

>>MALE SPEAKER

Welcome back to this afternoon's session and welcome especially to those who are looking at -- on us on the webcast and who will be looking at the webcast in future dates it's on our website, my name is Bill Atkinson, I work in the Office of Policy Studies in the general counsel's office. I'm really pleased to introduce this afternoon's panel. It's going to address the patent system, whether it adequately fulfills its notice function. For example, whether it assures that firms are seeking to very many to -- develop to introduce technologies ensuring firms seeking to develop and introduce innovative technologies can obtain clear and reliable information regarding the existence and scope of patent rights and could cover those technologies. We have an extraordinarily distinguished panel here today and I'm going to introduce them very bravely. Bob Armitage serves as the senior vice president and general counsel for Eli Lilly and Company and he's a member of the company's. Prior to joining Lilly he was a partner at Vincent and Elkins and then general counsel for Upjohn. Positions in the past president of the American intellectual property law association and currently member of the counsel for the ABA's intellectual property law section. Rob Clarke is the director of the office of patent legal administration under the deputy commissioner for patent examination policy at the PTO. Mr. Clarke began his career at the PTO in 1990 as a patent examiner and started his tenure at OPLA in 1999 as a legal advisor. In 2005 he was named deputy director and was appointed to his current position in 2007. Among his awards, Mr. Clarke has received two Department of Commerce silver medals, one in 2001 for his efforts in implementing the American inventors' protection act and the second in 2004 for his work related to patent examination in the electronic environment. Then we also have professor Chris Cotropia who is an assistant professor of law at the University of Richmond law school. A member of the intellectual property institute. He teaches intellectual property laws and other subjects. He's authored numerous articles and books on patent law and testified before the Senate judiciary committee and the U.S. ITC. We have David Kappos who is vice president and assistant general counsel, intellectual property law and strategy for IBM corporation. Mr. Kappos directs IBM's intellectual property law function providing legal counsel over all facets of protecting and licensing IBM's intellectual property assets and he leads IBM's engagement in intellectual law policy issues as well as setting legal strategy for the company's business units. Steve Kunin is a partner at Oblon, Spivak McClelland Maier & Neustadt where he serves as a patent consultant who advises clients on patent prosecution and policy matter, prepares infringement and noninfringement opinions and serves as an expert witness on patent law. He previously was deputy commissioner for patent infringement policy with the PTO from 2000-2004 and served in a similar capacity since 1994. He received many awards for his service at the PTO including a U.S. PTO career achievement award and the vice president's reinventing government hammer award. Mr. Kunin also serves as an intellectual property program director at the George Mason school of law where he teaches patent law. Michael Messinger is director in electronics groups at the intellectual property law firm of Sterne, Kessler Goldstein & Fox where he works with company managers, directors and employees to identify and leverage intellectual property assets. He has extensive experience prosecuting U.S. and international patent applications and developing strategic patent portfolios. Previously, Mr. Messinger worked as a patent examiner at the PTO. Professor Arti Rai is the Elvin R.

Latty professor of law at Duke Law School where she's taught since 2003. She's a authority in patent law, administrative law and the law of biopharmaceutical industry. She -- her current research on innovation policy in areas such as green technology, drug development and software is funded by NIH, the Kaufman foundation and Chatham House. She's published widely and is currently editing a book on intellectual property rights and biotechnology. She is currently chair of the intellectual property committee of the ABA's administrative law section. And finally, we have Terry Rae who is a partner at the Washington, D.C. office of Crowell & Moring and is a member of the intellectual property section. Terry focuses on complex patent litigation patent procurement and portfolio management. Focuses her practice on biotechnology, pharmaceutical chemistry and related fields. She's been named to the best lawyers in America for biotechnology and currently the president of American intellectual property law -- international intellectual property law organization. We'll begin our panel.

>>MALE SPEAKER

Thank you. I think the way to begin is with a broad question. I'm going to ask you all about how you feel about how the patent system, link the notice function. But before I do that I've got to take advantage of that, I've been a competition lawyer, my background, and have never been able to do this work orally but the patent system gives me this opportunity, I could be me own lexicographer here and say I know the system so we're all on the same wavelength we're talking about enabling third parties to know what patent and patent applications cover. So I guess the opening question is how well do you feel the patent system fulfills this function and does your answer vary from industry to industry or from technology to technology. As you go -- yes, Steve's been here before, knows the drill, if you want to comment on something turn your nameplate up. Steve?

>>STEPHEN G. KUNIN

I'd like to make three brief comments. I think that there's areas where the notice function really does fail. First, in the current situation at the patent and trademark office, where we have a very large number of applications which are published at 18 months as unexamined applications and because of the de facto deferred examination by virtue of nearly 800,000 unexamined applications, that with respect to the claims in these published applications and the lack of certainty as to what will be the fate of those applications and claims I do believe that that's a severe notice function problem. Second, where there are a very large number of commonly owned patents which have a very large number of claims, some people refer to as patent thickets cetera, that the notice fails because of the extreme difficulty of having to navigate large number of patents that are related and conflicting claims, to try to figure out what your position is as a third-party and then finally in some fields of technology in certain types of claiming -- claims that are written in fairly abstract form, both as to pure functionality and written more from the standpoint of what the invention does as opposed to what the invention is, that those level of abstraction in claims again make it very difficult to know what the claims cover and what you have to do to avoid infringement.

>>MALE SPEAKER

Arti?

>>ARTI K. RAI

So I know you acted as your own lexicographer, Bill, but I will perhaps add to your

definitional statements by noting that even though sometimes the issue of notice is confused with breadth, we should be clear that those are two different questions. Breadth can often be -- or excessive breadth can often be correlated with lack of notice but it's not the same thing and it's important to keep that in mind as we go forward because in biotech, for example, there can be excessive breadth, we have Markush claiming, for example, perhaps, arguably, but the problem is not lack of clarity, it's perhaps excessive breadth. I know that's an issue that the PTO has been thinking of late and so just to put that on the table. The second thing that in terms of just definitional stuff that I want to note is that I think it's really important to focus also on sheer numbers. Now, you've talked about enabling a third party to know -- which suggests that it's the -- as Steve suggests, and I think he's ride rite about this, is it's the way that the language is drafted but as a practical matter we're also talking about sheer numbers. How much do we want to -- how much effort do we want to require parties to engage in to examine patents, and if it's -- if there are literally thousands and thousands of patents out there, even if they're terribly clear there's a sense in which the notice function is not exactly failing but there's something wrong, if you have to clear thousands and thousands of patents for any given invention. I think anyway. And particularly because there is evidence that in some industries, at least, there's a tendency to file patents, you know, by the thousands every year. And one of the very interesting suggestions that was put forward to me by somebody from an I.T. company and I thought this was -- it was a Nixon going to China almost, very interesting, some sort of system where the fee structure was explicitly set up to discourage the filing of more than say 1,000 applications every year or perhaps there would be no sharp distinctions between 500 or 1,000 but it would almost be like a progressive taxation scheme and I thought that even though that's numbers as opposed to lack of clarity of claims, at the end of the day, when the numbers are so large, you're not going to -- the claim language is clear, I don't think you're going to get much efficiency in the system unless you reduce the numbers. And that's it.

>>MALE SPEAKER

Mike? Make mike hello, I just wanted to sort of add a perspective and I agree with a lot of what Stephen was commenting in terms of large numbers of patents that have to be assessed and it's a part of large numbered of unexamined patents where the panel needs resources and that's part of looking at notice but I thought it might be helpful for the panel to also begin this discussion thinking about, with some insight on how these actual patent portfolios are created, I work with a number of companies, small, emerging and large companies, that are basically looking at their product development, their research, preparing to commercialize and getting in the marketplace and they're actually building these patent portfolios and what I find is with the existing -- a lot of the existing doctrines that hopefully we'll get into today on written description, enablement, claim construction, some of those kind of issues that there are some strong incentives in the current system to basically prepare a very well drafted patent, prosecute it very well, avoid ambiguity, the more certainty and clarity and specificity that's in the document, in the patent portfolio which will put the public on better notice, it actually creates far more beneficial business situations where you're able to get the license that you want and that kind of thing. So what I find, with a lot of the companies, is these incentives are pretty significant and in the regular course of business there's many situations where both parties are looking at groups of

patents, often backed by very credible technology and then they're sort of looking at the patents with a reasonable appraisal of the rights, with an understanding of where the technology came from, they're able to make appropriate business decisions on it. And so I welcome the FTC looking at this issue of notice and trying to come up with a good balance on promoting innovation, at the same time encouraging competition. And I hope we can go forward looking at sort of all the companies, practicing entities, if you will, that are really relying on the patent system.

>>MALE SPEAKER

Bob, you have experience in the pharmaceutical area and if you can talk about that.

