

EDITED & EXCERPTED TRANSCRIPT OF THE SYMPOSIUM ON IDEAS INTO ACTION: IMPLEMENTING REFORM OF THE PATENT SYSTEM

ABSTRACT

On April 16, 2004, the Berkeley Center for Law and Technology and the *Berkeley Technology Law Journal*, together with the Federal Trade Commission and the National Academy of Sciences, presented a symposium on Implementing Reform of the Patent System. The following is an edited and excerpted version of the transcript from all of the conference panel discussions. Full transcripts are available at <http://www.law.berkeley.edu/institutes/bclt/patentreform/schedule.html> (last visited Aug. 12, 2004) and at <http://www.ftc.gov/ftc/workshops.htm> (last visited Aug. 14, 2004).

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I. OPENING REMARKS

Panel:

Robert Merges, Boalt Hall School of Law, University of California, Berkeley

Mark Myers, National Academy of Sciences and Xerox Corporation
Mozelle Thompson, Commissioner, Federal Trade Commission

MERGES: I think it is probably time to get started here. We have had our April sprinkles, so we are all woken up and ready to go onto the substantive part of the program. I just want to welcome everybody back on behalf of the Berkeley Center for Law and Technology and U.C. Berkeley generally, plus all of our many co-sponsors. Thanks for coming out.

Today is the substantive part of the program. We are going to dig into some details from the Federal Trade Commission Report. And now that the press has gone off to file their stories from yesterday, we might actu-

ally hear some more meat and potatoes on the National Academy of Sciences Report, too, I am told. So today is going to be a real good day.

For those of us who used to teach patent law courses to rooms not so full of 12 or 16 somewhat desultory students, it is always kind of mind [boggling] to realize that patent reform and patent law generally has gotten to be such a hot topic.

....

... [L]et me turn it over to Mark Myers who has promised some real substantive comments for us this morning. Thank you.

MYERS: I am Mark Myers. I was Co-Chair of the National Academy of Sciences' study with respect to intellectual property, which we have named *The Patent System for the 21st Century*. This study was carried under the Science Technology Economic Policy Board of the National Research Council, which looks at issues of technology, economics, and policy.

... [B]asically over the last fifty years there has been a significant and continuing strengthening of the patent processes within the United States and the world. You have had patenting extended to new technologies in the biotech area; patenting extended to technologies that previously were not subject to this form of intellectual property, such as software; the encouraging emergence of new players, universities and public research institutions; strengthening of the position of patent holders versus alleged infringers; relaxed antitrust constraints on patent use; and the extended reach of patenting upstream into scientific tools, materials, and discoveries. So this has been a fifty year period of greatly enhancing the patent system. But it has created strains. Patents are being more zealously sought and aggressively enforced, the volume is increasing, the cost is increasing, and the benefits of a patent stimulating innovation varies considerably across different parts of the industrial sector.

In fact, as we undertook the study four years ago, there are several of the members of this study that [are] within the group. We basically are a committee composed of economists, scientists, engineers, inventors, business majors, legal scholars, as well as practitioners with a great variety of experience.

The first phase was defining the problem and then a second phase was defining solutions. But to define the solutions, we carried out nine areas of contracted research. That research is available, it has been published, published about a year ago, and it deals with patent quality and examination: two studies, patent challenges in Europe and the United States; two stud-

ies, litigation; two studies, patenting software, patenting internet business methods; and licensing and biotech.

The focus of our study was restricted to looking at the patent system, particularly with respect to issues of backlog and the productivity of the system, as well as two problem areas which were in biotech and business practice patents. We looked at the patent system really through the lens of seven criteria that we desire as we go forward: a patent system that can accommodate new technologies with flexibility; a system that rewards only inventors that meet the statutory tests of novelty, utility and meet the obviousness standard; a patent system that is effective at disseminating information; administrative and judicial decisions [that] are timely and at reasonable cost; access to patented technologies, [which] is important to basic research; and the development of cumulative technologies.

Greater integration or reciprocity is needed among three major patent systems—that is, Japan, the United States, and Europe—to increase the overall productivity and reduce the transaction costs. And there should be a level playing field [where] all holders of patents are subject to the same benefits and constraints in all jurisdictions.

So, we have seven recommendations. These recommendations will formally be announced next Monday [April 19, 2004]. The documents are being shipped today for those who are expecting to receive it. The seven that we are recommending [are]: preserve an open-ended, unitary, flexible patent system—I will say more about that; reinvigorate the nonobvious standard—you have a panel with respect to that today and that discussion is an important one; institute an open review procedure—another panel that is being held today and an important discussion; strengthen the U.S. Patent Office resources; shield some research uses of patents from liability and infringement; modify or remove the subjective elements of litigation; and reduce redundancies and inconsistencies among national patent systems.

I will just make a few remarks about some of the key areas of this.

Preserve an open-ended, unitary patent system [that is] flexible. As one thinks about approaching the area of remedy of issues, there is . . . legislating. But there is also working within the procedures with the Patent Office and the judicial system itself, and there are some advantages, significant advantages, of making the changes through the work processes of the Patent Offices and the precedents of the judicial system because legislation is a much less flexible way to work. So, we make a number of recommendations in that area.

Reinvigorate the nonobvious standard. We have considered the nonobvious standard extremely important [and] we believe that there has been some lowering of the bar of that standard. It is a hard issue to deal with; in business method patents, which we have a concern in that area, there are different solutions than one would consider in biotech. And so approaching this is probably going to require remedies very specific to the technology area.

A key area with respect to our recommendations is to institute an open review procedure. We looked, as I indicated in our studies, intensively at the European system. . . . We feel a third party initiated review that can challenge a patent under any standards in the USPTO, and that the outcome of that would be confirmation, cancellation, or amendment of any claim. Or, we envision the courts, the district courts or the court of appeal, could also refer validity questions to such a body, and then there would be an appeal process to the Board of Patent Appeals and to the Federal Circuit. One of our studies with respect to the economics of such a system finds significant social welfare economically that such a system would bring compared to our current legal processes and, if properly designed—and I do not believe such a system has been properly designed—there [are] great opportunities.

I think given the time, I am not going to go further into the strengthening of the USPTO other than we need to address the issue of adequate compensation for examiners, as well as adequate numbers of examiners. But also, there are significant investments in electronic file processing and database searches that need to be funded and supported.

It would be impossible for the National Academy not to remark on protecting the interest of basic research, and we feel that the *Madey-Duke* decision creates a cloud that needs to be addressed, and that there are both legislative and administrative actions, strategies, that could be considered to remove that cloud.

And the final two that I will just mention is that we believe in an overall tone of making a more productive, efficient system, that we need to remove those processes that are not really contributing to the working of the system. That is why we propose removing the subjective elements of litigation which would include best mode, willful infringement, and that would help, also, with respect to some of the organization issues.

And, finally, with respect to harmonization, that there are issues that we feel need trilateral, bilateral negotiations between the major patent systems—that is, Europe, United States, and Japan. The issues for harmonization would be: application priority; of course a grace period for filing [an application after publication]; best mode [requirement in the U.S.; and the]

U.S. exception to the rule of publication [of patent applications after eighteen months]. I think those are manageable. The issue of business practice patents for Europeans will be a harder problem to resolve. I am not implying that others will be easy, but that one would be more intractable. That, I think, is a quick run-over.

MERGES: Now we know what to look for when we get our NAS reports in the mail. Let me now quickly introduce Commissioner Mozelle Thompson from the FTC, again, for a couple of quick comments so we can get going on our panel. Thank you.

THOMPSON: Good morning. . . . Well, it is good to see all of you here today and you must be all very committed to the idea of patent reform.

The Commission has been looking at the subject of technology and competition and innovation for quite a long time. Yesterday at our press conference, I mentioned that one of the most critical issues facing us in America is how we maintain our position as a world leader in innovation because innovation has played a central role in economic growth in the United States and providing consumers with products and services that are of the highest quality, the greatest variety, and lowest cost.

I also noted that no one knows that better than the people here in Northern California who have witnessed the impact of innovation and the transformational effects it has. And so, it was appropriate for us to come here almost two years ago to conduct hearings and meet with industry that was based out here to talk about competition and intellectual property. It is similarly fitting that we come back here now that we have issued a report that makes certain recommendations about patents. That report provides a variety of perspectives about the goals and policies behind patent law and competition and their interaction, and how we might be able to do better in supporting the future of innovation.

Now, how many people here are from industry? And how many people here are from academia? And how many people here are just looking for a way to make money off either, no, are here to advise others as to how they should think about the future of patents? Okay. I think that is a pretty big deal. I think that is a pretty big deal because, collectively, you are all sitting here at this event, in what I think is going to be a watershed event: to talk about what the future of innovation is going to look like. Those opportunities do not occur very often, and a group of people like this one actually do not sit together and talk about it very often. So, it is your opportunity to give voice to perspectives that, frankly, do not often get aired and especially do not get heard very often in Washington, D.C., where we are

charged with looking at policy, and have to look at what the future is going to be.

I am happy to participate, to see you all here talking about the details of our report. It does give us a chance, perhaps, to take a step back and think about this important opportunity that we have, because many of you are stakeholders. You have a stake in what the future outcome is going to be, and to the extent this year represents the beginning of a critical mass, especially out here on the cutting edge of innovation, I am very happy to see you.

So I can tell you that the Commission itself will continue to be committed to this area. We are happy to provide at least an initial framework for discussion, and I hope at the end of the day to be able to talk about some of the observations that we may be able to make collectively. Thank you very much and we will see you throughout the day.

II. NONOBVIOUSNESS PANEL

Panel:

Mark Lemley, Boalt Hall School of Law, University of California, Berkeley (moderator)

John Barton, Stanford University Law School

Q. Todd Dickinson, General Electric (former Director, U.S. Patent & Trademark Office)

Rochelle Dreyfuss, New York University Law School

Rebecca Eisenberg, University of Michigan Law School

Ron Laurie, Inflexion Point Strategy, LLC

LEMLEY: We have a distinguished panel. We are going to hear from Professor Rochelle Dreyfuss at NYU; from Todd Dickinson who, for the next week or so, is at Howrey Simon Arnold White, and will then become IP counsel at General Electric; Professor John Barton at Stanford University; and, finally, from Ron Laurie at Inflection Point Strategy. Everybody is going to talk for a very brief period of time to enable us to have some conversations among the panel and then some conversations with all of you.

EISENBERG: Thank you very much. I found this FTC report very interesting. I look forward very much to reading the National Academy's report.

In wading through some of the testimony in the powerpoint slides and all of the wonderful resources from the FTC study that were up on the

web, I was struck by the widespread perception in various quarters that the nonobviousness standard has been falling, has been dropping, that it is not therefore doing the job that it had been doing in the past of separating out the wheat from the chaff, of distinguishing those inventions that need the incentive of a patent in order to be culled forth from those that are likely to be forthcoming in short order in any event because they [such forthcoming patents] are the low-lying fruit in the particular art, something that is within easy reach of ordinary practitioners. I began reading through the cases in chronological order and the picture that emerged was of the sort of systematic marginalization over time of the views of the person having ordinary skill in the art to the point of irrelevance, really, in recent decisions. This is very different than what you would expect from looking at the language of the statute. . . . Now, reading that language, it sounds like the person having ordinary skill in the art is the ultimate determinant of what gets a patent. . . . It seems to call for an examination of what the invention would have looked like at the time it was made to the inventor's contemporary peers in the technological community.

But this poses, of course, a couple of administrative difficulties in implementing such a standard. First is the time frame. This is a difficulty that has been much remarked upon by the courts, particularly the Federal Circuit, which is constantly admonishing the examiners to avoid falling into the hindsight trap. . . . The second difficulty, though, is the one that I am concerned with, and one that has been ignored, which is how do you bring to bear upon these determinations the perspective of a person having ordinary skill in the art if the standard is administered and reviewed by people who do not have ordinary skill in the art? The Federal Circuit, again, has been obsessed with the first difficulty, but has virtually ignored the second difficulty. When it speaks of the second difficulty, of the difficulty of discerning the perspective of a person having ordinary skill in the art, it conflates the two issues. It says the reason that we look to the level of ordinary skill in the art is to avoid hindsight, when in fact it is a really different problem, and it is a problem that points in the other direction. . . . The worry with hindsight is the bar will be set too high, the worry with the PHOSITA problem is that the bar will be set too low.

Now, the Supreme Court in its decision in *Graham v. John Deere* listed level of skill as one of the basic factual inquiries that needs to be determined en route to evaluating the obviousness of the invention. But the Supreme Court never actually used that standard in any way—used that skill level in any way—in figuring out whether the particular invention before it was patentable. That was true in other cases as well. [The Supreme Court] would point to a level of skill as the statute required them

to do, as something you have got to determine, but then once they determined that, they would set it aside and they would look at the prior art and they would do their own evaluation of whether the differences between the prior art and the invention were obvious or not. The lower courts have done the same thing. . . . So instead they [courts] all focus instead on the prior art references, the written record of prior art, and what it reveals. The person having ordinary skill in the art is consulted as a reader of references, rather than as an evaluator of obviousness. So they will refer to the skill level, to the training, to discern what the reference would reveal, but not to go beyond that and evaluate whether the invention would have been obvious.

There are a number of reasons, I think, why this has happened. First is what I call the "plodder presumption," the presumption in the case law that the person having ordinary skill in the art is unimaginative, uncreative, is not an innovator, [and] thinks along conventional lines. This was expressed most starkly from Judge Rich in the case of *Standard Oil v. American Cyanamid* This is, I think, a deeply flawed approach that cannot possibly be right. It seems inconsistent with the statutory language and it seems to be either circular or a downward spiral, more likely a downward spiral because what happens is, if you exclude patentees in determining what is the level of ordinary skill, then you are constantly looking below that level to figure out what ordinary skill is, but then the top of that range, presumably, is patentable. And so then you drop the level down further. You exclude the most innovative of the plodders because they become patentees, so we have kind of a race to the bottom. It sort of inverts the relationship between the person having ordinary skill in the art and the standard of patentability. So rather than PHOSITA setting the standard of patentability, we have the standard of patentability setting a ceiling on the skill level that we are willing to ascribe to PHOSITA. It is just completely inverted. So one fundamental problem is that by presuming that PHOSITA has no capacity to innovate, we have made anything that is different from the prior art appear obvious.

Second move, I think, that has accelerated the marginalization of PHOSITA has been the Federal Circuit taking a strong position that the determination of nonobviousness, that the ultimate determination of nonobviousness, is a question of law subject to plenary review, rather than a question of fact. And, of course, it is a mixed question of law and fact. The standard itself is a legal question, but the application of that standard to the facts of particular cases is something that is essentially a case specific factual determination. They do not see it that way. But if it were seen as a factual determination, then you could consult some person out in the

field there to figure out what it means. If it is a question of law, then the evaluator's judgment does not matter and, in fact, PHOSITA is incapable of determining questions of law. PHOSITA has no skill in the art of law.

Another move has been the elevation of evidence of secondary considerations, or objective evidence [as] the Federal Circuit calls it, [which is] evidence of how the invention was received in the marketplace as bearing on the question of obviousness. If you read the statutory language, it talks only about the technological evaluation of the evidence from the perspective of technological workers of ordinary skill. The so-called secondary evidence, or objective evidence, is all about how customers receive the invention, how it was received in the marketplace, which, again, makes the perspective of customers more relevant than the perspective of technologists.

Another move has been the suggestion test for combining the disclosures in references. If we go back—how old is Winslow Tableau [*In re Winslow*]?—if we go back something like . . . 41 years, we pictured the person having ordinary skill in the arts, sitting at his bench surrounded by prior art references, able to cull together these prior art references with ease in order to innovate. Today, the Federal Circuit insists that there be some sort of explicit showing of motivating suggestion to make the combination. They have retreated somewhat recently, say, allowing combination of references where the nature of the problem seems to call for it. They seem to be retreating somewhat from what, for a time, seemed to be an ever-accelerating trend towards focus on the written record of prior art in determinations of nonobviousness. But, still, the focus is primarily on the disclosures of the prior art, detailed reasoning, and away from the judgment of PHOSITA. And I think this focus on prior art obscures an important dimension that PHOSITA brings to bear upon technological problems, which is tacit knowledge, judgments, insights—the sort of thing that is not articulated in prior art references, things like a sense of whether the equipment is working properly [or things] that somebody who is working in a field would have an intuitive feeling for but you are not going to find that by looking in the text of prior art references.

How to get this tacit knowledge of ordinary practitioners into the system of evaluating claimed inventions is a problem. We have examiners who are skilled, well-trained people, and that is one important source of information and it is a good reason for the Federal Circuit to defer, in my view, to the decisions made in the PTO about obviousness, much more so than they have done. But the examiners are not current practitioners; they are, at best, former practitioners whose tacit knowledge is likely to be dated and atrophying. Litigation experts in the particular patents that mat-

ter most, who argue about the validity of a patent, are another source of input, but they are adversaries, hired guns. There is too much at stake by that point. It is not the sort of process that is likely to yield dispassionate technical appraisal of how an invention looks to real practicing technologists. So, it would be better if we could figure out ways to allow the PTO to consult with outside technological practitioners in making determinations of obviousness, that would allow them to document obviousness in circumstances where the written record of prior art is an inadequate foil for making that judgment. There are certain circumstances where there is particularly likely to be a problem, like with the patent system [getting] into a technology that previously was outside the patent system, like business methods, for example, where the written record of prior art is a very inadequate source of guidance as to what would have been obvious. Now, there are some difficulties in trying to figure out how to do this. Any agency that makes technological determinations faces this problem, and most of them have some sort of mechanism for consulting the views of outside technologists: they will have scientific advisory boards, they will have peer review panels, they will have something in place that will allow them to do that. There are some challenges to bringing those kinds of mechanisms to bear within the PTO.

