what do you do about that?

MR. RIVETTE: So one of the things that we found as we went through the trial, is when we get an open discussion with them, many times they will back off and say, you know, I may not have an invention here.

And what had happened in a couple of the instances -- because what we're talking about here is actually bringing in the inventor, not just the lawyer. It's not

just the lawyer sitting down and say, here's what our invention is. It's the inventor or saying to the examiner, you know, why don't you get it; or the examiner saying, well, why don't you get it, that there's really nothing here. And that allows a different conversation then, once the office actions start and everything is on the record.

And so we -- we thought long and hard on this issue, because if everything is on the record, then there's no misstep that's allowed, there's no ability for them to go, 'I didn't think of it that way.' There's no ability to stand back.

MR. SCHULTZ: Right. And I completely understand. But then what do you do about to about the documents and the presumptions of -- of the notice that come with --

MR. RIVETTE: Yeah, but those -- I mean the first office action normally hits that which is, you know, after the discussion what normally happens is here are the things we're -- you know: I've looked at it. I understand your point of view, but I still disagree with that. Or: Here's why I'm going to reject. And all of those should be open. And I think we should have better -- better transparency to those issues, because I think that we don't do enough right now to articulate what the examiner was thinking. It's too

easy for him to check off boxes.

But I would caution that the chilling effect could be so great, because -- I mean we went through this ad nauseam on interviewing different groups. The moment we make this truly transparent, at that point no one is going to say anything. And then we really -- now we're in a very adversarial system the whole way through. So that's the only point I'd make on that.

MR. COHEN: John.

MR. McNELIS: We've all been talking about different ways we can improve the process. All of them require additional time from the applicant and the examiner. The examiners don't have enough time. The examiner corps doesn't have enough time to do a thorough job on all the applications they're working with.

MR. RIVETTE: And I will tell you on some of them it's real easy. Otherwise, we got problems.

MR. McNELIS: And so there's a couple solutions. We've talked about using Europe as a guide. And Europe does cost more to file applications. We could double our filing fee, at least for large entities. And that would -- presuming Congress doesn't take away the money, we would have double the amount of time for the interactions and for

the examinations, which would be great.

Europe also has -- at least in Germany has a dual patent model. They have a utility model and a utility application -- a utility patent. And we have in our system one patent where the rights are this huge monopolistic right. There's no compulsory licenses. And it's basically, because of the damages, with the issues going on in Congress with damages, you have one product -- you have a product, one piece of that product, and profits from that entire product can be given for one element. And that's a huge issue.

And so another possibility is to do something like the German model and we have a bifurcated system, where for less cost you can file a patent applications, which the process would be similar to what it is today, but maybe there's compulsory licenses involved. Maybe damages are more proportional to that aspect of the product which it contribute to. And we can have a more expensive utility application where there is significantly more examination that's going on back and forth and maybe require more from the applicant.

And we can charge 5,-, $10,000 for something like that. And then the rights for that patent, if it issues,

would be what we're seeing today, where there's no compulsory licenses and you get the true monopolistic rights. But in some way it's going to cost more money for us to get a better notice for in place.

MR. COHEN: I'll break my -- my prior statement. We'll take Lee to wrap up on examination, then we will on.

DR. PETHERBRIDGE: So I just wanted to -- really my thoughts were -- were sort of stuck in the colloquy that Jason was having with Kevin about sort of these pre-examination interviews. And, you know, my recollection from just when -- you know, back when I practiced and at the court, and times like that, was much like Michelle's, as she represented earlier, which is you look at these prosecution histories and there's not that much of the examiner's work product written down, which, you know, it would always I think be helpful to see more of that.

But the other thing that I sometimes think happens in these interviews is that people go in and sort of represent, well, look, maybe we don't really have that much. And you can get a sense of some kind of an agreement, sort of maybe between the examiner and an applicant or potential applicant about what an invention is.

But then the language that sort of comes out of

that meeting is, well, the applicant -- and the -- or maybe I should say the examiner has a view of what the invention is based on what was told to them in that meeting. And then the language that sort of develops in the patent document might not well reflect that viewed more objectively from -- from people on the outside, right. So what you might have is a sort of, kind of a representation of a narrow invention they could sort of, well, we know it's narrow, and then the words used to sort of talk about it are -- are maybe much, much broader or more uncertain. That's sort of at the end of the day that allows for, you know, some gaming of the system here -- there, by not sort of allowing for some transparency in that sort of an initial interview, so I don't know.

MR. COHEN: Okay. Let's shift now to the issue of notice that can come from pending applications. I'd like to start briefly with publication. I think -- well, we're probably now into a set of issues where we can try to give short answers, which might convey a lot of useful information in the little time that we have left.

On publication, I heard a couple of you already talk about the idea of the possibility of publishing inside the 18-month period, shortening that, or doing away with

that. I'm wondering if anyone else wants to comment on that, on whether that would be useful. Whether the 18-month delay is currently a problem of any magnitude. And whether, if you went to publication, whether that would have any downsides.

Michelle.

MS. LEE: So I think I'm in favor of publication, definitely. And Peter's suggestion of immediately upon filing is a good idea. The problem is is the rest of the world doesn't have immediate publication.

DR. MENELL: Exactly.

MS. LEE: So that would create some gamesmanship, right? If I really didn't want the world to know about my application, I might go file in a different jurisdiction, et cetera, et cetera. So I think there are some practical realities there, as between a publication obligation and none.

Even at the 18 month, I'm in favor of the publication requirement at the 18 months. And, you know, when you look at the 18-month period in the software space, some product development cycles are very short, on the order of three months from concept to launch. So even if I want to do a clearance search, right, and I want to know what my

competitors have filed or what other inventions are out there by individual inventors, by definition my search and the information that I have access to is out of date. So that's a problem. But an 18-month delay is better than a, what is the delay now, four to five years between a filing and issuance? So if I had my choice I'd rather an 18-month delay.

MR. RIVETTE: Should be across the board.

MR. COHEN: Yeah, let's throw in the issue for publication, as to whether we would want all applications published.

MR. RIVETTE: Yeah.

MR. COHEN: And not just so those that are filed foreign.

MR. RIVETTE: Internationally, or large, or entities, right.

MR. COHEN: Kevin.

MR. RIVETTE: You know, my -- and this is not on behalf of the Office or anything else. I mean my gut is that everybody should be treated equally. I think that the 18-month rule would work and that you should file it -- no, I mean there shouldn't be exceptions. That's my gut.

MR. COHEN: John.

MR. McNELIS: I think the concern are the solo investors, primarily. I think most corporations are fine with the 18 months. I do think it should be, for anyone who is not necessarily a solo inventor, it should be everyone is 18 months. There should be no distinction between whether something was filed internationally or not.

MR. RIVETTE: But they don't have that in Europe. They don't have that anywhere else.

MR. McNELIS: Correct. I think this is a more pragmatic response in terms of what the issues are with the solos here.

MR. COHEN: Maybe you could explain what the concern is that the solo inventors have.

MR. RIVETTE: Right.

MR. McNELIS: The concerns I've heard from solos are primarily that if you go and you disclose something too quickly, then you're stuck in a situation where the larger companies can go and basically steal the idea and there's essentially no recourse because it's so expensive to follow up.

And so the issue basically comes down to -- I think everything should be published, I don't think it should be limited. I think small entities should be subject

to this also. I think there potentially should be just a carveout for those that are truly solo in method.

MR. COHEN: Anybody else on publication?

A little bit related to this there is the issue, which has been floating recently, of deferred examination. And I'm wondering if anyone has thoughts as to whether there are any specific features that should be incorporated in a deferred examination system that would help safeguard notice. Publication requirements, anything along those lines? Do you have any thoughts here?

If not, we'll move on.

Let's talk about evolving applications and, in particular, how this ties in with written description and enablement. And I guess the overall question is: Do you feel that current written description and enablement requirements cause applicants to provide adequate notice as to the universe of inventions with respect to which the applicant may ultimately be able to claim exclusivity?

How is this working out? Are you -- have you in your experience been surprised or are you normally able to see what's likely to emerge? Anyone here.

Michelle.

MS. LEE: I think the audience probably knows my

answer to this question, but in the cases that deal with, I mean we are routinely surprised with what we read in the written description and what the patent owner claims the coverage is. So I mean it's just -- for us it's a habitual problem. So we look for greater -- we'd ask the PTO to look for greater support in the specification, to actually use terms that have support in the specification.

And also when there's a continuation practice, oftentimes an application that is published and the claims that are published in that application, if you look at the fifth generation continuation, the two look nothing like each other. So that's a problem. And, you know, even good faith companies that want out avoid infringement, it's very difficult, so.

MR. COHEN: Vern.

MR. NORVIEL: So this is probably predictable also, but I actually think that the pendulum in life science has swung yet too far the other direction. As a practical matter, the examiners these days without significant battles are willing to give you pretty much only exactly what you've actually done in the first blush in life science. So this is restricting or limiting to some extent I think investment in healthcare, so I think that if that were to swing further

I think it could be extremely damaging to health innovation in this country.

I do think we can again learn from that and see that once the examiners are incentivized and knowledgeable enough, they can see when people are playing games and trying to scoop up the world when all they really did was a very small thing.

So I think we should learn from that in other industries, but I think again we have to be very careful not to clamp down on that even further such that we have a healthcare industry that is no longer financeable in this country.

MR. COHEN: Well, I'd like to develop this idea of learning from that in other industries. Does anybody have thoughts as to the extent to which written description and enablement are being adequately enforced in, say, the electronics industry or the mechanical arts?

Anyone want to talk about it from that perspective?

Dan.

MR. BURK: I guess I was just going to sort of make a general comment, also very predictable in answer to your original question, which is it depends, and we just

heard that it depends, right. Which is both in the Patent Office and when we get to the courts, the disclosure requirements are enforced in very different ways in some industries than in others.

So I don't think we can give a blanket answer to that question. Even in Vern's comment, I mean I'm getting the sense as Vern is talking, he talks about life sciences. That carries a whole lot of territory, all the way from sort of straight chemistry to things like bioinfomatics, which would be really IT. But at least as far as what the empirical evidence is that people have developed in sort of discrete technologies, written description and enablement are not being treated the same in different areas, which is the problems that Michelle's seen as opposed to the kinds of experiences that Vern's talking about.

MR. COHEN: Daralyn.

MS. DURIE: I again and, perhaps, shockingly I actually agree with Vern. I think in the biological arts the written description are sometimes being applied to stringently. And the problem there is that there's such a focus on the specific examples and the specific actual work that was done. And even when there is a description of a broader genus of the invention, there's a finding that

there's not support for that, even though it's something that the inventor pretty clearly described as being within his contemplation.

On the other hand, I think when you do get into some of the IT areas, there really doesn't seem to be much enforcement of the written description requirement at all. And I think it may be because sometimes the invention is less tangible. In many cases, the inventor didn't do any inventive work at all, I mean in the sense of actually reducing something to practice as opposed to filing a patent application. And I think in those cases there's sometimes a tendency to just kind of -- for people to throw up their hands and not really know how to apply the written description requirement in that context.

MR. BURK: And if I can add a footnote to that. I mean differential applications are not necessarily bad, right. I mean you want a written description that is as precise and full as the technology allows. So the real question we're talking about is whether you have inadequate enablement or inadequate disclosure in a written description in a technology where you could do more. Maybe the Patent Office or the legal doctrine should have pushed you to do more, and you didn't, as opposed to one where it's

appropriate to how that technology actually works.

MR. COHEN: And I guess in our context the further question is: Are we getting differential notice to third parties --

MR. BURK: I think we just heard that we are, yes.

MR. SCHULTZ: If I could just add one really quick thing. I think in the software IT space, in particular the type of claim, and I know that some things get claimed as machines, but like there's so many of these broad-method claims. In particular, and I know that when I did do one project with the Clinic on freedom to operate for a medical device, it was not the device patents that were the problem but the manufacturer methods and the other methods. So I am noticing a differential there in the type of claim as well.

MR. COHEN: What I'd like to throw into this discussion, that would be the procedural aspect of continuations and broadening continuations and the extent to which this has affected the ability to see notice.

Do you agree or is it the feeling of the panelists that there's some tension between continuation practice and public notice?

Vern.

MR. NORVIEL: Just leave it up. So I'm very clear

and strong on this point. We actually had an informal study. And in healthcare, again because the examiners are so restrictive in healthcare, if there are not continuations and divisions available reasonably widely in healthcare, there will absolutely be a restriction on healthcare investment in this country, I guarantee that. So we have to be very careful in this regard.

Again, I think if the examiners are being very careful you won't have continuations popping out with absurdly different claims in the fifth continuation or the first continuation. I don't think the fifth one should be any different than the first one, and there's no conceptual reason why they should be. So I think we have to be extremely careful about this because most cases that are litigated in life science you would find were on subsequent continuations. And if the examiners are only able to do the first one in life science, then the VC is not going to be investing in those companies to do things like cure cancer and Parkinson's and those sorts of horrible diseases.

MR. COHEN: John.

MR. McNELIS: I agree with Vern, I think continuations are critical to keep and not to limit as per the rules that were promulgated about a year and a half ago.

One of the issues is the notice. And as long as the applications are published and the prosecution history is available on PAIR, I think the problem is very manageable. It's those applications that aren't published and so you get an issued patent, but you don't see what's going on in continuations. That becomes more of a problem. And so as long as we can address this issue significantly in my mind by just solving the publication issue.

MR. COHEN: Dan.

MR. BURK: I guess I'll just comment that this is sort of the poster child for my earlier comment about gamesmanship, right. I mean so back when I was practicing before what was -- used to be Group 180 and is now 1800 and we had 17 years from issue, we played games with restriction requirements.

Now that's gone away and so people play games with continuation practice. And so there are going to be unintended consequences where people shift their effort depending on what you do.

The happy -- there's probably some happy medium between having enough continuations and being able to play the games that people play with continuations.

MR. COHEN: Michelle.

MS. LEE: So I wish I lived in Vern's world, in terms of the patents that are issued out of your world. But going to the issue of continuation, I think it does run contrary to notice in our space. And I just want to give one example.

I mean oftentimes what happens in our space is the applicant who is filing the continuation is not the inventor. So you've got a nonpracticing entity, a patent aggregater, that goes out onto the market, specifically looks to buy applications that are pending so that they can file continuations and mine it for everything that it's worth. They know all the rules in the Patent Office. They know what they can get through. They know that you can add new claims, you can amend the claims to target other competitors, and the Patent Office is not going to look for a lot of support in the specification.

They will also look to issue patents and they will attribute greater value to patents that are within the reissue period, precisely so that they can go back and mine it for more. So I mean there is the opportunity for gamesmanship. I mean that's whether you're talking about an NPE or a real company, but the consequences for NPEs and what they're able to do with it and the consequences to

operating companies is a pretty serious one in our area.

MR. COHEN: And, Jason.

MR. SCHULTZ: Yeah, just to follow up on that. Just for -- I think what -- I mean continuations have been talked about and I think that there are a lot of criticisms that are very, very valid. And I think this tying the claims to the specification, that's really one of those key areas where you see this sort of, you know, weird connection and you can't figure out what is the connection between this and the original filing.

And so I think tightening that up and maybe even having, like I said, like a simple chart saying: Okay, well, where is the connection. I think this at least gives us more information about how far they're stretching it. And maybe in some fields -- I agree, maybe that's totally necessary and it's totally supported in the spec.

MR. COHEN: Kevin.

MR. RIVETTE: Yeah. To follow up on Jason and Michelle's, Michelle, I think that the real issue is exactly what Jason was going to, which is if it was tightened up, if the spec was the only way you were going to be able to expand those claims or change those claims, but that goes back to, you know, how do we examine properly and how do we

incentivize the examiner to be able to spend the extra time, or at least structural how do we have it so that you can easily see where the change was, because I don't think continuation per se is the issue.

MS. LEE: So I absolutely agree. I'm not saying continuation per se is bad, but it is subject to a lot of abuse.

MR. RIVETTE: It is the practice that -- yeah.

MS. LEE: And to the extent that the Patent Office can be stricter in its enforcement of support, I'd be in favor of that.

MR. RIVETTE: Yeah.

MR. COHEN: Okay. For our last set of issues, Bill Adkinson's going to take over.

MR. ADKINSON: Thanks, Bill.

And we've been -- we started this morning talking about the current state of notice and have now been speaking for quite a while on how the clarity of the patent document and certain doctrines can be improved.

I wanted to throw out a couple of issues of where are we now? Do we -- what do we think practically can be done to improve notice given the discussion we've had of really a very broad set of possibilities? What problems

remain with respect to the numerosity of patents. And given that assessment, what else might we do beyond simply trying to improve patent clarity and, in particular, do something about the way in which the remedy system, which we'll talk about this afternoon, plays into notice?

As Peter mentioned, one possibility is having inadvertent infringer defense or prior user defense as sorts of issues. Or simply other mechanisms which might make damages depend on the level of notice. So I'd like to throw out that broad set of questions.

Yes, Daralyn.

MS. DURIE: Well, I think it is the case that you have to think about notice issues on the back end as well as on the front end, because I don't think you can remedy the problem on the front end, particularly in art areas like the IT space. I think the problem is simply intractable.

And, as a consequence, you are going to have large numbers of infringers who did not receive actual notice and could not plausibly have received actual notice at the time that they are making design choices relating to their products.

And of course the problem now where you measure a reasonable royalty as of the date of first infringement is

that you're looking at how much an accused infringer would be willing to pay after those design choices already have been made. And so built into the current structure is the availability of the argument that the infringer should have to pay a premium because the cost of redesigning the product to avoid infringement would now be so great; whereas, had they actually received notice of the patent, they would have been able to evaluate what the choices were ex ante and perhaps choose a noninfringing patent.