>>ROBERT A. ARMITAGE

I might start maybe with a few more general comments if that's OK because I think there's possibly one framing concept that's worth considering. We don't, in my view, and shouldn't, in my view, aspire to perfect notice. And let me explain what I mean. We have a patent system that I think best functions when the notice requirement is analogized to defining the metes and bounds of the invention in the same way that we, in a real property sense, think of defining the metes and bounds of a piece of land. My wife occasionally takes me to antique shows and sure enough, this week we went to the Indiana state fairgrounds, went to an antique show. And I was looking at antique maps. And I was particularly looking at antique maps of Michigan. And I was noticing that the older the map was and the less charted the territory was, the less the state of Michigan looked like, you know, sort of raise your hand and hold your thumb up. And I know today in the Midwest, being laid out in a perfect grid, that a place that's well defined topologically, a place that's been well surveyed you can draw extremely accurate metes and bounds. But by definition, when you're entering a new territory and you've got totally new ideas, it may be that like surveying tools don't work very well when the maps are not very good, that the most you can expect is a fair and reasonable approximation of what those metes and bounds are. So I would urge us, as we talk about notice and the idea of metes and bounds being well defined, for us to remember that innovation, by its nature, has some uncertainty associated with it. Now, I'm going to make three points because it seems that's the norm everyone should make? So that would be point one. Point two, this -- this issue of whether the notice requirement is being well satisfied is not independent from the issue of validity of patents. And at least in my experience, which continues to the present day, even though I don't spend every day most of the day looking at patents anymore, if I pick up a patent and look at the claims and ignore the claims that I believe are invalid and could never be enforced, many are overly broad, others are clearly not designed in a way I believe that rigorous application of all the requirements that patent validity would lead to their being sustained if I throw those claims out and I look at the claims that are left that I believe are valid then I think the notice requirement, by and large, is very well met in the current system. And the difficulty we have in some situations is that you do pick up a patent. There was a time when I was Upjohn's -- Lilly's chief patent counsel not that many years ago that I picked up a patent on an emergency basis because I was being asked to go make some comments to the media about a patent that had issued that day and I read through well over 100 claims which takes some time, and I couldn't find a claim I ever thought a court would enforce. I couldn't find a claim that I thought the court would ever enforce. Now, I have no idea what those claims ultimately cover but that's irrelevant. In terms of multiplicity of patents, two weeks ago I

picked up 10 patents that I needed on a very short notice to provide some guidance to our company. It was a patent owner who had decided to take one invention and patent it 10 times. There's nothing wrong with that. A huge multiplicity of claims. In a very short period of time you can come to the conclusion that those claims that can be sustained, perfectly well defined notice requirement. Those claims that are abstract, exceedingly broad, honestly I perhaps don't know what they may cover, but if the patent system works right, I shouldn't care. Third point: and I believe Steve's touched on this in one way but let me touch on it in another way. I think, as technology has become more complicated, the 19th century of patent examination needs to change. The patenting process today is, as Rob instructs his examiner it's patentable unless -- I think that's the way the Congress wrote the statute in 1952, it's patentable unless. We probably need to look at a patent as a petition to the government for the right to exclude others and at some point in the patenting process, there ought to be incumbent on the petitioner explaining the basis for the petition, the reason the patentability requirements are met, of a patentability because paradigm for patent examination. And while this probably today is not a very popular view, I think looking at the crisis in patent examination today, the number of unexamined patent applications, the ability of patent owners to proliferate patents and proliferate the number of claims, rather than some exotic tax by those who get above a thousand or other mechanisms, simply having patent owners explain their invention is patentable because, I think would be of enormous downstream benefit in analyzing the those valid claims and the basis of patentability and when it's when you understand the claim and the patentability that I think the notice requirement is most easily understood for a novel invention.

>>MALE SPEAKER

David, would you like to contribute your perspectives?

>>DAVID J. KAPPOS

Sure, trying to add comments beyond what's already been said here. I would take the discussion perhaps even a little bit higher than we have so far initially, at least from the viewpoint of the information technology industry, where my practice is focused, and that starts with directly answering your question with the answer, yes, absolutely, very clearly, the notice function is not working as well as it should for the IT industry. There's a significant problem in our industry with claims that come out of the USPTO that are unclear, that are ambiguous, and those claims invariably lead to conflict which undue amounts of conflict, which isn't good for the system, isn't good for clarity, doesn't lead to the ability to conduct business, forces all participants, at least in the information technology industry, to spend undue amounts of effort on dealing with conflict instead of employing people, investing in doing research and development to create more innovation so I think there really is a problem, at least in our industry. The second thing I'd say is that there, actually, is an incentive in our industry at least, in the information technology industry, there's an incentive to be as vague and ambiguous as you can with your claims and it's really very well documented and, in fact, it's recommended by the -- by the folks who teach people how to write patent claims and who advocate in favor of producing patent claims that have the most ongoing downstream value. And so, you know, it shouldn't be surprising to us that when people are being taught to write vague and ambiguous claims they're going to do that. When they're being told you'll get more value out of your patents if you write vague and ambiguous claims, they will do that. And it then therefore shouldn't be a surprise that

we have the amount of conflict that we do in a system that works that way. The last point I'd make at this juncture is to say that there really is, at the highest, level a sort of enough responsibility to go around where all parties who interact with the notice function of patents can and should play a role and that includes applicants on whom, in my view, the lowest cost to avoid should be exacted. The USPTO obviously can and should and needs to play a really important role and I hope we'll get to talk about ways that role can be improved and then, of course, the court system which is only recently I think started to focus significantly on the notice function has a very important role to play and in my view, it's when all three of the participants in the system are playing their role that the public will finally get patents that meets the metes and bounds requirements in the notice function at least in the IT industry that they don't now.

>>MALE SPEAKER

I'm going to pursue one of the points you made in just a couple minutes and that's the incentive to go vague -- to be vague and how you extract -- how firms have been able to extract additional value from vagueness but before doing that I want to give everybody else an opening opportunity to give their perspective on the general question as to whether there is a notice problem. How about -- I see Chris has his sign up.

>>CHRISTOPHER A. COTROPIA

Yes, first of all, I kind of second that I think the notice problem might not just be being able to understand what the claim is but the number of patents and claims aspects to that. I do have framing points and this is piggybacks off of Arti's point there is linkage between substantive rights and notice solutions. I think this is one thing that we shouldn't lose sight of is while we try to perceive or get greater notice you're going to also tinker with scopes of substantive rights. I think maybe there might be certain solution where that doesn't happen but I think we'll see in a lot of these doctrines we're talking about will have impacts on the scope of the substantive rights at issue. And so kind of expanding that point to kind of what Bob was saying, I think that's why we need to kind of figure out what is our main goal here and maybe notice needs to be considered in the basket with well, what kind of rights do we need to maintain the optimum incentive to invent so we're not just looking at notice by itself but we're looking at notice in the context of its substantive effect. The other kind of framing point and I think this kind of goes with this idea, well, what do we mean by notice, if we're talking about notice to competitors, the assumption being kind of notice kind of prelitigation and I guess optimally before they make giant investments that end up becoming burdens on them, then we need to think about, well, if we're going to have solutions for notice where should they be and I'd make my push to say, well, I think ex-ante and upfront, front end solutions might be the better way to go absent how costly they are in a sense of being able to have a situation where, when the patentee is able to provide more information, kind of Bob's idea during examination we can actually have some kind of feedback from the applicant and you have them more kind of a multiplier effect there in the sense that that would be information that would help everyone as opposed to information that just gets produced during litigation. So those are just some framing points I'd like to make.

>>MALE SPEAKER

And Terry?

>>TERESA STANEK REA

Thank you, Bill. I guess when I think of words, they're fascinating but they don't have the

precision and elegance of numbers. So in the notice world, I don't think we're ever going to have something, a hard and fast type rule and I do agree with Mr. Armitage on that. We also have to keep in mind that words mean slightly different things to different people and that our words are viewed from the perspective of one having ordinary skill in the art. And even that is subject to a level of flexibility. And then beyond that, these patents have to survive for 20-25 years in some cases, and the perspectives of one of having ordinary skill in the art, even if they were originally defined and identified as the art progresses, these, attitudes progress, and words become even more flexible. One point that nobody has specifically addressed dead-on is there's very, very different perspectives in this panel when it comes to technologies. I'm actually a pharmacist so I work in the life sciences, pharmaceuticals, biotech. Mr. Kappos work -- lives in a very different world from where I live. When I do a clearance opinion, I don't have to look at a thousand patents and for that I am grateful. But for the most part I'm dealing with an oral tablet where I'm looking at an active ingredient, a formulation, perhaps a method for administering that to a patent for a desired use, and there's not going to be very many patents covering that, anywhere from one to maybe 10? At maximum? In the I.T. world it's a very different world. If they're bringing a new computer to the market the number of patents that would cover what they're working with is just phenomenal. There's no way you could have one patent examiner allowing you to put all the new inventions that were invented to bring that patent -- to bring that computer to market in one patent application. And therefore, maybe 1,000 patents do cover that particular application. So I do slightly differ from my respected colleague on my right that attacks on people who develop too many patents and file too many patent applications perhaps is not the best and proper use of the system. But unfortunately, you have to look at the technology, you have to look at the product, you have to look at what's being protected and so the variations in our system is -- it's -- we're not going to come to any easy answers today. Different technologies are going to give you different answers, thank you.

>>MALE SPEAKER

Oh, we've got Robert.

>>ROBERT A. CLARKE

I just wanted to throw into the mix that the upfront petition process that a number have raised we do have two very small-scale pilots ongoing at the office, the pre-first action interview process and the accelerated examination pilot where the applicants have an opportunity to provide quite a bit more detail upfront in the examination process. It would be interesting to see how the results of those pilots are perceived by the folks on the panel in terms of notice.

>>MALE SPEAKER

Good. As I said, I wanted to return to this idea of businesses having an incentive to be vague and I even want to broaden that a little bit more into the whole impact on businesses. I'd like a sense, you know, if there is a notice problem, how does it affect the risks of a business operation? And what are its effects on business activity? And if you could drill down a little farther than saying you devote a lot of time to solving notice problems that you could direct otherwise, the more specific you can be, the more helpful you'll be on this, and would any of you like to jump in, you started the -- started us in that direction, maybe you'd like to amplify.