First of all, there is the extraordinarily broad range of technologies that the PTO addresses. You cannot really have a standing scientific advisory board that would advise PTO across the broad range of inventions that come before it. . . .

Confidentiality is another issue that would stand as an obstacle. We have a statutory requirement of confidentiality for pending patent applications. Even with 18-month publication, you can opt out of that system if you are not applying outside the U.S., so that would be something that would need to be addressed.

Conflict of interest is obviously a serious problem. If you bring ordinary practitioners [to review] the relevant technology in an area where you are making decisions, those people may often be working for competitors of the patent applicant and have a material conflict of interest in the judgment. Some of these issues also plague journal peer review or grant peer review, and I think there are ways of addressing them and managing them.

. . .

DREYFUSS: We want to thank Pam [Samuelson] and Mark [Lemley] and the Berkeley Center [for Law and Technology] for allowing me to come here. I was a participant in a very small way in the FTC Study and on the NAS Committee, and it is nice to have an opportunity to get some things off my chest.

The first thing I wanted to talk about was confusion, as was talked about at this panel. You see there are really three issues on obviousness, and unless you disaggregate them, people wind up talking past each other. One issue is the way the PTO is implementing the standard. People talk about how the teacher is doing a great job; the examiners are really dedicated. That is terrific and it could be true, but if they are being told the wrong thing to do, then their output is not going to be great. The second thing is about the way the court is interpreting the standard, and what we heard on that was, “the Federal Circuit is still citing *Graham* against *John Deere*, what could be wrong?” [But], is citing *John Deere* a great sign? It is close to half a century old, and if it lays out a rule and a methodology that are not suited to modern research, then it is not going to work out very well. Third, people talk about the standard itself and that is really quite a different issue from the other two. So all three issues, they need to be discussed separately.

Let me start with the PTO. I am an academic. I am not the best person to evaluate its current performance. But I will start with the assumption that it is doing the best job under the circumstances. That is a big qualifier. And one issue is funding, and I take Mark [Lemley]’s point, rationale ignorance, as well, that there are diminishing returns to increasing funding. Nonetheless, I suspect that more funds would help.

But, as important, there is a question about the source of the funds and this notion of user-supported PTO. The conflict you hear is about whether some funds should be diverted. I think that is a total red herring. It seems to me the rhetoric of user-support is fine when you are talking about Yosemite and when you are thinking about public parks. And if you want, you can think about examiners as a core of park engineers, or park rangers rather, because they are protecting the public domain. But, the analogy breaks down when you consider the users. At Yosemite, it is the folks who enjoy the public land, but at the PTO, the users are the privatizers, the patent applicants. I would like to see this idea of user support dropped, in part, because it does not necessarily measure the amount of money that would be rational to spend on examination, but mainly because the rhetoric fuels this notion that the PTO is there for the applicants and not for the public. It is also symptomatic of a bigger problem. Although park rangers actually do see loggers from time to time, examiners do not often see the people whose interest they are protecting. And in that connection, I would like to point out some side benefits of the opposition approach. . . . The people who are arguing for the public domain, they are not often seen in current practice, as I said. And it would expose the Office to the effect of its decisions on the public. It would also do something else, and that is it

would create a career ladder that might help retain examiners who would otherwise go off to practice, and there might even be a ladder that would lead to a Federal Circuit appointment, and that would bring to the Federal Circuit the PTO's perspective on what its decisions do. I think that would be good, too.

That brings me to my next concern, and that is the Federal Circuit and how it interprets the standard of obviousness. I remember the days of Monday morning quarterbacking, when the invention was used as a road map for anticipatory prior art, and in that context, I can see why the court did much of what it did. Thomas Edison's paper showed that inventiveness can be about combining known art, and so requiring the examiner to articulate why a person of ordinary skill would think of combining is actually a good thing. As sciences mature, the roots to making certain discoveries become known, but sometimes without making it actually easier to accomplish that result. So the obvious-to-try doctrine is important because it focuses the decision maker on how many alternatives the inventor faces and his actual chances of success. Unlike my colleagues, including the one to my right here [Rebecca Eisenberg], I do see a potential for secondary considerations. If they were seriously combined with a nexus requirement, I think they would help focus the judge on whether the inventor was unique among folks in his field.

But I, too, see reason for concern. The tacit knowledge problem Becky [Eisenberg] just talked about, the obvious-to-try doctrine—it is fine to think about the number of alternatives, but when deciding if a number is a big number or a small number, the role that instrumentation and automatic machinery now plays in research really needs to be considered, and you do not see that very much in the cases.

I also have to agree with Becky [Eisenberg] that in many fields, the level of skill in the art is not only not right, but not much thought about. Perhaps we need a different perspective on collaborative work. Some people have suggested the PHOSITA, the team having ordinary skill in the art, and we need factor in work that is done by instrumentation, as I said. The court is still using the standards of *In re Bell* and *In re Deuel* cases that were decided, work that was done, decades ago. And John Duffey has alerted me to a recent case in which the court introduced the concept of nascent technology where a person of ordinary skill in the art has little or no knowledge. That is *Chiron* against *Genentech*. If nothing else, that is likely to breed a lot of litigation on what nascent is. So there is important work to be done in implementation. And I like Becky [Eisenberg]'s idea of using experts to flesh out some of this, it is certainly an intriguing idea and well worth considering.

But I do have some skepticism. First, who will these outsiders be? I have a hard time getting my head around the idea of the expert on what is ordinary. We could choose ordinary people in the art, but how are we going to choose them, and once they are on a panel of expert people, are they going to continue to think that they are so ordinary? I think about my colleagues and the elitist way in which they talk about people at other law schools, endocrinologists, what do they know? And I have a concern that this expert panel might drive down this standard of what is considered ordinary, rather than driving it up. Also some process questions on how will these experts be utilized. Do you have a standing panel of people? If people get called on a lot of times, I think people tend to find it difficult to serve under those circumstances. If it is an ad hoc committee and one person serves only once, then there is going to be learning curve issue, much like the one that the PTO faces in training its examiners.

I am especially concerned because this approach has been tried and found wanting in other adjudicatory contexts. For example, the FDA has tried it on Boards of Safety and they did one on the safety of Aspartame, the sweetener and, in somebody else's words, I cannot remember who, it was a pig's breakfast. It was hard to find people without any ties to corporations. Many people said that picking the experts effectively picked the results, and scientists showed themselves to have a rather poor understanding of distinguishing between scientific questions and legal questions. Since the FDA tried that, there is an extensive literature now on court appointed experts and how to choose them and how to train them. Maybe that would actually be a useful place to start looking to implement Becky [Eisenberg]'s suggestion, if it was thought to be a good idea. I also think that experts at other points would be good. The NAS report talks about the need to help alert the PTO to emerging technologies so they can start gathering the right literature and staffing the office correctly. Experts might be very helpful on that. I will talk in one more minute about some other areas where experts might help. But, what I suspect is that the true problem actually lies elsewhere. To my mind, it is no accident that the Federal Circuit does not update the level of skill in the art. I think it is happy with a low level of skill in the art because [the Federal Circuit] likes the result of [the level of skill] being low, which is to say, in fact, that [the Federal Circuit] likes narrow patents.

Remember, the PHOSITA standard applies not only to obviousness, but the *Chiron* case I talked about was about what the PHOSITA knows for purposes of enablement. And the less the ordinary artisan knows, the less she is enabled, and the narrower the claim. And I think that is where the Federal Circuit is really going: to a system of narrower claims. It is

clear in other areas, too, the written description cases, their own opinions in *Festo* and *Hilton Davis*, betrayed a certain interest in having very narrow claims. Unfortunately, the court has not actually explained why that is so, so it is hard to evaluate why they want to do that. In part, I suspect the court thinks that if a claim is narrow, it won't be very dangerous, and that means that it won't matter so much if it is not examined right or the level of skill in the art is not properly set. But I wonder if that is really true. I think the court may well be following itself. Narrow claims create lots of work for patent lawyers, but what that actually means is high transaction costs. Patent thickets are a problem that many people on this panel have written about—they create difficult entry barriers [because] if you do not have a patent portfolio to trade when assertions are made, then you are in real trouble. The increased wear and tear on the Patent Office [is] because they exacerbate whatever problems there are because people have to keep filing in order to protect their investment. So I think it is actually foolish to think that narrow patents are less dangerous. Of course, in part, the Federal Circuit may also believe that narrower patents correlate with better notice, but I am skeptical about that too. If you have notice, you need crisp edges to the claim, but what those crisp edges contain, whether it is broad or narrow, that is not so relevant to the question of notice.

I highlight this issue not just to criticize the Federal Circuit on narrowness, but also to demonstrate another point about this concept of PHOSITA. When the court sets the level of skill to accomplish a narrowing function, what it is doing is creating a construct, a social construct to achieve a particular goal. In this sense, PHOSITA is not a snapshot of reality, it is not meant to be a fact-based historical measure of inventiveness. As we see, it does not much mirror what we know about invention or inventors or artisans of ordinary skill in the art. It is a concept that is constructed so that the system does what the court wants it to do. And if we think it is the wrong standard, it is not because we know of specific patents that should never have issued; rather, we think it is wrong for systemic reasons, because systematically we think there are too many patents, transaction costs are too high, etcetera. At the end of the day what, we really need to think about is getting the system to operate in a way that we want it to. We need to think about obviousness for sure, but also the scope of claims that best serves industrial and creative needs, the distance between inventions on the innovation ladder. Should the boundary of one invention touch on the boundary of the next invention—which is the way it works right now? As we have it structured, PHOSITA is key to all of those concerns, but do we really want the same standard of PHOSITA for everything? Maybe we need different standards in there. What should the

standard be for each thing for which PHOSITA is used. For that, a panel of experts could be useful, but I would not use them as retail adjudicators of particular cases, [but] rather wholesale in helping us to think about [how] all the roles, the nonobviousness and the knowledge of persons with ordinary skill in the art, play in creating the system we have, and in creating the system that our modern age and new technologies of research actually require.

DICKINSON: Thank you very much. Let me join the others in certainly thanking Berkeley for hosting today. . . .

So there are interesting and robust debates about what the patent system in particular means today and how we deal with it. [This forum today] is also interesting because traditionally, I think, or at least the last couple major times we had patent reform in this country, starting with the '52 Act, and then the reforms in the 1980s around the CAFC, and most recently in the American Inventors Protection Act, much of that reform was driven by the IP community, the insiders, if you will. And a lot of the discussion we are having here today, at the FTC, at the NAS, the IPO panel on Monday in Washington[, D.C.]. is coming from outsiders, so it is a very interesting and, I think, appropriate debate.

. . . As we have sat here this hour, I am going to guess that the Patent and Trademark Office will have allowed 100 more patents. In the next hour, they will allow another 100 patents, and after that, they will allow another 100 patents. It is not a stream; it is a torrent, and it keeps coming very rapidly. So a lot of what we have to talk about and remember as we talk about the reforms or the issues around obviousness or anything else, is the fact that we are dealing with a very big process which is hard to change. [The process] is susceptible to [change], but that it has a lot of aspects to it and a lot of nuance in it, and that small changes can make big effects, have big effects, and that a lot of unintended consequences certainly and clearly can and sometimes does apply to the PTO.

One of the premises about the FTC Report is that there are questionable patents out there. That is actually the phrase that gets used. I think that probably everyone would agree that there are patents that have issued that should not have, for one reason or another, or that raised a concern of one sort of another. But the challenge, I think, is that we have not come to the place yet where we have really defined what we mean here by questionable patents. And in so doing, I would suggest we are not quite at the place yet where we have the evidentiary back-up to justify, certainly politically justify going to the policy makers and getting the kind of changes that are suggested. I think we need to continue to work there. When we say questionable patents, do we mean the stick patent that issued or wait-

ing-in-line-for-the-toilet-on-the-airplane patent that issued, the ones which people traditionally take a poke at because they sound odd or ridiculous, or why did somebody spend the \$3,000 to get it in the first place? Or do we mean patents like genomic patents which are getting in the way [or] perceived to be getting in the way of research, or a business method patent which maybe just offends somebody's sense of what ought to be patentable in the first place? I am not quite sure. The critique comes from a lot of different aspects and a lot of different places, and so I think we need to be a little more clear about what we mean by questionable patents and why we should reform a system in view of them. How many are there? One of the issues we will get into later today is lowering the standard of review from clear and convincing to preponderance of the evidence. Well, you lower the standard of review for questionable patents, you lower it for all patents, and you make patent portfolios and individual patents less valuable. When you do that, you start to cut into, I think, significantly the intellectual base or the intellectual capital of the country. [That is] not to say it is not justified, but why are we doing it and how many are we doing it for? I still think we need to take some care to define [the standard].

Also, don't forget, the statute basically allows the applicant to get a patent unless it is anticipated or obvious, and you could argue that maybe it should be the other way around, and people do, but that is the current statutory standard. So I think we need, with all due respect to the FTC and to the NAS, I think we need more evidence of this lowering of obviousness that is perceived to be out there. Do I believe it is there viscerally? I think I could make a case in some areas that that is the case. Do I believe that uniformly that is happening, and happening in such a way as to warrant wholesale changes? I think that is a much tougher case to make. I think the evidence for the lowered standard of obviousness is thin at this point. And if we are going to proceed in some of these ways, I think we have to take a lot more time and care and put some more energy into developing it. And we have got great economists and great patent folks who are in a position to develop that. For example, the FTC Report was almost all based on anecdotal evidence. There was very little empirical evidence adduced at all. The NAS did a few more studies on many topics, and I think it backs that up a little bit more.

With regard to the U.S. Patent and Trademark Office, they have traditionally been more conservative, than the courts, traditionally. They have proceeded very cautiously in terms of moving into new subject matter traditionally, and they have been very rigorous, I think, in terms of how they tend to implement the obviousness standard, at least initially. [For example], one of the biggest complaints I often have to deal with in my current

practice is the complaint that folks have that the Office will not allow their case, despite the fact they [the complainants] believe it is clearly allowable, and they cite, they write extensive briefs to back that up. One of the interesting things about the NAS Study is that it is going to use at least two examples, genomics and business method patents, which frankly is about three or four percent of the number of patents issued each year, to drive the change in obviousness. Now whether that should drive that change, at three or four percent, should drive that change or not, we can argue as well. But business method patents have now, because of the second level review, only seventeen percent of them have been getting allowed—only seventeen percent of business method patents in Class 705, on average, get allowed. The bigger complaint from the folks who want those patents is that they are not getting them out of the Office, not that too obvious business method patents are issuing. So I think we have to examine that a little more closely.

I think there are some areas where we ought to look. I proposed two rules that affect this area when I was in the Office. One is what is called Rule 105, . . . [which] allows the examiner to make an inquiry of priority of the applicant on their own initiative. It is relatively underutilized, as I understand, at this point. I think it could certainly stand to be utilized more. It was widely opposed by the intellectual property community, by the patent bar, in particular. But, we held the line on that one and that one became implemented.

I also proposed another rule. It would allow examiners to apply general knowledge that they had. This is a topic of several speakers, it is a topic of general discussion, and I would disagree with Professor Eisenberg to a degree. I think examiners are not these stale Ivory Tower folks who are not keeping up with the art at all. On the contrary, they are on the cutting edge of the art all the time. It is coming across their desk in a steady stream and they deal with the state of the art at this level, of the current state of the art at a very high level. So I think there are opportunities for them to apply general knowledge if they are aware that they are able to now. The CAFC really does not let them do that, they have gone so far—I respect and admire Judge Newman enormously, but she wrote an opinion last year [or two years ago] and went so far as to say that examiners could not even apply common sense to the examination of patent applications, and I think that is really pushing the line a little far. But, having said that, that rule that I proposed was shot down. It was so widely opposed that we had to back off of that rule. With all due respect to the panelists, I do not remember any of them sending a letter and saying that rule was a good idea.

The FTC dealt with obviousness in two particular ways, commercial success and motivation to combine. . . . *Graham* [*v. John Deere*] says that you can use commercial success as support for nonobviousness, and the Report suggests that we may be getting undue balance to that, I think is the phrase. That may be happening in the courts, it certainly does not happen in the Office, frankly, because people do not have a lot of commercial success to bring to the PTO at the time the application is pending, and it is very difficult to get that kind of evidence introduced. So while I take the point that the FTC makes, I do not think it is that big a deal, frankly, in commercial success, though it is not a bad issue to take a look at.

The motivation to combine is a tougher one, principally because the CAFC has continued to push the envelope, I think, on that issue. However, one reason why they do it is that it is awful easy. It is awful easy to apply hindsight once you have got references in front of you. And to have Reference A which has got Element A, B, C, [and] D, which has three more elements, and to say, "Well, look, anybody could have put those three things together, they are in front of me right now, I see it"—that kind of hindsight is easy, and perhaps too easy, and so what I think the CAFC is saying is you need to come up with even more rationale for combining those. Could we change that? Could we tweak that a little bit? Sure, we could. But I am, as most of you know that have heard me speak, more of a calibrator than a wholesale change guy, and so I think that is a calibration.

What the real issue I think—well, let me talk to the peer review thing real quickly. I think that Professor Dreyfuss articulated a number of the problems with it. A peer review panel, for those last 100 patents that we just have issued or the one patent that issued in the last minute I have got here, is a big challenge. I get it if you are going to have peer review panels for genomics, or you are going to have them for very sophisticated technologies. Where is the peer review panel for that largest of classifications in the PTO: golf equipment? Where is the peer review panel for boxes? Where is the peer review panel for what we used to euphemistically call "vermin control," or mousetraps? They are out there, but getting those folks together for a peer review process is a pretty daunting task. We do do parts of those things. The Office, rather, does parts of those things now. They have for very advanced technologies biotech, business methods, now nanotech. They have quarterly customer partnerships where anybody who wants to can come in and meet with the examiners as a group, they can meet with the senior leadership, there are structured learning that go on, there are seminars that go on. They are very valuable. Also, when a new technology comes along, to the extent they can, the Office—I did it with business methods—tries to draw on those communities to help teach the

Office. We brought in, for example, on business methods, the Securities Industry Association, the Check Cashing Association, the American Banking Association, a number of those organizations, to train examiners both on the art itself and also where to find the art. I think that is a pretty reasonable mechanism to work on.