I think our damages analysis needs to reflect the reality that notice in many cases is not practical and that if you are an innocent infringer you should be able to go back not just to the date of first infringement, but to the date when the actual design choices were being made and evaluate what the value of the IP would have been at that point.

MR. ADKINSON: Kevin.

MR. RIVETTE: I'm going to take it actually from -- and I agree with Daralyn, but I think I'm going to take it from a different perspective and that is how the FTC looks at this not just on a notice issue but I've watched -- you know, so when notice goes out, I've actually watched situations where companies have decided to move offshore,

set up an infringing company. They know it's an infringing product. Two or three of those companies then manufacture the product, but sell it through hundreds of others companies in a global supply chain. And then it comes back into the U.S. and it's too expensive to actually fight it on an individual basis.

The ITC only gives you injunctive relief, even if you go for a global. And I'm going to suggest that the FTC should probably start taking a more nuanced look at global supply chains. Because I see it almost as a situation where you're looking at like a tax issue: How can we avoid taxes in the U.S. And what we've got here is: How do I avoid infringement if I go to a global supply chain and then bring the product back in and it's really difficult for a patent holder to be able to, one, get notice to them. But even if they get notice to them, what do they do? How do they actually stop this? And there's no damages typically involved.

So I'm going to suggest that that's an area that the FTC might actually want to look long and hard at, at the anticompetitive side.

MR. ADKINSON: Thanks.

Anyone on this side? Peter, do you have any

thoughts on this?

DR. MENELL: Well, I mean I do think this is a very fundamental issue. I don't think it can be solved -- well, I'd be skeptical you could solve it without legislation.

MR. ADKINSON: Yeah.

DR. MENELL: And so that puts in a different class than several of the things we've talked about. But the economics, I think, are very supportive of this. There's been a number of articles that have kind of developed this theme.

And I think we can -- I don't know that it's legislatively feasible, but I do think when you think about it from the standpoint of promoting innovation, you've got people working in laboratories who have no ability to know what is out there. And to tell them that you could face, you know, all kinds of damages based on a very uncertain standard by going ahead with those projects, I think it just chills that area of innovation unnecessarily.

MR. ADKINSON: Mark Lemley and Chris Cotropia wrote an article published this year which showed that outside the pharma area more than 90 percent of all complaints filed were -- appeared to involve allegations of

infringement that did not include allegations that the patent was known before the filing of the lawsuit. So that inadvertent infringement in that sense, and you can define it obviously in a variety of ways, was quite -- accounted for a large portion of total complaints, much less actual trials.

Dan, did you have -- or, I'm sorry. I'm sorry, that's --

MR. BURK: I had a point on the earlier theme.

MR. ADKINSON: Got you.

MR. BURK: No, go ahead. I'm sorry.

MR. ADKINSON: Daralyn.

MS. DURIE: I just had a comment on that last point. I think part of this may be the somewhat unintended consequences of the *Metimmune* decision, --

MR. ADKINSON: Um-hum.

MS. DURIE: -- because now that the standards for declaratory judgment have loosened up, --

MR. ADKINSON: Right.

MS. DURIE: -- if you are a patent holder, it's a much greater risk to go make any kind of overture with respect to the licensing because you face a risk of a declaratory judgment suit, even if you don't make an

explicit threat of infringement. So I think that may account in part for the increasing number of cases where there's not an allegation that the accused infringer was put on notice, and I do think that that makes this problem even more acute.

MR. COHEN: Yes, Michelle.

MS. LEE: Yeah, so in almost all the cases that we are dealing with, all the litigations, we did not receive prior notice. On only a very small portion of them did we actually receive a letter, the opportunity to discuss it.

And what that means, though, for businesses is that once you're in litigation mode, right, they know the cost of defense is on average 5,- to $6 million, so guess where the settlement price starts: It's 5,- to $6 million. And if you're dealing with an NPE and you're an operating company, the bulk of the discovery, which is in the initial phases of the litigation, is going to fall predominantly on the defendant. You've got lots of engineers, you've got lots of product development. Maybe the NPE bought the patent from somebody else and there's some documents associated with the invention, but there's not a lot.

So already there's a disproportionate balance there and a disproportionate leverage, combined with --

that's just through discovery -- by the time you go through summary judgment for hopefully an early summary judgment on noninfringement or invalidity, you're talking easily 2,- to $4 million -- well, 2,- to $3 million. Daralyn would know the numbers better. But, again, --

MS. DURIE: Ours are cheaper.

MS. LEE: -- there's a tremendous amount of leverage and there's a tremendous temptation, regardless of the merits of the patent, regardless of how much notice -- you are under no notice, to just pay an amount of money under some amount of -- you know, under 3,- to $4 million. So that's a practical consequence of notice and litigation and coming to you before versus later.

MR. ADKINSON: One other related question here is whether we can get better notice by being more specific about burdens and consequences of burdens for both the applicant and patentee, on the one hand, and the alleged infringer on the other to do more to make the existence of the patent known, on the one hand, or to search for patents before taking action, on the other.

Do you think panelists have feelings about how doctrines like the willfulness doctrine, for example, could be used in this way?

MR. SCHULTZ: Yeah, I have a couple comments related to that. I mean I think what we've seen in both today and yesterday is that not all notice is equal, right. So that there are different levels of notice that you get.

And I thought I was struck yesterday in hearing some of the discussion about valuation, about, you know, you'll have these experts on the plaintiff side versus the defense side and sometimes the difference in their valuation will be a thousandfold. Right, like that's the difference in terms of damages assessments.

And what's interesting is in copyright law we have a wide range of statutory damages and other kinds of damages, and there are problems with that that have been talked about. But there is not only the opportunity to go up when you have willful infringement and copyright but the opportunity to go down, right.

And there's some argument about how much guidance there should be for courts and things like that and judges and juries, but there might even be some way to sort of incorporate guidance as to this level of notice and also in going to the ambiguities that we talked about, right, in the claims and things like. And perhaps that should have an influence on the amount of damages and the valuation. That

the clearer the patent is, -- talk about incentives -- the clearer the patent is and, you know, that's believable, then maybe more damages are merited. And if it's more ambiguous, it was hard to figure out that this would have been something that, you know, infringed, maybe some way to kind of ratchet down the damages because of more of the innocent infringement type idea.

MR. ADKINSON: Kevin.

MR. RIVETTE: Yeah. I just wanted to respond actually to the prior one and this is more towards Michelle's comments. And, having been at IBM, I understand the issues of being a large target and seeing them roll across you know the transom.

I will suggest, though, that having looked at this, the asymmetrical imbalance, it's not just an NPE, and I get nervous when I see the NPE rolled out as, you know, a real bogey man, and maybe that's not what you were meaning at all, but I just wanted to make the comment that I've seen it with small companies, I've seen it with small inventors. I've seen it with people backed that are inventors, that it's not an NPE situation.

I think that distinction should probably go away and we should look at this in a more global perspective, on

how do we deal with the system. Because I think if we make the distinction at the NPE stage, I know a lot of companies that produce a lot of research that goes into other people's products. IBM was great with Lasix. We developed that. Are we an NPE because we never really practiced it? I mean these are sort of things. So that distinction, and that was the only thing I had wanted to point out, is that I actually find difficult for myself to go through.

MR. ADKINSON: Are there things that the PTO could do to make it easier for firms to identify potentially relevant patents?

MR. RIVETTE: In what -- I think, yeah, so I think the PTO, and you'll see in the 2008 PPAC report, we're looking for more transparency. We're looking -- at least the Advisory Committee is.

The PTO has a huge problem with IT right now. I mean we would love to put in systems of unitary search for the examiners. We would love to put in systems where we have, you know, statutory checks in all of the patents that come in in textual format, so we can actually find out whether or not they should even get to an examiner.

I think that public PAIR should be completely out there. I don't see there's any reason why we have to screen

scrap those on the private side. I think all of that information should be public.

And, having pushed at this a number of ways, typically what I run up against is the IT system is so delicate at the PTO that a lot of this can't be done the way it is right now. So I mean if I were here, I'd make a plea: Let's fix that. And now we've got a CIO that is doing that, we have a path forward, but I would like to see everything transparent as much as possible.

I'd like to see all the file wrappers easily -- you know, they're in electronic format, let's make them easily accessible. Let's make it so that you could click on the file wrapper from the patent. Let's make it so that you could click on all the prior art patents from the patent.

I mean this is not rocket science. And I think that would go a long way to notice. I think it would allow the kind of user experience that we all expect from the net right now. And thanks to Google we have most of it and we don't understand why we can't get there from here at the office, so.

MR. ADKINSON: Good. Thanks.

MR. COHEN: Okay. Listen, I did give you a promise that you'd all have an opportunity to make any final

comments that you felt that we skipped over. I didn't promise you that I'd do it before we were all ready for lunch, but if anybody wants to say anything further?

Otherwise I'm going to thank you all for what I thought was a very helpful and very informative panel. I'm looking forward to reading the transcript and learning even more as I go over it and over it.

I want to add that there will be an opportunity -- I guess -- through May 15th?

MR. ADKINSON: Right.

MR. COHEN: -- to continue to submit written comments for our record, and that would always be appreciated. And just the final repetition of thanks for a job well done. Thank you.

MR. ADKINSON: And thank you.

(Applause. Luncheon recess taken from 11:58 a.m. to 1:32 p.m.)

PANEL 2: PATENT REMEDIES

MODERATORS:

SUZANNE MICHEL, FTC

BILL ADKINSON, FTC

PANELISTS:

YAR R. CHAIKOVSKY, Partner, Sonnenschein Nath & Rosenthal LLP

MARY E. DOYLE, Senior Vice President and General Counsel, Palm, Inc.

RICHARD J. GILBERT, Professor of Economics, University of California, Berkeley

MARK A. LEMLEY, William H. Neukom Professor of Law, Stanford Law School

VINCE O'BRIEN, Managing Partner, OSKR, LLC

WILLIAM C. ROOKLIDGE, Partner, Howrey LLP

JOHN W. SCHLICHER, Attorney, Lafayette, California

P. MARTIN SIMPSON, JR., Managing Counsel - Business and Land Use, Office of General Counsel, University of California

P R O C E E D I N G S

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MS. MICHEL: If you'll take your seats we'll get started.

All right. Thank you. We are going to start the last panel of the last day of this series of hearings for the FTC's Project on the Evolving IP Marketplace. We'll be talking about remedies, including damages and reasonable-royalty calculations, so we're hoping to go out with a bang. I think this will be an interesting panel. We have a lot of ground to cover.

So, my name is Suzanne Michel, I'm Assistant Director for Policy at the FTC, and I will turn it over to Bill to introduce our panelists.

MR. ADKINSON: Hi. My name is Bill Adkinson. I'm an attorney in the Office of Policy in the Office of General Counsel at the FTC.

This panel is going to discuss damage awards, the current standards governing patent damages, and their impact on patent value and innovation. We'll look at damage calculations and the evidence used in calculating damages, particularly in the context of reasonable-royalty determinations. We'll also look at permanent injunctions after the *eBay* case and the doctrine of willful infringement.

We've got a really great panel for today's last panel, and I tried to figure out a way to do them justice and keep this short enough, and failed. So I'm just going to give you a name, rank, and serial number.

Yar Chaikovsky is a partner at Sonnenschein Nath and Rosenthal;

Mary Doyle is a Senior Vice President and General Counsel at Palm;

Rich Gilbert is Professor of Economics here at Berkeley;

Mark Lemley is William H. Neukom Professor of Law at Stanford Law School;

Vince O'Brien is Managing Partner at OSKR, here in the Berkeley area;

Bill Rooklidge is a partner at Howrey;

John Schlicher is an attorney in Lafayette, California;

And Marty Simpson is Managing Counsel, Business and Land Use, Office of General Counsel, at the University of California.

MS. MICHEL: All right. I'd like to start out with a broad general question that would give the panelists to give a little background on their perspective on these

issues by asking you: Why is it important that we get the legal rules governing damages right. Why were you -- and this probably goes to also: Why does it matter? Why were you willing to take time out of your busy schedules and come here today?

If panelists would like to respond throughout the day, you can turn up your table tents, and we'll call on you, and we'll move our way around the table.

Rich.

DR. GILBERT: Well, Suzanne, it's really not an easy question because you have to ask what is -- what's right first and then you have to ask, well, do we want to get it right.

In terms of what's right, ideally or at least theoretically you would like to choose a reward that provides incentives for the right amount of investment in research and development. So you would like to align the rewards to call forth the right amount of R and D. That could imply more than the incremental value of the patent or less than the incremental value of the patent. And it depends on the opportunities and technology for research and development, so it's likely to differ from industry to industry.

So getting patent rewards exactly right is very complicated, very industry-specific. I'm not sure it's really the objective that we want to shoot for in patent policy.

And other issue which is -- well, a couple of issues of course is that reward to one innovation can be a cost to a second innovation, to the extent that innovations build on each other.

And another issue that we don't think about much but I think we should think about is how do rewards affect incentives for conduct that we might think is pro competitive, like licensing and like forming and holding together patent pools, which can be very much affected by the type of rewards to individual patent suits.

MS. MICHEL: Thank you.

Mary.

MS. DOYLE: My perspective is very much born, Suzanne, of the work that I do as a general counsel at Palm. And so I am focused more on what's wrong than what's right. And I think these statistics might illustrate best my experience and what I likely think about the subject of damages in patent cases.

Currently Palm has 17 cases pending against it and

all but two of those cases have been brought by nonpracticing entities. The vast majority of those cases have been brought in 2008 and 2009, with a few hangers on from earlier years.

And those 17 cases compare quite unfavorably, from my point of view, to the 30 that I understand Chip Lutton described as the patent caseload pending against Apple, we have more than half that number, obviously, and we are 1/32 of their size.

The other statistic I would like to share with you is our total expense on patent litigation over the last -- since 2000. We do have a case that was filed against us in 1997 by Xerox -- it's widely reported -- which we settled after 2000 for 22.5 million. That particular case skews the results. So if you want to add the data in for your own purposes, certainly do. That was settled for 22.5 million, and the fees involved in that case over the course of seven years of litigation, three trips to the appellate courts and no trial, was $7 million.

Without counting that case, of the cases filed against Palm, there are 21 since 2000, the total fees expended other than I said Xerox, in the Xerox case, were $21.6 million and the total settlements were $6.8 million.

So we spent more than three times as much, as you can see, on defending cases, which now you understand why I'd say they're worthless, the median settlement: $250,000. And by that I mean there were about ten cases settled for less than that and ten for more.

But the highest number in that list and the only one in the millions range is a $2.9 million figure that was paid with respect to a case many years ago, before we got smart about these things.

So what's wrong in my view is that Palm, which is a little company, barely a billion dollars in revenue at the present time, has over the last five or six years, spent $21 million on defending this litigation. It's relatively unmeritworthy. In every case we spent, with one exception, we spent less to settle than we spent litigating. And we have nothing to show for it other than licenses to patents that we don't think were implicated by our products in the first place.

So you can imagine what my perspective would be then on the damages issue.

MS. MICHEL: So your concern then is that if the legal rules over reward or grant damage awards that are too high, it just encourages litigation?

MS. DOYLE: It encourages what I would consider opportunistic litigation that has little relation to the value of a patent, its patentworthiness, its validity, let alone whether or not it's infringed.

MS. MICHEL: All right. John.

MR. SCHLICHER: I want to repeat something Rich said which I think is very important: Remedies for patent infringement depend on what you're trying to accomplish. My view, I think I share with Rich, is that the purpose of granting patents is to encourage companies to do R and D projects that they would likely not undertake if they did not have patent rights.

The purpose is not to induce people to disclose inventions that they would have made with or without patents. The incentives that the rights will create obviously depend on the remedies. In my view an injunction is and always has been and should be the preferred remedy. The reason is that an injunction, unlike a damage remedy, forces people who know the most about the technology and the business to attach a price to an invention based on economic reality. It also prevents activities, namely infringement, that distort the activities of patent owners and the licensees while they're exploiting inventions. Distortions

that will have longlasting effect that damages will never remedy.

The third main point I think for me at least is that the patent system works only if people make agreements regarding these rights. It doesn't work to the extent that the courts have to make decisions about these rights or decide who uses what invention at what time and how much they pay for it.

To the extent that the system relies on agreements, patent owners and potential users of invention can make agreements only if they know how the courts are going to behave if they don't make an agreement. And that means patent owners have to know the likelihood that if they win they will get an injunction and the approximate amount of damages they'll get if they win. Potential patent infringers and potential licensees have to know the same thing.

If the law is such that you cannot -- that those groups of people can't predict in advance what will happen to them if they go to court, then the law on remedies is defeating the very agreements on which the whole system relies. And my view is that current damage rules and rules on granting injunctions in patent cases fail that test

fairly miserably.

MS. MICHEL: Thank you.

Marty.

MR. SIMPSON: The University of California is an inventing, nonpracticing. As an outgrow of research we have inventions. One of the things we're doing in our mission of teaching research and public service is trying to get this technology out so the public can get the benefit of the research.

To do that you have a patent as a tool. If the patent is not an effective tool, then you inhibit that ability to get it out and used. You come back to predictability. That was mentioned earlier. And you come back to Professor Gilbert's statement earlier.

Two-thirds of our cases are licensed to small business in a given five-year period. Those small businesses need to be able to get funding. There has to be predictability in the system so that they can go get that funding in order to take the risk to try the new technology. If there's not enough predictability in what a patent means, whether it's damages or injunction, then what happens is that they don't get funded and that technology doesn't get a chance. That's where our concerns are.

MS. MICHEL: Okay. Thank you.

Mark, and also if anyone would like to address the problems of both over compensation and under compensation, that would be interesting.