>>MALE SPEAKER

Sure, I can get the discussion started, anyway. So starting, Bill, with the question of so how you -- I think you want to know specifically, you know, how is it causing us to change our behavior.

>>MALE SPEAKER

Yes.

>>MALE SPEAKER

Function. Well, I would -- in several ways. Number one, we wind up spending, as a result, an inordinate amount of effort trying to understand that which is indecipherable, right, and because we're lawyers and our clients are asking us to give them answers we put a tremendous amount of effort into that. So said more directly, we -- my view, we spend a lot of unproductive lawyer effort trying to understand claims that are inherently not going to lead us to a good solution. Now, where does that lead? Right? So it's not just the lawyers spending time on this. Of course, every time a lawyer is undertaking to make a legal judgment about technology, there's one or more technologists involved too so you amplify the issue across the technology community, you know, all the companies around this table, I would think, or at least in the I.T. sector and then many others beyond that. And then you go further down the stream, what we find is that despite our best efforts to avoid conflict, and in the case of IBM, we're both on the side of being a big patent holder that's trying to license our intellectual property and we're on the side of being approached by others who have intellectual property. And in all of those cases, we seek to create a business base solution and not a confrontation-based solution. It becomes very, very difficult to do that because we can't agree on value. Because the two sides of the equation see things from a different -- very different viewpoint. It's just like the situation where you're shopping for any kind of a product and you're not sure if you're looking at the genuine thing, right? Whether it's a watch or a car or whatever, you wind up in conflict over the value of it because you don't have confidence in its authenticity, right, in how to value it and it's the same thing we find in patents. So we end up investing a tremendous amount in conflict resolution that we don't need or we shouldn't have to invest, and I'm not trying to point fingers on either side of the equation either the patentees or people taking licenses, it's not productive for people on either side of the equation. And then lastly when it comes to finally sort of coming to grips with the problem whether it's in the licensing context or whether it's in a litigation context, I feel like on both sides of the equation, we're either getting or paying the wrong amount for these things because they can't be valued accurately and I think anachronistically in many cases it may be causing patents to become devalued by having significant problems with the notice function. Since we can't tell the difference between the good stuff and the bad stuff, when we look at that watch we don't know whether it's really a Rolex so we're going to devalue that thing, right, and on both sides of the equation, if it's a genuine thing you're not going to get enough for it because of the devaluation factor and on the other side you're not willing to pay enough for it because of your concern it might not be genuine so ironically sort of everybody loses in this equation there's tremendous amount of unproductive effort spent and then the result winds up being suboptimal at the very end of that effort.

>>MALE SPEAKER

One thing I didn't hear in your answer is that -- that uncertainty about possible patent rights has caused you to curtail R&D activities or limit your operations. Was that an oversight or

does that just not happen?

>>DAVID J. KAPPOS

Oversight on my part. It absolutely does happen. The lack of clarity in patent rights routinely forces action to move away from technology areas, move into different technology areas, steer clear of innovations that we'd otherwise want to invest in, the business level problem is, you know, sort of at the -- you know, at one extreme of all of these dysfunctionalities of dealing with the patent claims I'm talking about and it causes both change in R&D investment and where you invest the R&D and changes where you take the business once you've invested the R&D.

>>MALE SPEAKER

Let's stay with the business perspectives for right now. Bob, you want to contribute?

>>ROBERT A. ARMITAGE

Let me perhaps give a pharmaceutical perspective that's a little different. We actually, in a very deliberate and affirmative way a couple of years ago put together a process improvement team, Lilly's a six sigma company which is one methodology for improving business processes. And had a team of patent lawyers spend an enormous amount of time working on defining best practices for drafting patent applications and develop metrics and we now have a formal review process where we in a qualitative and quantitative way look at the quality of our patent applications. And it became clear to us that if you want a high-quality patent you need to have greater precision in your patent applications and you needed to control the breadth of the claims that you are seeking and you needed to have a specification that clearly exemplified the invention well relative to what you're claiming and as time has gone on we've continued to define those metrics in a way that would be the exact opposite of the advice that maybe is given that the way to add value to a portfolio is by crafting large numbers of intentionally vague patents. However, it's true that the cost to any of us of getting rid of, casting or invalidating otherwise a patent that never should have issued is enormous. And therefore, there is some value, however, vague the invention is, however, unlikely the validity to be ultimately sustained to simply trade off the fact that if you issue enough patents, and each one of them costs enough to take out or invalidate and particularly given the current America numbers in the current law for doing that, that you'll create a value to a thicket that is greater than the absence of potential value in any of the given parts. I think again when we talk about the notice function it really in my mind is not divorced at all from the problem of -- the notice function is just fine for patents that are valid. But patents that frankly won't ultimately be sustained, it's very difficult in many cases, vagueness is one, there are other reasons, over breadth another, to figure out where those inventions might end.

>>MALE SPEAKER

Number still up and I want to move us forward but I know -- I didn't get to Arti last time when you had one up so --

>>ARTI K. RAI

That's good because it was basically the same point as Bob has now reminded me of this once again. I think actually -- it's very interesting to think about what the economists called collective action problems and challenging bad patents. So a bad patent where you know its boundaries are -- you know it's not really clear but it's overbroad say, there's a collective action in challenging that because there's no chief mechanism and the benefits of

invalidating patents in the world where all the charges may be accruing to you, that's a collective action problem but with a bad patent that is vague it's arguable that there's even more of a collective action problem or at least more of a cost because -- Bob is nodding his head so I believe I'm right on this one -- because there's all the uncertainty about whether you're likely to win the case as well because you have no idea what you're challenging in the first instance. So I think the cost is even greater. So I think the cost is even greater, so there's a cost to challenging an overly broad patent and there's a bigger cost it seems to me to challenging an ambiguous perhaps an overly broad patent.

>>MALE SPEAKER

Your response starts to take us a little bit into looking toward solutions and I'd like to push us in that direction. For those of you who I don't get to right now I'm going to say towards the end of the panel I'm going to give anybody an opportunity to cut back to what they wanted to get into the discussion but weren't able to. I'd say let's say if there is a notice problem, and this has come up from a couple people, is it best addressed upfront by making claims and potential claims clearer during the prosecution process or is it best addressed after patent issuance? The reason that might be cited for after patent issuance potentially is that there are so many applications that get reviewed, you can't -- you can't perfect the notice for every one of them, is there any way -- a possibility of sorting out what's commercially significant and making sure that notice is appropriate there? Do any of you have thoughts on this? Chris?

>>CHRISTOPHER A. COTROPIA

Yeah, and I kind of alluded to this in my opening comment. I think in the end you have to consider what's the problem with lack of notice, and if it's the problem that David points out that people are avoiding investing in areas because of patents they see, so these are prelitigation type of situations, litigation is going to arise, once you've had commercialization, et cetera, so if we're afraid of somebody is doing clearance and say, gosh, I really don't know what this is so I'm going to avoid it, then it seems like you need some kind of front-end solution, something that I can utilize, maybe it's claim interpretation methodology changes but really I think it's kind of more information from the applicant because the applicant's the one who knows about the invention, has information about the invention, is also engaged in a process where we can put something on record that's objective that others can look at which is the patent or the prosecution history, et cetera. And so that's why you'd want some kind of a front end solution that I could use if I was doing clearance work. One caveat, though, is you have to consider, though, the costs of creating that information, right? Either from the office's perspective or from the individual patentee's perspective and the substantive impacts of that, right? So this is, again, kind of another drum I'm beating that we need to think of notice in the context of those things as well, not just saying that look, I just need to make sure there's enough information upfront so I can figure out what their rights are, well, we also need to make sure that those rights are broad enough to create incentive but not too broad to hurt downstream innovation, et cetera, so I think a front-end solution's a better way to go.

>>MALE SPEAKER

Stephen?

>>STEPHEN G. KUNIN

I would agree that a front end solution makes the most sense. We've already heard from

the panelists regarding the economics and the costs to the public and third parties in terms of having to, threw opinions or through defending patent suits, having to establish invalidity or unenforceability of patents. Roughly speaking it's roughly two orders of magnitude to defend against the patent than it is to obtain a patent and, as Chris mentioned, one aspect of the file history is that the file history has an opportunity to help define essentially through what was said during the course of the prosecution, whether there is, you know, issues of a disclaimer of claim scope and so forth and so on. But this is where I think the aspect of the PTO as a gatekeeper is important and we'll get to this with respect to the 112 second paragraph board decision. But the PTO has had for decades and decades various provisions in its rules and the manual regarding insisting on correspondence between limitations in claims and supporting written description, probably in the overall analysis, PTO insistence on complying with the rule has not been, perhaps, very good. But I think from the perspective of the PTO insisting on applicant demonstrating where there's 112 first paragraph support for claim limitations, where language particularly added to new claims or amended claims provides antecedent support in the description is very important in the examination process, because, as the courts say, in the PTO, when the applicant has a right to amend and to create the record, that's fine. In a court of law where the patent owner doesn't have the ability to amend, you get a different approach taken. So I think that, you know, if -- if the PTO is serving as a good gatekeeper, things will get amended appropriately and if the PTO is a little overzealous then the applicant can seek the right of appeal and get redressed that way.