So where does that lead us? The PTO needs more money. Frankly, the examiners need more time, and that is a function of money. Each hour of additional time across the PTO costs between \$15 and \$18 million, so they need more money. They need greater access to prior art, and they need better search tools. They have great search tools and they need even better search tools. Thanks very much.

BARTON: Let me try to concentrate on a particular example. I think I am pretty much known as a nonobviousness hawk, but I am going to try to give a more balanced picture, if I can, and describe a little bit of what is at stake and sort of the philosophical differences on where you go with different nonobviousness standards.

I am going to concentrate on one of the principles of the CAFC, the principle of obvious to try Obviousness to try, at one point, was a basis for saying, "You can't get a patent." In other words, this patent results from a research effort that you suspect is going to lead to an answer to a problem, you undertake the research effort, get the answer, and since it was obvious to try this particular research effort, you should not get a patent. Judge Rich came along and stated as follows, "Slight reflection suggests, we think, that there is usually an element of obviousness to try in any research endeavor, that it is not undertaken with complete blindness, but rather with some semblance of a chance at success, and that patentability determinations based on that as the test would not only be contrary to statute, but result in a marked deterioration of the entire patent system as an incentive to invest in those efforts and attempts, which go by the name of research." In other words, we want people to do research even though it is obvious to try the research and to encourage them to do the research, we therefore grant a patent.

Interpreting the CAFC's obviousness to try cases is a nightmare, and they certainly have ended up somewhere in between those two extremes. I think sort of a basic situation of where they are is, you can get the patent in spite of the fact there was obvious to try in their strategy, depending on how likely success looked when you undertook what was going to be obvious to try. Let me apply that to a particular example, the genomic patents. At one time, of course, it was genuinely very difficult to get the sequence of a gene. Today, we can get the sequence of a gene from a machine. We can get an insight—like whether or not a particular mutation is

associated with a particular disease and know what I am thinking—now, particularly if things are like the diagnostic patent, such as the breast cancer patents which have been issued and have been so controversial in many circles from the medical perspective. You know how to do that now. You know now how to run all the things on a chip and run a lot of tests of a lot of people and find out with pretty high confidence. If you put enough money into it, you can design a project to determine what genetic sources are associated with a particular disease. Similarly, and what I put together with the genomic patent system, and that is just my perspective, it is now pretty obvious—again, sometimes very difficult, but pretty obvious how to get the precise structure of a biological crystal, a biological protein. And yet I can now get a patent on the protein coordinates; I can now get a patent on the use of the knowledge that gene sequence is associated with disease Y; I can now get a patent on a gene itself. . . .

In some sense obviousness to try precisely affects the patentability of these categories of information. I do want to put it as information because we are really patenting information in these contexts, and there is an obvious question whether or not this should be patentable subject matter. That is another set of issues which is related to genomic patents, but certainly now that we know how to get these sequences by an automatic mechanical process—I am overstating a little bit, of course—are they not obvious to try? And the CAFC has, in effect, told us no. It is obvious to try a particular research direction, but knowing how to do the research direction does not tell you the shape of the protein, does not tell you the sequence of the gene, therefore it is not obvious what the result of that research project is going to be. So this is a case in which the obviousness to try principal is one which the CAFC tells us to use, and you can see Judge Rich is looking for it, [and] it is one of the reasons why we issue patents which, in some people's minds, raise some questions.

Now, I promised to give you a balanced perspective. Currently, because I read so much about this set of patents and I have written much about it, I also want to understand the industry, so I am trying to investigate the diagnostic genomic industry, understand better how it works, and understand better the role of patents in that industry. It is becoming abundantly clear to me that a large amount of money is being invested as a result of the fact, almost certainly as a result of the fact, that patents are available. In other words, the patent system is in this context serving its role of providing an incentive to investment. Just as Judge Rich suggested, the patent system is serving its role as an incentive to carry out research, even if you know the research is going to automatically succeed. We are then faced—and this is sort of the dilemma I want to put you with—if we

accept Judge Rich's perspective with the obviousness to try arrangement, then we are going in the genomic context to say, "We grant these patents because there is a genuine incentive factor there, and it is genuinely working." And we face the cost, the cost being it is very hard for Affymetrix to put together a chip which scans for all the different genomic mutations which a baby might have because they have to go back and get a license from a zillion different companies in order to produce that chip. Similarly, it is very hard for a pharmaceutical company to work with drugs against a protein crystal X . . . because somebody has a patent on the use of those coordinates and theoretically the company could simply go out and measure them.

We are indeed creating some incentives and we are also creating a set of complications. If I broaden that to industry, in general, what Judge Rich is saying is, "We want a system which rewards routine research and encourages routine research because it is good." And he is absolutely right. But the counter-argument is, "Don't I want to preserve the monopoly, the patent system, for those cases in which the research level is a little bit above sort of the normal level of research in the industry?" If I am going to reward sort of the normal process of industrial innovation, if I am going to reward that with patents, . . . then I am going to increase the number of patents and I am going to create significant problems of having to negotiate cross-licenses and all that kind of stuff.

So I want to suggest what the tensions are here. . . . My bias would be the CAFC is currently saying the standard is whether the invention would certainly have been made by a person of minimal skill in the art who was unable to integrate the different concepts present in the art. I would like to turn that into "to grant a patent only if the invention is more substantial than that regularly made by a person of average skill in the art, being funded and supported in a way that is typical in the relevant industry." My proposal as to how to do that is a little bit different from Rochelle [Dreyfuss]'s and Becky [Eisenberg]'s [proposals], but I think that is one of the dimensions we need to be talking about because, there is no question, it is a hard standard to apply. It is a judgment standard in any call, and I think that has a strong tension, given the actual pressures present on the examiners of driving it down, particularly given what the CAFC is saying. But, at least my proposal would be to try to include [in] the patent application, or maybe in some other context, some kind of indication of sort of the way routine innovation is going in this industry. How much do you change the technology from the pentium computer, from the pentium chip to the titanium chip? That is sort of the standard baseline. Does this go above that

baseline or below? Now that is a judgment call, too. But I am wondering if there is a way to get that kind of evidence into the process.

MYERS: Ron [Laurie]?

LAURIE: Thanks, Mark [Myers]. I just wanted to say what a pleasure it is to be on this panel and part of this program. I just wanted to give you a little bit of disclosure on my particular perspective, which I think is different than anyone else up here. I am now operating at the intersection of patents and capital formation in a firm that calls itself an IP Investment Bank, and I can tell you absolutely that patent quality is essential to ensure that financial markets make correct investment decisions in connection with technology. I see this every day. Any uncertainty about the value of a patent creates misallocation of resources in the financial community.

I would like to make just introductory remarks on the “but for” test that is set forth in the Report. I think the “but for” test is a useful contextual construct in many cases, and certainly reflects one of the key policies underlying the patent laws, and that is, of course, the policy of incentive by reward. If the incentive is not necessary to produce the invention and its commercialization, then there is no point in offering the reward. I think, however, there are two other policy bases for the patent laws that the “but for” test does not address. One is the public disclosure or dissemination of technology policy. The “but for” test ignores the possibility that, even though an invention would have been made and commercialized, that in some cases it would have been kept secret. And this, of course, affects a very delicate balance between the patent laws and the trade secret laws. Certainly many, in fact probably most, inventions will be disclosed upon commercialization, but there is a lot that will not, particularly in the software area where past practice was to distribute under confidentiality. The other policy that I do not think “but for” adequately addresses is what I call the “forced improvement policy.” That is the motivation to design around existing patents and thereby advance the technology in ways that would not have happened but for that forced requirement to avoid doing what is claimed in the patent.

With regard to the issues of motivation and commercial success, I absolutely agree with Todd [Dickinson] that the PTO has got it right, there is no lowering of the bar at the PTO in terms of obviousness. The cases that I see being examined, especially in software and business method areas, are, if anything, the PTO taking a very tough position. I would refer you not only to the MPP which applies to all subject matter areas, but particularly to the recently published examination guidelines on obviousness in connection with business method patents. There are, I think, twenty-some examples—fairly detailed examples—of how tacit knowledge and nature of the problem to be solved, and mere conversion, mere automation of a

the problem to be solved, and mere conversion, mere automation of a manual process, and many, many other things that are not explicitly taught in any of the references that are combined, and of how those are folded into the obviousness decision by the Patent Office. To the extent that the Federal Circuit does evidence a trend toward lowering the bar, I have read the cases, [and] I think many of them can be explained on other grounds. I think there is an increasing emphasis on requiring the Patent Office to build a proper administrative record for judicial review, and therefore there is a great antipathy toward what the Federal Circuit calls “conclusory statements of the skill of the art.” I think all that means is that the examiners and the Board of Appeals members have to document the basis for their tacit knowledge, and not just cite it as something they know. I think that is an easy hurdle to get over. For example, in the Internet area, the tacit knowledge that one can perform many business methods that were previously done manually or in a face-to-face manner on the Internet, that is the kind of tacit knowledge that will not ordinarily appear in the references because it is so totally obvious. But, it is not a problem because it is certainly easy to show with any textbook or newspaper article that implementing physical processes on the Internet is well within the tacit knowledge and skill of the art. I also think that the trend, and I will defer to my academic colleagues on the extent to which there is a trend, but a lot of the trend can be explained on the basis of the general concept of what I would call the Federal Circuit’s diversity of opinions. I think, on many issues, you can find opinions all over the place, and I think the more recent case law, the Ruiz/Chance case puts us back on the right road, at least in connection with consideration of the effect of nature of the problem on whether the solution is obvious.

Finally, on commercial success, just a quick note. It seems to me commercial success comes up in two different ways and they ought to be treated differently. The first case is where commercial success is coupled with long felt need. There is kind of a common sense reaction that, if there is a long felt need for a solution, and it is recognized that that solution will be commercially successful—now, keep in mind, that is commercial success measured prior to the invention—the solution is not obvious because making money is something that everybody wants to do and if the need is recognized and the fact that the solution will be commercially rewarding is recognized, and the invention is not forthcoming, that is very strong evidence that it is not obvious. On the other hand, where it is not coupled with long felt need, but where commercial success is just a consequence of the invention, then I absolutely agree with the Report that commercial success could be due to many other things than the invention, and it is en-

tirely proper for the burden to shift to the patent owner to demonstrate clearly that the commercial success is tied to the patented invention—that is in court.

Now, I have a little trouble applying that to the Patent Office and having examiners analyze submissions of commercial success. I mean, the introduction of business method patents caused quite a disruption and a lot of people were saying that now we have to get examiners with a background in computer science that had an MBA from Wharton in order to understand the significance of the business method; ditto in spades if the examiners have to start analyzing and rebutting economic evidence of commercial success. Thank you.

LEMLEY: Let me ask a couple of questions directed to the specific proposals that are before us today and then we will open it up to the floor for questions. The first has to do with the issue of combining references. There has been some discussion of what Ron [Laurie], I think, quite properly points out, as the meandering Federal Circuit case law on the question of whether you must have an actual suggestion in a reference in order to combine it with another reference or whether you can find motivation in some other source. And I guess the question for the panel—Ron [Laurie] talked a little bit about this already—what is right? Is the FTC right here? I mean, are we to be finding motivations to combine references outside the documentary corners of the reference themselves? And, if so, where is it [that] we are going to find it and how? Is it testimony? Is it some base of examiner knowledge?

EISENBERG: This whole approach seems to me to be fiction upon fiction. We start with the fiction that the person having ordinary skill in the art has access to every single reference, sort of the Winslow Tableau [*In re Winslow*] fiction. And then we presume that the person does not know how to combine references unless there is some suggestion or motivation to do that. Another point of inconsistency in the Federal Circuit's decisions is the issue [of] whether we are motivated to combine references—which is this highly artificial question, as if somebody trying to solve a technical problem goes to the library and tries to identify references that will help them—or is the motivation to combine elements. It seems the combining of elements seems like a much more logical way to proceed if the focus is on what can we expect of ordinary artisans in the fullness of time, with or without patent protection. On the other hand, if your focus is more on the prior art references themselves, then you start thinking about whether there is a reference to combine.

Ron [Laurie] had an interesting point about the value of disclosure. It may be that when the prior art references themselves are weak or when the

written record of the state-of-the-art is weak, then there is a stronger interest in using patents to bring about greater disclosure, even though maybe it is not bringing about any greater innovation. So it might look different from that perspective.

LAURIE: Just a quick comment. I absolutely agree with Becky [Eisenberg] because the inquiry is the state of the prior art. And to limit the prior art to what Section 102 refers to as printer publications is absolutely unjustified. Section 102(a) also includes “known or used by others,” “others” meaning the public. That is in many cases the glue that holds the references together, and to ignore that is to ignore the most valuable method for combining references.

DREYFUSS: I think my point is very similar to that one. We over-treat inventions as if they are true monopolies. Judge Rich often said they are not true monopolies for purposes of thinking about what the patentee can or cannot do with this monopoly. But [patents] are also not true monopolies in the sense that there are not other inventions out there that are like that or similar. I think if you look within a field, you see the way that people within the field think, and by taking an invention within sort of the entire scope of inventions that are similar and thinking about why is it that people in the field look at, how do they think about the direction in which they are doing research, you can start seeing trends in the way that people in chemistry think, or trends in the way that people in mechanics think. I think all of that helps. It does not have to be written down. You can see the trends in the way that people think.

LEMLEY: Let me follow-up on this, if I may. So, if we want to look at the sort of general way in which people think in the field, how they might think about combining elements, and if we want to look—as Ron [Laurie] points out—not just at the printed publications but what is going on in the business, the section 102(a) art the public uses, and all of that stuff, and then—we also talked a little bit about secondary considerations, another element of the FTC Report—we want to look at economic evidence, commercial indicators or success, what were people doing, how does the industry react to the invention. All of these are relevant questions for obviousness. They also seem questions that the PTO is going to be essentially unable to deal with, not only given the resource constraints, but also given the way in which we structure the inquiry. The PTO does not have the ability to go out and talk to everybody in the industry, to go out and collect evidence of public use, to go out and collect evidence—economic evidence—of commercial success. Are we necessarily, by focusing the obviousness inquiry on this broader question, are we necessarily relegating

it to the courts and saying the PTO is just not going to be able to do some of the things we want to do in the obviousness inquiry?

DREYFUSS: I think the examiner is doing a lot of that stuff. I mean, that is just Todd [Dickinson]'s point. The examiners are sitting there and they are seeing everything that is in their piece of the world, and so they are seeing each and every inventor as he comes along, telling the PTO what it is that [he is] doing. I think the examiners actually do get a very good sense of what it is that is in the art. And I think Becky [Eisenberg]'s point that we should be deferring more to the examiners, that, to me, has a lot of resonance because that, in fact, that part they do see. They are seeing the way that people think about pushing the frontier slightly forward, making incremental changes. Not to push the NAS Committee Report, but I think the opposition procedure is also a piece of that because it brings people from the outside in the cases in which the examiner has not seen stuff that is in public knowledge, but not in print.

DICKINSON: Mark [Lemley], I have a one word answer to your question: Google. . . . Let me elaborate a little more on that, and not to put too fine a point on it, because it obviously can still be improved, but the PTO has access to some of the world's most extraordinary databases and has very facile tools for accessing those databases. They also have print libraries with research librarians whose whole job is to try to help them dig out that piece of priority. Do they not always get it? Absolutely. Are there opportunities for improvement? Always. But to premise the whole argument on the fact that the PTO's examiners are just sort of sitting around, poking around, and doing a Google search is just not the way it works. We also have another opportunity that gets overlooked. It is another rule we put in place called Rule 99. Because we have publication now at eighteen months—I think most people would support what the FTC Report does, making publication universal—you have got a political challenge there with small inventors, but other than that, if you believe that there is prior art that the Office is not considering, you have an opportunity under Rule 99 to send it in. It is vastly underutilized still. That may be partly structural, but I think part of my job and others' job is to make people aware that that is out there.

MYERS: John [Barton].

MR. BARTON: I just want to add that I view those secondary considerations as mainly applying not for the Patent Office, but when you review the patent later in some kind of litigation. In some sense, to the extent I consider secondary considerations as success in the market, it means I do not know whether the invention was nonobvious until ten years after the patent was issued, and I am in litigation about it.

LEMLEY: Let me push a little bit on this, and then we will open it up to questions from the floor. If the PTO has got all these great databases and they have got this tacit knowledge that comes from looking at all the patented inventions, and the argument here seems—the consensus here seems to be that we owe greater deference to the examiners—why is it that all the empirical evidence seems to suggest they are not doing such a hot job of finding the right references? Why is it that the European and Japanese Patent Offices regularly find prior art references that the U.S. Patent Office misses? But why is it that the courts, when you go into litigation, you always end up litigating prior art references that the Patent Office did not find? It seems to me there is a felt sense that the PTO is not, in fact, finding all the most relevant prior art.