MR. LEMLEY: Sure. Yeah, look, I mean I think the important thing to keep in mind is patents are government interventions in the marketplace. All right, they are government changes to what would otherwise have happened. They are government interventions in a good -- for a good purpose and I think they are desirable, right. But what that means is that, like any other government intervention in the marketplace, it's going to distort what would otherwise be a free and competitive market. And if you get the numbers wrong, if you grant patents to the wrong people or don't grant patents to the right people, or if you grant remedies for infringement of patents that are too high or too low, you end up distorting economic behavior, all right.

Right. So I mean one of the concerns, clearly as Rich and Marty say, is predictability of outcomes, and I agree with that. But we could have predictability of damages outcomes quite easily, right. We could say everybody gets a million dollars, but that's absurd, right? Nobody would even contemplate such a system. The reason we

don't contemplate such a system is that it does actually matter that we calibrate the patent damages rules to a normative baseline that's designed to achieve the goals Rich is talking about, right, to try to improve research and development incentives.

I mean it seems to me that we currently don't -- we seem even now to argue about what that normative baseline is or ought to be. I mean it seems to me that the logical starting point is what is the value that the patent contributes to the world that we didn't have before, right, and what's the incremental value of the -- of the world with the invention versus the world without the invention, that even that has turned out to be extraordinarily controversial in congressional efforts to reform patent damages. But we've got to have, I think, some measure of what it is we're trying to achieve in order to figure out compensation, because if we do over compensate, if we do under compensate, we're distorting the free market.

MS. MICHEL: Okay. Vine.

MR. O'BRIEN: Yes. I mean in the broadest sense what you're really trying to do is minimize enforcement costs while maximizing the preferred behavior. And I'm talking about compensation damages. There's also deterrents

that go into that equation as well. And compensation really goes to what people would often call fairness. You know: I've been harmed, I deserve to be compensated for that.

But if you get it wrong, if you get damages too high you have excess of litigation and you have licensing at excessive rates. And you probably have less innovation, especially improvements on patented items. Because if you get close to a patent you're likely to be sued and get bitten, so you'll stay away from those.

On the other hand, if you're under compensated you get investment in nonproductive activities. You probably would get more emphasis on trade secrets, onerous contracts with employees. At the extreme you get the mafia to help you enforce your intellectual property rights. It sounds funny, but that's what's happening in countries like Russia. These people serve an economic function. And if you get it wrong, this is what happens.

And I come at it from the standpoint, well, when it comes to compensation in patents your goal really ought to be able to mimic the marketplace. To measure what would be the incremental value in the marketplace of this technology. And it's interesting, because as Mark points out that's controversial. And the fact is you often get a

debate going on for hours where that's not even mentioned and it's quite shocking. But, anyway, that to me is why you need to get this right.

MS. MICHEL: Okay. Oh, yeah, Rich.

DR. GILBERT: Can we circle around a little bit on this. I think what Vince said is something I would agree with, although not because it's the right answer. I think what --

(Laughter.)

DR. GILBERT: Mark said that what we want to do is have a patent system that compares the world with the patent to the world without the patent and moves us in the right direction. And that's not necessarily the same as giving a reward equal to the incremental value of the patent. I mean you could have a patent where everybody knows it's worth a million dollars. There's just no -- there aren't many that are that clear, but you could have one, let's just suppose, everyone agrees it's worth a million dollars. But it might be for a technology that's going to get invented no matter what, that doesn't need a million dollars to promote research and development. And you could ask the question why are we then rewarding it with a million dollars if it's not going to actually produce any research and development.

I, for one, think that a reasonable starting point is to say: Let's figure out what the incremental value of the invention is and try to steer patent rewards in that direction. It's a good starting point. It's not necessarily the right answer, but it's I think better than where we are now, where you often get rewards that are unrelated to the incremental value of the patent.

MS. MICHEL: Well, let's lay down this groundwork. Mark talked about the measure of what we're trying to achieve. I want to start with the words of the statute, at least as it's currently formulated. And, in fact, how I think it's even in some of the proposed changes, which is the damages should be adequate to compensate the patentee. And that has sometimes been discussed in the framework of putting the patentee in a position he would have been but for the infringement.

Is that a starting basis that makes sense?

Mark.

MR. LEMLEY: So, yes, and in the vast majority of cases it's also going to be the ending basis that makes sense. So I mean the alternative -- patent law, unlike other areas of intellectual property law, doesn't involve disgorgement of defendant's profits, it doesn't involve

measures with the exception of willful infringement designed to punish defendants. And there's a good reason for that.

The reason for that is that patent law, unlike other areas of intellectual property, doesn't punish people who steal things, or at least it doesn't only punish people who steal things. In fact, Chris Cotropia and I have studied the question of whether the defendants in actual litigated patent cases are accused of actually copying the technology from the patent or the patent owner, or whether they were in fact independent inventors. And what we find is that while there are major industry-specific differences, the actual incidences of even allegations of copying is very small, it's under ten percent, and that in the industries that seem to spark the most damages concerns, the IT industries, it's on the order of two or three percent.

So it doesn't make sense, I think, to talk of punishing people who turn out in almost every case to be independently developing technology on their own or having made the mistake of independently developing the technology that someone else patented.

Now I think there are cases in which there really is theft of an idea. In those cases probably punishment is an appropriate because we are -- we don't want, I think John

said earlier, right, to just displace the contract and licensing system with a court system, right. We prefer people who know that they are taking someone else's technology to go and do a deal firsthand. But it's important to keep in mind that that's a pretty rare part, a pretty small part of modern patent litigation.

MS. MICHEL: Okay. John.

MR. SCHLICHER: Just to respond quickly to what I understood Rich to say, Rich is proposing -- well, let me back up.

I think we have had a hard enough time creating a set of rules under which judges and juries award damages that approximate the economic value of the invention in the particular case. If we ask them in addition to make a judgment about the extent to which that award would create proper R and D incentives in that industry given the research opportunities that will exist in the future and the costs of risk in undertaking them, we're asking them to do something that they are simply incapable of doing. And, while I admire the test, --

DR. GILBERT: That wasn't my proposal.

MR. SCHLICHER: Okay. Then I misunderstood it.

The short answer is: The patent in the case you

posited should be invalid. If the invention would have been made anyway, that there should have been -- there should be no patent.

To the more general point, the question -- the words "Put the patent owner in the financial position it would have been but for the infringement" come out of the *RO* case. That's a Supreme Court case in the 1960s. It wasn't a damage decision, so you can't tell what they meant, if they meant anything.

My answer is that damages never put a patent owner in a position it would have been but for the infringement. Only injunctions do that. During the period of infringement, the price at which products are sold are distorted. The people that sell them are distorted. The investments that are made by patent owners and licensees to enhance the values of the inventions are distorted. Damages paid by an infringer to a patent owner can never undo that damage.

To the extent that you're talking merely about the monetary effects on those two people, the answer of course depends on how it's applied, and that's the $64 question. If you ask the question: What is the amount of money the patent owner would have made if the infringer didn't

infringe and vanished from the face of the Earth, you get one number: But for this person doing this activity, how much would the patent owner have made.

For most inventions, in my mind, that's way, way too much, because the question's too simplistic. The question ought to be: How much money would the patent owner have made if it used the invention or something it had available to it that was better and other people used the next best thing available to them, including the infringer, and the amount of money the patent owner would have made if everybody infringed. It seems to me that that is the difference, that is a test which will allow you to put in the hands -- or the pockets of the patent owner in an amount of money that approximates the economic value of the infringement.

MS. MICHEL: So Rich, and then Bill.

DR. GILBERT: Well, the question is should patent rewards make the patentee whole for infringement.

MS. MICHEL: That's right.

DR. GILBERT: Well, at one level, of course yes. And then we have to worry about deterrents and all of that.

MS. MICHEL: Right.

DR. GILBERT: But particularly for reasonable

royalties, there's a fundamental problem with this analysis in that it's all circular. If I ask what is a reasonable royalty, well, what's a reasonable royalty is a value such that if I turn it down and go to court, the court will say that's what I owe you. Well, what is the court going to say I owe you, it's going to be the reasonable royalty that you calculated in the marketplace. So I mean this can wind up anywhere.

You can have a situation where a high damages result in high royalties, which then reinforce high damages. Or you can have a situation where a low royalty or low damages result in low royalties which then reflect low damages in court.

The only way you can get around this is to actually look at the underlying value of the patent and that's a more complicated question.

MS. MICHEL: All right. We will go into that complicated question in just a couple of minutes.

And, Bill, any comments on -- what's our touchstone here, what are we trying to achieve with damages?

MR. ROOKLIDGE: Well, that's the flipside of the question that Mary started this whole session with, is what's wrong. And from her perspective what was wrong is

that her company is spending too much money defending what she described as opportunistic litigation.

I agree that that is wrong, but I don't agree that that is the problem. I believe that that is a symptom. And I think everyone here has expressed a different perspective, as if we were the seven visually-challenged individuals and the elephant. I tend to look at it from where from my perspective the rubber the meets the road. Mary's perspective is the rubber meets the road on her budget. My perspective is the rubber meets the road in litigation, the results of which are what are causing this behavior.

So when I ask what's wrong, I recently sat down with my partner, Martha Gooding, and we undertook to study a couple of things. One, we undertook to study review mock jury trials in patent damages cases. And we watched a lot of them.

And then we undertook to sit down and read the Federal Circuit decisions in this area and we found some really surprising things. And one of the things that we found was it's not really the law that has a problem, that very often what we're seeing in these jury deliberations is the jurors going off the rails for reasons that are wholly unrelated to the law.

And the answer there is for trial lawyers to understand how jurors are likely to run off the rails in patent infringement cases and to use their skills to bring them back and to keep them on track. So I see the problem from a very different perspective.

Now John looked at this and said the current rules, he said, are failing miserably. I don't believe, frankly, that that is necessarily the case, at least I haven't seen that demonstrated from my reading of all the Federal Circuit cases. We've got to take a look at the trends. And when you sit down and look at the trends, the early Federal Circuit cases were very problematic on damages. The court was very loose on that kind of thing, but it's gotten a lot better. And Judge Rader is leading the charge to make it a lot better.

There is a common perception that was expressed in the House Report on the 2007 Patent Reform Act that damage awards are seldom overturned on appeal. That is just not the case. If you read the reported decisions, if you read the nonprecedential decisions, you'll see that the Federal Circuit has shown a lot of willingness to overturn damage awards, even damage awards that result from jury verdicts. The --

MS. MICHEL: Bill, in your reading of those cases do you see the court striving to fulfill this concept of reasonable compensation to the patentee and defining that as putting the patentee in the position he would have been but for the infringement or are they trying to do more, create deterrent, something else?

MR. ROOKLIDGE: I don't think they're trying to create deterrents. I think the Federal Circuit has hewed very closely to the line that deterrence is what enhance damages and attorney fees are all about. And what I've been focusing on are simply compensatory damages.

And the Federal Circuit seems to have been very clear to the extent that the arguments of the lawyers, the arguments of the parties in the case before it, allow the court to do that. I think the court's been very good about that. And what it's been trying to do is make sure that there is a basis in the record before the trial court to award those compensatory damages.

MS. MICHEL: Certainly calculated compensatory damages is an extremely difficult concept, and I want to, after laying this groundwork, dive into the nitty gritty of how to do that.

Yar.

MR. CHAIKOVSKY: So I guess my comment was going to be Bill's point, is he exactly pointed out that it takes the Federal Circuit to get it right with respect to compensatory damages. And so we have a system where whether you follow the *Georgia-Pacific* factors or what-have-you, how is a jury supposed to get it right? I mean we don't have juries getting it right. They have factors laid out in front of them that, quite frankly, they don't follow or they don't pay attention to. And they may make their determination based on some other aspect of the case. And I don't think they get enough guidance, quite frankly, from the lawyers.

And so right now we have a system that if you go to trial, you don't know what the result will be. And, going to Mary's point earlier, even prior to that, how do we know how to value this invention? I mean what value do we know to provide? And I don't think currently we have that guidance. And, quite frankly, even what's in the patent reform, I don't think that alone gets us that guidance.

Now do I have a perfect mathematical formula to get us there? I don't. I don't have that solution. And I'd love it. I'd love to have it. I mean I'd love to have it, but we don't have that mathematical solution. And the

realities are that, you know, anything we come up with, whether it's what we have today or whether it's what we have in the reform that exists, we're going to be litigating it no matter what. And it's going to be obtuse and the problems that Mary has are going to continue.

MS. MICHEL: Uh-oh. Well, let's hope not. So I'm hearing pretty broad consensus then that the point of damages is to be compensatory, not punitive. No disagreements there.

Vince.

MR. O'BRIEN: Well, the only comment I had is, you know, I liked the *Arrow* wording.

MS. MICHEL: Okay.

MR. O'BRIEN: The only trouble is is these cases where the judge or the jury or even the CFC is way off base, start out quoting *Arrow*, so it isn't helpful to us. I mean it's what we ought to be doing, but clearly it isn't giving guidance to any of the decisionmakers.

The other thing is I would agree with the prior commentators. There seems to be a cultural bias toward high damage awards in infringement cases. I think the average juror -- it's been my -- you know, from testifying and seeing the outcome, the average juror I think thinks that

you have a patent, you get rich, and that infringers are very nasty people. When, in fact, as we know there's a lot of what I would call innocent infringement going on.

So when I'm working on the defendant's side of a case and the defendant likely infringed, I know I have a tough road to hoe. And I just pray that the plaintiff's expert gets greedy, so I can destroy his or her credibility, because it's hard to get the jury away from a big number once they decide infringement.

MS. MICHEL: Okay. Mary, and then we'll dive into reasonable-royalty nitty-gritties.

MS. DOYLE: Well, I suspect that I was going to go there anyway. The issue for me, and I find a lot of the remarks made actually consistent in many ways, I think we agree on one other thing which is that presently the rules do not provide any kind of certainty. It would provide it with injunctions. I would say to you that that would distort the marketplace much, much more than anything that's happening today and, in fact, before *eBay* it did, in my -- again, in my experience.

But for me the problem is looking at a given patent and in the real world convincing the holder of that patent that at least in the case of my products, which have

been referred to as complex products, that as everyone here knows, a Palm incorporates many, many different components, 800 or 1,000, and certainly implicates in the view of patent holders, hundreds if not thousands of patents, most of which would be very hard for us to identify from the start.

But to ascribe to each patent holder who would claim that their patent implicates our product or to arrive at an agreement with that person about what they are entitled to, each and every one of them thinks that they're entitled to two to five percent of the entire value of this product. We have in that set of circumstances an impossible mathematical problem. Certainly there will be no investment in this product or in the innovation that led to it if that kind of math is going to rule the day.

MS. MICHEL: All right. So we have some agreement then that our goal here is compensation, but that it's difficult to figure out how to do that. So we wanted to start out by talking about reasonable royalties and how that's done.

Any thoughts on whether the hypothetical negotiation is the right framework to be thinking about what a reasonable-royalty award ought to be? Rich.

DR. GILBERT: Well, I think Mary gave a very good

example which says that a hypothetical negotiation is not generally going to get you to the right place.

MS. MICHEL: Is that because there's a problem in the fundamental concept or is the problem the way that it's working out in court?

DR. GILBERT: There is a fundamental problem about the way the market works for complementary innovations, at least. The complex product that Mary was talking about. To give you an example, suppose you have two licensors -- suppose there's a product that requires a hundred patents. And there's one licensor who has 99 patents and another licensor has one patent. And they both negotiate over how much they should get.

Well, under a plain theory of bargaining, if all of those patents are essential the person with one patent has as much of a claim as the person with 99 patents. It really makes no sense. But that is what the market is going to do. And that also creates a centrifical, centripical, whatever the right force is to get people to, in effect, disburse their patents and have more people negotiating more patent rights, as is what happened with the *Alcatel-Lucent* case, where they spun off a separate negotiator for three patents and then brought a case with an argument that their

three mp3 patents should get a very large share, a very significant share of the value of a computer.

So we cannot really rely on market negotiations to set the standard for what is the right determination of value, at least for complex products.

MS. DOYLE: May I ask a question about that?

MS. MICHEL: Sure.

MS. DOYLE: Why is that true, when a device like this that has hundreds of components and is the result of literally hundreds of negotiations to get the right price assigned to each and every component, all of which are necessary to the product?

MS. MICHEL: Mark and then Yar.

MR. LEMLEY: Let me start by just a brief answer to Mary's question. I think the dynamic that Rich is identifying works because of the threat of injunctive relief, right. So if the owner of any one of those patents can shut down the whole thing, right, then they do have just as much power and, therefore, in some abstract that's right --

DR. GILBERT: Yes, exactly. That's a necessary --

MR. LEMLEY: And so that's part of the reason why injunctions in these cases are so problematic, so --

MS. DOYLE: But not why negotiations shouldn't work.

MR. LEMLEY: Well, no, but -- right, well, though the problem is -- right now we're back to Rich's circularity point, right. So what are people willing to accept in negotiations? They're willing to accept in negotiations something that's a function of what they could get in court if they didn't get it at the table, right. So if we gave them in court the power to shut down the whole product, then they can get a pretty substantial amount of money in negotiations.

MS. DOYLE: That's true, but if you assign the value to the actual component in question, you may then get a much more reasonable result --

MR. LEMLEY: Well, and I think that's right, but I think -- right. And now I think we're moving -- and I think that's a move away from a hypothetical negotiation, at least as it's conceived right now. So the problems I have I think Rich has identified the theoretical problems with the hypothetical negotiations.

I just wanted to add a couple of practical problems, right, which are you're -- to talk about a negotiation between parties who by hypothesis not only

didn't come to terms but just spent $5 million a side in legal fees to take the case all the way to trial, rather than come to terms, right. There's probably a reason for that, right.