>>MALE SPEAKER

Well, that's what we're going to be heading next into 112 but I'll give both Michael and Terry a second opportunity to comment, Mike?

>>MICHAEL V. MESSINGER

I just want to comment about your point about moving it upfront in the process and wanted to challenge us to consider maybe moving it up even early in the process and the applicant and the role as the PTO as gatekeeper to what I'm seeing is the actual companies are evaluating their best practices for product management and accounting for the role of intellectual property rights of others and I work pretty much exclusively with a lot of I.T, software, high-tech communities, totally can understand some of the concerns that were raised so far, but what I'm finding is that perhaps for the last couple years there's been kind of a reactive approach where some of these overly broad patents are raised with the company and then it's a reactive approach and that's kind of an expensive one-off elevation where invalidity research is done, assessment's done, reviewing the record and what a lot of companies are starting to look at is how can we incorporate the role of intellectual property throughout our company either like at a CIPO level, whether you have a chief intellectual property officer as well as down at the product level so even in the IT sector when new features are getting added to a user interface elements and assessments are being made on whether or not the company should do patent protection, even at that small feature level, that person responsible can also take on the responsibility of, well, would I be infringing the rights of others if I released this feature in this complex product? If you talk -- it's interesting, you talked to medical device companies and as Ms. Rae said if you talk to some pharmaceuticals, they, of course, assume you're going to do a clearance check and respect the rights of others and for whatever historical reasons, a lot of it has to do with the

law of willfulness or like the number of patents like people have said there's been a sense maybe we'll keep our head in the sand or maybe we can't take on this function but now I'm seeing that a lot of clients are getting much more sophisticated and pushing up and down the levels of their companies so that they can have sort of the best of both worlds and it's a lot more efficient because they know a lot more about whether their feature's patentable before they file as well as is it the kind of thing that's going to survive scrutiny in the marketplace by the patent rights of others.

>>MALE SPEAKER

Terry?

>>TERESA STANEK REA

Very quick. The notice function is the joint responsibility of the applicant, the PTO and the courts. And we want to avoid overburdening the courts and we want to avoid the cost of litigation. So, of course, we want to move it up as early as possible. Things like notice, the reasons for allowance, everybody who litigates want to see if the case was allowed, you get the notice of allowance from the examiner, did they give reasons for allowance. That's one of the first things that one looks for, what did the examiner see that was patentable. Some examiners give good insight, others it's very difficult to figure out why it was allowed but the gatekeeper function of the patent office would be beneficial because that issued or granted patent is a foundation and it's presumed valid from then on so suddenly the hurdle has gotten higher. But the earlier the better, thank you.

>>MALE SPEAKER

OK. Let's move into our substantive patenting discussion. And starting with 112, and I guess, you know, maybe a simple question to begin with, that might get some interesting answers, is one of the goals of written description and enablement requirements to allow the public to predict claims that will emerge from a patent application? Anybody have thoughts on that? Start -- I see Chris here.

>>CHRISTOPHER A. COTROPIA

This is made as a law professor type of -- written description, yes, I don't know about enablement. This is only -- one of the things I understand is the division between the two. But I think enablement is the public disclosure and something I can use 20 years down the road to make the device et cetera. I see, and I definitely know there are courts and others that don't agree with me, the written description, this idea of what invention are you in possession of when you file, I think that that does take a real -- I'm not going to say necessarily a notice rule but takes a very substantive role of cavitating the rights that you get and that's going to have an impact on notice if I use it as such probably through the claim interpretation process more so than maybe validity. And I think you're seeing courts try to use it as a notice substance limiter and it seems like it's used more as a limiter in certain fields of art than others. The way I read the doctrine, it's really should be kind of a case-by-case on the invention in the sense of how much do I need to provide you to show kind of certainty as to what the possession is that I have there. And I think this is a nice kind of I call it front end solution it's not really a front end solution, it's just a nice way to kind of package up an interaction between a validity requirement that has a -- a notice side function, you know, what were you in possession of when you filed. So I think written description could play that role.

>>MALE SPEAKER

Clearly these issues are going to flow together so I'll throw out on the table expressly along with is one of the goals of these requirements public notice, I'll throw out the question do current written description and enablement requirements provide adequate notice as to the universe of inventions that an applicant might ultimately be able to claim? Arti, for either of those questions or both.

>>ARTI K. RAI

So let me just say one thing that is slightly [inaudible] with what Chris is saying. Oh, OK, sorry. Let me say something that is slightly [inaudible] with what Chris is saying. I agree with Chris that written descriptions as the courts seem to have interpreted it or to be more accurate as certain judges on the federal circuit seemed to have interpreted it, the goal seems to be to play a notice function, however, that ends up creating a much narrower patent than one would get otherwise and one has to think about whether that's from a social welfare standpoint a good idea. And one of the criticisms of the written description line of jurisprudence has been that enablement is what gives the appropriate scope to a patentee. That from a social welfare standpoint gives appropriate scope to, for example, a pioneer patent. Whereas written description wouldn't give appropriate scope. Now, I don't have a definitive opinion on whether that's true or not, whether written description gives scope that is too narrow or ends up resulting in scope that is too narrow, but that is a substantive impact of using written description. What was your second question, Bill?

>>MALE SPEAKER

Well, the goal in the second one went to are they working, are these --

>>ARTI K. RAI

Well, yeah, that's part of.

>>MALE SPEAKER

Giving adequate notice.

>>ARTI K. RAI

So, well, it depends on whether notice is your only goal, you know, 'cause you have to balance notice with adequate protection. And that's a tricky balance to achieve because a lot of the doctrines we have actually in the context of claim construction are intended to perhaps detract a little bit from notice, but give adequate scope. So we have this -- these -- these doctrines where, you know, as a consequence of the fact that you had a pioneer invention that time A and what you claimed as an antibody, for example, at time A ends up encompassing a lot more at time B you get a lot more at time B than you originally made at time A and that's deliberate, so we argue anyway in the patent system. Now, that may not be a good thing but we'd have to change a lot of that doctrine if we were to rigorously insist upon the notice function.

>>MALE SPEAKER

Bob?

>>MALE SPEAKER

I mean, clearly because there have been so many cases now in the biotech arts and the chemical arts the written description art is fairly well-developed but, you know, I would say that there is a near miss experience that could have been a near death experience had that not happened because ESTs could have been patented little tiny snippets of DNA. You could have simply laid claim to huge number of genetic sequences by setting forth a desideratum I would please like the proinsulin gene, and maybe I'll take all mammalian

proinsulin genes, for example, where you basically didn't know what any of the genes were you simply knew there was a desire to have one there was one and eventually using maybe a technology well enabled, you'd fish one out of a DNA library. I think the other concerning thing to me about focusing on a requirement is that you really need to focus on all the requirements to sort of elucidate all the issues with claims that end up being vague and claims that end up being very difficult to understand. And clearly in the last few years, I've spent a good deal of time on statutory subject matter issues. And just to take a very absurd example, look at a combination invention where the combination is an apple and religious belief. Apple and religious belief. Well, I submit it's novel. Have you ever heard of anyone combine an apple and religious belief, it must be nonobvious, if an apple is useful the combination is useful, we all know --

>>MALE SPEAKER

[inaudible] genesis against you, I think.

>>ROBERT A. ARMITAGE

Well, but my point is you have to get all the way through enablement, written description, indefiniteness all of which it sounds you meet the requirements for patentability until you realize that at least for combination inventions, you can't combine something that is besides the human intellect or at least broad enough to be so construed. So in many cases particularly I think in some of the information science-related arts, you basically have technology that probably isn't a machine, manufacturer or a composition of matter. And it could be, it could be drafted in that sense but someone has to develop the case law to hold the patent drafters rigorously to the requirement of patent eligibility.

>>MALE SPEAKER

Clear the table this way, we'll try David.

>>DAVID J. KAPPOS

OK, thanks, Bill. So I would add a couple of comments. One is to answer the question directly, again, I would say absolutely the written description and enablement requirement should enable one to reasonably predict the scope of claims because, you know, quite simply the claims in the patent, whether they're in the original patent or added by amendment in the original patent or in a continuation or divisional should only pertain to what was originally disclosed so that's sort of a simple answer to the question but the problems are a couple here. One is that we're actually getting the opposite of that benefit right now in many cases in the IT industry where we see claims that contain terms that were not only well-supported by the specification, they were totally undefined in the specification, they were totally unreferenced in the specification. There's a great quote, I just will read it very quickly, if it's OK, from judge Lynn at a recent USPTO society annual meeting this is just last month in February. The last part I want to make not to forget -- he's speaking to the examining court, right, not to forget 112, it's not correct to trivialize or ignore informality, not an informality. Claims vague or indefinite or lacking in support or description indeed these problems affect not only the applicant but the public as well in a significant way. In case after case before my court, the central debate revolves around the meaning of claim terms that, for example, were added during prosecution and do not appear anywhere in the written description. That's a pretty stark statement, right, that, to me, is putting its finger right on the problem. The last comment I'd make in this area is that it -- it turns out that it appears to me to be much easier to define claim scope in technology areas where there's a

good, solid, consistent lexicon, where there's a dictionary of some form. For instance, in the chemical arts, where there's a language that's been developed that's very precise, you see, you know, my observation anyway, is a much better correspondence and much higher ease of complying with the written description and enablement requirements to having claims that correspond to them. In other industries, for instance, I.T, where there's no set dictionary where the same word can mean very different things in different contexts, we're very burdened by an almost inherent imprecision that puts a big tax on us in terms of meeting the enablement and written description requirements.