DICKINSON: That is not a bad point with regard to litigation. Do not forget, very few patents actually get litigated, and when they get litigated, enormous resources are brought to bear. I am not a litigator, but my firm, for example, is primarily [made up of] litigators, and they just wheel out the big, big guns. Now, whether that is good thing or bad thing, well, we can debate that, and there are a lot of aspects to that. But when you start to apply \$10, \$15, \$20 million to try to turn up that one piece of invalidating prior art, that is a little different than the \$5,000 search you did or the eighteen hours of searching that is available to the Office. But that is the flex in the system. Can we change that a little bit? Yeah, we could change it a little bit, but I think to decry the whole system because the examiner does not have \$20 million worth of capability to find that one piece of prior art hidden in a library in Russia somewhere, I do not know.

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FARRELL: Joe Farrell from U.C. Berkeley. Just to follow-up a little bit on that change. I thought Mark [Lemley]'s question was not any blame to the examiner for not finding it, but should we take the view that the examiners do in absolute terms an excellent job?

DREYFUSS: There are really different questions packed into this. One is the question of finding the prior art, but the question we were talking about before is that question of combining it. So, you might want to take the view that examiners are really good at thinking about that because of the fact that they have seen it a lot, see it continuously, see trends within what is going on, and are able to abstract from those trends. That is a different question from whether each piece of prior art that is out there can be seen.

DICKINSON: We have talked about the issue of tacit knowledge, too, and I think we need to give the examiners more leeway to apply tacit

knowledge and what they know to be out there. We can do that, I think, through rulemaking, or we can do it—

DREYFUSS: What they know to be known.

DICKINSON: I think we have much more play in that regard than we should have because, again, the examiners—I came into the Office as a knowledgeable guy, but not really knowing it as thoroughly as being in it—I was amazed at the level of commitment and knowledge that the average examiner tends to have. Are there exceptions? Sure, but it is really a very high level of commitment and knowledge. It was sort of surprising to me. There are over 400 Ph.D. scientists at the Patent and Trademark Offices. It is more than at NIST, it is roughly how many are in NIH. I mean, that is a lot of brain power. And that is not a lot of engineers—those are mostly in genomics and in biotech areas, for example.

DREYFUSS: A third issue is the application of law to the facts that they know. That is another question where, whether or not you give as much deference to the examiners—I just do not know the answer to that question—about how much examiners knows about law and knows about the application of law to facts. But each of those are different issues.

DICKINSON: I was very pleased to put back, on full scholarships to law school, any examiner who wanted to go. It has been cut out in the latest couple of budgets, I am disappointed in that. I think we need to get more legal training. Only four of the twenty-six group directors are lawyers now in the PTO. I believe that is scandalous. I think we need to have much more legal training, as well.

...

LEMLEY: For benefit of the people in the back who are having trouble hearing this, the question is why is it that the EPO regularly finds references that the USPTO [may not].

DICKINSON: How much does Chevron and Texaco pay at the EPO to get a search and examination as opposed to the United States? They pay roughly three times as much. I agree with the general concept, there are many times when it is perceived that [at] the EPO, you can get a higher quality search, in certain technical areas, in particular. Given some challenges they are facing in terms of resourcing and staffing and other things, they have had a freeze on hiring for a long time, I think that that may be a little more differentiable than it may be currently, but I think traditionally the belief was you would get a better search, principally because they have more money, which leads to more time.

[Question from audience member not transcribed.]

BARTON: Obviously, we are skating into the territory of the panel which will discuss the presumption of validity. The question is to what extent must the court accept that presumption, to what extent should we accept the presumption that the examiner did not make any mistake. Then the related question: to what extent should we be installing procedures that are somewhere in between the two, that are designed to test the validity of patents? Or designed to provide, you know, as in the European [Patent] Office procedure, some opportunity for the public to bring additional prior art? And, additionally, counterarguments against the patent because, after all, the patent is necessarily granted, even in Europe, in an *ex parte* proceeding? [The solution] has to be a fairly low cost or it would just be insane.

LAURIE: The fact that the litigation is so many orders of magnitude more expensive than the prosecution, to me, is the best reason why the prosecution ought to be as absolutely good as it possibly can be in order to avoid tremendous misallocation of resources.

LEMLEY: Alright, please join me in thanking the panel.

III. OPPOSITION AND POST-GRANT REVIEW PANEL

Panel:

Robert Merges, Boalt Hall School of Law, University of California, Berkeley (moderator)

Robert Blackburn, Chiron Corporation

Joe Farrell, Economics, University of California, Berkeley

Bronwyn Hall, Economics, University of California, Berkeley

Dietmar Harhoff, University of Munich

Steve Kunin, U.S. Patent & Trademark Office

Douglas Norma, Eli Lilly & Co.

MERGES: We are going to start out with Professor Bronwyn Hall from our own Economics Department here at U.C. Berkeley, and she is going to be joined with her co-author on some very interesting research, Dietmar Harhoff from the University of Munich. So in all the discussion of European oppositions that is thrown back and forth in the U.S. reexamination reform kind of movement, Dietmar has really got the goods. He has got the real data on European oppositions and what they are all about. And following them, we are going to have Bob Blackburn from Chiron Corporation, who is a veteran of many of the biotechnology wars. He has personal experience with the European oppositions and lots of detailed

experience with the U.S. patent system as well. He is the Chief IP Counsel at Chiron, and we are really pleased to have him here. After that will be Joe Farrell, also from our Economics Department, who is presenting a paper that he and I are working on. I may have a few words to say on that in the Question and Answer period, but Joe is mostly going to handle it. Joe is also from the Competition Policy Center and they are a co-sponsor of today's conference. After that will be Doug Norman from Eli Lilly, who also has extensive personal experience with the U.S. patent system, obviously from the pharmaceutical and medical services and processes industry. And batting clean-up is Steve Kunin from the U.S. Patent and Trademark Office. And so, in all the discussion of sort of what the Patent Office is doing, and how examiners are really sort of performing, Steve [Kunin] has got the day-to-day experience on that.

So this is really a terrific panel We will start with Bronwyn [Hall] and then Dietmar [Harhoff].

HALL: There were two things that I wanted to emphasize, just out of my experience with looking at patents. And the number one point to always keep in the back of your head is that patents are extremely heterogeneous in their value, and that means that figures like three percent of patents are not very meaningful, really. . . . It could be that three percent is a completely uninteresting set of patents or it could be that three percent is all of the value in the patent system, and you just have to keep that in the back of your head. I particularly mentioned this with respect to the concern for genome and software and business method patents. It is possible, at least in the genome case, that the reason we are focused on it is because those are valuable patents, even if they are a small number. You just have to keep that in your head when you are thinking about it.

The second thing I want to say—repeat again, [that] which economists are always repeating—is that more patents are not necessarily better for innovation, for a long number of reasons that I do not have time to list right now. Now, the previous panel did a really good job discussing the details of what I will call “patent quality” even though I know that is an over-used and misunderstood term. I wanted to do only one thing, which is report on a couple of numbers which provide evidence on this question, statistical evidence on this question, with respect to the USPTO, keeping in mind that it is not the USPTO's fault that this is the case. I mean, the USPTO has been flooded with patent applications over the last fifteen years. When you look at the aggregate numbers, you can easily identify a structural break that took place using the usual time series technique that took place in 1983-84 where there was just an enormous shift in the growth rate from zero percent a year to five percent a year in applications.

And the budgets have not grown at the same pace, but nevertheless, here are the two facts. The first one is that if you look at U.S. originated patents and non-U.S. originated patents, and how they fare at the European Patent Office, what you find is that the grant rate at the European Patent Office, though it is the same level playing field here, the difference in the grant rates for U.S. originated patents and non-U.S. originated patents has risen in the past twenty years from zero percent difference to sixteen percent. So, U.S. applications are being turned down more often. Now, this does not say anything about the USPTO, this says something about what the expectations of U.S. applicants are, and so that by itself suggests a decline in the standard of U.S. applications. But one cannot help but think that that is not because they are responding to something that is going on in the U.S.

The second fact, and this is directly related to what is going on at the USPTO and it was discussed in the previous panel but I just wanted to give you the fact, which is: suppose you look at U.S. priority patents' equivalents at the EPO. So, we are comparing what the USPTO does with applications for an invention for which there is an equivalent at the EPO, so these are more valuable in principal patents because there are equivalents at the EPO. How do they fare at the EPO versus the USPTO? And the answer is the difference in the grant rates, . . . differences in the grant rates has grown from about twelve percent twenty years ago to thirty percent today. I would argue that there has been some change in the standards being applied either at the EPO (they have raised the standards) or at the USPTO (they have lowered the standards). Could be either one, really, but that is just the overall fact.

. . . [A]t this point, I wanted to talk about the benefits and costs of post-grant patent review, something that we have suggested in the [NAS] Report, something that was discussed in the FTC report, something I saw, in fact, in at least one of the position statements that were in the packet that we received. I want to reinforce this idea that I think there is some value in having a post-grant review within the Patent Office, particularly for new technologies, because of the feedback effects you get from having a review. Having prior art being brought in by outsiders—it is not that the Patent Office does not catch up on its searches—[it] is that it takes a while and [the process] may speed it up a bit; [the Patent Office] may get the information more quickly. . . .

HARHOFF: Well, thanks a lot. Thanks for inviting me to this panel. I feel I am honored and it is a great opportunity to say something about the European experience on post-grant review, which is called Opposition. And let me just hop directly into a summary of empirical facts so that we

know how such an institution could look. This does not mean that I am advising anybody to assume exactly the design perimeters that are here, let us talk about design perimeters later.

This is an *inter partes* procedure. You can file an opposition within nine months after the patent grant. Typically what you find is that it is opponents, rivals, competitors that are opposing the patent-grant. Sometimes you also find that NGOs like the Animal Protection Society of Vienna or Greenpeace or others are doing that, and I will argue that that is probably good that we have such an open process. How about the frequency? If you look at the opposition rate, 7.9 percent of all patents are being opposed at the European Patent Office historically. It has gone down somewhat. And there is a second instance and an appeal against the outcome of opposition, which is realized by 31.7 percent of all the opposition cases, so you can see that the patent holders, but as well the opponents, are really going after this is battle for IP, very clearly, with a high frequency. Germany, by the way, has a similar opposition system and there the opposition rate is even higher. I will later argue that that has to do with the fact that in Germany you only have three months to file, and therefore you do not have time to settle with the possible counterpart you have. What is the duration? Each instance about two years. So it is quite long, adding to the already relatively long grant period/examination period that the European Patent Office has, which is on average 4.2 years for decision making. What are the outcomes? Now this is the really relevant part. About one-third of the patents are revoked; they disappear. And given the structure of the system in Europe, there is no judicial appeal against that once the appeal chamber has said the patent is not there. One other third [are] amended, and that means narrowed—the claims are narrowed. And then, in 27 percent of the cases, the opposition is rejected. The opposition is closed in about seven percent of the cases, which means that either the patent owner dropped the patent, they did not pay the renewal fees, or the opponent dropped the procedure and was never heard of again. What are the costs? Per party, per instance, between 15 and 25,000 Euros; if you go through both instances, it would be between 30 and 50,000 Euros. There is a very low potential for driving up your competitors' costs, and I think that is very important for not making this a harassment institution that can be abused strategically, although some strategic abuse may be going on.

Which cases get to opposition? Now, again, this is very important because we have been talking about what we would like to see in this mechanism, and what you see is that in new technical fields, for example, biotechnology, nano, in fields with uncertainty, with asymmetric information between the patent owner and the opponent, you see a lot of opposi-

tion. When it is high impact patents, like in cosmetics, for example, although it is not an R&D intensive industry, you have high opposition rate, and typically we can show in empirical studies that it is the valuable patents, that typically opposition draws from the upper quarter of the value distribution.

Let me simply summarize that and say that this is a mechanism which has in terms of economics both the quality of screening and of information revelation because what is produced in the procedure here is knowledge about prior art, knowledge about the interpretation of prior art. Many cases do not reveal new prior art, but they deal with the interpretation of prior art, which may be contentious between the parties and, of course, this mechanism identifies high value patents. My interpretation as an economist is very simply that, in a second round, once you have identified these patents, you can give them much more attention than you can in the standard examination process, where maybe you have close to forty hours in the European system, but errors happen nonetheless because not all the information is on the table, even if you have greater resources available than at the USPTO. So there will be errors, even if there are more resources, and you need some kind of mechanism of [dealing with] that.

. . . The European Patent Office examines and grants a patent, and then these patents become national patents because something like a European patent is not really in existence. And subsequent litigation is within the national systems of the judiciary and so forth. In Germany, what you find is when you look at EPO granted patents coming to Germany, there is a subsequent invalidity challenge that you can raise against the patent at any time—this is not time limited—and any party can do this, so this is a mechanism that the United States does not have. It is a quarter of a percent. I can use these data to show you that the real welfare kick out of the system comes from striking down those 2.7, those 7,300 cases, which do not proceed in the system. Their career has ended and they will not cause litigation either. There is also an effect from hardening legally the patents that were under opposition because they withstand validity challenges much better than other patents attacked in this procedure.

Let me say something about the overall litigation rate in Germany. Again, if I did this for Europe as a whole, I would have to go into basements because we do not have electronic archives of litigation files up to now, unfortunately. The litigation rate in Europe, in Germany, that is my calculation, is 0.9 percent. Litigation is less costly in Germany, it is faster in many cases in Germany. Another member of this panel has come out very much in favor of this mechanism, so all of this is speaking against and sort of an inflationary number here. Compare this to the 1.9 percent in

the United States where litigation is more expensive, takes longer, and so forth, I think that this is partly an impact of the opposition system as a pre-screening mechanism that takes out a number of these cases. . . . At the European Patent Office, the case is heard by a special board. There is an issue whether you want the original examiner in there or not. I hear from the EPO that the revocation rate is higher when the original examiner is not part of that board, and that might just be human nature.

Which time period should you allow for filing the case? I would argue make it short. The USPTO Strategic Plan set twelve months. These are twelve months during which there can be settlement between two parties where society at large would not like to see settlement because you do not want to have collusion at this level.

The last point I want to make: I do not think that discovery is very helpful here. You want to make this a low cost mechanism, keep it simple, so that you have the screening function and not sort of an imitation of litigation. Thank you.

BLACKBURN: Good morning, everybody. . . .

Why replace validity litigation? Well, for you litigators out there, I hate to tell you, it is not about you. I know you are saying, "What about me and my needs," but it is about industry. Aim it at the prosecutors and the academics, it is not about you either, it is about industry being able to make, as Ron Laurie put it, make rational capital allocations. So what does industry want first? More than anything out of the patent system, it wants predictability, because if [the outcome] is predictable, [the industry] can negotiate [and] a deal can be struck. In those cases where [the outcome] is not predictable, what [the industry] wants is fast, cheap dispute resolution because that gets you back to predictability.

Why do you want predictability? So you can formulate a rational strategic business plan for what you are trying to do and allocate your capital correctly, whether you license, you go into another area, you do add-on research, whatever. You need a predictable system. But wait a minute. Isn't the American litigation system the best? You are either for it or against it.

Building on Dietmar's talk, I have sort of pulled out a not actually hypothetical example, although I was trying to remember what the numbers were in the middle of the night, so I am not holding these up as precise, but they are pretty close.

Same patent, same issues, litigated three different places, here is what it cost and the time: Germany—\$400,000, 18 months; the U.K.—\$2 million, 18 months, there is discovery in the U.K. The U.S.—\$6-8 million, 30

months, and just got to the Markman hearing. Compare the outcomes. They were identical. The substantive outcome from the business's perspective of all this litigation was the same. How much justice can you afford? The dollars you spend on this dispute resolution system do not go into R&D, do not benefit society in another way. I know, what about me and my needs? But if you can maybe sell this level of litigation and cost if we were in a different market like perfume or Scotch, high price tends to work there. For the same price, for a lower price to get the same results, it should not be selling.

Can we move to an opposition system? Can the PTO actually deal with the validity issues? We have heard some concerns about their ability to deal with things. Usually that comes up with the things like best mode, or inequitable conduct. How would you deal with those? If you have a system where you have different defenses available in an opposition system or you have more additional defenses available in district court litigation than you do in an opposition system, somebody in each dispute is going to want to try to get to district court. But now let us look at other countries like Japan and the EPO countries where they do not have these type of defenses. Sky is not falling, their opposition systems tend to work pretty well and are a substitute for things like the duty of disclosure, etcetera. It works pretty well. The simple solution is [to] get rid of these areas of substantive requirements for patentability in the U.S. like most other industrialized countries who do not seem to require it. Do we eliminate litigation altogether? I do not think anybody is seriously suggesting you eliminate litigation for the liability aspects of an infringement. But perhaps you could eliminate it altogether for validity and adopt something akin to the German model. Or, you could make it an option out of litigation where, say, the district court litigation has stayed and pending resolution, the district court will accept the resolution on validity, and that could include a PTO opposition and a direct appeal to the Federal Circuit, but you gain nothing if you then have a *de novo* review of that process in the district court.

The question is how does that option get exercised. Is it up to the judge, can either party opt for it? Does it take both parties to agree to it? The key thing to get the advantage of an overall cost reduction and time saving in the overall dispute resolution process is that one party in a particular case cannot frustrate access to the opposition system. Because what we can agree to ahead of time is that those of us who are in the marketplace of IP is that we end up on both sides of this, and we can see a net savings. But when we are in a particular dispute, somebody says, "We will have a five percent better advantage, we think," and I will tell you, "I think most of those calculuses are wrong in this form versus that form,"

then you will have a breakdown and there will not be resort to an opposition system and you won't get the advantage of it.