There may well be a case -- maybe the reason is, you know, idiosyncrasy, right, particular rationality by a plaintiff or a defendant. But it may also be the case not all deals would get made in a world without the lawsuit as a backstop, right. I mean some patentees wouldn't license their patents for anything that a patent licensee is willing to pay. Those deals --

MS. MICHEL: Well, yeah, but why? I mean we got assume economically-rational actors in this hypothetical.

MR. LEMLEY: Oh, well, so here's -- I mean so the short example -- answer to why is: If I'm in the marketplace -- let's say I'm a pharmaceutical company. I will make more money by selling the product at a monopoly price than I will make by licensing it to a generic competitor.

MS. MICHEL: So I should get lost profits, then we shouldn't be having a reasonable-royalty calculation, right?

MR. LEMLEY: I agree. I -- I -- yeah, --

MS. MICHEL: Okay.

MR. LEMLEY: All right. So that -- so I don't think it works in that circumstance.

The other problem is I think we need -- because we need to assume that the patent is valid and infringed, which is something that no one in fact does assume in any ex ante licensing negotiation, we've introduced an artificiality to the negotiation that's really hard to mimic.

MS. MICHEL: All right. Yeah, well, Yar, and we'll come back to that.

MR. CHAIKOVSKY: I think the only thing I'd add to that and it's consistent with what Mark just added: I mean how do you get to this hypothetical negotiation when you could take the *Alcatel-Lucent Microsoft* case when Alcatel-Lucent is nowhere in the business of what Microsoft's in, so how is Microsoft supposed to sit there, irrespective of what factors you use, and take a look at them and go: What should I reasonably pay them in a negotiation and what's reasonable. You know, yes, they could look at the previous frown off licenses and go: Well, maybe that was reasonable. But, sure, that wasn't reasonable to Alcatel-Lucent. And I can tell you there are other similar instances.

I was doing a negotiation this morning where we were trying to avoid litigation, where it's not the core

line of business of the patentee that's asserting the patents. And how do I value those patents when they say they've got patents in another line of business. They're not in the line of business of, let's say Palm, for example, they're in some other line of business. It's not a nonpracticing entity. It's a going concern. And all of a sudden they reach out and they say: Well, by the way, you know what, we do have patents on your product.

How do I know how to value that? I don't know how to value that because all I know how to value that is the cost of litigation. You know, and I want to avoid litigation, and that's going to be a significant driver.

If I look at those numbers that Mary cited, I mean 21.6 million in legal fees and $6.8 million to settle cases, I mean that has nothing to do -- I mean she's driving -- it's all legal fees. I mean the cost of her for the settlements here are kind of ridiculous, I mean.

MS. MICHEL: Okay. But if we place the hypothetical negotiation at some other point in time, you're talking about a time when the parties are facing litigation and have sunk cost, right. If we place the hypothetical negotiation at a point during the design stage for the production and why -- would it be the case in that sense

where the accused infringer then is only willing to pay in relationship to the cost of an alternative? Can we deal with the problem you're talking about by placing the hypothetical negotiation at an appropriate place in time in the past?

MR. CHAIKOVSKY: Perhaps there's an appropriate place, but I would have a hard time saying where that appropriate place is. Right now, again, the negotiation I had this morning, we're trying to avoid -- I mean if you're in negotiation, right, you're hoping to not get into litigation. You're hoping that the person, let's say the net plaintiff that actually has more in the way of patent weight, doesn't bring a lawsuit. And you are attempting to avoid that lawsuit.

Well, in that situation, again in any situation where there's a license negotiation, that there is going to be that component that you can get sued on these patents. And so you necessarily have to be thinking and avoiding that and that cost.

In the situation I was describing, in particular when the person is a nonpracticing entity in a certain field, but on the other hand is a significant entity with significant funds in the area of its core business, what am

I to do in that area and what am I to do let alone and hypothetical negotiation situation, then if I get into litigation, any test that I have seen proposed doesn't necessarily ascribe to me how do I value that.

MS. MICHEL: Okay.

MR. CHAIKOVSKY: How do I value that technology.

MR. ADKINSON: Just to interject one further question that's broader, is whether there's ways to impose additional structure on this amorphous hypothetical negotiation, beyond just particularly the time at which it's set, that might break Rich's circularity problem by having more of an objective basis and provide some way of limiting damages.

Perhaps something like -- John had mentioned something about looking at the value versus the noninfringing alternative, I think, as one measure. Let me throw that into the equation.

MR. COHEN: So John's had his tent up. Let's go to John, and you've thought about this.

MR. SCHLICHER: Bill said I think damage law fails miserably. I think we do a reasonably good job on lost profits, which is where the *RO* words are invoked. I don't think we do a good job in other areas in the sense that you

can't tell going in what the award is likely to be. There is simply too wide a range of possible results that the law permits.

The best I -- I, by the way, do not like the hypothetical negotiation rule, if that is the exclusive way to determine damages. It doesn't work at all in situations where the patent owner wouldn't have granted this personal license because the person owner could make more money using the invention than the infringer could, which is what happened in *Georgia-Pacific* which is why that's not what the district court or the court of appeals actually did in *Georgia-Pacific*. All the court of appeals did is note in passing at the end: Oh, by the way, the award we've arrived at in the other way happens to actually be what you might have gotten through a hypothetical negotiations. Almost the side light.

The same thing happens if there's another licensee who is better placed.

My main problem with the hypothetical negotiation rule is that it presupposes -- well, let me say it this way. It asks about an amount of money people would have paid in the future. That's what licenses do, and that's when people talk about it.

For purposes of damages they ought to be based on the economic value the invention had in the past. We know what -- with know a lot about what happened, because we ought to look backwards.

And to the extent the hypothetical negotiation says: Let's look at what these people would have agreed to pay in the future based on their best guess of how the economics are going to work out.

It seems silly to me to rely on that when we know actually how things worked out. So I have a whole bunch of problems with the hypothetical negotiation rule. That being the one.

The best I can do to impose a better rule on it is to do what I think the Supreme Court said to do when it created the rule in 1915 and that is: Try to identify an amount of money, if it's going to be do the value of the invention had when used by an infringer, try to identify an amount of money that's the difference between the profits using this invention allowed that person to get at, and the profits that person could have gotten at if they used the next best noninfringing thing available to them during that period. And that amount of value may change during the period. That's about the best I can do to try to impose

some other rule.

MS. MICHEL: Vince.

MR. O'BRIEN: Well, I think that I actually like the hypothetical because I can't think of any other construct that would help me get to a number, but there are some things with it and it does have its limits. The biggest one is the time of negotiation. And they obviously picked the date of first infringement because it's an easy time to determine.

But you end up in the pharmaceutical industry where because of the safe harbor laws you're not infringing until you've got an approved FDA product out on the marketplace, so some with an embryonic technology comes in and says: Oh, I want the 30-percent rates that you would license at this level. And that does not make sense.

And then you get the holdout because people are locked in to technology or they've had to have sunk costs. I think if you take it back in then when the decision was made, you'd get around a lot of these things. And because of the book of wisdom you really get back in time when you know what happened. And so you factor that in as well. So I would say with that part of it would help out a lot if you could do that.

MS. MICHEL: Well, would you think, Vince, that the cost to the defendant of the closest-noninfringing alternative might be brought into play in the hypothetical negotiation as the maximum amount that an accused infringer would pay?

MR. O'BRIEN: Well, it's not necessarily the maximum, but it's a benchmark, because obviously there's time, there's risk inherent in that that you would have discussed at the time of the hypothetical.

Now one thing I want to make clear too is the next best alternative isn't just a noninfringing way of providing that feature. It could be just provided different mix of features or cut your price or --

MS. MICHEL: Just not include the feature you mean.

MR. O'BRIEN: Pardon?

MS. MICHEL: Just not include -- leave the feature out.

MR. O'BRIEN: Leave the feature out all together and maybe enhance your product some other way or, for that --

MS. MICHEL: We could all live without the pop-up calendar.

MR. LEMLEY: In the broadest instance, not even make that investment and pick your next-best investment.

MS. MICHEL: Okay.

MR. LEMLEY: Can I say something to that?

MS. MICHEL: Yeah, mark.

MR. LEMLEY: So I think this is the least-worst of the alternatives, right, so what John suggests and Vince is talking about, the approach of the closest-available, noninfringing alternative, that's a test that gets adopted, interestingly, in lost profits in *Grain Processing*, but that the Federal Circuit has not really moved into reasonable royalties, which is where I think it actually could do its most good.

I do want to note one limitation which makes life a little more complex. The next-best, noninfringing alternative, that is an alternative that does not infringe this patent, may well infringe another patent. And then you're in an interesting circumstance, right, because if we really mean an alternative that doesn't infringe or even arguably infringe any patent anywhere, well, that's going to be almost nothing in the modern world. If we mean only if we can prove that it really doesn't infringe anybody's patent, then we're in collateral litigation over whether the

alternative really was not infringing.

I think what we mean is that in that circumstance where what I had was a choice between two alternatives, both of which turn out to be patented by different people, that I wouldn't have paid a monopoly price because there were two alternatives, right. There would have been bargaining that reflected the fact that if your price was too high, I could turn to this alternative. But the model starts to become more complex because we can't just say: Here's the difference, it's a three-percent difference in price and, therefore, that's the number. It depends a little bit on what the parties would have negotiated.

MS. MICHEL: Marty.

MR. SIMPSON: We've had the case where the closest available alternative was covered by another patent of ours.

(Laughter.)

DR. GILBERT: Which means by definition you're entirely free to go ahead.

MR. SIMPSON: Well, also I wanted to come back a little bit on the time. We have had copyist. And, essentially, what happens is that our small business typically, or our licensee takes the big risk of a new technology, proves it out, gets the market done, and then

what happens is somebody comes along and says: Oh, that's a good idea, I will copy it because you're making money and you're successful. And we have had people where we finally get into a lawsuit with them and it turns out they were just plain out and out copyist.

MS. MICHEL: Do you think the willful infringement doctrine is insufficient to deal with that problem?

MR. SIMPSON: We have never seen a willfulness award. Now with respect to how the suppositious negotiation works, though, if this copyist has let all the high risk go out of the new product development, so what they're doing is they're just copying a product that's a proven product, they're going to be paying a higher royalty in that negotiation than our licensee, who started off, had to prove the product to get it on the market and prove to people that this was something that was worthwhile.

And in the medical industry it's even worse than that because you not only have to start off with a new product that they turn into something that actually can be used commercially, what they also have to do is get it accepted in the medical community, and that can be very hard with as conservative as doctors can be, and you also have to get the insurance industry realizing that it's something

that would be good for patients that they should reimburse for. And that is a long process.

MS. MICHEL: I'll keep going around the table, but I want to throw out another question. You know, feel free, I don't want to stop any comments, but I will throw out there into the mix. So in thinking about the hypothetical negotiation or the reasonable-royalty calculation, how do we avoid the nondeterrence problem, the 'Why should I put a quarter in the parking meter if the fine's only a quarter problem'? Is there a way to deal with the doctrine to address that without becoming punitive?

And, also, any other comments you were planning to make, John, on reasonable royalties.

I'll go to John next.

MR. SCHLICHER: I'm not sure I understand --

MS. MICHEL: Okay.

MR. SCHLICHER: -- the parking meter metaphor, so I have no comment on it.

MS. MICHEL: Oh, well, then that won't be a problem --

MR. SCHLICHER: The only thing I wanted to say is that *Grain Processing*, where Frank Easterbrook, for purposes of lost profits, did indeed do something really similar to

what I described. He also actually did the same thing in doing the final award, although he didn't explain it that way.

The award in that case was indeed reasonable-royalty damages. Judge Easterbrook arrived at that amount of money by comparing the cost to the infringer of making the product the patented way and the somewhat larger cost, the -- excuse me, the infringer, the somewhat larger cost the infringer would have had if it had made the noninfringing way, subtracted those two numbers, and that was the damage award without one single, solitary word about whether that would have been the result of a hypothetical negotiation.

I don't mind if you call that difference-in-profits test an aspect of hypothetical negotiation, because it seems to me in the real world no person asked to license a patent will pay more than that, subject to what I think of as the sum-cost bargaining problem, which we ought to spend some time on because I think it's enormous and difficult. I mean I think Mary alluded to it in connection with injunctions. I think it's pervasive, so I agree.

But I don't see any necessarily -- if you want to say hypothetical negotiations, I don't mind. I simply think

that test allows you to focus better.

MS. MICHEL: All right. Bill.

MR. ROOKLIDGE: I don't think you are going to see in today's economic environment somebody just willing to plug the parking meter and say: Go ahead infringe. The costs of infringement -- the costs of defending infringement litigation is so high, particularly when you factor in the costs of discovery, that nobody undertakes defensive patent litigation for recreational purposes.

The other thing I wanted to point out was that we've got to be careful not to lay down over rigid rules by say, for example, that defining the value of the infringement by comparing the infringing product to the next-best alternative may very well work in the vast majority of cases, but in some cases there may be alternate evidence that's available. For example, evidence of what the infringer's own contribution to that product was and there may be an easy way to value that contribution that would end up resulting at coming at it from a different angle that would be a different way to do it. And we've got to make sure, especially if we go into any kind of legislation, that we don't unfairly tie the hands of the parties and the courts in what they present to get to a

number that is reasonable as far as compensating for the infringement.

MS. MICHEL: Mary.

MS. DOYLE: It seems to me that you don't want to tie their hands, on the one hand; but on the other you want certainty, because it's just the lack of certainty that has got us in this mess as far as I'm concerned.

I can also -- I would like to comment on the hypothetical negotiation in the context of standards, where there -- John, there is no reasonable alternative, there's only that one. So in the absence of a better-regulated standard space where patents can't just be declared by the holder as essential whether they are or are not. I think this approach that you've been talking about doesn't quite work.

MS. MICHEL: Could we move the timing back to the standards-setting body decisionmaking, when there were alternatives available?

Anybody got a comment on that?

MR. CHAIKOVSKY: I've got a comment there because --

MS. MICHEL: Yeah.

MR. CHAIKOVSKY: -- the reality is in the current

world: No.

MS. MICHEL: Okay.

MR. CHAIKOVSKY: I mean you have too many nonpracticing entities. I mean right now you've got Weiland (phonetic), you've got PACid --

MS. MICHEL: I meant as a manner of law, that we define the hypothetical negotiation to occur at a time when the standard setting -- when there are still alternatives available so we don't have that kind of lock-in problem.

MR. LEMLEY: And I think the answer's yes.

MS. MICHEL: Yes.

MR. LEMLEY: I mean I think actually you solve a lot of the hold-up component of damages problems in multi-component industries if you don't allow somebody to capture value that's not the value intrinsic to their technology but value that's the result of an irreversible investment made after that technology was chosen.

DR. GILBERT: I think subject to Vince's comment, though, that there might be risk and timing issues where you don't -- where you do want to give a preference to the patent owner for creating a fertile environment in which the product can be developed and to get some share of that, I think Marty's point on that was a valid point.

MS. MICHEL: And, Mary, I cut you off. I'm sorry about that.

MS. DOYLE: That's all right. I'm enjoying the rest of the conversation, so I'll chime back in when it's important.

MR. CHAIKOVSKY: No, but if you add -- going back to the hypothetical negotiation being the time, let's say, prestandard as a matter of law, I mean again I guess I would say Rich's comments, too, your potential of cutting off in terms of what's the economic value of this when the inventors came up with this, especially if you're talking about solo inventors, they came up with something. And why shouldn't they be entitled to the value of this if it continues to grow and grow in value at a later point in time?

MR. O'BRIEN: Well, it depends on whether it grows --

MS. MICHEL: Yes.

MR. O'BRIEN: -- as a result of the standard or because of the inherent value of the technology.

I would say one thing, if you do go back in time before the standard, I think you still -- I mean and I've actually testified that that's appropriate, so I'm not being

hypothetical here, I think you still have to take into account the fact that it was chosen as the standard shows some value, inherent value over the next-best technology and you should factor that part in, no.

MS. MICHEL: All right. John.

MR. SCHLICHER: Suzanne, the reason I haven't sent in my written comments on your notice is that I regard this on-cost bargaining problem and the standard problem to be by far the most difficult in this whole area: On injunctions, big time; on damages, to a lesser but significant extent.

And I've never spoken out on that because I was never sure I had anything useful to contribute or knew the answer, but I'm probably going to do that. But the current draft of my comments say that when there is an invention that is a standard, however defined, de facto or real, and because of -- for that reason and that reason only, the infringer during the period of infringement could not have switched to something else, even though back on day one, before anybody built a product, it could have.

And what I would do in that situation is compare the profits a company would make selling whatever product, satisfy the standard, to the profits that company would have made selling the next-best production that could have become

a standard way back on day one. That amount of money in a lot of cases may be zero, --

MS. DOYLE: Zero, exactly.

MR. SCHLICHER: -- which to my mind is a perfectly appropriate damage award in lots of those cases.

MS. MICHEL: Bill.

MR. ROOKLIDGE: Well, just as a practical matter, the Federal Circuit has been dithering on that. And I think it'd be more accurate to say $1 would be perfectly accurate under the law.

(Laughter.)

MR. ROOKLIDGE: Set -- adjusting the timing of that decision is not going to change the fundamental problem that both John and Mary have referred to, and that is the uncertainty in the damage awards that come from a court decision and the resulting effect of that on the negotiation. That can only be done within the litigation process, not by setting the timing.

MS. MICHEL: That's a good point, yeah.

Rich, did you have a comment?

DR. GILBERT: I think I do. If we're on this issue of sunk costs, --

MS. MICHEL: Yeah.

DR. GILBERT: -- I mean the problem of expectation, damages and expectations has come into many, many damage situations, not just patents. And do you measure damages at the time of the act or how do you incorporate developments that have come since that time. I think there's this Janice Joplin's yearbook example of if you had a signed copy of Janice Joplin's yearbook and somebody took it way back then, do you get the value of the yearbook then or do you get the value of the yearbook now.