>>MALE SPEAKER

This morning some of the panelists suggested that some of these problems that you're talking about in I.T. right now are a function of patenting in these areas being relatively new and some of the technologies being relatively new that over time there will be more common ground as to what terms are used to describe -- to describe what's being invented. Do you think that that's likely is a transitory problem or is it one here to stay for a while?

>>DAVID J. KAPPOS

You know, unfortunately I can remember 20 years ago when we were saying well, this is a transitory problem, as the computer and software arts grow up it's going to get better. We've now got millions and millions of patents out there and I don't know how many technical documents. I don't really think it's a transitional issue anymore. I think it's a -- it's an issue of, you know, sort of inherent imprecision that's being carried on as we inject more levels of indirection into the discussion every time we create a new technology in the I.T. field, it involves imposition of another level of indirection that create a whole new level of terms that in some way relate to the previous set of terms and there's no one dictionary, no one way to define all these things so the situation isn't a transitory one in my view and it isn't getting better right now.

>>MALE SPEAKER

Stephen?

>>STEPHEN G. KUNIN

Well, I'd like to make a comment on what Dave just said based upon my experience. If I threw out to the panelists the word iPhone and asked them what they think an iPhone is I would submit to you that many of the panelists would immediately be thinking of a product that is a smart phone, that is made by Apple. But if I were to ask you that question 10 years ago, you would have given me a completely different answer. Because 10 years ago, an iPhone was a system that was voiceover Internet protocol where you could make telephone calls over the Internet. It had nothing to do with a portable device. It had everything to do with sitting at a computer terminal and being able to make telephone calls over the Internet. Same exact term. So I don't -- I would agree with Dave that this type of situation I don't see is going to get better in the coming years. As far as the specific question on the table with respect to the notice function through a written description, enablement, my initial reaction is this is interesting from the perspective of semantics. Because this question really points out to me that when you start even talking about semantics of notice function it can mean completely different things within different contexts. For example, when you look at the narrow view of written description, it's basically nothing to do with putting the public on notice, but it's determining what the applicant was in possession of. The flip side of that is with respect to the enablement

requirement, is intended to put the public on notice on how to make and use the claimed invention so that when it becomes publicly available, they'll have the notice of how to practice the invention. The interesting thing is I -- I agree completely with Bob Armitage with respect to can biotech area, relative to the law of written description and enablement. But in part I agree with him because it's been an area where, here we sit today in 2009, where, through infringement litigation, the law of written description as it applies to original claims has been defined going back, you know, principally from Regency California versus Eli Lilly in 1997 to where we are today in 2009. But I would submit to you that, as Dave was saying, if you look at a comparable body of case law in the I.T. area, the phone R case, the robotic vision case's micro computer and so forth and so on, systematically over that same time in the 1990s, the federal circuit was basically saying you don't even need to have flow charts and you can satisfy description best mode and enablement. Now we've got, you know, cases like Lizertech and a few others that are coming out affecting electromechanical arts and are moving, perhaps, again, through litigation and having the federal circuit look at the applicability of these principles that they've had, you know, a dozen years of experience with in the can biotech field and trying to reapply it in the I.T. area, but even with respect to, you know, cases like Lizertech, when you read Lizertech, Lizertech talks about how these discrete wavelet transforms were unpredictable technology and basically shoehorned that in can biotech pharmaceutical law. But I would say that, in a nutshell, we still have a ways to go with respect to written the can biotech pharmaceutical area in terms of the notice function in the I.T. field.

>>MALE SPEAKER

I'd like to get other people's comments on these various issues that have been raised, I'll throw in, for those of you who do see problems with -- with -- or think that more could be done with written description or enablement to give notice and that it would be appropriate to do so, what would you change, what would you suggest? So all these questions are on the table together. Bob?

>>ROBERT A. ARMITAGE

I don't know I think historically Steve has hit on probably the root cause of one of the biggest issues. And that is in the pharmaceutical/biotech arts you had patent-holding entities who went after other patent-holding entities to reduce the scope of the claims of the patents they were getting the. The Eli Lilly case is one, we've got another case we've been fighting against another broad biotechnology patent. You have the Pfizer case involving Rochester, we wrote an amicus brief, we filed amicus briefs in ex parte appeals where we were concerned utility requirements would be underapplied. And you basically need to be in a posture where you say, look, this is how we define a high-quality patent, this is the kind of patents we're seeking all respect the patents of our competitors but the ones we don't believe are valid patents we will go after those who get them to make sure the law develops in the right way. That's much more difficult if you're an entity that files 1200, 1500, 2,000, 3,000 patent applications a year, where, if you make a strong enablement argument or a strong written description argument, your own portfolio could be cut by a factor of 10. I think I'm very encouraged in the I.T. space, seeing companies, as a matter of policy, saying we're getting too many patents, they're too broad, and perhaps have that symmetry between what we're now getting and what we're going to respect and then how we're going to go about systematically removing the patents that we don't believe should have ever

been issued. And, of course, there's no mechanism right now to do that. There are no tools. The best tools come when you get two very sophisticated entities who have the very best legal arguments and the federal circuit gets the best the two can offer to define exactly and precisely how to limit protection so that it remains effective but not oppressive. And I think that's -- my view, I said it once, I'll say it again, the beauty of the biotechnology industry you can get very strong patent protection for your inventions in the biotechnology industry today but you're not, in my view, in a situation where you're immobilized by huge fortresses of patents by others.

>>MALE SPEAKER

Arti?

>>ARTI K. RAI

So I do want to -- this is slightly against, you know, my usual stance about worrying about broad patents. But -- so -- but I do want to point there are in description as it emerged in the Eli Lilly case was a shock to the entire community. That as a -- as applied to original applications, no one thought that written description was supposed to apply that way. Enablement was the standard for section 112, I mean, that was what was what section 112 was about. And in these days if you look at the follow-on biologics debate, the biologics companies are arguing they need long-term data protection, 15 years or so because, as a consequence of cases like Eli Lilly, they have such narrow patent protection on their biologics. So threats be -- let's be clear, for startup biologics companies Eli Lilly was a disaster. Disaster is perhaps a little bit strong but it was perceived as a very bad thing because it gave them narrow scope. As it turns out Eli Lilly it's pretty clear has not been applied comprehensively by the patent office. So they -- the standard for Eli Lilly was supposed to be 95% homology and the patent office, Chris Hulman has a great article showing the patent office has let through 70% homology claims which are far broader and would not suffice under Judge Lurry's approach. But be that as it may, I think written description as it applies to original claims is a real innovation of the patent system of the last 10 years.

>>TERESA STANEK REA

One question about that, Lilly was certainly a shock to the bioindustry and it was a concern but has that concern played out and you pointed to the patent office as a reason it might not have but are there other reasons it might not have.

>>ARTI K. RAI

There are two reasons it hasn't thus far, the first is we don't have biologics because they're a lot of hurdles in biotechnology [inaudible] in the current debate, if we were going to have generic biologics patents wouldn't be sufficient because their patents are too narrow in Eli Lilly.

>>FEMALE SPEAKER

They're arguing that.

>>ARTI K. RAI

Whether that's the case or not. But the fact is they're saying their patents are too Larry on their therapeutic biologics, in general I'm not a fan of broad patents but I want to put in the record that written description is a very controversial doctrine still. It's not as if everyone has accepted it.

>>MALE SPEAKER

I see -- is that Chris? I thought it was rob for a second but it's Chris.

>>CHRISTOPHER A. COTROPIA

A couple of other kind of just comments about this description. I think, first of all, Arti hit the nail on the head I think that while this has some notice kind of secondary effect it's really it's a substantive question and it's an important one, I think, in some ways in the sense of one description being a tool to effect patent scope and to me link it up with kind of actual inventive activity by the patentee in the sense of kind of what they've done and what they've described et cetera and obviously there might be debates in the sense of, well, how costly is that amount of activity, how broad the scope it needs, and it sounds like Arti points out one area maybe biologics, other areas where it gives you touch so the substantive debate needs to be there I think. The one difference between kind of life sciences and I.T., et cetera, kind of two points, one, I think if you read the, quote, the case law, not as it's applied but at least as it's articulated it is technologically neutral and has high fidelity for technology because it links itself up with the reasonable certainty to people in the field. And I think in some ways the, quote, problem is that people kind of just take it as a broad brush, oh, you know, bio stuff is unpredictable I.T. stuff is not and I think the one thing if you think about who we're trying to provide notice to, these are individuals who should know what is certain or is not, right. And so in some ways if we stay true to the fidelity which I think in some ways when you get these Laser Tech cases, et cetera, you start to see people put on evidence saying this is a very unpredictable area, et cetera, but the case law is actually written in a way that should lend itself to those in industry to be able to determine scope issue. And I'll piggyback on to that. And I think this is where, I mean, I think the patent office and maybe I'm going to -- can play a really great role in the sense of this, if they stay true to the fact that this is technologically specific then examiners would look at all cases whether we've got a 112.1 written description question and not just a knee jerk reaction of this is what I hear from my friends, if I'm trying to pursue a pharma, I always get 112.1 rejection, regardless, and if I'm in I.T. area, I never see 112.1 rejection. it should be kind of across the board, that if it turns something pops up that's in an unpredictable area, then we should have those sorts of rejection. So I think there can be evolution in the office, now, maybe some wouldn't trust the office to do, I think there needs to be an evolution in the office as to what these requirements mean that would have notice impacts going forward.