Tig concern, it has been raised: will patentees be harassed in an opposition system? There are lots of ways to deal with this. The first is adopt the time limit like EPO does. Proposals are one year out there. A concern here is, though, what do you do about the invention, in particularly you will see this in biotech, [and] its commercial relevance to you, [since the commercial relevance] does not come about for five or ten years, and you never bother to look at this thing to see whether it was truly something worth spending the money in opposition. Maybe the way to do it is that you award costs. That would, I think, go a long way to eliminating harassment and you could say it is in any opposition filed more than a year after the patent is granted, so it truly has to be a rational business decision to bring the opposition and you would as a business person think you have some pretty good grounds to do it. An alternative is to look at some sort of standing requirement, again, perhaps maybe after one year passes. I am a little concerned that it will be anything close to the case or controversy which prevents people getting access to the courts for DJ [declaratory judgment] actions, as they do today, because that has been a real problem in the biopharma industry. You do not have infringement during the Hatch-Waxman Exemption which goes on for years, so there is no reasonable apprehension of suit, yet you are supposed to be investing hundreds of millions of dollars in bringing a product to market, and you cannot test a third party patent that might be in the way.

So, finally, maybe some form of *res judicata* is something to think about. That is, it really would depend very much on what the rest of the system looked like and what the other options were for doing validity in district court.

FARRELL: Thank you. As Rob [Merges] mentioned at the beginning, this is a presentation of parts of what will be a joint paper between myself and Rob [Merges]. To give you the bottom line in a sentence, there are sound systematic economic reasons to believe that the incentives to challenge and defend patents in litigation are often, not always, but often, wildly skewed, and the result of that is, if you are tempted to think that you can repair rational ignorance or any other kind of ignorance or inevitable imperfection at the Patent Office through the litigation backstop, you are badly mistaken.

Why do the incentives to challenge and defend patents matter? We have a cheap, secretive error prone, according to many people, PTO process, and the question is: is there a well functioning backstop for this? There are other backstops, there are other processes, . . . the main one of

those, as I understand it, is litigation. Litigation is costly and I will say in a minute why I think that is important for the analysis. It is not for the obvious reason that we end up spending a lot of money.

. . . Rational ignorance and its cognates may be fine if litigation works well. Whether litigation works well depends on the parties' absolute and relative incentives to fight in litigation. Now let me explain why that is true. In order to get the right answer, you want two things: one is both parties have enough incentives to bring forward a reasonable and adequate amount of evidence, and the other is you want the incentives to be broadly balanced so that, loosely speaking, the decisions are apt to follow the merits rather than being biased in the direction of whichever party has stronger incentives to bring forth all the available evidence. Suppose you have a lawsuit between two parties, one of whom very much wants to win it and the other of whom, for some reason, does not really care very much. Even if the latter is in the right, he will probably lose because he will not spend the resources to bring forward all the evidence and put on the best case. Now you might hope, if you are a real optimist, that the court system is good enough that, even if one litigant does not care as much as the other litigant, the fact that he is right will make him win. If you think that, and I am probably pushing on an open door here, then you will predict and expect that people won't spend very much money in litigation, and that the amount of money they spend in litigation will not vary according to the stakes. Those predictions would be false. Therefore, you have to believe that the incentives do matter for the average outcome. And therefore, if as they claimed on the title slide, the incentives are wildly skewed, you will tend to get the wrong answer, on average, coming out of litigation. That is a problem if you are thinking of litigation as any kind of good back-up for an imperfect administrative system.

What do I claim are the relative incentives? They vary. But what I want to say is that in a widespread class of cases, I would venture to guess in the average case, the patentee cares much more than the alleged infringers. And I claim that this is apt to be true for two reasons, one of which I learned yesterday is actually in the literature, and the other of which, as far as I know, is not. So the first one that is fundamentally in the literature, [and] Joan Miller from Lewis & Clark has been at the forefront of discussing this, is that when there are multiple alleged infringers, a validity challenge is a public good among them. That follows from the Supreme Court's *Blonder-Tongue* decision, which basically said that if one alleged infringer gets a patent overturned or ruled invalid, that becomes truth which the others can call upon. And what that says is suppose you have five alleged infringers, each of them only have one-fifth of the incentive to

challenge the patent, that the patentee has to defend it. Five is probably a modest number, but let us take five because it actually fits with the numbers that I have messed around with. A factor of five is a big deal, given that the evidence on litigation costs suggests that spending fifty percent more than your opponent is going to make a significant difference. What is that evidence? If that were not true, then people would not end up spending a significant fraction of the amounts at issue in litigation, and they do. So a factor of five, or whatever it is from the public good component, is a big deal.

Now, by the way, the public good issue is reinforced to the extent that the patent holder can, as my understanding is they quite often do, put it about that they will discriminate based on challenges, or based on how quickly and tamely an alleged infringer takes a license. It is quite cheap for a patent holder to charge somewhat less than the otherwise profit maximizing price for a license to tame alleged infringers, and somewhat more to feisty ones. It is quite cheap because the profit maximization curve is flat on top, and therefore departing in either direction costs relatively little. . . .

The second point, the one that as far as I know is not in the literature, is when these multiple alleged infringers are not just independent multiple alleged infringers, but compete in some product market downstream, things are worse. The reason things are worse is, if one of them successfully challenges a patent, not only does it reduce its own costs, but it reduces the costs of its rivals. That pass-through, it turns out, has a huge effect on the incentives to challenge. The alleged infringers may bear little of the excess costs of a questionable patent, even collectively. Who bears the costs? Downstream consumers.

For example, suppose you have a billion dollar industry, suppose a five percent royalty is being demanded on a questionable patent, suppose there are five equal-sized firms in an industry that is using this technology, and suppose that the demand elasticity in that downstream industry is two. Then the patentee's stake in defending the patent is \$50 million, the downstream industry's total stake in challenging the patent is not \$50 million, it is approximately \$6 million. In other words, this pass-through thing in this particular case is a factor of more than eight, and then there is the further factor of five from the public good phenomenon. So what?

Based on the evidence from litigation costs, this is going to mean that the patentee is going to tend to win if the merits are broadly equal, challengers can only be expected to win what should be really quite easy cases. Among the likely results? Too few challenges, inadequately pursued, too few bad patents overturned, and downstream final consumers

bear the brunt. It is worth noticing that the role of litigation costs here is not so much that these challenges are costly when undertaken, it is that they may be more costly when they deter litigation. What to do? One thing you could do is to have cheaper post-issue challenges. That will help if what is going on is that the general expensiveness of litigation makes the ratio of incentives matter more, in other words, if a cheaper process makes the ratio of incentives matter less. It could well be true, although it is not analytically obvious. Another thing you can do is have a bounty system proposed to strengthen the private incentives to challenge, you could allow multiple challengers to get together. A third thing you could do is to accept that the adversarial approach is deeply flawed and say that pushes us, despite what you might otherwise hope, to try to improve the PTO. And a fourth thing you could do is to have these competition agencies, who should be in the business of defending final consumers, do so. Thank you.

NORMAN: I want to say thank you to the folks at Boalt Hall and from the FTC for inviting me here to speak, and at least pass on some information related to how some in the industry, not all, feel such a post-grant opposition procedure should be established. I would say that, coming from the pharmaceutical industry where we live on a daily basis with the Hatch-Waxman Act such that we are absolutely, unequivocally guaranteed that four years post-product launch we will be involved in a patent challenge from a generic competitor, which carries with it a bounty of the ability to obtain a 180-day co-exclusivity, we are talking about a system which is tried and true for eternal litigation. And my life is little more, anymore, than litigating patents in federal district court.

However, I have had some experience over the years in dealing with reexaminations and reissues in the United States, oppositions in Japan, and oppositions in Europe. I would be here today to advocate for a United States opposition system that is not as tightly wound as the Japanese, but perhaps a little more tightly wound than the European system. The elements that I believe would be most desired in a U.S. post-grant opposition system is one that has a set period of time in which to request an opposition. In Europe, we have nine months. Others have proposed here in the United States [that there be] twelve, yet other commentators have come forward and said, above and beyond the twelve months, there ought to be some period during the entire pendency, the life of the patent in which a challenger can come forward and request an opposition much along the lines that you could get declaratory judgment jurisdiction in the federal district court to bring everything back to the Patent Office and run one of these sort of cheap validity—supposedly cheap validity challenges—before the USPTO. I would be less in favor of something like that because

of some questions that I will raise later, much of it dependent upon the diceyness of declaratory judgment jurisdiction as it is currently being interpreted within the federal district court system.

I would say that, of course, all evidence needs to be brought forward at the beginning of the opposition, the patentee ought to have the right, of course, to be able to respond in kind. Discovery should be allowed, but ought to be limited to some reasonable manner. The vast, vast, vast majority of expense that arises from federal district court litigation in the United States arises from discovery. For instance, now that everything is finished, I can tell you that I ran a lawsuit for Eli Lilly & Co. a couple of years ago where the Federal District Court Magistrate ordered us to produce to the opposing party every document within Eli Lilly & Co. that had the name of the chemical compound on it. Try as we might, we could not get the Magistrate to back off that, and so we ended up producing 1.9 million documents to the opponent, less than 5,000 of which were ever found to be relevant and introduced into the court record. It is the outrageous expense of the way the United States Federal District Court system wants to run its discovery that is causing all of the problems that we all admit to now in litigations. However, before the Patent Office, we do need to have some sort of limited discovery, [since] the Patent Office has experience in interference proceedings whereby the Administrative Patent Judges at the Interference Board certainly know how to run appropriate discovery within the confines and the bounds of what would be truly relevant to the issues at hand. It is quite important that the Administrative Patent Judge be legally trained to the extent that, if we are going to follow the Federal Rules of Evidence and, as most people say, we ought to get to some level of estoppel, whether it be issue or claim preclusion, but some sort of estoppel arising out of a post-issuance opposition, then it is quite important that we actually follow the Federal Rules of Evidence and have a judge that is willing to enforce those.

Have a time limit. Everyone is saying a year, that would be wonderful. J.R.R. Tolken says, "The tale grows in the telling." So do the expenses in litigation and, therefore, a time limit that would be extendable only for cause would be most important. . . . [W]e ought to probably have a twelve-month period in which to bring the opposition, and then be limited thereafter to such an extent that, once a patent is past this twelve-month period, there ought to be some level of certainty, as Bob [Blackburn] raised, in the patentee's life, in the patentee's business, to be able to determine whether or not you want to draw up an additional \$100-150 million building, a pharmaceutical plant, to make this chemical compound. It would be nice to actually have a little bit of assurance that there are going to be very,

very limited opportunities for those coming in to make a challenge to actually pull you back into the Patent Office.

Another huge question is, in the event that we end up going towards a scheme whereby you can be brought back to the Patent Office, how do we deal with the status quo arising from the fact that many times, if someone is going to be infringing your patent and you want to bring suit against them, the first thing you need in order to maintain your business model is a preliminary injunction. If you get a preliminary injunction, then you are sent back to the Patent Office for post-grant review at any time during the life of the patent. We need some more rules and regulations and some more law around what needs to be done, how we are going to handle maintaining the status quo during the pendency of that if the Federal District Court Judge gives up the jurisdiction of the case and sends it back to the Patent Office.

Again, we like to see our Federal Rules of Evidence followed, we want to see the appropriate procedures followed. I have been involved in European oppositions, unfortunately, where I showed up for the day of the opposition and my opponent walked in and actually had a whole new stack of prior art and a whole new set of briefs, and handed them over in absolute violation of all the rules and regulations set down by the EPO. Nevertheless, the Opposition Division accepted it, and I spent the remainder of two days arguing against something that was nothing more than an ambush.

Along the same lines, too, we need to be concerned about how we are going to deal with expert testimony and whether or not you are going to have the opportunity to cross-examine an expert who might give an expert's report because, again, before the EPO, I have walked in before and seen a Ph.D. sitting across the table from me when I did not bring anyone at all, and found that the Opposition was quite interested in hearing what the Ph.D. scientist from my opponent's side had to say about the relevant level of ordinary skill in the art. I say this prevents reliance on the "astrology factor" because I was actually in litigation in the U.K. one time and mentioned from the witness stand that my client had taken advice before going into an opposition in the European Patent Office, and the good judge in the U.K. said, "From whom did you seek that advice? An astrologer?" Sort of laying out how the U.K. court system, at least, feels about the European patent opposition.

A very key element that we ought to discuss is the right to amendment and whether or not this ought to be a right from the immediacy, how it ought to be dealt with, whether or not broadening amendments ought to be allowed. My stance on this would be that, from the time that you get out of

the examination and you are in the opposition, you ought not be allowed to have a broadening claim as you are going forward so that the public can have some right of reliance upon exactly what has been going on in the Patent Office and whether or not the public can in any way make its decisions based upon the scope or the breadth of the claim. To guarantee a speedy resolution of the opposition, the patentee should be allowed to amend the claims only once. I say this, again, because I was in Europe one time when we spent two days going back and forth with—I think we got up to twelve auxiliary requests—and it became apparent to me that the Opposition Division was not really so much looking out for the public interest, but instead was hearing from me, hearing from the other party, seeing whether the other party could come up with an auxiliary request that I might be happy with, and vice versa. Actually the Opposition Division was acting as a mediator, which I think, if we want to use this as administrative action, may not be something that we would want to see occurring here in the United States.

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KUNIN: I, too, as the other speakers have indicated, appreciate being given the opportunity to speak at this conference today. What I would like to do initially is say that I think the Office is doing a pretty good job of examining patent applications. I want to thank Ron [Laurie] and Todd [Dickinson] for defending us at the earlier panel, but nevertheless, as you can see from the Office's *21st Century Strategic Plan*, we have a number of quality initiatives underway so that we can do an even better job.

In our Strategic Plan we have shown support for establishing a post-grant review system in the United States. We have done some comparative studies with the EPO and the JPO, and I would tell you that we also find art they do not find, so consequently I think you need to understand that it really is sort of a distribution, if you will, in terms of relative examination.

I think the important thing, with respect to any opposition or post-grant review, is that it be a process which is predictable, reliable, and timely. I do not think it ought to be an examination system, it ought to be a low cost administrative proceeding conducted at a renamed Board of Patent adjudication, done with special dispatch by a skilled Administrative Patent Judge, namely the people of legal and scientific competence as set forth in section 6A of the statute. One of the things that I think we need to do to make it attractive is to remove the provisions that currently exist in 315 and 317 on issue preclusion as to issues that could have been raised during the proceeding, at least during the first period, whether that be nine months or twelve months after the patent was granted or reissued. I think the one thing that we do need to recognize is that it is probably desirable

for us to have a system that avoids patent owner harassment, but at the same time truly incentivizes people to challenge patents which they feel are weak. This issue preclusion, an estoppel feature, is one that really needs to be given serious consideration. Maybe after the first year, if you can challenge after one year, you should have perhaps a substantial economic interest and maybe this higher level of issue preclusion would be applicable. I think we also need to make sure that these proceedings are ones that avoid some of the merger problems with other proceedings such as reissue and reexamination, and they need to provide a sufficient period of time for the challenger to reply to patent owners' responses.

Unlike reexamination, I think it is very important for us to permit the challenger to challenge claims based on all conditions of patentability. This will get a complete resolution of validity issues. Also, to increase reliability, these proceedings ought to be conducted using e-processing tools and techniques. The best approach, we feel, is one where we establish a proceeding that, once it is initiated, could be completed within twelve months. We do agree with the premise that at least one narrowing amendment should be permitted by the patent owner, perhaps a further amendment only on a showing of a good cause, and this would be entirely controlled by the three-judge panel, the Administrative Patent Judges.

Also, probably, there should be an opportunity for settlement in a situation where maybe there is a proposed narrowing amendment that could be handled by way of reissue and, if such an amendment were provided in a reissue, that the parties may choose to settle the *inter partes* proceeding. Probably the single best feature of our current reexamination system is an *ex parte* reexamination where the owner, him or herself, can come back to the Office of Administrative Proceeding to correct or strengthen the patent. Even with respect to an *inter partes* reexamination, it gives the opportunity for the examiner to hear both sides of an issue, to make a better informed decision and, of course, the appeal process is much faster than getting to the Federal Circuit in litigation. Reexamination really is nice where there is what we call "killer" 102(b)-type prior art that can be introduced and have a significant impact on the proceedings. Probably one of the worst features that we have heard is that there is no opportunity for the third party requester to obtain any discovery or cross-examination in affidants or declarants when evidence is presented by the patent owner in support of patentability.

I think, finally, what I would like to indicate is that we are currently looking at how to put together a legislative package that would indeed establish a post-grant system that has all the various benefits of those who advocate some of the best features from systems around the world, and to

avoid those things which have been already mentioned by other members of the panel which make it somewhat unattractive in other parts of the world. I think we can do this right. It is possible that this can be something that will either metamorphosize the existing *inter partes* and reexamine into a more workable system, or stand as an additional aspect of the U.S. patent system as a way to administratively correct patents in a way that can be substantially at lower cost and quicker, and truly address some of the issues that really led in the thought processes that went into some of the early President's Advisory Commissions on Patent Law Reform, one in the early 1990s by the then Secretary of Commerce, and see that perhaps this could provide us a good opportunity to further reform the system to sort of make good balance between what can be done in the examination of some 350,000 applications a year. Then for those that really will have a commercial impact, they could go through a second level of review in order to get the kind of scrutiny that ought to be provided, that just cannot be provided by any Patent Office in the limited amount of time you have when most people want the timely issuance of valid patents. I think the aspect of having high pendency is also a problem in relationship to good quality. We have to have a system where at least the initial examination is very thorough, but also in a timely manner to help provide greater certainty to those who are innovating and seeking protection, as well as their competitors. Thank you.

....

FARRELL: So the question is, is there an additional problem caused by the fact that in some sense a bunch of claims can be made and an alleged infringer has to prevail on all of them, and in a context with error, that makes it almost impossible to expect to prevail. I am not sure what I think about that. If all the claims were correctly patented, then you ought to have to prevail on all of them Is there an increased probability of an incorrect finding of validity based on the fact that there are multiple things? I am not sure. It does make some intuitive sense, but I do not have a very firm intellectual grasp on that question.