So it's not unique to intellectual property, but of course the intellectual property does typically invoke sunk costs and standardization much more. And there I think I hear agreement among the panelists that the reward should not incorporate sunk, irreversible investments that were unrelated to the patent other than the fact that the patent reads on the technology that people made sunk investments in.

MS. MICHEL: Okay.

DR. GILBERT: I think I would agree.

MS. MICHEL: Vince.

MR. O'BRIEN: Getting back to your original question about worrying about whether there would be an incentive to infringe if all you ended up with was what you

would have gotten in the first place, --

MS. MICHEL: Yeah.

MR. O'BRIEN: -- I think this is a bit of a strawman. I mean, first of all, the hypothetical has a bias upwards because you're assuming then that the patent is valid and infringed, so it could be higher. And then the biggest thing is the damage award is not a license. You still have to negotiate a license going forward. So all you're doing, as John pointed out, is you're paying for past use of the patent. And in some cases that may be enough. You know you infringed while you came up with a noninfringing alternative, maybe. But most of the time it's just not going to be an issue. You're going to have to sit down with that plaintiff and negotiate a license going forward.

MS. MICHEL: Okay. Mary.

MS. DOYLE: But nothing saves you having come up with a noninfringing alternative from an argument that that too infringes someone else's patent in the end.

MR. O'BRIEN: Correct.

MS. DOYLE: It seems to me that we're looking for a rule that applies everywhere universally, and I still can't bring myself to understand or to fully comprehend a

rule that would accomplish that. It seems to me that different rules apply with respect to products that implicate maybe two or three patents, principally in the pharmaceutical and biotechnical spaces or, you know, no more than a handful, or products like ours that implicate -- I'm told there's an Intel study that dates back many years now that says a microprocessor implicates as many as 10,000 patents in a single -- excuse me -- in a single microprocessor. I haven't had that problem yet, thank heavens.

But the fact is that I think a different rule may need to apply where account is taken of the value of all of the contributing components, particularly patented components.

MR. COHEN: Okay. Bill.

MR. ROOKLIDGE: I think there is plenty of precedent in the law for dealing with appropriationment and royalty-stacking issues like that. I think what people's concern has been, that there hasn't been any kind of extended treatment from the Federal Circuit on that. The Federal Circuit was presented with that issue in *Integra v. Merck*, and vacated the district court's damages ruling and sent it back for reconsideration on precisely that point.

The Federal Circuit is sensitive to that issue, but it hasn't yet been presented with a case that's squarely on point on that that it can give a real extended treatment to.

My guess is that with the current attention on patent damages in this economic climate, that people are waiting for that case and we're going to see a lot of amicus briefs when it comes along. And the Federal Circuit, I think, is going to be well able to address that based on what I've seen is a lot of tough love for patentees both in the Supreme Court and some of the Federal Circuit cases on apportionment and royalty stacking.

MS. DOYLE: Though the correspondence from Judge Michel to the Senate Judiciary Committee two years ago would belie that.

MR. ROOKLIDGE: Well, and I think if you see what Judge Rader has been doing, for example, in the *Cornell versus Hewlett-Packard* cases, where he's sitting by designation and out there serving as an example for district court judges on how to both serve as a gatekeeper, how to come back after a jury verdict and look at it very carefully, that is a great example. And if you look at the --

MS. DOYLE: Certainly he inspires us, but I think

that we've been waiting rather too long for the result.

MS. MICHEL: Well, this would seem to be a good time to move into some of the litigation issues that Bill raised as really the place we need to think about and deal with if we want more predictable decisions.

So how helpful is *Georgia-Pacific*?

(Laughter.)

MS. MICHEL: Are the *Georgia-Pacific* factors helpful to courts and juries in reaching predictable awards? If yes, explain. You know, if no, what else can we do?

Bill, you're our litigator.

MR. ROOKLIDGE: Okay. I think *Georgia-Pacific* is very helpful when used for its correct purpose, which is that the lawyers and the judges have a framework so that they can very carefully limit what goes to the jury through Rule 56 summary judgment motions, *Daubert* motions, in limine motions. It sets a framework to see how jurors respond to different factors through voir dire. It helps you think about the kind of things that you want to put on your jury form. It helps you in framing your objections, in to keeping the evidence that's before the jury limited to what's truly relevant.

It helps you frame your jury instructions. It

helps you teach the points that you need to teach the jurors in order to make them want to rule for your client. But, most importantly, where it is helpful and where you see it time and time again is on motions for new trial, motions for judgment as a matter of law, and on appeal.

MS. MICHEL: Bill, let me just ask from your experience, when the damage award goes to -- when the damage decision goes to the jury, do the instructions tend to list all 15 factors, here they are, or are courts better at picking out and instructing the jury as they go?

MR. ROOKLIDGE: You know it's very much decided I think in part by the feedback that the lawyers give to the judge. A lot of judges, the knee-jerk response is to use the form instructions that have all 15 or 16 factors and not to tailor it to the case.

A good instruction will in fact be tailored to the case, but I have to admit, as an admission against interest for my position, that having looked at a lot of mock jury tapes, you will never see the jurors sit down with the instruction and go through the *Georgia-Pacific* factors. It simply is not done.

MS. MICHEL: So what are they doing?

MR. SIMPSON: You would be shocked at the things

that jurors do.

MS. MICHEL: Well, I'm curious. Can you give us any insight into that? Surely, because --

MR. ROOKLIDGE: Oh, absolutely. Because what happens is that jurors tend to get -- to be presented with numbers, and that's why it is so critical to file motions in limine and to object at trial to keep out evidence of the kind that plaintiffs' lawyers like to get in: The gross revenues of Palm; the sales, dollar sales of Palm of its accused product. Because if you give the company's gross revenues or market capitalization, those kind of numbers are the numbers that jurors immediately leap to. It has nothing to do with the laws of damages. It has everything to do with what's presented to them. And if you give them a number, jurors particularly in this economic climate will leap to the highest number that they were given and sometimes talk about smaller numbers.

MR. CHAIKOVSKY: So my --

MS. MICHEL: Okay, let's go to Yar.

MR. CHAIKOVSKY: So my comment there would be to Bill's is that I would agree with him, that the *Georgia-Pacific* factors are an excellent framework for litigators as they go to the courtroom, but I would agree with him. In

having seen so many mock jurors, it's all about the numbers. I'm not going to necessarily say they leap to the highest number.

I mean obviously they may leap to the highest number, but we have a set of rules that they are not looking at, they do not pay attention to, and that's whether you actually look at mock juries or actually poll a real jury after the case, and that has nothing to do with the award that they are granting. They are looking at the infringement, who's the good guy, whether's the bad guy, who's got the white hat, who's got the black hat; and then the numbers coming out of them. I mean that's all that's happening.

And so for those that are testifying as to these hypothetical negotiations and using these factors and maybe picking out four or five factors that they find to be the most relevant and, you know, let's get to this highest number, it's a number. And that number sticks in their head. And if they then determine that there is an infringement, well, that number stuck in their head. And if some reason they say, well, the infringement was as bad, well, maybe we'll go with the lower number that defense counsel had. Quite frankly, maybe we'll even go with a

number in the middle.

But my point here is we can have this academic discussion, which is great to have in these hearings, but the realities are is we have a system, and quite frankly even have changed, I mean a juror is not going to necessarily -- because we can all play with these numbers, Bill and myself, others, Mark can play with these numbers in front of jurors, et cetera, and/or in front of the Federal Circuit and play with these numbers and come up with numbers that are, you know, whatever we would like them to be. And that's where we live in currently right now.

And, as Bill pointed out earlier, yes, the Fed Circuit's doing a better job. And, as Mary pointed out, it's not all the Fed Circuit, it's specific judges on the Federal Circuit, as we have splits. I mean Judge Michel's letter is a perfect example.

So we don't have any predictability and I don't know if we necessarily have a different rule we're going to get that predictability.

MS. MICHEL: So what do we do?

MR. ADKINSON: Can we get all the methodologies for both apprising and combining the *Georgia-Pacific* factors so that there are in fact rules that can in fact not

perfectly define and give perfect predictability that would be desirable, but at least would restrict the heights to which juries could leap and the depths to which they could go.

MR. CHAIKOVSKY: So in the *Markman* -- so Bill and I use -- we discussed this before. You know, the next-best infringing alternative, where we were before, and if we could put a little bit -- and I hate to say it -- but a little bit more mathematics to it where it's a little bit more predictability, the rules and not the *Georgia-Pacific* factors where I have so many factors and anyone can kind of pick or choose and it's great for damages expert and lawyers that I have such diversity to choose from in the process, if I limit that process, that will still -- obviously we can play with it, we can argue, but if I limit that process and provide more precision, you're right. Do I have that answer -- and maybe Mark does.

MS. MICHEL: So --

MR. ADKINSON: Can I -- okay.

MS. MICHEL: Yeah. Let me ask Yar one question first and Bill too, if you have a thought. So if we design these new rules, right, to limit what could go to the jury, what is your faith in the courts and the judges willingness

to act as a strong gatekeeper? Do you ever hear, 'Counsel, that's your problem. Take care of it on cross. I'm going to let it into the jury'? Do you see courts being active in --

MR. CHAIKOVSKY: It depends --

MS. MICHEL: -- keeping evidence out?

MR. CHAIKOVSKY: It depends on the judge. You know, some are going to be gatekeepers, some are not going to be gatekeepers. The realities are, as Bill has mentioned, you also have the opportunity in motions for new trial or JMAL (phonetic) for the court to actually take an opportunity there to overturn a jury's verdict.

I wouldn't count on it. That's just not a place where I would say, oh, okay, let's -- judges today could be stronger gatekeepers with respect to the evidence that is being provided in damages cases and say: Well, look, I'm not going to let this in, whether it's a motions in limine or even during the course of the trial. The judges could be greater gatekeepers than they currently are. Are they? No, I don't think they are.

And we see these -- and, again, it depends on venue. It depends on the judge. It depends on a lot of things, but we see a lot of stuff get in that I don't think

necessarily should get in.

MS. MICHEL: Bill, what's your experience in how willing judges are to be gatekeepers?

MR. ROOKLIDGE: It's mixed. I think like Yar has observed, it's mixed. But I think what we are seeing also is in the past lawyers have not been as active in attempting to keep this stuff out, not perceiving that they have the tools to do so.

It was very much like the pre-eBay cases. A lot of patent lawyers had been practicing their entire careers and had no idea that there was this case out there, *Weinberger versus Romero-Barcelo*, that identified what the standards were for an injunction, and were blithely moving along as if a statement out of the Federal Circuit law about the standard rule was the be-all and end-all of injunction law.

If lawyers get sensitized that they have a job to do in presenting evidence and defending against damages cases, combine that with the fact that the Federal Circuit being more active, and it is being more active in damages cases, I think we're going to see a great improvement and I think we're already seeing a great improvement because of the increasing attention paid to these issues.

MS. MICHEL: Okay. Mark, you've had your tent up for a while.

MR. LEMLEY: Let me raise one other thing that I think contributes to the problem and then two solutions. The other thing that I think contributes to the problem is not too much evidence coming in but on the defendant's side too little.

As a litigator you do not want to spend a substantial portion of your case in a unified presentation on: Here's why you shouldn't make me pay very much money, as opposed to: Here's why the patent is invalid or not infringed, right.

So two solutions, one of which flows from that, is bifurcation of damages. Right. I think one -- the single thing we could do that would get more rigor into damages is separated out from the rest of the trial and make people actually try just the damages case.

The second thing I think that we ought to do comes out of what Yar and Bill are saying. The problem with the *Georgia-Pacific* factors is not that they don't encompass the interesting questions, right, it's that there are 15 of them.

Now really there are three of them, right. Really

three things matter. And if you parse *Georgia-Pacific* down, you can get them into three, right. One is what's the value of the technology compared to the next-available alternative. The second is how many different things have to be combined to make that technology. That is the appropriationment question, right. Are there other patents that have to be included, other contributors, so forth. And third is what has the market actually done, right. Have people in other similar cases negotiated a particular royalty, and so forth.

If you structure the damages inquiry not as: Here's 15 factors, jury, pick some and choose a number, but as: These are the things you have to determine in order to get to the number, you might or might not actually persuade a jury to walk through those three factors, I don't know. Bill may be right, that the jury's going to pick a number based on who they like or don't like. But you will do is you will enable judges to grant judgment as a matter of law. You will enable the Federal Circuit to reverse in cases where a jury verdict clearly can't be supported in that structured environment as opposed to: Well, you know what, if they just chose Factors 11 and 14 and disregarded all the rest, maybe they could have come to this number.

MS. MICHEL: Okay. Rich, then John -- oh, yeah, Rich, then John. Bill, okay.

DR. GILBERT: Well, I didn't expect such fuzzy feelings about *Georgia-Pacific*. And it's nice to hear that some people like it.

I guess a couple of things. One is even though you have these 15 factors and you can read different things into these 15 factors, it seems like it would be nice to have another factor, one more saying something about not attributing value to sunk investments and things -- the discussion that we've had here, which I guess you can read in *Georgia-Pacific*. It admits a lot of interpretation, but I think a lot of the points that we're trying to make here are not in the *Georgia-Pacific* factors.

MS. MICHEL: Okay.

DR. GILBERT: The other thing, Mark mentioned bifurcation of liability and damages, so it just -- I can't resist making one of my favorite suggestions, which I'm sure will be torpedoed on constitutional grounds, which is I don't know why we have juries doing this stuff. I mean I understand that juries can be just as qualified as judges or anybody else in determining liability on various issues, but damages? I mean that's not what a typical jurist does. And

it seems to me there's a lot of reason to have some sort of specialized or tells that court-appointed expert or somebody who can add and subtract and do things like that and figure out what damages are.

MS. MICHEL: John.

MR. SCHLICHER: Any rule that says consider 15 things and anything else you think is relevant and arrive at a number permits any number. *Georgia-Pacific* factors are simply what the district judge said they were: A list of things that the judge or, more likely, the judge's clerk found in the earlier reasonable-royalty cases, period.

Now how that became a test for determining damages in patent cases is a historical tragedy. And we would do well to simply get rid of them entirely because they don't allow you to articulate a rule that focuses a judge's and, if the lawyers really insist on it, a jury to the facts and the theory that will let you figure out the economic value that you wanted to put in the patent owner's pocket.

It seems to me if you -- if you articulated a separate rule, which I thought -- you know, I've told you the best I can do, then at least you have a chance. And then at least you have the possibility of dealing with the problem of companies whose profits are enormous and whose

revenue are enormous. You could, ignoring one subtle detail, require a jury, for example, to figure out damages based on a single unit, okay. There's no reason they need to know the total number of units to do reasonable-royalty damages with one exception that the law doesn't recognize anyway.

So I think -- I really think it's -- obviously if you include all the *Georgia-Pacific* factors, then they do get to know about the infringer's total profits and they do get to know about the extent of total use and they get to know about the only revenue. So I think in order to arrive at a place, at a system that allows us to get a reasonable amount of money, we simply have got to get rid of them, with all due respect to Bill.

MS. MICHEL: Bill. And, Bill, what do you think about bifurcation?

MR. ROOKLIDGE: Well, I think bifurcation -- well, first of all, let's make sure we're using our terms correctly.

MS. MICHEL: Okay.

MR. ROOKLIDGE: Bifurcation is a misnomer. What we're talking about is separate trials, a damages trial following a liability trial. That's not bifurcation as it's

used in litigation.

The other thing I just wanted to mention briefly, of course it is beyond the FTC's purview and that of Congress to jettison the Seventh Amendment without a nasty political fight, but I can guarantee you it will not happen during my career. But, turning to the *Georgia-Pacific* factors, the Supreme Court emphasized very early on that determination of damages has to necessarily be a very flexible determination.

The *Georgia-Pacific* factors were culled from a lot of cases over many years. And I suggest to you that you do not want to jettison all those decades of experience until you find a framework that everyone can agree is a framework that's going to move us forward to providing the kind of clarity and predictability that is going to make business happy and is going to make the other constituents in the patent system happy as well. And I think we are a long way off from that.

MS. MICHEL: All right. Do you want to go?

MR. ADKINSON: Beyond the structural question of having a general structure to impose *Georgia-Pacific*, we also have questions about specific factors. And Mark usefully reduced the number of factors dramatically. I

wanted to ask, A, the general question of whether there are particular factors that people think can be misused or are misused in the process and, in particular, I wanted to focus on average royalty rates for an industry, which are sometimes proposed or rates on comparable licenses and whether you really can have licenses that are comparable given the heterogeneity in licenses and rates on different types of different patents, where the patents may be heterogenous.

And, Vince, you had had your tent up before, so with that and whatever else you were --

MR. O'BRIEN: Well, let's go onto your question. I think royalty rates on industry -- industry rates or so-called comparable licenses are -- when I work for the defendants it's one of the few ways you have of dealing with this throwing numbers around the jury room. This is one thing out bring them back into reality, you know.

And now, sure, they're not comparables, but if I have an industry, say, semiconductors where licensing is always done at less than one percent or some lump sum or cross-licensing, and the other side is proposing an eight-percent royalty rate, I need to be able to look at other licenses. And I think right now, if anything, the courts

are too restrictive. They try to peel back, you know, the number of licenses you can work at.

Now the other thing on *Georgia-Pacific*, though, that I think is problematic is its emphasis on the profitability of the product. I mean the value of a component has little to do with the profitability of the product. You know, if I'm building a house, it doesn't -- you know the profit I make on that house isn't going to affect what I pay for a hammer. And it gets us misguided. It gets us into the big-numbers problem, because the plaintiff always talks about gross margin and the defendant says net. And it just gets us off on the wrong -- we're off on the wrong foot.