>>FEMALE SPEAKER

Can I add one thing to that, that could come under enablement, though, right?

>>MALE SPEAKER

Well, I think it's the question of, again, purpose, and I see description as a nice way of linking up scope to what the applicant's actually doing. If the idea is we've got a teaching function, we also have this idea that the patent is supposed to be assisting the applicant or whoever towards commercialization or licensing, et cetera and when you have this kind of disjointedness, right, I've done X but I get, you know, some protection that's completely discrete from that, that's when description does a better job when we're dealing with the idea of possession, what is -- so that's why you see somebody's got knee jerk reactions in cases like super guys, that's not what they invented, you know, they just didn't invent, you know, direct TV, onscreen TV guides, and really the idea is that's not what they were doing, the applicant wasn't doing that, they weren't going forward with that and that's why I think written description is a better way instead of kind of accidental enablement kind of in the

other way, at least that's my view on it.

>>MALE SPEAKER

Before we leave written description and enablement, kind of sum of what I'm hearing, I don't think we've got clear agreement here as to whether these are the right doctrines to be pushing for notice but if you do have an application out there which has been published and you want to try it as a third-party you want to try to determine what might come out of the patent prosecution process at the end this is about all that you have going for you at the beginning, if we don't get notice here, the concern might be we're going to have to look for other ways of getting it on down the line that said, two issues that come out of the PTO procedures, I'd just like to set out and see if we get reactions to, in the PTO written description guidelines, they state there's a strong presumption that an adequate written description of the claimed invention is present in the specification as filed. But then they go on to require that the applicant show support in the original disclosure for new or amended claims. I guess the question that I want to get in here is that adequate for notice purposes, if notice purposes are to be served through this doctrine, and secondly, in the enablement area, do the rules that place the burden on the examiner to advance reasoning inconsistent with enablement inherently limits the amount of notice that's provided and is this the best way of structuring the enablement inquiry? All this together before we leave written descriptions, anybody we've got two up, we'll start with David.

>>DAVID J. KAPPOS

Sure, OK. I'm happy to comment on both of those. So relative to the first point, the presumption that -- the strong presumption that adequate written description is given, you know, I don't have any problem with there being a presumption of -- that written description is adequate. I don't know about the word "strong." It -- you know, it seems that it would be hard to have a system where what else would you presume, would you presume that the written description was inadequate? Then you get into putting the applicant in the position of having to prove the negative. So it seems like the system we've got is about the best way to start out. You know, putting aside the word "strong," which is not exactly right. What I would say, though, and this somewhat addresses your first and second questions, is that placing a strong burden on the examiner to advance an argument as to lack of written description and enablement, you know, puts the examiner also in a bit of a difficult position. What I would like to see is the examiner having -- examiner exhibiting or having more flexibility to use inquiry techniques including rule 105 which is very much unused but a great way for examiners to reach out to applicants without necessarily imposing an objection or rejection to say look, I can't find this term that you used in your claim stated or defined anywhere in the specification. Can you please point out to me where you defined it? I see that you used what looks to me like it might be meets plus function 112.6 language in your claim, but could you please point out to me whether that's what you intended to do in the claim and if so, can you point out the corresponding structure in your specification. Those seem to me to be both very fact-based, straightforward questions that I would love to see coming out under 105 that don't put the examiner in the position of necessarily having to make a rejection but do get much better file histories developed and much more precision on the record. One other comment I'll make and then I'll stop is that I also don't have a problem with examiners being more aggressive about rejecting and objecting to claims that they don't think meet the -- or where the specification doesn't meet the notice requirement

compliant with the claim. And putting the onus back on the applicant, right, the applicant created the invention, the applicant wrote the patent application, the applicant is the lowest cost-avoider of confusion and ambiguity, I see absolutely no problem with examiners shifting that back to applicants, using both objection and rejection practice.

>>MALE SPEAKER

We'll try Bob and then rob and then we'll move on to indefiniteness.

>>MALE SPEAKER

You know, by and large I think the written description guidelines the PTO put out were a very laudable effort and I think there were two generations of them and not to say that everything that came along with them I totally agree with but they were really a substantial advance. But, you know, this particular paragraph I think is not the guidelines at their best. There really -- there are really three written description issues we're talking about. If you have a original claim they provide their own written description. Because if there's some defect in the rest of the application, you're entitled, before an original claim, to put the information in the claim back in your patent application so it's in both places. If you amend your claim, by and large, what you're supposed to do, what I was taught to do, is explain to the patent examiner why, for the amended claim, there was support. Even if the only thing you did was narrow your claim, explain why you're entitled to a claim less broad based on what you've disclosed in your patent application. The other issue we're talking about that was, I think, shocking to many, I won't say shocking to everyone but shocking to many in Eli Lilly was the idea that you could claim something in words for what your specification disclose nothing about it that wasn't already known. So, for example, everyone knew there was a human proinsulin gene but nobody knew what its structure was. Everybody knew that it was produced in the pancreas but nobody figured out a way to fish it out of the pancreas. The invent interrogatories at the University of California said it's time for us to patent the gene even though they disclosed nothing more about the human proinsulin gene than had been known ever since it was clear every mammal had a proinsulin gene, mammal, at least, to produce insulin. I used to give a talk at the biotechnology industry meeting about broad claims and I think you've heard this before the talk would start broad claims are wonderful. Broader claims are even better. And infinitely broad claims are best of all and you got great rounds of applause until you got to the infinitely broad claims and all of a sudden everyone in the room realized, well, that's not exactly what we want. What's happened because biotechnology claims were limited is you had startup companies with technology that was partnerable and licensable. Without us having to sort through 10 people who claimed with these very broad claims to have patented the same thing. You actually helped well defined rights. The reason, the reason that the biotech industry is so adamant about 14 years of data protection in a follow-on biologics context is not necessarily only because some biotechs have very narrow claims there are many biotechnology products that have no patent protection, no effective meaningful patent protection whatsoever. And frankly it makes no sense for the industry or the country to say well, gee, the industry should only develop new drugs with the best patents, rather than what might be the best medicines your respective of patents and that's why you protect the data in a balanced way to protecting a biotechnology invention if it happens to be patentable as well.

>>MALE SPEAKER

Because I asked a couple of questions that went to PTO issues I want to give rob the last word but I want to go to somebody else with a big PTO background let's go to Stephen and finish with rob on this.

>>STEPHEN G. KUNIN

OK, very briefly, the issue that you raised, Bill, in part goes back to something that Bob Armitage said with respect to burden of proof that in many conditions of patentable you're entitled to a patent unless the PTO demonstrates otherwise and I think that philosophy is sort of reflective in the examination guidelines. But really what Terry Rae said earlier I think needs to be looked at again from the standpoint of what she said in terms of an examiner's statement for reasonable allowance. One of the things that I hear quite a bit, especially from litigators, is that, wouldn't it be nice -- and, of course, this would make rob Clarke cringe -- but, you know, wouldn't it be nice if the examiner would systematically look at all the conditions for patentability and to make some assessment included in the statement of reasons for allowance where the examiner did not reject claims on a particular statutory basis. So if the claims are subject matter eligible, they have utility, maybe they have adequate written description, they are enabled throughout their entire scope for their particular use and the issue only is whether the claims lacked novelty or would have been obvious, then in the, you know -- wouldn't it be nice if there was a record which indicated that the examiner actually looked at that set of conditions of patentability for which there is no record and made some statement that, yes, I did look at subject matter eligibility and it was eligible because dot dot dot, it did have utility because dot dot dot, and I know this would impose additional burdens but it certainly would make a record more complete and perhaps address some of the notice function of complete file histories.

>>MALE SPEAKER

Rob?

>>MALE SPEAKER

I guess I should start off with in view of the current make-up in the Obama Administration I can't really comment on proposals for change in the procedures but I am taking notes.

[LAUGHTER]

>>MALE SPEAKER

And names.

>>MALE SPEAKER

And names, yes. [LAUGHTER]

>>MALE SPEAKER

But my comment kind of dovetails with where Steve is going but in a different direction. There are certain efficiencies in any system, in the examination system, litigation system, where you focus on disputed limitations or disputed aspects of a claim. And so when I hear the call to have a petition for patentability before any examination occurs, it seems like you would spend a lot of resources on limitations and questions that no one, you know, no party, even an accused infringer would ever raise and that leads to a certain inefficiency in the system. And it -- I hate to say it but it seems like you would be best served by focusing on disputed limitations and just focusing better on them and that would really be the focus. So, you know, Mr. Kappos when you said use 105 to, you know, elucidate a limitation, does it invoke 112.6, that's an example of focusing on a disputed limitation. And so I -- I'm kind of curious as the afternoon goes on when folks are suggesting changes that we can make

in the system, whether we should focus on using an examiner or some member of the public to dispute a limitation or dispute whether a limitation, you know, is enabled, has written description, is indefinite, renders the claim indefinite, rather than imposing an upfront cost on the patent applicant. And that's certainly how the current system operates and has operated for a long time. You know, the examiner has the initial burden, he disputes whether a claim is patentable because of a particular reason and the examination focuses on that. It certainly is more streamlined and more efficient, lower costs, certainly lower upfront costs but kind of the opposite view of where Steve was going with a detailed -- or perhaps not detailed but an assessment as to each ground at the end because in many cases there would -- it wouldn't be in dispute and it would cause an inefficiency in the system to make those statements.