MERGES: . . . [I]t is an interesting question. If you sort of set it up as an introductory probability problem and you say, "Well, gosh, there are eight patents and they each average, you know, twenty claims," it looks pretty hopeless. But it is interesting that, you know, here is one where the cognitive scientists have really predicted reality pretty well. What district courts actually do is they usually boil it down and they say, "Which of these eight patents are you really putting your money on? And which claims within them are you really putting your money on?" In other words, people are kind of boundedly rational, and district court judges

have only so much patience and time, and so what they tend to do is kind of boil it down and say, “[What is] the key patent and what are the key claims because I just do not have nine years to process the case.”

One way to kind of transpose your question is to say, “How would we handle that distillation process in an opposition setting? Is there a way to focus the inquiry in a similar way?” And it is a good question. I mean, I think it is something that would have to be thought through; if we could do the same thing because there are just sort of inherent limits on how much people can process and it shows up in the system, even when you are spending \$8 million, because it comes down to one or two decision makers and they are just not unlimited. You know, it is not the Cray-1, it is a certain judge. That is just the way it goes.

FARRELL: Can I just jump in again on that? I have come across cases where a patent holder has announced that it had multiple patents and that it was not going to litigate all of them in any one case, and perhaps that is a response to this distillation process. And that, I think, puts [the] question back on the table in a more forceful way—but I still do not know the answer.

. . . .

FARRELL: The question was what are the relative incentives if you have basically a patent thicket with multiple patent holders. I think the spirit of the question was these multiple patents are all blocking on the things that the alleged infringers want to do. I do not know the answer to that; it is a good question. I think one observation would be that, as to any one patent, if you do not have the public goods and pass-through issues in strong degree, then there is a certain symmetry because the two are potentially fighting over the same amount of money if you are just dealing with royalties. If you are dealing with injunctions, then, for the alleged infringer, to win one battle is only to be put into another battle and I think there will be circumstances in which that is a rather weak incentive. So I think that might lead to some results parallel to the ones that I was talking about, but I do not know.

MERGES: I think we should—we have got to hear from the biotech and pharmaceutical people on that question because that is kind of something that you guys face all the time, multiple inputs in the product development stream and lots of claims. . . .

BLACKBURN: Well, for the subject matter of the panel, you would want an opposition system, a cheaper faster opposition system to deal with those. And it would be that simple.

NORMAN: Right. And Bob [Blackburn] and I could get even chum-mier spending time before the Opposition Division. But there is sort of a dichotomy if you look at it just from the biopharma issue, from the biotechnology side where we do have thickets. If you look at the pharmaceutical side, often you find savannahs and that is not my quote. Bob Armitage said that a while ago. But in the straight pharmaceutical industry, you end up having, because of Hatch Waxman, having to list your patents in the Orange Book, and if you open up the Orange Book and look at any given drug product, you will find very often only one or two patents that have been listed. Now, admittedly, you will find some that have twelve or thirteen or fourteen, but, again, usually the biotechnology and the pharmaceutical industries are peculiar in that, because of the horrendous expense of bringing a product to the market, very often people are not willing to license a piece of their technology because you need that total market exclusivity in order to make back your investment on doing all the research and development on the pharmaceutical product itself. But, again, an opposition would be quite nice to take care of these things one or two years out.

....

BLACKBURN: Well, I was actually interested in that number, too, and not so much as relative to reexamine. I think the explanation for the reexamine system being underutilized in the U.S. is because it is such a stacked deck for a challenger. You have an option of keeping your counter dry for district court litigation where you have more defenses and perhaps a better chance of bringing it about, so that is why, when you give people an alternative on an individual case, they are going to make that kind of decision. But I am certain that, in part, the reason there is more or vigorous opposition practice in Europe is, in part, because of the lack of some other reasonable alternatives at some level, and also a perception of a fair process—or fair enough. The thing that always sort of strikes American lawyers who go over there, who have been trained in American concepts of due process, it is almost like the cultural equivalent in some countries of somebody trying to shake hands with their left hand. It is just really odd what they consider . . . is a fair process. I actually take, for example, Steve [Kunin]'s proposal that there would be one opportunity to amend the claims. And I am a little bit concerned about discussions of the opposition system that we are thinking about implementing, or might adopt here, to start immediately dropping to that level of detail because I think there is a lot of other issues that have to be decided about whether that is a fair rule. For example, I do not know how you can say you only have one opportunity to amend if the other side can bring in new arguments, for example.

And they say, “Well, if you don’t, we will make it where the other side can’t bring in new arguments at a certain time,” but is that actually the best result to a quality output? Or is a fair iterative process something that we ought to look at that keeps within time lines? But, anyway, that is kind of a long answer.

. . . .

MERGES: . . . The obvious answer is that a lower cost system is going to encourage more participation and include more public interest components than a high cost system. The one issue that you might consider in terms of design is whether or not the public agency can step into the shoes, maybe the PTO or somebody can step into the shoes of a private agency in the face of a settlement. And the settlement question is a really tricky one when you look at this. And so interesting problem. Dietmar [Harhoff] wants to address it.

HARHOFF: Of course, the cost issue is there. Let me tell you that in Europe there is an institution, Article 115, European Patent Convention, which allows third party observations, some *ex parte* procedure, and you come out with exactly or very very close to the same participation rate as with U.S. reexaminations. So, it is really the *ex parte* versus *inter partes* issue that is driving that. The other thing is, of course, and that addresses some of Joe [Farrell]’s concerns, Factor 5 is fine, but if you make it Factor 5 on a low cost figure, it has considerably less bite, and that makes it even possible for organizations like in Europe, NGOs, Greenpeace, some animal protection agency, the Free Software Institution in Europe, to oppose certain software patents. And they have been successful to some extent.

Now, the settlement issue is, I think, something that one should worry about, and one needs to go away from the classical interpretation of settlements as something that is strictly benevolent because in this case it is not. It is at the cost and the expense of society. If Rollet [phonetic] has a patent and I have the information to shoot it down in opposition, and you give us enough time to figure out how to deal with this, and he gives me a license and I shut-up. That is a wonderful case of dual monopoly and we do not want that. So be careful about the settlement issue. Within nine months at the European Patent Office, the averages that I hear from the patent lawyers, when I talk to them after two beers or so, is that there is a settlement rate of about 20-25 percent of the cases that do not even hit opposition. Now, that is low by U.S. standards in litigation, but I think it is an issue that you really should watch, and my proposal would be to make it a short time for filing—that is why my three months came up—give the parties some more time to develop the evidence then, but allow the U.S. Patent Office to pursue the case in and of itself if it wants to, because it is

the Patent Office's task to make sure that patents that should not be there should not be there.

MERGES: Joe [Farell], last word.

FARRELL: I would just like to reiterate what Dietmar [Harhoff] said about settlements. The most affected, or often the most affected people, are not at the settlement table, and the excessive incentive for cozy settlements is fundamentally the same as the incentive that I was talking about to not bring a challenge in the first place.

MERGES: . . . Thank you.

IV. LITIGATION PANEL (INCLUDING PRESUMPTION OF VALIDITY)

Panel:

Pam Samuelson, Boalt Hall School of Law, University of California, Berkeley (moderator)

Mark Janis, University of Iowa College of Law

Mark Lemley, Boalt Hall School of Law, University of California, Berkeley

Lynn Pasahow, Fenwick & West LLP

James Pooley, Milbank, Tweed, Hadley & McCloy LLP

Edward Reines, Weil, Gotshal & Manges LLP

Arti Rai, Duke Law School

SAMUELSON: I am Pam Samuelson. I am one of the Directors of the Berkeley Center for Law and Technology, and I have the great good fortune of being the moderator for this panel on litigation issues. . . . This [panel] will be a little bit more of a potpourri than the previous two sessions, but I think nevertheless will both deal with some of the issues that the FTC has raised about the presumption of validity, which obviously has gotten a lot of people's attention, but also will cover some of the issues in the National Academy Report because subjective factors were both discussed in the FTC Report and also to some degree in the National Academy Report that is coming out on Monday. So we will have a chance, I think, to sort of visit quite a few issues in the course of this panel. . . . First we will start with Mark Janis who will be talking about presumption of validity issues.

JANIS: Thank you, Pam [Samuelson]. Thank you for the invitation to come here. . . . I apologize if [my remarks are] too fragmentary. I will use

the usual Academic's excuse—there will be a paper and you can read the paper—and that will be very coherent, I promise you.

I keep hearing all this talk lately about trolls, and at first I thought, “I do not need to pay any attention to this, I am from Iowa and we have no trolls there.” Then I began hearing that these were actually patent trolls. That got me interested and here is what I read in the transcript of a Congressional Hearings testimony within the last few months: “Patent trolls are patent system bottom feeders who buy improvidently granted patents from distressed companies for the sole purpose of suing legitimate businesses.” And this brings us to the topic at hand because these patent trolls, according to the testimony, have the presumption of validity on their side and, so, clearly, they must be stopped.

This is where the FTC comes in. It is [up to] our federal government here to either save us, or at least here to study the matter very, very thoroughly. And it should be studied very thoroughly because this is a serious matter, not just a fairy tale matter at all, this patent validity litigation and patent validity disputes. What I would like to do . . . is to think about two functions that the presumption of validity might perform, and then I want to argue that the FTC's proposal to reduce the standard to preponderance for overcoming the presumption of validity might overlook the first function. And as to the second, I doubt that I will have time, but I have got a few things to say about that, as well. As to the second, there are arguments that are a little more plausible.

Let me tell you what I mean by two functions that the presumption might perform. Here is what the Supreme Court has to say on the matter, not as to the presumption of patent validity, but as to presumptions more generally. [Presumptions] might sort of do two things: 1) indicate the relative importance that society should attach to the ultimate decision—I want to call that the “expressive function”; and 2) allocate the risk of error usually as between the litigants—I want to call that the “instrumental function.” And it is ordinary to talk about the presumption, and especially the presumption of patent validity in terms of the instrumental function, the second way. And I think that is what you find in the FTC Report and, in fact, that is what you find in the literature—a lot of the literature—about presumptions.

For example, in a criminal case the State should bear the risk of error, and so we have a strong presumption of validity, beyond a reasonable doubt standard for overcoming [the presumption]. [In a] civil case for damages, parties should bear the risk of error equally, hence we have a preponderance standard. We can build on this, and have a nice neat menu of options—like picking the wine for dinner where we have [an] ordinary

civil case, or we have a criminal case, or we have some kind of case in between that gets a clear and convincing standard. And the FTC Report, I think, makes plausible arguments in this regard. It says the patentee should not enjoy the benefit of a strong presumption of validity because we have concerns about the quality of patents, so therefore the patentee should be made to bear a little bit more of the risk of error, to put it in those kind of terms. The FTC also says, and I think this is important, that the clear and convincing standard might facilitate anti-competitive uses of patents. And that is interesting because it shows us that there are obviously—and we have heard about it already today—third party effects to be concerned about here. [It is] not just a matter in patent cases of allocating the risk of error between the two private litigants, third parties have interests as well. Maybe that would lead us to think that the clear and convincing standard would be inappropriate.

And those proposals are fine, but I want to turn back to the first function, the “expressive function” of the presumption of validity, and make a few comments about that. First of all, what do I mean by the expressive function, exactly? There are a couple of things that one could mean. One is that a rule is expressive in the sense that it is purely symbolic; it is not designed to accomplish anything except make a statement, even if it is never enforced. One way to think about it [is if I made a] rule on flag burning or something like that. Even if you never expect it to be enforced, the fact that [my rule] makes a statement is significant. Another example, or another variety, is a rule whose main significance is as a statement of aspirations, or a statement of principals. Even if that rule is designed to accomplish something, we do not necessarily expect to find very sharply [defined] incentives and disincentives, nor do we expect that we have real precise control over the level of enforcement, it seems to me that is another way to think about a rule that is expressive.

Let me suggest a few insights that we might gain from looking at the presumption of patent validity from this perspective, as a statement, as a symbol. One, the fact that we have a presumption of validity might be as significant, or more significant, than the precise verbal formulation that we use for the standard of evidence for overcoming the presumption. Second, while it is easy enough to manipulate the words of—the precise verbal formulation—the words of the standard, it might be very different and a very subtle exercise to manage the message, the overlying message that is embedded in this presumption of validity. And then, thirdly, manipulating the words without paying attention to the message, the overlying message, might lead to some real surprises. Ironically, it might lead to changing nothing, while changing everything.

What do I mean by that? Suppose you change to a preponderance standard. Is it really going to make a difference, really going to make a difference, in the outcome of judicial decisions? Or will judges go on and do the same thing they did before and change the words? I think there is at least some question about that. So that is the changing nothing part. Yet, on the other hand, the other actors in the system, at least in the short term, might perceive that the overall message has changed dramatically. Patents are less secure, the patent system deserves less respect, and so forth, and the consequences that flow from that. So, it might be counter-productive at the end of the day.

Let me just explore that a little bit by getting down to cases. First, early Federal Circuit cases dealing with the adoption of the clear and convincing standard. If you think about this, before the creation of the Federal Circuit, most courts already used the clear and convincing standard for overcoming the presumption of validity. A vast majority of them did, yet the overlying message was that the patent system was in distress, that the presumption was meaningless. There is a disconnect between the words that we use and the overlying message. Now, to be certain, some courts were also holding that the presumption of validity did not apply to newly introduced prior art, that certainly contributed to the message. After the creation of the Federal Circuit, the Federal Circuit adopted the clear and convincing standard. You could look at the words and say, "Well, that is hardly a watershed event, there already was the clear and convincing standard." The Federal Circuit also spoke to this issue about newly discovered prior art and it said, "Well, the presumption still applies, but yet it may be a little easier to overcome the presumption." You could look at that and say that is really no change from the law before, yet if you look carefully at the tone of these cases, and if you combine that with other things that were happening in the patent system at the time, it is very clear that the message had changed. And we see this in the FTC Report today and probably all of us would say the Federal Circuit has strengthened the presumption of validity and this has changed the message.

Now, this can work the other way—that the words can stay the same and the message can change. Look at the *Rochester* case where the court says a patent can prove its own invalidity, and do so clearly and convincingly. The words can stay the same, but the message there is a little bit different. Look also at trademark cases. I clearly do not have time to talk about those trademark cases where the preponderance standard is used. Take a look at a case called *Burke-Parsons-Bowlby*. It is an older Sixth Circuit 1989 case, and you get a little bit of a scary view as to the use of a

preponderance standard for overcoming the presumption of validity—very difficult to figure out what is going on there.

Bottom line here, changing the words of the standard might not make a lot of difference in case outcomes. At the same time, the overarching message that the presumption of validity sends in the patent system is a very potent indicator of the overall health of the system, and I worry a little bit that by choosing the presumption of validity as a point of policy reform. The FTC might not have chosen wisely. They may create more of an adversarial tone than I think they ever intended to do. Now, other comments will have to wait. So thank you very much.

SAMUELSON: Our second presenter will be Arti Rai.

RAI: I am going to focus on the presumption of validity as well, although perhaps I will take a little more sanguine view of what the FTC has done than Mark [Janis] did. In talking about this recommendation, I will also end up within ten minutes looking a little bit at the FTC's recommendations on the nonobviousness standard and on opposition proceedings, believe it or not. So bear with me.

In my view, I think the FTC has actually made some very interesting recommendations with respect to all three issues—the presumption of validity, nonobviousness, and opposition proceedings—and they can be viewed as a coherent whole from a procedural perspective rather than a substantive perspective. I will explain what I mean by how they can be viewed as a coherent whole—but the basic insight is that I think they can all be understood by looking at the comparative competence of the various institutional actors within the patent system. And those of you who have read my work know I love to talk about institutional competence, so you will hear a little bit more about this today. So with some caveats that I will talk about more towards the end, it seems to me that, in the context of the ordinary patent that is issued, there is good reason to set the presumption-ability at a little bit of a lower level than it is currently set.

Now, Mark [Janis] has made some interesting points about what will be the actual impact of the FTC's proposed change, and I think that is actually very interesting to consider empirically in the context of all sorts of different areas of law where presumptions matter and people have done empirical work. I think we should continue to do that in this area as well. But for all of the reasons that the FTC and many, many others have pointed to, perhaps Mark Lemley most eloquently of all, ranging from burdens of proof, to incentive structure, to workload, to the *ex parte* nature of the proceeding, a patent examiner's decision to issue a patent should probably not be the last word on its validity. And this is true, I would argue, even despite the fact that a patent examiner is probably the person in

the patent system, at least the legal actor in the patent system, that is closest to being the all important PHOSITA.

Even despite that fact, I think that patents that are issued are not necessarily—one should not necessarily give much deference in the context of issued patents, which brings me to my next point. In contrast, when the patent examiner denies a patent, I think there is some reason to give weight to his or her status as a quasi-PHOSITA, which is particularly true in biotech, for example, where the patent examiners are fairly well-steeped in the technology. And, to put it mildly, none of the various institutional pressures that cause the issued patents to be somewhat problematic come into play in the context of denials. In fact, if anything, all the institutional pressures run against denials.

How does this all relate to the FTC's recommendations in the context of nonobviousness and opposition proceedings? I would interpret the FTC's discussion of the nonobviousness requirement as having been prompted by decisions by the Federal Circuit that reviewed the patent examiner's denial of a patent and simply refused to defer to the factual knowledge of the patent examiner in those contexts. I would argue, and have argued, that the Federal Circuit should in many circumstances, if not most circumstances, defer to a PTO fact-finding in the context of a denial. There [are] particularly good reasons for showing this kind of deference when we are talking about a PTO's determination that a particular combination is obvious because, for all the reasons that were discussed in the first panel, a PTO examiner is likely to be the person closest to the PHOSITA in terms of thinking of combinations of references. So in the denial context, there is good reason to show deference, and in the issuance context, less reason to show deference. To use the words made popular by Condoleezza Rice recently, we should have an asymmetric response to the PTO's actions.