And I would back up to part of what John said but also what Mark said, is it would be much better having a conceptual framework, the three things you look -- the three areas you should examine, as opposed to this list of things we marched through, which is also missing the single most important thing of all, and that is the next-best alternative. Often that just throws *Georgia-Pacific* right out of the window. And without it, G-P's untethered.

MR. ADKINSON: Marty.

MR. SIMPSON: Well, I would be cautious about

throwing out the *Georgia-Pacific* factors when we're not replacing them with something. I think you need something that's practical for a jury or a judge who's sitting on the bench.

And now if you want to group them, or something like that, like Mark was suggesting, to rearrange them, you can do that, to say: Consider this group together, consider this group together, something like that. You might do something that you think improves it, but you have to have something to focus the discussion on when the trier of fact is trying to figure out what do I do with this.

And one of the things I come back to is we do license negotiations all the time and what we're asking is: Give us a business plan, we want to see what your profitability is. That's the question. And it's a profitability based on what we're licensing.

Now typically in the areas we work in, we are licensing them, the main idea, that is the product. So our focus on profitability is -- that really is the problem. And then you work down from there on what a reasonable royalty is.

So I think you need to have something in mind, whether it's the suppositious negotiation, or, if you can't

get there, say: Okay, here are some factors. If you want to regroup them, regroup them. But you need to focus the discussion in some way.

MR. ADKINSON: Mark, I got the impression actually much earlier that you were suggesting that we might focus on the noninfringing alternative as an alternative to the hypothetical negotiation itself. Is that --

MR. LEMLEY: Right. So I mean my worry about the kind of actual comparables, I think actual comparables have a place. The difficulty is -- well, the first difficulty is that they don't take account of actually -- the assumption that the patents are valid and infringed, right.

So if every -- if no one pays more than one percent for a patent in the semiconductor industry, that has only, based on the court statistics, a 24-percent chance of being held valid and infringed if it makes it to court, it doesn't follow that the patent that has actually been held valid and infringed is only worth one percent, right. It might be worth four percent or it might be worth, you know, somewhere in between.

And so I think that that's a concept that's both correct in the law and really hard to explain to the jury. So now we have the alternative to the throw-around, big

numbers and get it into the jury box, we have the sort of throw around the small numbers. If you get up and tell someone: Hey, nobody's paid more than one percent, even though logically that should imply that you should pay four percent in this case, people aren't likely to get it in the jury box, right. And so I worry a little bit about how those numbers can mislead.

You also see those numbers -- there are all sorts of inconsistencies depending on circumstances, right. So there are lots of circumstances in which people pay for a nonexclusive license in a particular field of use for a patent more than the purchaser of that patent paid for the entire patent. And that suggests that there's an instability in the choice of the number you're going to use as to what the right comparable royalty is in this negotiation.

MR. ADKINSON: Mary.

MS. DOYLE: Well, there are a number of kind of -- the assumption that the patent is infringed invalid I think does go into -- you wouldn't pay anything that you didn't think was infringed invalid. So in my view I do think that similar agreements reached between parties absent negotiation is good evidence of what the defendant ought to

be paying in a case where the plaintiff has prevailed.

And I think we continue to struggle here with defining how patents -- damages should be calculated. We have -- I know you argue that lawyers should get better, well, I'll tell you this $21 million thinks that lawyers think they're pretty good, doing the right thing already, and they're many people that you know.

So it seems to me that 'lawyers should get better' isn't an adequate solution. It seems to me that injunctions should be issued in every case where infringement and invalidity are proved doesn't seem to me to work either because it works very nefarious, results in settlement negotiations in my experience.

And I think the hypothetical negotiation in the end seems -- I mean I think *Georgia-Pacific* is trying to approximate all the things you might think about in such a negotiation, but *Georgia-Pacific* is notoriously empty of any real meaning here. It certainly hasn't led to predictability of results. It's led to, in my view, grossly inflated -- or a willingness to settle cases that shouldn't be settled at all because you can't afford to pay 42 million instead of $21 million in the course of your defending yourself over a number of years.

So I have to say that I find myself back to apportionment. And it seems to me that apportionment, just by itself, as a rule standing alone is the only thing that anyone's come up with that has half a chance of focusing the discussion.

MS. MICHEL: Okay. We are going to -- John, then Bill briefly. We will come back to apportionment and the entire market value rule right after break. So if you have any -- we want to be fresh for that discussion, I think.

So, John or Bill, if you have any comments on what's just been said.

MR. SCHLICHER: I'm going to sound like a lawyer now. What Mary said is what the law ought to be. In 1915, when the Supreme Court said it's okay to do it this way, it said: Well, when there aren't lost profits and you can't prove the infringer's profits attributable to the invention and you got to do something else, make an approximation of the value of the invention given its advantages.

If you read the Supreme Court cases, the word "advantages" is used in dozens and dozens of apportionment cases. That's a very important word. That decision led to the change in the Patent Act in 1922, to put that measure of damages in the statute. In about 1933 or 1935, the only

other time the Supreme Court's had a crack at this, it said it's okay to do it that way, but the measure of damages -- measure the damages by the -- I forget the exact words -- but increase in revenue or amount of cost savings, essentially, which is the same concept in others.

And that formula is Factor 9 of *Georgia-Pacific*. The utility and advantages of the patent over old modes and devices, if any, that have been used for working out similar results. That's what the Supreme Court said the test was. If you want to keep the list, fine. Narrow it down to nine. And I think you have to think 13, Mark. I'm not sure of the other one you want to include. And then you have a reasonable standard that's entirely consistent with the law, entirely consistent with the intent, and it allows you to do something that has some focus.

MS. MICHEL: Bill.

MR. ROOKLIDGE: Apparently I didn't make my position clear enough. My position is not solely that lawyers should get better but that trial judges should get better and appellate judges should get better at this.

I agree with John that there is plenty of authority in the existing case law for apportionment. Obviously apportionment is a concept that's not applicable

to all cases. Once again, the Supreme Court recognized that that flexibility was necessary. But I think that flexibility being necessary has unfortunately left us somewhat unmoored. But the bottom line is there's plenty of authority to do what we need out there in the case law. And what we ought to address this afternoon is how to get there.

MS. MICHEL: Okay. Great. With that we'll take about a ten-minute break.

(Recess taken from 3:10 p.m. to 3:28 p.m.)

MS. MICHEL: We're back and we're going to continue with reasonable royalties and, in particular, the problem of how to assess damages, reasonable-royalty damages in a situation where the invention is a component of a larger product. This could be the feature on the processor that is incorporated on a CPU brick, which is incorporated into a work station, for instance. And, in particular, an area of recent debate has been the role that apportionment or the entire-market-value rule should play in that reasonable-royalty calculation.

So I'd like to get the panelists' thoughts on how to approach that question. I'm going to start with Mark Lemley.

MR. LEMLEY: Because I have a very defined view on

this question, which is to say the entire-market-value rule has no place whatsoever in reasonable-royalty analysis.

The entire-market-value rule is a concept that says: Well, if my part of the -- my component of the larger invention is the really important component, it's the reason people buy the product, then people would have bought the product from me. And because they would have bought the product from me they also would have bought all these other components from me and not from the infringer.

And that makes a certain amount of sense. There are issues will the, but it makes a certain amount of sense in a lost-profits context, right. So if I would have the made the sale of the whole product, not just the component, because I've got the really valuable feature, and you wouldn't have made the sale, then all the profits you made from the sale in some sense belong to me. But it doesn't make any sense at all in a world in which there is not a plaintiff's product being sold at all, right. A patent owner who is a nonpracticing entity would never have made the sale of some entire product. They don't make the product.

And so the concept of the entire-market-value rule gets accidentally transported over from lost-profits cases,

where it makes sense, to reasonable-royalty cases via a Federal Circuit -- a dictum in a Federal Circuit case involving lost profits that says: Why don't we do this in both lost-profits and reasonable-royalty cases. In fact they didn't do it in both, but after they said in their opinion that we do it in both, then they started to do it in both.

And the problem is unless you believe that this is really the only thing that contributes any value to the success of the product, if you give the first patent owner a hundred percent of the value of the defendant's entire product, there's no percent left over, right.

The next -- the second patent owner who shows up and says, well, I have a value component too, they're going to get paid something. Maybe it should be a dollar. I'm kind of with John on this question, right. You know, sometimes the answer should be the royalty ought to be nominal, but as a practical matter that's just not what the law does. And so we end up punishing companies, right, basically engaging in royalty stacking by definition whenever we do entire-market-value rule in reasonable-royalty cases.

MS. MICHEL: Mark, given that, if you're right,

what does that mean about how we should think about apportionment in the context of reasonable royalties?

MR. LEMLEY: Well, I think the answer is your -- you've got to do apportionment. And to some extent, of course courts always already do apportionment in a reasonable-royalty case, they just don't do it very well, right. So there's a reason you get a percentage of the value of the production as your royalty award and not a hundred percent, right. That reason presumably is we recognize that there are other contributors to the success of the product that need to go into the calculus.

But if you just phrase it as a percentage number, if you just say as somebody was saying here: Well, Microsoft Windows and Microsoft Office together have made a quarter of a trillion dollars over the last 17 years, all I want is one percent of that or 2.5 billion, you don't get a sort of very clearly articulated reasoning, right. You don't get any thinking about what it is that this patent contributes relative to all of the other contributors to the success of the production.

MS. MICHEL: Okay. How are you defining apportionment in that context? I'm wondering if one of the reasons I'm so confused about the ongoing debate is

apportionment's being used by different ways and by different people.

What do you mean by apportionment there? Is it defining the base differently? Is it apportioning --

MR. LEMLEY: Right, so --

MS. MICHEL: -- that the whole product doesn't get the entire royalty? What is apportionment?

MR. LEMLEY: Well, right. So I mean apportionment broadly is, right, dividing out the percentage of the production that is attributable to the patent and, therefore, ought to be paid to the patent owner.

MS. MICHEL: Is that about the base?

MR. LEMLEY: Well, right. So, as currently done, it ends up basically being about the base, because we're not very good at affirmatively pulling out, we don't -- it's one of the *Georgia-Pacific* factors, but we never really pay a lot of attention to it.

I think the fight over legislative reform on apportionment is about the question of whether we ought to specifically call out and require courts to engage in a process of saying: Okay, the patentee is -- the patent is one component of the product that contributes to its success, but there are others as well. And we need to pay

attention to those others in deciding how much the patentee should get paid. I think that's the right thing to do, because if you don't do that, then you just end up fighting over broader versus narrow royalty bases and what the right percentage of that royalty base is without any context, without any specific evidence about what the other contributors to the value of the product are.

MS. MICHEL: Okay, Vince.

MR. O'BRIEN: Yeah. I think that in the reasonable-royalty context if you start talking about the entire-market-value rule you've made a mistake right there. You know, you should just look at industry practices, I think is the best thing to do. if they're using -- and it gets back to this base issue. And, you know, if the royalty rates you've been looking at are based on the component base, then that's what you apply it to. if it's based on the full product, you do it to that.

Now it seems to me, though, you can -- if you get rid of the holed-up problem, you've solved I think the apportionment problem in almost every case except where you have the, you know, say ten features that are necessary to sell the product but not sufficient by themselves. And so the guy is sitting there, he's got nine of the features,

either they developed themselves or they licensed. And somebody shows up with the tenth one and says: Hey, without your -- without my -- without a license from me, you can't sell your product. And he wants to grab all the value of that. And that's the difficult problem at that point.

In the real world, most of the time everybody's in the industry and they solve the problem through cross-licensing and they work it out. It's when you introduce the nonpracticing entity into that equation, which would also include people who practice in another area but not in that area, then you've got someone who can sit there and hang in there and say, no, I want it all.

And, quite frankly, I don't have an answer for it because I don't like ten features, you know, divide the value by the ten, and I don't like any of the suggested alternatives, but it is a serious problem.

MS. MICHEL: Okay. Rich.

DR. GILBERT: Well, at one level this issue of the total-market-value rule versus apportionment is like saying do I pay in yen or do I pay in dollars. I mean just the different, as we put it in economics, a different *numerare*, it's the same price either way, except for transaction costs --

MS. MICHEL: Did you mean -- do you mean by that the size of the base can vary and we just adjust the rate accordingly and the total damages ends up in the same place or did you mean something else?

DR. GILBERT: If it's -- I mean just that: If it's done correctly. Really, apportionment is about doing the analysis correctly. And I don't think the answer in terms of getting people to do the analysis correctly is a particular rule but, rather, somebody, hopefully Court of Appeals for the Federal Circuit or maybe the Supreme Court, or a little scary to think about Congress doing this, but someone should note that because you have one patent, it doesn't necessarily mean you have a claim on the entire product if there are many, many sources of value.

MS. MICHEL: But can I -- can I push back a little? When you say you don't have a claim on the entire product, I'm trying to understand what people mean by that in the sense of does that mean the base can't be the entire product, or does that mean that the patentees shouldn't be allowed to extract royalty value from the whole product? I don't know what that means.

DR. GILBERT: No -- well, I don't think the base matters so much.

MS. MICHEL: It's not about -- okay.

DR. GILBERT: Because how you calculate it, if I have -- I can do a calculation. I think what went on with the *Alcatel-Lucent* calculation, damage calculation -- this is very instructive. I mean the jury came up with a very fanciful calculation and then the judge came back and said: No, you have to apportion. The apportion could have been done many different ways.

In that case the analysis was done on the price of a computer, but it could have been adjusted for the number of patents or other sources of value on the price of the computer. It could have been applied just to the value of the Windows Operating System that incorporated the mp3 patents, or it could have been done in many different ways. And I think the judge in that case pointed out a number of mistakes that were made and how a more reasonable number could have been created.

I don't think there's a magic formula to doing this anymore than I think there is a particular formula for doing any damage calculation, even if you don't have a complicated, complex technology. Even though some people will try to sell you formulas for doing damages; but in any serious, complicated case it's going to have to be an

individual investigation of the factors.

But what I would like to see is something along the lines of a warning label on a pharmaceutical product, saying that do this damage calculation incorrectly, it can be hazardous to our collective health, and some advice that one patent doesn't mean you have a claim on the entire product.

MS. MICHEL: This apportionment concept described the way you described it seems to involve taking into consideration the contribution that the invention makes to the entire product. Is it anything more than that?

DR. GILBERT: Well, it's certainly going to be more than that in any specific analysis, but the underlying principle I feel is what is the contribution, much of what we've discussed earlier: What is the incremental contribution relative to the next-best noninfringing alternative.

MS. MICHEL: Okay. I'm just wondering if we need a fancy word for that. That seems to be upsetting people.

DR. GILBERT: A buzzword.

MS. MICHEL: Right.

DR. GILBERT: The delta.

MS. MICHEL: Okay.

MS. MICHEL: Let's call it the delta. Okay, what is your dealt.

MS. MICHEL: Okay. All right, Mary.

MS. DOYLE: I guess I'm struggling with the following proposition that I've raised a couple times and perhaps haven't explained as well as I can or ought to. The product I have in my hand is a Palm Centro and it has 800 or 900 components in it. And we negotiate a value assigned to every one of those components --

MS. MICHEL: Right.

MS. DOYLE: -- that has something to do of course -- you know, there's always a question of how much does it cost to produce the component versus, you know, what is the value. And so there's always some negotiation between those two different approaches to valuing a commodity or an item that goes into a decision on the price. But ultimately the price is decided. And right now today the value of this device and the relative value of each of its components has already been decided by a very complex set of negotiations over a long period of time.

And I haven't run into a patent yet that doesn't really relate to one of the smaller components in here, unless it's, you know, one of those over claiming things

where you say the very small component in a mobile computer. Well, so the value of the actual invention is something we want the judge to focus a jury on.

But, in the end, the discussion's already happened. So when I say apportionment I'm thinking about what actually was patented here, was it a change in the touchscreen or the keypad? What actually was patented here and how much did that cost? How much do you pay to have a keypad on a device.

And, in the end, then the percentage, a percentage, whatever is commonplace in the industry ought to be applied to that device to satisfy -- I mean to that component to satisfy the question. But, as you say, you could come to the same number by disregarding the base, you know, the base of any given component. You could look at the whole device and try and figure out what contribution one small invention made to the whole device. But everyone gets themselves all tangled up in their underwear, so to speak, by saying: Well, I would never buy a car without a windshield wiper or an intermittent windshield wiper, whatever the variation on the theme is today. Well, okay, you wouldn't, but you wouldn't buy a car without tires and an engine and 1700 other things either.

MS. MICHEL: Right.

MS. DOYLE: So people keep trying to claim, as Rich says, the entire value. You know, that they've made something by adding a windshield wiper that was worthless to begin with. That's just not accurate or fair. So in the end I think there's already an economic process, a series of very real negotiations that have occurred over time to define the value of this product, what a consumer is willing to pay, what we are willing to pay. And if you simply attach the patent to what it's clearly designed to -- or the source of the invention, the invention -- in other words, you've got to -- when you read any patent, almost any patent, it relates to a small thing. It doesn't relate to the whole thing.

MS. MICHEL: Okay. Let me --

MS. DOYLE: -- been around for 30 years.

MS. MICHEL: Right. Okay. So you're -- I want to pack that a little bit.

MS. DOYLE: Okay. Sorry.

MS. MICHEL: No, that's very helpful.

Okay. So say the patent relates to a small feature within the entire device there, and you want to apply the damages to the small feature. How mechanistically

-- because, as you point out, those kinds of negotiations and thought processes have already occurred. How mechanistically do we go through that damages calculation. Are you talking about make the base of the reasonable-royalty calculation just that -- just that feature and then applying a rate to that or are you talking about something else?

MS. DOYLE: I think I'm talking about the former, only because in my simplistic world what I would like to do is to ask the inventor to go talk to the person who produces the product to which their invention relates.