>>MALE SPEAKER

Just to let you know what I'm planning. We're going to go out into indefiniteness. I think we're definitely going to take a break probably around 3:00, maybe a few minutes either way. I would hope that we can break into claim construction a little bit before the break and resume and talk in more detail about claim construction and then examinations as we move on through the afternoon. Let's talk about indefiniteness. It's an area where the -- the patent board has recently issued an important case the Musaki case, we'll talk about that. But preliminarily I think maybe the place to begin is maybe to ask the panelists what you think is the appropriate reach of the indefiniteness doctrine, does it have application to all forms of ambiguity that affect breadth? Anyone want to start it off that way? Boy.

[LAUGHTER]

>>MALE SPEAKER

Well, I'll jump in and that sort of relates to the other topics we've been talking about so maybe it's a good segue of my thinking on this especially at least in predictable arts we've been talking about some of the I.T. software areas. When we're looking at claim interpretation and all of that, we definitely are dealing with issues of breadth. We're often dealing with very common terms. But they're in sort of combinations of elements, different features drawn from different technologies and put together to create kind of a new result. And so often we find that vagueness doesn't come up as much. In fact, my sense is the patent office internally made some very specific policy decisions to basically kind of call off the dogs, call off the examiners from making rejections on 112 for vagueness in lieu of putting the effort on the art. And there was a sense that there is a balance there, there's finite resources in the patent office and it's better to make sure that the appropriate amount of resources are going on on anticipation and on obviousness, the art and not arguing about the claim language as much because that's going to be done in court anyway by two very, you know, by the adversaries, with more resources. And so my sense is it's interesting in the predictable arts you look at written description you look at enablement and like many of these biotech pharmacists folks have commented on they look at it very closely. We frankly, a lot of us is predictable and once you've describe, oh, you've got a decoder on there it could be this kind of decoder or graphics processor or whatever the element is, someone skilled in the arts a competitor really understands it and so what we rely on is the claim interpretation and we have to have support in our specification, we want our claims to be definite. I disagree strongly with David's earlier point about some teaching out there for vague and indefinite patent applications. None of the clients I've worked with

in real situations have ever seriously wanted legal resources being directed to that kind of endeavor. It's just -- they're too precious, they very much want clear patent applications, well drafted that they can rely on. And so there's a lot of incentives from the applicant, and it's not necessarily to please the patent examiner but it's to please the court. And it's especially in predictable arts, tech software-related when you're looking at claim construction issues the noninfringer has many opportunities the way the technology works to sometimes do design-arounds that can be trivial design-arounds but still get around the infringement of the claim. We've seen some of this where methods moved to other countries, certain functionality can be moved out of one device and into another device there's a lot of sort of flexibility compared to an oral tablet for you have a reasonable not vague not indefinite claim well-supported by the specification and infringers have a lot more latitude in terms of trying to design around it. I don't know if that answers your question. But I think the patent office has pretty much gotten it right the way the current setting is now on vague and indefiniteness where they only raise it in extreme situations where they can't make sense of it and then seem to do it with pretty good judicial discretion.

>>MALE SPEAKER

Terry.

>>TERESA STANEK REA

Thanks, Michael. I do agree with you that the appropriate reach of the indefiniteness doctrine should be brought, it should apply to all forms of ambiguity affecting the breadth and I've seen it in so many office actions that in my art, you're right, it's a very common rejection and I think it does provide a notice function that is important in making sure that you have clarity in the claims so that at least we have a meeting of the minds at that point in the prosecution as to what's intended between the examiner and the applicant. However, as I mentioned before, it's not a frozen point in time. It's not hard and fast. And we're dealing with words. And so we have to be flexible. But I do think that the indefiniteness doctrine is very valuable in terms of providing notice. I think that at least in my art it's very helpful in providing notice. I think giving it broad breadth is morning. The Musaki decision, actually surprised me because I wasn't used to dealing with the relative position of the user and the printer. [LAUGHTER] So I had a little bit of difficulty getting through that case because it's not part of my world, but it actually was very, very good because the hurdle in the patent office with respect to indefiniteness, and this accuracy and the notice function, it is -- the examiner can ask questions and inquire more and be more prodding and say, now, did I get this right? Whereas the court looks at it after the fact, it's got that assumption of validity and the place to be more proactive is within the PTO when you do have that lower hurdle.

>>MALE SPEAKER

David?

>>DAVID J. KAPPOS

OK, well, thanks, Bill. You know, I'd add just a couple comments. First, I don't think there's anything additional that's needed in the indefiniteness doctrine beyond what we already have in terms of the authorization. What's needed is to, you know, apply it more or maybe question more along the lines of indefiniteness. What I'd like to see, again, something that -- where the -- the action could be taken in the examination phase along the lines of, you know, examiners putting statements in the record that indicate parts of claims that

aren't interpreted to be limitations and in appropriate cases, requesting that applicants remove those nonlimitations from the bodies of claims. And I don't have a problem, then, with a applicant responding to that and disputing it and having the discussion on the record. So an example, statements that you see in claims along the lines of, you know, esthetic kinds of limitations, something being esthetically pleasing, subjective opinions, statements like that, no problem with the examiner then I would really love to see examiners make statements in the record and ask that those kind of subjective opinions be removed from the bodies of claims. Limitations based only on effect, I think someone mentioned this before, this is a big problem in the I.T. arts with what's called results-based claiming or results-obtained claiming, claiming the effect of what was done rather than what was actually created and that's another good place where objections can be interposed and examiners can be called to take those limitations and say capable of doing X, take them out of the body of the claims because they're nonlimitation that affects patentability.

>>MALE SPEAKER

One other common problems that comes up is when there could be multiple embodiments and perhaps the specification, use an example, of one embodiment and the question always comes up, well, is the claim meant to cover -- cover other embodiments that aren't in the specifications, is this a question for indefiniteness, is this something that should be handled in that way or not? That's part of the issue that I -- I'd be interested. Stephen, you want to talk about indefiniteness in general and if you have anything on the latter comments, questions, add it.

>>STEPHEN G. KUNIN

Yes, thanks, Bill. I wanted to come back to a point that Mike Messinger made having to do what the PTO policy had been. One of the things that you have to recognize is that if the PTO doesn't take a measured approach it can get back to the abuses of the past where it was an excuse to perform piecemeal examination. Where the examiner basically, instead of doing a search of the prior art would impose a pro forma set of 112 second paragraph objections as an excuse not to search the case and then use that as a way, basically, to make production and avoid having to do a search right upfront. So one of the things that the PTO did many years ago in a board decision ex parte in ESQ which was essentially the PTO's answer to in re steel, because the federal circuit and the board of patent infringement uses in re steel for the following proposition, I got a claim rejected on art, claim rejected on 112.6 second paragraph, you can't have it both ways. If it's indefinite, how can you understand how to examine it so that the art rejection can't be sustained, and you sustain the 112, but if the 112 fails, then, of course, you go to the art rejection. Now, what was happening in the old piecemeal examination is the examining court was using in re steel as the basis not to make both rejection and the board said no, no, no, no, we want to see both, we'll tell you which one you're right on and we'll use steel on the basis of well if it is indefiniteness in your right we're not going to touch the art rejection. So the statement Mike made with respect to avoiding mere technical rejection is what we also have to look at in terms of going too far and the PTO overdoing 112, second paragraph. So it should take a measured approach and it should do essentially compact prosecution where, if an examination on the merits can be done concurrently, and there's still some language problems, do both. But don't substitute 112, second, as a way to avoid comprehensive examination. As to your point, Bill, I don't really see that the aspect of readability of a claim

regarding a plurality of species is necessarily a 112, second paragraph problem. Typically speaking, what the PTO does is it uses it as a way by which to look at -- particularly where there's going to be an election of species and deciding which claims are examinable with which elected species and then at some point in time trying to decide there's an allowable generic claim for which you can have rejoinder. So the aspect of reading on alternative embodiments or even reading on embodiments that are not disclosed, so long as I believe that there's adequate written description and enablement it's not going to be a 112, second paragraph problem. We've seen, you know, what's happened with respect to the 112.6 paragraph problem that becomes a 112 second paragraph problem where means plus function limitations are being used but it seems to me, if we go back to, you know, whether there's a representative number of species to support a genus then that's fine, you don't necessarily have to disclose all of this potential embodiments.

>>MALE SPEAKER

Chris?

>>CHRISTOPHER A. COTROPIA

Just following on the comments my fear of indefiniteness is it's this empty vessel that the problem that Steve is talking about this is a great way for me to say look, this is too difficult, I don't understand what the term means it's indefinite. I think -- getting back to rob's idea of kind of efficiently, call back prosecution, examiners are doing claim interpretation when they're looking at the claims and seeing whether these are valid in 102 or 103. It seems like you don't get a lot of that discussion right and since they're already doing that process it seems like -- it should be just like, look when you're involved in that you can make statements or turns out the applicant comes back and said look that's not disclosed in the art there can be a discussion, well, what do you mean by process because I think there's a processor here and that's not necessarily an India rejection it's basically making explicit what is implicitly happening. The examiner's making an interpretation decision, they're just not putting that down on paper or they're not forcing the applicant to engage in that level of discussion, it's just more kind of an element discussion or discussions focused on the prior art. And one of my fears about this recent board opinion is that either it leads to just a bunch of 112.2 rejections that don't develop a record that gives us understanding it's more of a discussion of, well, what is indefiniteness case law, not what this term means, the other thing I'm afraid of combined with the idea that the patent office can do the broadest reasonable interpretation is that I think we don't want to sidestep interpretation during examination. I mean, you know, let the examiners get in this discussion, well, the specification has this limitation in it and the applicant says, well, you're reading, limitations to the specification of the claim and we can have that discussion on the record, we're producing information that's then going to be able to be used later and I think this may be sufficientness, we're not going to interpret every term just for the heck of it but, you know what, if it's in the prior art and there's these questions as to what does processor mean with regard to higher art I think there's a higher likelihood that there's going to be flexibility going forward and there's not as much extra onerous placed on the examiner because the examiner is doing this in her head she's just not putting it down on paper but putting it on paper produces an information product that feeds into claim interpretation later down the road. I'm sure applicant wouldn't like to get engaged in this kind of process but they're the ones that know what the claims mean or have an idea what the claims mean, having it put

on paper. So that's where I think not necessarily indefiniteness but that kind of discussion you're talking about Bill I think would be nice to be in the record.