Unfortunately, from the perspective of institutional competence thus far, the asymmetric response has been precisely backwards. We have tended to show more deference because of this high presumption of validity to the PTO's actions in the context of an issuance, rather than the context of a denial. So my view is that the FTC's recommendations in the context of nonobviousness and opposition proceedings, particularly nonobviousness and then also its recommendations in the context of the presumption of validity, are leading us towards asymmetric response in the right direction: more deference in the context of denials and less deference in the context of issuances.

What about opposition proceedings? I did mention I would talk about those. And what about the presumption of validity to attach in those con-

texts? Here, I think, the FTC has been pretty careful as well. If you look carefully at the recommendations, we have said that the decision of the PTO in the context of an opposition proceeding should be reviewed deferentially always, whether the PTO ultimately decides to grant or to reject. I think that is absolutely right as an institutional matter because if a patent has been looked at from a comprehensive adversarial perspective in the context of an opposition proceeding, there should be deference, not only on the fact-finding, but on the legal conclusions as well. And for what it is worth, for those of you who remember your administrative law, this is perfectly in keeping with the way that the Supreme Court has administered the *Chevron* deference standard, most recently in the *Mead* case. We would also nicely bring patent law into conformity with administrative law, which it often is not in conformity with.

I do have one small issue with respect to the FTC's recommendations, well, perhaps not such a small issue, but it is an issue that I must admit I also do not have a good answer to, and that is the following: so we put in place robust opposition proceedings and there is lots of deference in the context of those opposition proceedings, not so much deference in the context of an issuance, and a fair amount of deference in the context of denial. What happens if a patent goes through the system and just happens not to be challenged in an opposition proceeding, and therefore falls into the pile of patents that are subject to a thin presumption of validity? And what if the reason for its not being challenged was that it was simply a very solid patent? Should it be put into the same pile as all those patents that are subject to the thin presumption of validity because we think the patent issuances are somewhat suspect?

I do think that is a problem, but as a practical matter it may be less acute a problem than one might think at the outset. For the most part, I would imagine, although of course we are all speculating here since we do not have anything remotely comparable to an opposition proceeding. On the other hand, the European experience does tend to suggest this as well, [and] I would imagine that the most important patents would, in fact, be the subject of an opposition proceeding, no matter how solid they were. That is, that there would be some piece of prior art that somebody would want to at least try to run by the patent examination procedure in the context of the opposition proceeding with respect to really important patents. So for those who are concerned, particularly in the biotech industry which I study, [about] what will happen if we have a lower presumption of validity for most patents, particularly for biotech where the patents really matter, or pharma[ceuticals] where patents really matter, well, I would suspect that most of those patents would go through an opposition proceeding, and

thus be subject to a very high presumption of validity. But that is a problem and one that is important to think about. One way of tweaking the FTC's recommendations a little bit, perhaps so as to not render the thin presumption of validity entirely meaningless, would be perhaps to have a higher presumption of validity even in those contexts where the patent has not gone through an opposition proceeding for situations where there is no new prior art presented, so as long as the litigant does not present any new prior art, the patentee still enjoys a fairly high presumption of validity. So that is one way of tweaking the FTC's recommendations a little bit.

That is my view of how the recommendations with respect to presumption of validity, nonobviousness, and opposition all cohere from an institutional competence standpoint, with the slight tweak that we may not want to take the presumption of validity too far down for your ordinary run-of-the-mill issued patent because it may not have been subject to an opposition proceeding because it just happened to be very good. Thank you.

SAMUELSON: Thank you. Lynn Pasahow is going to give us some commentary.

PASAHOW: Well, from a nonacademic point of view [and from] someone who litigates patents, I was asked to give my impressions of this. These impressions come from trying software and biotech and Internet patents to judges and juries, but more from going to focus groups that we often have before our jury trials where we put on a mini-trial and then watch the jurors talk about these things behind one of my glass mirrors.

AMmy first reaction to the FTC proposal is gratitude because, in my experience, the presumption of validity causes clients who are thinking of challenging patents not to do that or who are thinking of not taking licenses to take licenses. I think doing away with the presumption is one of the few proposals that government agencies are making today that is going to have the impact of increasing litigation, and I am surprised that one of our agencies is pursuing that goal.

But my other reaction is mystification because the question in my mind is this: I think that the presumption, to the extent it does anything in litigation, and that is something I'll come back to, but if it does anything, it limits the discretion of the jury, it puts the jury into a tighter box and controls them more. And so what we're doing is we're saying that the Patent and Trademark Office has some problems with its competence, and instead we are going to transfer the decision making more to the unbridled discretion of a bunch of jurors.

Now, for these jurors, think of the places that are popular for patent cases and think about why. Today one of the most popular patent courts is the Eastern District of Texas, the town of Marshall, Texas—not a technology center. And without a lot of cynicism, I promise you, people go there to get the least educated jury panels possible. The question is not whether the jurors have modern science competence in whatever field they are examining patents; they have none. The question is not whether they are going to spend twenty-five hours studying the art and the patent, they are going to sit there and watch the lawyers do their show, and we have found in almost every trial that we have looked at, and we have looked at not only the ones we have done, but some that other firms have tried, and in no case has any juror ever read the patent front to back. No juror has read a patent front to back. So what we are doing is we are taking the PTO discretion and turning it over to these jurors in a situation where they do not have the tools to do much.

The Federal Circuit tells us that the decisionmaking by this jury is absolute, almost entirely. We are not going to give them a clear and convincing standard presumption, we are going to assume what they did was right, unless there is absolutely no basis on which they could have decided what they decided. That is the standard on appeal. Once the jury comes back and says this patent is valid, the only issue is is there any evidence from the disputed experts on which they could have relied. Taking it one step further, the Federal Circuit told us in the *Biotechnology v. Genentech* case that it does not matter that two National Academy members have debated a highly esoteric, cutting edge issue with science as to which experts disagree, and that the jury could not possibly have made a reasoned decision. That does not matter in the slightest. The experts put on their testimony, the jury comes back with a verdict, and that is the end of it. The Federal Circuit will then accept that decision on the patent and that will be the decision that determines the fate of the validity of that patent. Given that that is the likely effect of doing away with the presumption of validity in most cases, I am perplexed.

Now, of course others will point out, “Well, judges try patent cases too.” And that is true. And some judges study patent law, and some judges even have scientific training. Perhaps more importantly, judges have the time and the incentive. They can read the patents, they can hire technical experts that are independent court experts, so they can have the tools to do this right. A couple of points about judges, though. All judges are not as interested in patent law or as knowledgeable about it as the judges that are going to appear before you, who are going to appear before the Federal Trade Commission hearings. There are judges out there who actually hate

to hear patent cases and try and spend as little time on them as possible. But the second and maybe more important issue is, under our system, either side can demand a jury trial. The problem here is one that we, the trial bar, created. In the mid-1980s we started trying some very complex technology cases to juries for the first time. Up until then, judge trials in patent cases, at least, cases about real patents and real technologies, dominated. But we started trying some of these cases to juries and what we found—and we found it in these pre-trial focus groups—is that one side or the other in almost every case enjoys a huge bias to a jury. And because we now know that, we will test that somewhere along the way and that party in any significant case is probably going to demand a jury trial and stick to it. And, again, that jury may well be the jury in the Eastern District of Texas. It seems to me that the efforts for fixing the patent system would be much better spent on trying to improve the PTO processes as the Commission also suggests, and if we do fix the PTO processes, I do not understand why we would not want the presumption to continue.

Now, finally, just on the question of does the instruction really matter. I have some question about that based on my experience. The lawyer's argument about how patents come about and what we are permitted to tell the jury by the judge, in my experience, matters a whole lot more than what the judge tells the jury in a very short instruction [of] what the presumption of validity might be. So it would take a whole lot more than just changing the instruction to have any impact.

There is now a videotape that was prepared by the Federal Judicial Center that describes how the patent works. I know it has been tested by different firms and I am not even sure we are getting consistent results, but at least what we have seen is that it strongly reinforces the presumption of validity of the patent. It shows patent examiners wearing suits and working on patents, and at least the impression that mock jurors give us back is, "Yeah, it looks like a good system. It causes us to believe patents must be valid if they go through that system." It seems to me that if someone in the government wanted to change the jury view of what patents are and what impact that you have on their deliberations, one of the first things to do would be to make that a more balanced videotape. Then the other thing is, judges have a lot of discretion in what kind of instruction they give. Some judges give an instruction that tells the jury that the facts have to be clear and convincing to show that the patent is invalid, and you have to have a strong belief in your mind that it is right, maybe a moral certitude is a word that is in some of the ancient instructions. Here in the Northern District of California, most judges use a standard instruction that the court has worked its way through which simply tells jurors that in order to find the

patent valid, they have to be convinced that it is highly improbable that it is invalid. It seems to me that a patent that has gone through a Patent and Trademark Office procedure and has had someone, who is skilled in the science and knows patent law, judge this as an invention which should be an issued patent, ought to at least have that impact on the juror. They ought to be convinced that it is highly probable that the government made a mistake.

To close, the really most compelling thing we find about patent validity in our jury research before trials is a lot of our citizens believe that when the government does something, it is probably right. This varies from geography to geography. Here in the Northern District of California, you can actually invalidate patents a whole lot easier than most other places. The Eastern District of Texas, not surprisingly given what I have told you, is one of the places where the jurors almost never think the government makes mistakes in its patent issues. And another court, and maybe one of the most important ones given all the trials there, is the District of Delaware and there, as well, the jurors almost always validate patents because they have this underlying glee in the correctness of government action.

SAMUELSON: So, Ed [Reines], did you want—

REINES: Yeah, let me address this a little bit. First of all, Professor Janis referred to the fact that people have used the term “trolls” and other terms such as that regarding people in the patent system. As someone who has litigated a defamation action based on the use of various and sundry terms such as that, I advise that the word “troll” is probably safer than “patent terrorist.” So if you are going to use terms like that, or your client is going to use terms like that, there [are] better and worse for defamation purposes [as] I have had the pleasure of learning.

The comments I want to make, first of all, on the presumption of validity is it is important analytically to decouple the presumption of validity from the standard of proof because they are two different things and they raise different issues.

The standard of proof, I think, in terms of jury decision making, is critical. It is the one thing the jurors grasp. Obviously, they will be swayed by a host of additional considerations, but when they hear preponderance versus clear and convincing versus reasonable doubt, those are things that they take seriously in my experience. So it is one thing to change that. Now, there is a trend away from even informing the jury in terms of the judge of the fact of the presumption of validity. I mean, the patent exists, so in that sense it is there, it is valid, so that is the start point. But it is important to appreciate from a litigation perspective that judges are increas-

ingly declining to inform the jury that there is a presumption of validity. . . . In a relatively important case that came out just about a week and a half ago in the *Chiron* case, Judge Rader's panel affirmed that decision not to give a jury instruction or presumption of validity over objection and appeal. So now there is [a] Federal Circuit perimeter on that, as well as model jury instructions in this district and others that do not have that. So if the jury never learns about the presumption of validity, at least from the judge, whether it exists or not, is less important because I think judges are used to the fact that presumptions are procedural vehicles, not substantive evidence, and they are capable of making the assessments of what weight should be given.

. . . .

Also from the reform perspective on the standard of proof, which from my perspective is where the action is, I think reform efforts should focus on the differentiation between different issues. There is a tendency to focus on prior art as the main area, and that is quite an important area. The areas that at least trouble me, personally, on the standard of proof are areas where, as a practical matter, the Patent Office is not performing any examination. So all the issues that we are talking about about the quality of an examination or discouragement of the PTO or anything else, do not apply to things such as inventorship, typically. I mean, there can be disputes, but in general, the applicant submits who the inventors are and that is it. I mean, if you have been through the ringer, you know that there is just not scrutiny on that. Best mode is another example. I have never in all the file histories I have looked at seen a best mode objection or, if I have, it has been in an anomalous case. It is on those things where there is not really examination, certainly in any meaningful way, and yet there is an elevated clear and convincing standard. That seems to me to be wrong.

When you move to prior art, it is a more complicated picture and I do not think they should be conflated. On the prior art, I think, there is one thing where there is a joined issue, an interference, a reexamine, or just a thorough examiner doing the right job where it makes sense for it to be a higher standard, and there are situations where the prior art is never presented or, in the case of [section] 102(e) prior art, maybe did not exist at the time of the examination, where the same level of proof should not be required. So I would propose decoupling the two and then, within the standard of proof issue, which to me is the more important in terms of reform efforts, having nuance to distinguishing the different elements. Thank you.

SAMUELSON: Great, thanks. Now we will hear from Mark Lemley.

LEMLEY: Let me start out with presumption of validity and then actually broaden it to some other issues—there [are] a bunch of litigation reforms in the FTC Report—we have not talked about yet.

I think the FTC is exactly right on the presumption of validity, and here is why. The problem is that, for a variety of structural reasons, the PTO is simply not set up to make anything like a very strong determination one way or the other on the validity of a patent to which we ought to give it substantial deference in litigation. Why is that? Well, start with the fact that the applicant never has a burden of proving anything. The way the law is now interpreted, if I decide to patent the wheel, my invention is that it shall be round, and the examiner does not come up with prior art [since] it is the examiner's burden to come up with prior art, if they don't, I get the patent. Right? The presumption in the Patent Office is I get a patent. Then when we get out, the presumption is, "Well, that patent was examined by the PTO, and so it must be valid." But there is never a point at which I have affirmatively to show anything. Second, the PTO is overworked. They get 350,000 applications a year. They devote seventeen or eighteen hours total over the course of three years to your patent. That means reading your application; searching for prior art; reading the art that you submit; comparing it to the application; writing a rejection; reading the amendment and response you write to that objection; probably writing a second misnomered final rejection; dealing with a phone call in which you are persuaded by the applicant to change your mind and allow it; and writing the Notice of Allowance. All that, three years, seventeen or eighteen hours.

Now, maybe they do a wonderful job under that time constraint, I am willing to concede that. I do not think the problem is examiners are stupid. But I think the problem is, given the time constraints we have and the cost constraints we have, that cannot possibly be a full and searching examination of the kind that you will get in litigation. The problem is worse because the way we have structured the examiner's incentive, you get rewarded only for the first office action and for finally disposing of the patent. You do not get rewarded more for disposing of a patent that cites 150 pieces of prior art and has 120 claims than a patent that cites two pieces of prior art and has three claims. As a result, those long complex patents, which are the very ones that turn out to get litigated at the end of the day, are likely to get less scrutiny per claim, less scrutiny per piece of prior art, because the examiner's incentive is not to focus on the complex ones, the examiner's incentive is to get as many applications out the door as possible. Couple that with the fact that there is a very strong culture in the Patent Office that issuing patents, not denying patents, is the thing to do.

When you look at the mission statement of the Patent Office, it is “To help our customers get patents.” That may be a very justifiable mission in lots of respects. Patents are good things, but it is not something that inclines examiners to resolve the doubtful case by rejecting the patent application, and indeed they don’t. Once you take continuations into account—continuations are another problem—you cannot ever finally reject a determined patent applicant. No matter how many times the examiner says, “No, I do not wish you to have this patent,” the applicant can always come back and ask again. You can wear down the examiner until the logical thing to do is issue the patent. And it turns out, as a result, when you take into account continuations, about 85 percent of all applications result in at least one patent at the end of the day.

Is this a flaw in the PTO? Maybe. I actually tend to think not. I think, instead, the PTO is doing what it is supposed to be doing—it is doing a quick once-over. It is doing a light screen of this huge number of applications to weed some of them out, to narrow some of them in scope to prevent people from claiming too much, and then it is properly leaving to the litigation process the real hard determination, the devoting of ten’s of thousands of hours to searching for prior art [and] to analyzing prior art.

But we can’t leave that determination to the court, on the one hand, and then, on the other hand, say, “Oh, but because we have had seventeen hours of scrutiny in the PTO, we must give deference to that scrutiny.” Now, Lynn [Pasahow] says, “Wait a minute, if we do not allow, we do not give that deference, the result is going to be juries run amok.” First off, it is plaintiffs, it is patentees, not defendants, who are going to Marshall, Texas, because they want the jury that does not have the technical background. They are going there because they know, and the empirical evidence bears out, juries are more likely to favor the Patent Office already. Because the jury says, “Wait a minute, I do not know anything about atomic layer deposition. The PTO has experts. They have already blessed this. I am inclined not to second-guess those experts at the PTO.” If we reinforce that already existing inclination by telling them legally, “Let’s have a strong presumption that what the PTO did is right,” the likelihood is we are never going to get substantial numbers of jurors to take a serious look as the litigation system wants them to take a serious look at whether or not these patents are actually valid. Lynn [Pasahow] then says, “Well, the Federal Circuit is going to defer too much to the jury.” That is, I think, perhaps the first time I have heard anybody say that the problem with the Federal Circuit is excessive deference to what goes on in the district court. They are in huge panels discussing the opposite—that the Federal Circuit intervenes too much. It seems to me that litigation, as Joe Farrell points

out, is an imperfect system. But if anything, it is an imperfect system already biased in the patentee's favor. Why would we want to give a better bias, a stronger bias to it? I do not know. So I think that what the FTC recommends on this issue is exactly right. At a minimum, even if you think this is too radical, either too radical to be adopted or too radical to be good policy, then we ought to take what Ed [Reines] says to heart. At a minimum, on issues in which the Patent Office has not engaged in examination at all, either it is an inventorship issue or it is prior art that was not cited before the Patent Office, it seems absurd to give deference—clear and convincing evidence deference—to the PTO's determination because there was no determination. So the idea that it has got to be an across-the-board validity presumption seems even more silly than the standard as it currently exists.