So I get knocking on our door all the time people who have invented something that relates to a chip. Nobody at Palm knows anything about the chip other than what it ultimately will do. Doesn't know anything about the guts of a chip. We are not qualified to say whether or not Palm infringes or the supplier of that chip infringes. We'd like the person to go visit the chip vendor.

But they resolutely refuse to do that, which of course renders negotiations almost impossible. No one has the information necessary to do it. And they're driven to do that because they are entitled to attach whatever royalty rate they think is appropriate to the entire value of the

product. They can go to any place in the chain they want, so long as it incorporates their component. And of course they're going to go to the end.

MS. MICHEL: So is the complaint is that they're trying to make the entire product the base and apply the --

MS. DOYLE: The complaint is that --

MS. MICHEL: -- raise the satisfaction --

MS. DOYLE: -- they're trying to benefit from the inventions of many, including Palm, --

MS. MICHEL: Okay.

MS. DOYLE: -- in seeking recompense, compensation for the invention they made, which may and often is trivial or, if not trivial, but it may be valid, but I haven't seen one yet.

MS. MICHEL: Okay. At some point when we're thinking about how to measure this royalty, do the calculation and identify the space, don't we need to identify some kind of measurable product. Maybe it's just a chip, but something that we can identify and associate a cost with. If the invention is only a circuit on the chip, we can't have the base be a circuit because that's not something we value.

We sell the chip. The chip is a product in

commerce and, therefore, we can assist a price with it and come up with a base; does that make sense --

MS. DOYLE: And perhaps that's the product in commerce made -- I haven't thought this through. But I can see that the apportionment argument could be reduced to an absurd point, where you could never negotiate anything. But I guess I think about it because of the world I come from in terms of the components, yes.

MS. MICHEL: Okay. All right.

Bill.

MR. ROOKLIDGE: Well, under the current law of course the patentee bears the burden of providing apportionment for improvement inventions. But I have never seen a case where a court has really held let patentee to that burden and poured them out for nominal damages, saying you haven't -- at least I haven't seen a modern case -- you haven't proven that.

Traditionally we prove apportionment by deductions of the infringer's contribution or comparison to next-best alternative. The problem I think with what you've described is it focused not on the value but the cost of individual component. And typically cost and value to the overall device can be different.

I think what's proper -- and we need to get this right because royalty stacking -- excessive royalty stacking is a problem. It's a problem in your industry and it's a problem in other industries. And the courts need to get this right. The way to do that seems to be not to focus on the value of the invention but the value of the use made of the invention by the infringer.

MS. MICHEL: All right. Let's -- John.

MR. SCHLICHER: "Apportionment" is a word that was used in the cases for from about 1820 to, roughly, 1966 to describe how damages are determined when they are measured by an infringer's profits. And the word was used to do what I have said so many times, that the value, the additional value -- that we should have a word for it. Rich had a good one: Incremental value.

MS. MICHEL: "Delta", he said.

DR. GILBERT: Delta.

MR. SCHLICHER: Or delta, that's even shorter. The incremental-value rule. The portionment in the law never had anything to do with figuring out how to separate out from the selling price of a product some portion of the price, which we will start from, to then go to a number. Apportionment was always take what actually happened,

infringer sold a product, it made a certain amount of money. How much of that money was the result of using this invention, compared to doing it the next-best way. The next-best way might have added a penny to the selling price. It might have reduced -- or the next-best way might mean selling price was a penny less. And, if so, you take the revenue, multiply it by the number of units times a penny, and that's the damages.

So -- and I use apportionment. And what happened was the Supreme Court wrongly said, in my mind, that that's not available anymore. So people stopped reading those cases. In *Grain Processing*, the Federal Circuit cited all those cases, so I think they're still relevant.

But, anyway, when I say apportionment I mean the rule. What do you do when the invention is a small component? The law is that if there is a component in Mary's product and the claim says a memory chip in a PDA, if that's the right, --

MS. DOYLE: It's good enough.

MR. SCHLICHER: -- the current right term. But all of the novelty in the invention is in the memory chip. Then it shouldn't be too hard for a lawyer to say to themselves: Well, a noninfringing alternative to that

invention is a PDA with a different kind of memory chip.

So if -- and actually the way it should work in practice is if the patent owner has sued the PDA seller, damages ought to be the difference between the profits that company would have made selling a PDA with that memory chip minus the profits the company would have made, and I would use net profits for both, using the next-best kind of memory chip it would have.

And when you're doing that -- let me just say the other thing, if they sue the memory chip seller, then the test ought to be it's the difference between the price of that memory chip with the invention minus the price of the next-best chip that company could have made without the patented feature.

In the first case, where the PDA seller is the defendant, a piece of evidence that is extraordinarily valuable and absolutely, positively always ought to be considered is the price at which the memory chip seller sold that chip to the PDA manufacturer if it's a single-use chip or if the parties know that that's the use that's going to be made of it, because while it's -- and Rich is way better at this than I am, but economically that price by definition will reflect to some extent the value of that invention to

the PDA buyer, I think.

It might be a little more, but it's not going to be very much more, because you'll pay -- you know, you'll pay a little less than its real value to you. So in -- in Mary's case, when she is faced with these people, the number she is talking about, and I don't know if you were talking about a different thing, but the price at which Palm, if we're using them as an example, bought that little component, ought to be very important in determining damages.

Now it's not all the total --

MS. DOYLE: It's never mentioned.

MR. SCHLICHER: -- it's not the total price of that chip, it's a part of it, but that's really good -- a good starting place.

MS. MICHEL: Okay, Marty

MR. SIMPSON: In license negotiations you deal with royalty stacking as a normal topic. And what the parties are doing is taking a look at, okay, what else applies in the economic situation, coming out with, again, what's a profitability and then coming back from that and getting a reasonable royalty.

If they're paying a lot of royalties to other

people, the profitability will be less. And the parties can choose their royalty base. The Supreme Court has let the parties choose a royalty base larger than the claimed invention. In this discussion that's an analog to the entire-market-value rule. The parties can choose a royalty base smaller than the claimed invention if, again, it's for their convenience. In this discussion that's apportionment, but that's part of a negotiation on trying to find for the parties to come to a negotiation about what a reasonable value is.

MS. MICHEL: So what you're suggesting then is the base ought to be driven by what would have happened in the hypothetical negotiation rather than a legal rule?

MR. SIMPSON: If you can get the hypothetical negotiation in a way that is given to the trier of fact, that will actually, I think, answer the question.

If, on the other hand, you can't get that and you have to have factors that go to the jury, then I'm looking at it and thinking, well, the parties can choose a royalty base larger than or smaller than. So it seems to me that what the *Georgia-Pacific* factors are telling you is something that's common sense in a normal negotiation. You can do that, however, as a patent attorney for over 30

years, you will always start with the claimed invention and then you will work from there.

MS. MICHEL: Let me ask about that. The claimed invention, there have been voices in the debate that suggest the base needs to be coterminous with the invention as claimed, the scope of the claim. How do we deal with the issue of the invention is a feature on a processor? But I can write a claim, a work station, including a processor having this feature. Now the scope of my claim is now the work station, not the processor. Does that legal construct therefore drive the base to be the work station? Just because I've claimed it that way --

MR. SCHLICHER: Mary, -- can I interject --

MS. MICHEL: Well, actually let me hear from Marty.

MR. SIMPSON: Well, first, if that's the claimed invention, you can take a look at it if you want to choose that as a royalty base and the parties look at it or the trier of fact looks at it and says this is minuscule compared to the value of what you're selling. Then you got a 0.000 something as the royalty rate if that's your base.

MS. MICHEL: But -- Mark.

MR. LEMLEY: So I mean I think that's -- and this

goes back to Richard's point about equivalency, which is entirely true in economic theory and just doesn't work in practice, right?

DR. GILBERT: Lots of things --

MR. LEMLEY: Because it's much easier to persuade somebody to give a very small percentage of a very large base, because people, you know, jurors but also judges don't understand the kind of law of small percentages, right. It's why people buy lottery tickets.

And it can't be the case that the way you write your patent claim to an otherwise identical invention should give you a different royalty.

MS. DOYLE: Result.

MR. SIMPSON: Right. The fact that I chose to claim a car containing an intermittent windshield wiper rather than an intermittent windshield wiper should not give me a larger royalty at the end of the day, but, as a practical matter, it tends to do so.

MS. MICHEL: Should it drive the math? Should the --

MS. DOYLE: No.

MS. MICHEL: -- way I wrote -- and explain why -- should the way I wrote the claim, if I recite the car, mean

that I have to have the base be the car and the royalty be something -- the rate be something really small? Can we disconnect those?

MR. SIMPSON: Yeah, I think we have to disconnect them, right, because in the real world those two numbers will not be equivalent, right. It should -- you're right, it should be .0000 whatever of a really high number or one percent of a much smaller number, but, as a practical matter, those aren't going to be the same.

And so I think the focus has got to be on what we've been talking about is the incremental contribution of the patented invention. What that means is that the -- you know, the Federal Circuit repeatedly intones: You can never under any circumstances focus on the point of novelty of the invention. But, as a practical matter, there are five or six different legal doctrines in which we already focus on the point of novelty of the invention. And this is one I think where, as a practical matter, you have no choice but to focus on the point of novelty of the invention.

You can't just say: Oh, this is a patent on a car, so we'll give damages for the car. You've got to say the only novel feature of this patent claim is the intermittent windshield wiper.

MS. MICHEL: Okay. When we do that, when we try to determine our base based on the convenience of the parties, what makes sense in commerce, and the invention itself, when that leads you to a base of a windshield wiper rather than a car, but my claim is written as a car, is that apportionment? Is that what people are meaning by apportionment? Any --

MR. SIMPSON: I mean I guess it involves apportionment, right. I mean that is -- well, so if you're measuring the base of the car, if you're -- I mean I think of it as -- I think of apportionment as actually not worrying not so much a problem in that situation. If people are selling windshield wipers separately, right, and I invented this thing, you don't need to apportion. You've got the patent, -- you know, the thing you're patenting -- measuring is now covering the product that's actually in the market, right. So if Mary's got a separate component, then we're in good shape, right.

Apportionment's what's necessary when you've got that same situation but: We only sell the thing as an integrated product, right. So it's not the chip that Mary happened to import, it's one of the six cool features of the screen, right. The sort of way you move your fingers to

cause some particular thing to happen. But we don't sell, you know, screens with five of the six cool features and screens with six of the six cool features. We sell screens. And so we've got to figure out, well, all right, how much did that one value, that one move add relative to all these other things, and we've got to do it in a world, in a circumstance in which we don't have the market signal of people paying just for that one individual piece.

MS. MICHEL: Okay.

MR. SIMPSON: And that I think is where apportionment matters.

MS. MICHEL: All right. Rich.

DR. GILBERT: Yeah. I think on the issue of the base, we could interpret apportionment to mean: Apply the royalty to the smallest standalone -- or potential standalone product. In your case, for example, an integrated circuit inside the Palm.

In the *Alcatel-Lucent* case it would be the Windows Operating System instead of the computer, and the judge in that case pointed that out.

That's one issue. I do feel that if you -- I mean subject to Mark's, I think, informed judgment that if you do the analysis correctly, as John pointed out, I don't think

it should make a huge difference on where you come out, although I do recognize that in practice it very well may.

There's another apportionment issue which even as a theoretical matter is a real apportionment problem and has to be dealt with. And that is I'll bet in your Palm there is a bunch of patents that if you did not have the rights to use them you couldn't sell the Palm. And they are all absolutely essential, do not have a replacement, do not have a next-best alternative. The next-best alternative is you don't sell your Palm. And how do you --

MS. DOYLE: A radio chip.

DR. GILBERT: So I mean it's certainly true, I mean obviously it's clearly true for, say, a microprocessor. There are many, many technologies in the microprocessor. You have to have them or you don't make a microprocessor. And how do you apportion in that case. And there it's my view that you have to figure out some way to divide value among different essential patents to go back. Our delta in that case can be the entire value of the patent.

Now what Marty says is fine. If you got everybody into the room, say there were a hundred essential patents, and you got everyone into the room and said: Let's work this out and let's figure out what each one of us should

have as a reasonable royalty, you might get to a reasonable number where if it has the product as a value of $100 and there's a hundred patents, each one gets a dollar, or something like that, or minus whatever else is needed to produce the product.

But the problem gets, I think, particularly difficult when one person pops up and says: I don't care that you have a hundred essential patents to make that product, I have one, and you can't sell this without my patent, because I can perhaps get an injunction against your sales of your product, and I think I should get half because I really like my patent, and that's our starting point. That's a conceivable market outcome, but I don't think it's a market outcome that provides the right incentives for innovation.

MS. MICHEL: All right. Vince, I'm going to stop worrying about what apportionment means. Vince.

MR. O'BRIEN: Oh, okay. The situation you were just describing, why wouldn't that be handled with the Palm? You look at those 50 features that are necessary but not sufficient. You can say what was paid in the past for those. And then you say why isn't this fifty-first feature in that same group, and you look at the range and you pick a

number out.

DR. GILBERT: Well, Vince, because of circularity again. Remember, somebody could have gotten a really good deal --

MR. O'BRIEN: No, but that's better than just -- that's better than be untethered, where you say: I want all of your profits.

DR. GILBERT: Well, I'll agree to that, yeah, but it's not the best outcome.

MS. MICHEL: John, and then I'll ask a wrap-up question.

MR. SCHLICHER: As I understand the law there is no rule that says the form of the claim requires that the base for determining reasonable royalty damages be anything. I think a court is free to do. There was an old rule in some infringer lost-profits case that might lead people to believe that, but I have never seen it in the reasonable-royalty cases. In early reasonable-royalty cases in the start of the last century, courts confronted that problem, solved it, and it went away.

MS. MICHEL: Thank you. That's helpful.

MR. SCHLICHER: It should have gone away. Apparently it didn't.

MS. MICHEL: Maybe it came back.

All right. I think we had some consensus on some concepts here, if we don't worry too much about terminology. That's where I'm coming down on this.

So let me ask as a wrap-up on reasonable royalties: Given where we are now in this discussion that we had, do juries and courts and parties need better guidance on how reasonable royalties ought to be calculated? And, if so, what should be the source of that guidance, legislation, judges, FTC reports, and any thoughts on where do we go from here?

Bill.

MR. ROOKLIDGE: Well, I'm advocate of the common law process. I think the beauty of that is that instead of dealing with hypotheticals we are dealing with concrete facts of real cases. I think the Federal Circuit is in the process of addressing this. I think we all bear a responsibility whether through representing our own clients in front of the court, filing amicus briefs, or whatever, to speed that common law process along. And I think we can make a dramatic improvement in the law of patent infringement damages through that process.

MS. MICHEL: Mark.

MR. LEMLEY: What he said.

MS. MICHEL: Really?

MR. LEMLEY: Really.

(Laughter.)

MR. O'BRIEN: I agree with that, too. I'll throw in my two cents here. It's interesting when you get into these cases, the difference between the plaintiff's number and the defendant's number usually comes down to about three assumptions or three factors. Just a handful. And, you know, some of those could, I thought, maybe along what Rich designed, you know the judge might want to decide. We've talked percentages, but is a lump sum more appropriate in this matter. That would bring the parties together really fast.

Are there substitute -- is there no other way of making and selling this product or not? That would bring them together.

At a minimum, I'd like to see a court just simply say: Okay, you get your two experts in the room, have them list the four key things they differ on, and that's what we're going to present to the jury.

MS. MICHEL: Okay. John.

MR. SCHLICHER: I have written an article

describing a bill pending in the Congress that I found well intentioned but problematic as leading to a better world. And I said at that time and still believe I would leave it to the courts. On the other hand, I wouldn't have infinite patience with the courts.

Courts are limited by the cases they get and the arguments the lawyers make. I think for too long the courts have not had lots of opportunities to do things much differently because the lawyers never asked them to do anything differently and the lawyers don't necessarily put in the evidence needed to permit them to do something different, and that's a lawyer problem. We haven't done as good a job helping the courts do their job. So I am strongly inclined not to ask Congress to solve this problem. On the other hand, if in ten years people are still having this same discussion, then I would run the risk of allowing Congress to solve it. Or ask -- I should say -- not allowing, asking Congress to solve it.

MS. MICHEL: Yar.

MR. CHAIKOVSKY: Well, I'm generally in agreement with the comments just made by everyone. Having said, I don't know if ten years is the right period of time, because I don't think Mary could wait ten years. And there's a lot

of other technology companies here that can't wait ten years. So if we don't get a resolution to the problem in some time less than that, whatever that time that is, and whether it's five years or what-have-you, through the courts, then we're in trouble.

I would say and whether we go into an ongoing royalty discussion that cases such as the *Amato* case in terms of ongoing royalties and the additional factors that they set forward there, and one of them being the infringer's likelihood of success on appeal, doesn't give me a lot of hope that the Federal Circuit's going to be getting it right or certain panels of the Federal Circuit are going to be getting it right any time soon, because all they did is muck that up even further.

And so I'm in favor of the common law. You know, I'm a proponent, I'd like to see the solution there, but I recognize that high-technology companies here in the valley can't necessarily wait. And if see things like *Amato* come down and that coming down in the future, I don't have a lot of hope.

MS. MICHEL: Mary.

MS. DOYLE: So to speak as a member of that industry, I think we've now waited for six years and if we

must wait another four I think you'll see companies go out of business because there are nonpracticing entities out there that are poised upon the failure of this legislation to take advantage of the vacuum and leverage huge and perhaps extraordinarily unaffordable for some of us settlements by virtue of huge patent portfolios that may or may not be infringed, who knows.