>>MALE SPEAKER

Just so we're all on common ground, we've been talking about this ex-part tee Musaki case by the PTO's board of patent appeals and interferences, which really stated if a claim is amenable the two or more plausible constructions the U.S. PTO is justified in requiring the applicants to more precisely define the metes and bounds of the claims mentioned by holding the claims unpatentable under 35 USC, Section 112 as indefinite. What we've just heard is a suggestion that perhaps a whole series of indefiniteness rejections, what you're going to have is more back-and-forth or what could happen is more back-and-forth, to avoid that type of rejection. Do people see this as the way things are going to go, well, what do we see as the likely reach of the decision and the likely consequences? Arti?

>>ARTI K. RAI

First of all, it's not law until the federal circuit decides what is the law so it's -- let's just put that on the record since the PTO doesn't have substantive rule-making authority. So that's A. B, I'm a little bit puzzled by Chris' point because -- and perhaps a little bit by Steve's point as well because it strikes me that this is a good backstop in case a rule 105-type opportunity doesn't elicit the information you need from the applicant because maybe they're concerned about inequitable conduct or what have you, that this is a good backstop for having -- for ultimately producing the exchange. Because as we all know, there can be several rounds of rejections in patent applications, there's no such thing as a final patent rejection. So this shouldn't be something used at the beginning but it seems it's a good threat to have in the background in case you don't get the information that you need with more soft mechanisms.

>>MALE SPEAKER

I think that's a really good point but I think you could have this thing kick back with saying look I think this reads on the prior art and if you're not going to give me the definition of the term you're going to give me the 102.

>>ARTI K. RAI.

But it's another tool in the arsenal. It could be overused.

>>MALE SPEAKER

I'm just afraid -- right, it's like a 101 rejection, you know, which is what people are saying, I could say it's not subject matter, and we can kind of move on but good point.

>>MALE SPEAKER

David and then Terry.

>>DAVID J. KAPPOS

Thanks, Bill. I would add that, you know, I would give my unqualified support to the general approach used in the Musaki decision. I think that during patent prosecution it's exactly the right time to have the discussion that some of the other speakers have been talking about here and it's much preferable to get claim limitations sorted out relative to indefiniteness issues while the applicant can still amend the claims and before you put them in front of a court with all the extra issues that are involved there and all the inefficiencies that are involved. So that case, in my view, is exactly pointed in the right direction.

>>MALE SPEAKER

Terry.

>>TERESA STANEK REA

I agree with Dave that it actually works out into applicant's best interest because they have an opportunity to easily amend their claims at that time rather than use some other more elaborate, more expensive, more time-intensive procedure. But also I like Chris' idea. We're so focused on the public notice function today that all of this happens concurrently all at one time and in real time it's not parsed out as -- as distinctively as I'd like. But that's the time you want to communicate, that's the best communication you'll get between the applicant and the examiner. I do like the Musaki case. I was surprised how far the board actually went with it but the board was nevertheless very clear so they also followed a good notice function and I think they provided clarity.

[LAUGHTER]

>>MALE SPEAKER

I think we have a few minutes, maybe we'll start claim construction, carry this about 10 minutes into it and then take our break. Judge Rich has stated the function of claims is to enable everyone to know without going through a lawsuit what infringes the patent and what does not. And now for a purposes of full disclosure I'll have to add in his next sentence indicates wasn't ideal and really questioned whether, you know, it really played out in practice as ideally set out. But I guess, what I'd start out with is measured by this standard, do you feel that claims today are successful?

>>MALE SPEAKER

Maybe I can frame a quick point as we get into it. The way I've always thought of patents is that the inventor has an idea, it's an amorphous kind of idea, and then it's carried out or implemented in some embodiments that are sort of the specific embodiments, could be in a product, could be in a service, something like that and then what we're doing is we're putting these claims in English language that are attempting to kind of bound that patentable invention and so we're actually starting at a pretty amorphous place, we have some very specific products that have real meaning in the marketplace to a lot of people and then we're -- as people alluded to before we're dealing with language. Given those difficulties, what I experience is we have a lot of case law that have been -- have been dealing with that for a long time and there's a lot of doctrines, there's tensions between the two and you can have lots of fun playing with these tensions in law school and all of that but there is a lot of doctrines and tools available that carry us a long way to determine the metes and bounds of the claims and courts are pretty good at it.

>>MALE SPEAKER

Arti?

>>ARTI K. RAI

So I think that for all the reasons that Mike mentioned, what's more important is having a clear determination very early on of what a claim is and then deference by subsequent decision-makers to that initial determination. Because this is life stature interpretation, one can use canons to reach any result one wants and on any term that is susceptible to more than one plug book construction and nonetheless manages to survive Musaki so it's much more important I think to get the decision-maker, make it clear that the decision-maker, who the decision-maker is and then give deference to that decision-maker rather than to spend a lot of time, as the federal circuit has unfortunately has done, to get the rules precisely right and they can never get them precisely right and then they do a de novo review to get

them even more right and it ultimately is all just a useless exercise as far as I can tell so here I'd place it fairly and squarely on the federal circuit.

>>MALE SPEAKER

Let's try Bob.

>>MALE SPEAKER

First and foremost the patent system probably survives and prospers over the long-term the more it acts like a property rights system and the only way we have today, like it or not, to define the property right is all the rules and regulations and doctrines and canons of claim construction. So to be getting this right is actually critical. For reasons I said before, we are never -- we're never going to get this perfect. And the -- as patent examination has become much more complicated because patent applications are longer and they are more complicated and they have more claims, you run the risk that just by the sheer advent of technology, we're not doing enough to get it right in the first instance in the patent office. As important as it is to get it right in the patent office, one of the other problems we have is it's counterproductive in a lawsuit to try to construe a patent when we do early in a lawsuit. And I say that because you understand a claim in context and you understand the context when you understand the invention how it relates to the prior art, and what the inventor was trying to do with the words that are being used in the patent application in order to differentiate what I did from what had come before, if I'm the inventor. And so when you have a sterile exercise in a Markman hearing before it's really understood what the infringement contentions are and really what claim limitations are at issue and how it is that those claim limitations relate to the inventor's ability to define what came before, you're very likely, at a very early stage in the case, to make an abstract construction that when the judge later understands the case he wishes he'd done it differently. And, of course, and I think I've said this before, and I apologize for repeating, but when you use the Markman process to decide whether -- to give the notice of what a claim means, you're merely using a set of words to describe the words in the claim. And you are merely setting yourself up in many situations for the rest of that lawsuit to argue about the words used to describe the words used to describe the invention.

>>MALE SPEAKER

Stephen?

>>STEPHEN G. KUNIN

Well, very briefly, I think I have to take the opportunity to be a little flippant here because following on to what Bob said, you know, there's been sort of this commentary after having read many of these articles written by famous law professors where you don't know what the meaning of the claim is until the federal circuit tells you and, of course, we still see in S 515 and HR 1260, you know, this provision to have this interlocutory appeal on claim construction so here we are today and we're seeing this still in the legislation, we still hear the debate as opposed to -- as to whether the SIBOR vs. Bass case should be overruled so that maybe greater deference may be given to reasonable analysis performed by district court judges and we've seen the numbers flip-flop with respect to claim construction reversal rates so I think that the short answer is we wouldn't be where we are today if everybody felt that measured by this standard or claims today successful.

[LAUGHTER]

>>MALE SPEAKER

Before we go to break, we'll end with David.

>>DAVID J. KAPPOS

OK, thanks, Bill. Yeah, following from that comment, I think that the clear answer to your question is no, that judge Rich's vision is not yet being realized in any real -- in any clear way. I saw a article recently that tracked rate of reversal of district court claim constructions by the CFC at 34%, with a reversal rate at that level I don't think you can possibly say that we're dealing with anything except extreme uncertainty in claim meaning and its effect on the notice function of patents. I think that more needs to be done working off of the Phillips versus AWH decision a number of years ago which moved the law in the right direction relative to distinguishing between intrinsic and extrinsic evidence and giving preference to intrinsic evidence. I think the law needs to move forward to further reward the use of intrinsic evidence and discourage the use of extrinsic evidence even to the extent of interpreting those terms that can't be readily defined from the patent specification, interpreting them intentionally narrowly the same way we look at contract interpretation where we very routinely interpret unclear terminology against the drafter. I'd like to see an approach like that used that builds off of the Phillips case.

>>MALE SPEAKER

Well, a provocative thought to end our session. We'll return in 15 minutes. We'll try to start right at like 3:18 or something like that. Thank you.