So in my view we've waited long enough. I have, in general, every confidence in the common law, but I look to the legislature to remedy abuses that are outstanding as long as these have. You know the venue issues that are involved here, but perhaps, most importantly, at least from my perspective, the lack of clarity around damages. The longer we wait the more money is going to be spent on transaction costs, which add value to nobody, benefit no one other than the source of those services, and many of whom are sitting around this table, so it's sort of, you know, no offense intended. But, in the end, we're not creating value.

And so I have looked to the legislature. Our company has, our industry has. And I think at this point we will be sadly disappointed because the legislative process isn't perfect either.

MS. MICHEL: All right. Just one question on lost profits. Are the standards for establishing lost-profit damages too strict? And if you think they might be, why might that be a problem?

Mark, this is your cue.

MR. LEMLEY: My cue? All right. Well, I mean so this is -- I have argued that one of the reasons we got into the reasonable-royalty mess is that we created a bunch of rules, including the entire-market-value rule but including a bunch of others, convoyed sales, various got things imported into reasonable royalties, because there were cases that were really lost-profits cases but where the patentee couldn't satisfy the fairly rigorous standards of proof that have been set out in lost-profits cases.

I mean the most extreme examples involve cases in which I've demonstrated -- a patentee who's a competitor in the market has demonstrated the demand for the product. They've demonstrated there isn't a noninfringing substitute, that they would have made the sale, could actually have manufactured the goods, but there was insufficient evidence as to distinguishing out particular parts of their cost structure to determine what the profit was. And so the court said: Oh, well, so you haven't proven lost profits

because we don't know what the exact profit number is, so we'll send you into the reasonable-royalty category.

And then when you get into the reasonable-royalty category, you say: Well, oh, but, you know, boy, the royalty should be pretty large because if you just give a small two- or three-percent royalty, it means they're not making much money and, in fact they would have lost a lot.

And so we add kickers to compensate for the seemingly low reasonable-royalty numbers. Or we add entire-market-value rule or we add convoyed sales or various other things. And I think if we could more readily distinguish between companies whose claim of injury was, 'I lost a sale in a market in which I participate,' from companies whose claim of injury is, 'I lost licensing revenue from a transaction that I would have made,' we could have a more rational set of damages rules for each of those cases separately.

MS. MICHEL: Thank you.

Any thoughts on that? We'll move onto injunction.

MR. SCHLICHER: I don't --

MR. CHAIKOVSKY: See Seymour Wemley's (phonetic) paper from 2007.

MS. MICHEL: Yar is in agreement then. Okay.

John.

MR. SCHLICHER: I don't think you could make the standards for proving lost profits any more lenient if you tried. I'm not aware of the case Mark's talking about, but I think the standard is extraordinarily lenient. Indeed, the only thing you can't do is prove a number by speculation and guess work. Anything else seems to be okay. So I'm not so sure that I think that we are having too many reasonable-royalty cases because people are having trouble proving lost profits, although I defer to Mark, I mean if he's seeing them.

The only lost-profits issue that I think is important is the extent to which the *Grain Processing* decision applies to all lost-profits cases, not simply what actually happened there, namely, an infringer who sold a product and had an absolutely perfect substitute available if it hadn't used the invention. The issue is whether if it had an imperfect substitute, the same analysis would have applied. I have seen one case that suggests to me maybe the Federal Circuit doesn't know the answer to that question.

Frank Easterbrook knew the answer and he wrote it. The answer is: The same approach applies to imperfect substitutions, but I have yet to see a case that actually

says it. And if that's not -- if that's not the way cases are being decided, then we have exactly the same problem in lost profits that we've been talking about in reasonable royalties. And I don't know whether the reality is that we do, but I fear there is a risk that we might.

MS. MICHEL: Bill.

MR. ROOKLIDGE: I would just say that like John I have a difficult time wrapping my mind around the concept of loosening up damages in one area to solve damage problems in another. And I'm just not there.

MS. MICHEL: Okay. All right. Permanent injunctions. We did have a day in D.C. when we talked about the four factors in great detail. One topic we'd like in the short amount of time we have left today is to talk about what ought to happen if a court denies the permanent injunction. What then? How do we determine the ongoing royalty, what kind of factors should we think about? Any thoughts?

Yar.

MR. CHAIKOVSKY: Well, as I already mentioned, I think we've already been provided some factors by the Federal Circuit in terms of what should be thought about in terms of ongoing royalty. I don't know if I'm necessarily

in agreement. In particular, there was one I pointed out where it was kind of nonsensical in my book.

You know that being said, I think you saw something in *Pace versus* -- you know, when you have *Pace* and you have a model from the Federal Circuit where there was a suggestion at least from Rader, you know, coming on early that the parties should enter into negotiations first and actually have negotiations as opposed to necessarily having a court decide that ongoing royalty. And you've seen most of these decisions post the *Pace* and the *Amato* decisions with these nonpracticing entities coming down from the Eastern District of Texas, although you've got a case from Massachusetts, et cetera, but you've got, for example, the *Telcordia* case in Delaware where actually the judge did say, 'Hey, parties, why don't you go negotiation and actually see what you guys are able to come up with post this finding of infringement.'

And maybe that is an answer, to see if the parties can negotiate a result before we actually have a court determine what the ongoing royalty should be.

MS. MICHEL: But parties can always go off and settle. You don't have to have a court telling them to do that.

MR. CHAIKOVSKY: Parties can. But, one, will they? Two, if we then let them -- if we let them go and have an ongoing royalty and, in particular, in light of -- we'll see what happens with *Pace* after it came back down with $98, you know, $25 going up, not enough evidence to support 25, 'Well, I'm going to come back down and give you 98.' You know, so when we have that, well, where's the settlement likely to end up?

So, yes, the parties can go off and have their settlement negotiation, but if you allow the court to establish an ongoing royalty and that ongoing royalty is based on: If we follow the case law as it exists, now we already did, the expert's assuming that we've got infringement and validity, but now, okay, we've got this heightened -- well, now we got a jury verdict that actually says that there's infringement and validity, and somehow in *Amato* we're saying that's different, there's a jury verdict, and even though we already made this assumption.

And, in fact, we've got Judge Clark in Texas actually saying: I'm not going to listen to that, and we'll see what happens with that. But we have other judges that are actually listening to that because that's the law of the Federal Circuit. And what I'm suggesting is, well, I'm not

sure there should be a difference. Why should there be this difference, and we're going to end up with this heightened awards and we're already seeing $98, I mean, like I said, coming out of *Pace*.

And all I'm coming down is to I don't know what the factors should be, but why is it not necessarily having the parties perhaps enter into a discussion before we have just more factors to discuss and we've already spent time today discussing how these factors are already creating a problem in and of themselves.

MS. MICHEL: Mark.

MR. LEMLEY: Well, it seems to me if we get the damages rules right for retrospective damages, those damages rules are just right as prospectively if we've decided that injunctive relief is not appropriate, right. In some cases of course injunctive relief is going to be --

MR. CHAIKOVSKY: Big assumption.

MR. LEMLEY: -- appropriate, but if -- well, but -- well, all right. So then the question is: If we think there's some uncertainty, maybe we got the damages numbers wrong, should we systematically change them now that we know there's been -- you know, now that we're in a going-forward royalty rather than a retrospective damages for the finding of infringement and, if so, how should we change them?

Most of the discussion here has been I think pointing in the direction that the problem with reasonable-royalty damages is that they are too high in many-component-industry cases for a variety of reasons. It is therefore particularly odd to say, anyhow, well, if we think we don't have a particularly good handle on the retrospective damages, and maybe they're all too high, we'll use that as a floor for the number going forward.

What the court in *Amato* says is the royalty on an ongoing basis should be somewhere between the minimum of whatever the jury awarded as past damages and the maximum of whatever the patentee asked for. And if the parties don't come to a deal, 'Well, Judge, choose a number somewhere between those two.'

And in that particular case, *Amato*, the numbers they used were what the jury actually awarded was four cents a unit, what the patentee asked for was $2 a unit, so there's a 50-times difference between those two numbers.

At that point, if we start effectively making this punitive, if we start saying, all right, we're going to have a higher number just because this is a going-forward royalty, we are granting an injunction, right. And that's just bizarre, having just gone through the four-factor test and saying we don't want to stop the defendant from doing

this. We think it's actually efficient for the defendant to continue to infringe on the payment of a royalty, but we'll set the damages award so high that the defendant can't afford to do it.

MS. MICHEL: The Texas Court mentioned the infringement going forward would be willful. Should that play into the discussion?

MR. LEMLEY: I think this is actually really a hard question. So the Federal Circuit hasn't resolved it. They suggest in *Amato* that it's not willful, but what they really suggest is willfulness is just not the right question.

So it is the case that, going forward, the defendant knows that they are infringing a valid patent, right. On the other hand, it's also the case that the district court has weighed the four-factor test of injunctions and decided we shouldn't stop this active infringement. So it is once again I think very odd to say but will punish it, right.

And there are plausible arguments on both sides. I think it is a bit odd to punish having not granted injunctive relief, but I can see the argument on the other side.

MS. MICHEL: Rich.

DR. GILBERT: The answer is delta. Otherwise, --

MS. MICHEL: Good economics.

DR. GILBERT: The answer to all. Otherwise you are trapped in an endless loop in which royalties equals damages which equal royalties, and that can be any number you choose. So you really have to nail it down by trying to figure out what the underlying contribution is of this technology.

a few complications. Well, first of all, if there are many essential technologies, you are necessarily involved in apportionment of some kind. It could come about through self-regulation of all the licensors getting around and saying: Let's license this and divide the value among us. But if you don't have that, it could very well require a court to determine how much this patent is worth when there are 99 others that are also necessary for the pump.

There are other complications as well, such as how much of delta should go to the licensor and how much should the licensee capture as consumer surplus, if you will. There are probabilistic issues, there are timing issues. But I think the bottom line is you need to start with delta.

MR. CHAIKOVSKY: If you answer it with you need to start with delta, then the question I would have is why do we have *Pace* and *Amato* and why is there the difference

between -- again, you know, the heightened focus on the jury verdict's finding of infringement and -- you know.

DR. GILBERT: The court got it wrong.

MR. CHAIKOVSKY: Yeah. I mean and that's where we are. And so that will harken me back to Mary's point of how long is she going to wait for the common law, because this is where the common law is going in the post *eBay* world, at least with respect to damages ongoing royalty. This is going to be a big issue as it goes going forward. This doesn't bode well for the damages issue in general and reasonable royalties in general coming out of the Federal Circuit.

MR. ADKINSON: Vince.

MR. O'BRIEN: It's always interesting when you look at the schizophrenia in these cases. But by not granting an injunction hasn't the court really said that we have economically-efficient infringement going on here? So why not worry about infringement. Let's just forget about that. Let's come up with a rate that's reasonable going forward. You can do it the way Rich says and have a hearing and the court decide what the value is. Or you can say: Go negotiate. Three months from now, if you haven't had an agreement, you each come in with a hearing. Each of you present a number, and I'll pick one or the other.

You can come up with all sorts of structures like that to solve this problem, instead of coming up with these crazy decisions. To an economist it's frustrating to look at them flounder around on this issue.

MR. LEMLEY: But we already did solve this problem, right. There's -- you know, outside of the pharmaceutical *Anda* (phonetic) cases, there is no case in which you find validity and infringement where you haven't already gone through a damages analysis, right. We've had economic expert testimony to --

MR. O'BRIEN: Well, I mean you could do that. I mean I just say it so that you have -- you put some pressure on them to reach some kind of an agreement, hopefully that they might be a little bit better than the trial outcome.

MR. ADKINSON: But they need to know what they're negotiating in the shadow of.

MR. O'BRIEN: Yes. And you have to define that before you send them off on their own.

MR. CHAIKOVSKY: And you've got a situation right now where you've got, for example, certain venues that are now emboldened. They in the past were giving out injunctions, that injunctive risk is now gone. Well, let's come out with a decision that will embolden plaintiffs to continue to file here, in particular in light of some other

venue cases that may have come out recently.

So there's a lot of incentives for decisions to come out the way they were are, if one were to be cynical about it.

MS. DOYLE: The injunction risk isn't gone if you look at the ITC as another venue, incidentally.

MR. CHAIKOVSKY: The injunction risk is a hundred percent there. So, yes, it's not gone at all.

MS. DOYLE: Right. And NPEs are now resorting to that venue on the grounds that their business in the United States is licensing.

MR. CHAIKOVSKY: And we're going to see more of that: *Zaxxon Innovations*, Gertrude Rothschild, et cetera, they're all going to take part into -- until we get to a hearing, and that's with Zaxxon and that's with Gertrude, until we get the result that actually has a domestic industry, we have the case law from the '90s really on forward that a licensing component is sufficient, is the *Zaxxon* case, which I know you guys having played a part in, is that enough, where you've got two employees and two part-time employees and you're holding to build up your license program; is that enough? I don't know, but, yes, you're going to see them run there.

If they're not going to get relief elsewhere, NPEs

are going to run to the ITC because of the speed, because of the injunctive risk. I can sue 40 people at once. Not beyond the scope here, but there's a lot of places for them to go, and the ITC is a beautiful place.

MR. ADKINSON: John.

MR. SCHLICHER: Only one comment. I mentioned injunctions earlier and I might have -- what I said might be understood to imply that I believe injunctions should issue in all patent cases. I'm going to submit written comments in which I will explain as best I can the cases in which I think an injunction should be denied and what I think ought to happen after an injunction is denied. So I will deal with this in writing. This is not a simple problem.

On the question of willful infringement, I trust it will occur to lawyers to ask the judge to enter -- to specify in the order denying the injunction that the judge has authorized the defendant to continue to sell that product under whatever conditions the court specifies in the order or the parties otherwise agree to, so that willfulness -- willful infringement absolutely positively disappears, because if you don't do that, of course you've totally defeated the whole purpose of the judge in denying the injunction.

MR. ADKINSON: Just to quickly go right up, if we

could, and ask people if could react, since we didn't have a time to talk about injunctions generally, just quickly what your thoughts are on the impact of *eBay* and on the impact of the ITC on the effectiveness of *eBay*.

MR. CHAIKOVSKY: So the impact of *eBay*, well, I mean I think you had something -- I don't know, pre *eBay*, maybe someone else here has the statistics in terms of 90, whatever, percent. But we've done an analysis of the decisions post *eBay* and I think you're getting competitor versus competitor. You're ending up with 80 percent, so you're still, you know, more likely than not, four out of five times, to be getting an injunction in a competitor-versus-competitor situation.

In a noncompetitor situation you've only had one out of eight that I'm aware of be granted, that one being CSIRO getting the injunction. That doesn't mean that CSIRO's going to get. I mean it's only gone up on validity issues. It's come back down on validity issues. We'll see if CSIRO does continue to get it. Obviously there's a concurring opinion that research institutes, et cetera, universities should be entitled to perhaps getting injunctions, and that's what the Eastern District of Texas relied upon there, so we'll see CSIRO.

And, quite frankly, we're seeing the proliferation

of universities now suing the likes of high-tech companies and lots of plaintiffs' attorneys looking for universities to sue high-tech companies because they think they're going to get an injunction.

So that's the world we're ending up with, with *CSIRO* being out there until it's overturned by the Federal Circuit or until the Federal Circuit blesses it, and that'll just make research institutes go forward.

That being said, also the ITC, I already commented on the fact, I mean if I'm an NPE I take advantage of that currently. There's absolutely no reason not to take advantage of it given the current case law. I mean if you've got not licenses you can even take the time during the course of the hearing, during the ten months to get up enough licenses so by the time you get to the hearing, absent a summary determination motion on DI, that you actually might have a chance to actually prove up the DI if someone doesn't take it to task early.

MR. ADKINSON: Anyone else on *eBay*?

MR. LEMLEY: I think I think it's a substantial step in the right direction. It's helped significantly. As Yar suggested, it's actually mostly parsed out into competitor cases versus NPE cases, despite the reference to no generalized rules. I think there are some things that

are -- there are some decisions that are problematic. *CSIRO*, I think -- the district court decision in *CSIRO* is a crazy outlier. It's already been reversed on other grounds. Maybe it will be reinstated as a crazy outlier, but hopefully not.

On the other side, the Federal Circuit decision in *Voda versus Cordis* I think unfairly lumps in exclusively licensors with the nonpracticing entities who cannot get injunction relief, and I think that's a mistake. It's just a kind of bad application of equity law.

MS. MICHEL: One question about the *CSIRO* case. My understanding is that the research institute had made a RAND commitment to a standard-setting body.

MS. DOYLE: Yes.

MR. LEMLEY: Yes.

MS. MICHEL: And any thoughts on whether an injunction should ever be available in that context?

MR. LEMLEY: Yeah. So I mean I am of the view that if you enter into a RAND commitment that is properly structured in the standard-setting organization, that you've entered into an enforceable contract, right. If you remember your first-year contract law, one of the things you do not have to have an enforceable contract is a price term. And so I think if you've entered into a RAND deal you have

licensed your patent and it remains to be discussed -- remains to be decided by a court what a reasonable price is at which you've licensed that patent.

MR. ADKINSON: Marty.

MR. SIMPSON: Well, I wanted to point out that you may have a research institute or a university that may be the only party with standing to sue. And if that's the case, then there may be a restricted number of licenses as opposed to -- and there may be some field-abuse licenses in there. So you may have the research university needed in there. So I think injunction ought to be available to the judge when they look at it and they think, okay, if that's --

MR. LEMLEY: Right, and that's the *Voda versus Cordis* problem, right, that the Federal Circuit said, no, sorry, you can't do it. But I think that's wrong.

MS. MICHEL: We're about out of time. I'll give everybody a chance for any last comments.

Thank you. You've been a wonderful panel. I think this is has been very informative and has actually advanced the debate, which was the goal. Thank you very much.

And the record remains open till May 15th. We'll take your comments and give us a call. Thank you.

(Applause. Whereupon, the hearing was concluded at 4:34 p.m.)

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