We have not really talked at this conference about implementation, but it seems to me that the way this can be implemented is actually quite simple. If you go back and you read the statute, the statute says there is a presumption of validity. Of course, the statute also says in copyright cases and in trademark cases, there is a presumption of validity, and that presumption, as Ed [Reines] points out, is decoupled from the standard of proof. In both of those cases, it is a presumption, but it is preponderance of the evidence. It does not take statutory reform to implement this particular FTC proposal. All the Federal Circuit needs to do is say, "Wait a minute, maybe it does not make sense to be deferring quite as much as we already are." So much for presumption of validity.

A couple of much briefer notes on two other reform issues. One, which I suspect no one else at the conference is going to talk about because it seems fairly obscure and non-controversial, is the section 105 relevancy statement. This was briefly mentioned this morning. Todd Dickinson says—one of the things he did is he got examiners the power to demand from applicants that they explain the relevance of particular pieces of prior art. This seems to make sense from the examiner's perspective if you are inundated with large amounts of prior art. What I want to know is, what do I need to read. Given my time limitations, what is it that is important to me? But I will tell you as a litigator, if you start as a practical matter requiring relevant statements in section 105, I guarantee you that in every case I defend, I will get past summary judgment with an inequitable conduct defense. If you make somebody write down, "Here is what is important in this prior art reference," there will always be something that they left out, there will always be something that you can say, "Oh, they said it wrong, they misstated it." There will be a litigation bonanza for defendants. The only thing you can do if you are a prosecutor in response to that

is overdisclose: “Here is each piece of prior art, you need a relevant statement for each piece of prior art. I am going to tell you everything is relevant. Here is why this paragraph is relevant, here is why this paragraph is relevant, here is why this paragraph is relevant.” [The] PTO’s burden actually may end up being higher, not lower. So I think it is a good idea in the abstract, and if we focus only on the PTO, it makes perfect sense. I fear a little bit, though, the litigation consequences of doing that.

Final point. The FTC suggests that we need to change the trigger of willfulness. Right now, I can be a willful infringer merely because I run across a patent. My engineer reads a patent, they are aware of the patent, they are doing something which we later determine infringes that patent, they are a willful infringer at least unless we start playing a rather remarkable game in which I go get an opinion letter of counsel that says, “Oh, no, it is okay to continue doing this.” I agree to disclose that opinion letter of counsel in litigation, I therefore waive the attorney-client privilege. How far, no one seems to know. There are no less than eight different legal rules in District Courts on how much the waiver extends. If I play this game, I am in serious trouble, and so a bunch of lawyers tell their clients, “Whatever you do, don’t read patents, because if you read patents you get us stuck in this really sort of labyrinth and quite disturbing process.” So what the FTC suggests, which it seems to me is exactly right, as a starting matter, is we ought not say that merely because an engineer read a patent, the company is willfully infringing that patent. We ought to have a higher trigger. I think that is a good idea, I think it is a necessary reform, but I do not think it is a sufficient reform. There are substantially greater problems with the willfulness game. I am still, whenever I get a letter, going to have to get my opinion of counsel, disclose my opinion of counsel, waive the attorney-client privilege—it distorts litigation advice. It distorts pre-litigation advice, it distorts your choice of counsel because you want your opinion counsel to be different than your litigation counsel, and so there are substantial problems with the willfulness game that are not addressed here, but at least the FTC’s report is a first step. . . .

SAMUELSON: Following up on the issue of subjective factors, Jim Pooley, I think, wants to say a few things.

POOLEY: Thank you. . . . You know, first, on a point of personal privilege, because the issue of the video from the FJC [Federal Judicial Center] came up I did write the script for that [and] received as many comments in the other direction of what Lynn [Pasahow] brought up. I take that as a signal that we probably did what we were supposed to. In fact, people on the other side of that debate complained about the narrator’s comment that, you know, you may be wondering why you are here

being asked to decide these validity questions. Well, in part, it is because mistakes sometimes are made, and while that is being said, you know, we cut to a scene of the over-worked patent examiner in her office with a stack of files this tall on her desk. Then that scene at the end where somebody pushes the cart through the file room when it looks like the final scene in *Raiders of the Lost Ark*. You know, we do try to get both sides in there.

But, moving on to the issue at hand, I had the privilege for the last several years of working with my colleagues on the Committee of the National Academy project, and the basic thing that we were looking at when you boil it all down, with the benefit of a lot of academic interest and perspective, was why do we hear so much noise and concern about the patent system? Where is the sand being thrown into the gears of the machine? And in large part, we found that it was in the enforcement system. And here I have to say I agree very much with Bob Blackburn on this point. When you talk to our clients, the people who deal with this system, they will tell you the reason that they end up being so irritated about having to pay out large amounts of money for something that is not perceived by them to be of very much value intrinsically is because they are petrified of the uncertainty, the unpredictability of the outcome of the process, as well as its costs.

When it gets down to enforcement, we find, I think, some of the greatest impact of the choices that we make in designing the system on how it actually is implemented. And, in part, looking at the enforcement system, we run into the issues that Lynn [Pasahow] mentioned about using juries for this process of considering validity questions and, of course, people from outside our judicial system look at that as something sort of comically quaint until, of course, they are in front of a jury trying to argue invalidity against the presumption. Not being able to modify the Seventh Amendment, apart from perhaps suggesting a third way in the post-grant opposition process, one of the things we looked at and one of the areas of recommendations that you will see is, is this phase of litigation in which we deal with subject elements of the parties. And one of them, Mark [Lemley] just mentioned, is the subjective the state of mind of the alleged infringer and [how] it plays out in willfulness. And here again we find in looking at the question balancing the purpose of willfulness, which is supposed to provide some additional deterrents against infringement, in a very, very large transactional costs that involve getting opinions that may be worthless for any other purpose whatsoever, and give people a real cynical view of the system itself, the cost of litigating the problems around the scope of the waiver of the privilege, and for the clients who face this

from the outset seeing their exposure tripled, potentially, against a standard that they really can't understand. So it is no surprise, then, that you see companies instructing their engineers, "Do not read patents."

When we are looking at cost-benefit analysis here of that incremental benefit that we get in deterring infringement, we have to consider [if] it is worth provoking a result that is 180 degrees from the constitutional mandate of using patents in order to inform the progress of science and the public knowledge. Willfulness is sort of an easy target in the panoply of subjective factors that we have to deal with in litigation. There were two others that you will see in the report that have to do with the state of mind of the patentee. One has already been referred to as "best mode," and although it does not come up that often, when it does it is a real side show, and an expensive one in terms of discovery, and one wonders what it actually gives us in terms of benefit over and above the other provisions of section 112 in motivating the parties to do a good job in describing their invention. We also, in that particular instance, run up against a substantial irritant and problem where international harmonization is concerned because, as in the area of first-to-file versus first-to-invent, we are the only jurisdiction in the world that employs best mode. And those who try outside of our country to harmonize their efforts with our system find this to be a very, very puzzling difference.

The last one of these is inequitable conduct, also referred to. I think Mark [Lemley] said if section 105 were really used very much, he would be able in cases where it was invoked successfully at the Patent Office to be able, in every one of those cases, to establish an inequitable conduct claim that would get past summary judgment, which is a little bit of an example of why this particular subjective element, although it is perhaps alleged less frequently these days and perhaps less of a practical problem because it is decided by judges rather than juries, nevertheless appears to be more of an inefficiency in the system, or cost in the system, than is justified. The additional burden on discovery, the additional burden on the plaintiff from having to consider whether it is counsel who might be participating as trial counsel, can actually take part in the litigation and trial of the case—all of those inefficiencies have to be weighed against what is probably a very, very statistically improbable incremental assistance that you get in making the system work, from having this aspect available to the parties to litigating their cases. So, one of the things that you will see in the report is that we have suggested that these elements which deal with state of mind either be eliminated or be substantially mitigated in a way that reduces their impact on the unpredictability and the cost of litigating disputes and patents.

REINES: Could I pitch just one minute on that? Just on willfulness, one thing to keep in mind is that in [the] Federal Circuit right now is the *Knorr-Bremse* case, which looks to be the palette from which they can re-write willfulness law altogether. I know Congress right now is deliberating based on what I have heard from committees on some willfulness reform, and the FTC obviously is wading into those waters as well. I would just suggest that all of those efforts wait to see the outcome of the *Knorr* case so that we can see what the Federal Circuit has done to cure that area, be clear what the law is in terms of getting some stable foundations from the *Knorr* case, and against that background can determine what, if any, reform is appropriate. Thank you, Pam [Samuelson].

SAMUELSON: Great. Would any of the other panelists like to do commentary? Shall I open it up?

LEMLEY: . . . I was quite interested to hear that one of the recommendations was, as I understand it, either eliminate or put substantial constraints on the inequitable conduct defense. Maybe understanding more about what the NAS proposal actually is would help in this respect. I guess I am a little nervous about the effects of a rule that said there is no inequitable conduct defense, not because I think the inequitable conduct is rampant today and, indeed, you know, there are lots of frivolous claims of inequitable conduct asserted, but because I fear what would happen if we sent a message that there was no punishment for lying or failing to disclose evidence to the Patent Office. And I wonder whether you guys have thought about that and what you might say about that.

POOLEY: No, indeed that issue is reflected in the report because it was a big part of our deliberations in every one of these cases, I think. We looked at what is the real objective, what is the goal of the particular element, and how central [and] important is it. Can you get there by using other methods than this one, and what is the cost? So that analysis is in the report. And I do feel a little bit constrained about talking about the details of exactly what we have recommended because the thing was not here in time.

SAMUELSON: So something to look forward to for Monday. Questions, comments? Yes, in the back.

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PASAHOW: The question is does the presumption of validity affect the ability to get a summary judgment in litigation. And for those of you who are not lawyers, summary judgment is a motion you make before trial and it is decided just upon written submissions of whatever the relevant evidence is. And technically, I think the answer is it shouldn't because the

question for the summary judgment is, “Is there any evidence on the other side?” And if there is any evidence, you are supposed to deny the summary judgment. It should not matter whether ultimately the question is, “Is that evidence going to be sufficient and meet a mere preponderance or a clear and convincing standard?” In putting aside that theoretical issue, in my experience, I have not seen trial judges get held up on the issue of whether it is clear and convincing or preponderance for summary judgments. On the other hand, there is the aura that this presumption puts around patents that I think sometimes does impact judges, at least subjectively. In making that whole aura go away, it might impact things like summary judgment more than we can guess.

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RAI: I take it that the burden of the question was, isn't it interesting that the Federal Circuit, at least with respect to some of its judges, has been trending towards a plain meaning version of claim construction so that there is not nearly as much need to look to the PHOSITA, for example, or to factual issues more generally. I think that this is part of the—I mean, I could speak at great length about why I think this is part of the Federal Circuit's desire because it feels like it is the most competent actor in the system to try to really control all aspects of the system. It is not a crazy position to take for the Federal Circuit to believe that it is the most competent actor in the system, but I do think that that means that the PTO gets ignored to some extent. Now, the only way in which it does not get ignored, as I have indicated, is in the context of patent issuances and the clear and convincing evidence standard gives more deference to the PTO than perhaps was given by the predecessors to the Federal Circuit. But with that small exception, it seems to me that that is a sort of indication of the Federal Circuit's wanting to kind of root out factual issues altogether so as to have more control over the system.

JANIS: I was just going to say I think the question raises an interesting point about linkages between the presumption of validity and other issues. For example, suppose we did change the presumption of validity, making it apparently easier to invalidate patents. Would we get an equal and opposite reaction in scope doctrines? We start construing claims to preserve their validity, really. We see other changes at the Federal Circuit that liberalize scope doctrines going back the opposite direction where they have been trending. What would happen? Who knows? But I do think it is important to see a change to the presumption of validity might well cause a cascade in changes in other areas, we should not look at it in isolation, I don't think.

LEMLEY: Going back to Mark [Janis], one of the things that has always struck me as remarkable about prosecution practice distinct from litigation practice is exactly how little claim construction seems to matter in the prosecution process. We get to court and we fight over the meaning of words that you would not possibly think could have a disputed meaning. There are Federal Circuit decisions interpreting the terms “a”, and “or”, and “to”, and “when.” But none of that seems really to happen in prosecution. Maybe it is just a function, again, of the time constraints and how detailed the analysis is, but we seem to sort of skate through prosecution without substantial discussion about what the terms mean, and so there is a bit of a *tabula rasa*. The Federal Circuit’s later change in how we will interpret those terms may not affect prosecution as much because it is just not being thought about as much in prosecution.

RAI: There is an obvious reason it is not thought about as much in prosecution. You think about those terms like “on” and “in” and all that only when you are confronted with an infringer who says that “on” and “in” and what have you do not take the infringer outside the scope of your claim, so—

LEMLEY: You see it for validity too, although it is often an infringement driven doctrine.

REINES: Just a couple comments. One is I think there is just a practical problem if you are going to attempt to run some sort of concordance between the law at the time of prosecution versus at the time of enforcement or district court litigation. I mean, there are all kinds of areas in law that change all the time in radical ways, and so I think we have to be somewhat humble about our ability to bring that into sync, on the one hand. On the other hand, I think the point was addressed, actually, by Professor Lemley’s comment that, really, if you think about examination it is sort of a reasonably good once-over pass, and that that is not going to get into the level of going through the dictionary library and then to experts and what they understand this to mean. So I think that is addressed in the sense that we have to recognize that there is not full blown claim construction of the style of *Texas Digital* or anything else taking place during prosecution, in general. I think the way that the Patent Office attempts to address this, and others can address this in more detail, is through assuming the broadest general meaning of the claims, and maybe that rule needs to be given more vitality in order to address the practical reality that the Patent Office is not going to perform a full blown claim construction on every word in a 100 claim application.

....

PASAHOW: The point was that if courts gave deference to opposition proceeding statements about claim construction, that would eliminate some uncertainty, well, a lot of the uncertainty. It is a good point, but often as you are talking about the validity of a patent, the issue of claim construction is less intense because everyone who is challenging the patent, and the examiner under the governing rules who is looking at it, simply assumes that the words have their broadest meaning or the broadest meaning they could have to one skilled in the art. Often the examiner is that person, too. So the issue does not come up as to every word in the claim that is going to get litigated about when you start comparing it to a product. And whoever's product it is is trying to find some word that arguably doesn't apply.

LEMLEY: It also may depend a little bit on the structure of your opposition proceeding, right? Is this a proceeding in which we are going to have Administrative Patent Judges write opinions giving the reason for rejecting a challenge, in which case they may be explaining why they think that the patent has a particular scope, and therefore avoids the prior art? Or are we going to fall back, in essence, on a Prosecution History Part II approach in which my representations in front of the Administrative Patent Judge may be binding or helpful in interpreting the meaning of the claim because I made them?

[Question from audience member not transcribed]

RAI: Although presumably, even if we were going to give full deference to whatever the opposition proceeding yielded with respect to constructions in particular context, if there was nothing said about other words, there would be nothing to give deference to, just as there is nothing to give deference to with respect to the PTO's failure to examine particular issues like Best Mode, or what have you. So, I am not sure it ends up being such a big issue.

[Question from audience member not transcribed]

RAI: Well, that is what I mean. And then those would have to be—I would assume that that would just be litigated *de novo* because there—well, probably to some extent *de novo*, anyway—because there would be no prior opposition proceeding holding on that question.

LEMLEY: Well remember, of course, *Markman* is a question of law and under *Cybor* there is no deference even to district court determinations of what a term means, so the likelihood that there will be deference to the Patent Office Administrative determination of what a claim means seems dubious to me, so only if you actually appealed the opposition to a Federal Circuit would you get a defined meaning of the claim term.

RAI: Well, [the] FTC recommends that, as a part of the opposition proceeding legislation, Congress mandate deference on questions of law.

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V. INDUSTRY/INSTITUTIONAL ISSUES PANEL

Panel:

Carl Shapiro, Haas School of Business, University of California, Berkeley (co-moderator)

Mozelle Thompson, Commissioner, Federal Trade Commission (co-moderator)

Robert Barr, Cisco Systems, Inc.

Bart Eppenauer, Microsoft Corporation

Gary Griswold, American Intellectual Property Law Association

Sean Johnston, Genentech Inc.

Jeffrey Kusham, Sidley Austin Brown & Wood and BIO

Jay Monahan, eBay Inc.

Ron Myrick, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP and U.S. Council for International Business

Kulpreet Rana, Google

Robert Sacoff, Pattishall, McAuliffe, Newbury, Hilliard and Geraldson and ABA Intellectual Property Section

Michael Schallop, Symantec Corporation

David Simon, Intel Corporation

Herb Wamsley, Intellectual Property Owners

SHAPIRO: Let us get started. Now that Commissioner Thompson is here at my side, welcome. I am Carl Shapiro. This is the Industry and Institutional [Issues] panel. We are going to really bring in industry here more directly and see if we can have ideas into action as promised or suggested. I am a professor here at the Business School. I come more from the antitrust side, but I have long been interested in antitrust and intellectual property issues. I think also a lot about competitive strategy, so I am particularly keen to hear today from our wonderful panelists how the patent system or its flaw are really affecting business. My perspective—I put the cards on the table right at the front—is if the government is going to be granting monopolies, they should do it when there is a good reason to do so and not just because we have got a process that favors people who are hoping to get such grants.

THOMPSON: From the government's side, there are very few good reasons to do so.

....

SHAPIRO: . . . We have great industry representatives here and we have representatives of several associations of attorneys. I think together we can really get a sense of how some of these FTC proposals are being greeted by people who live and breath this in their businesses and through all stages of the patent process, through attorneys who know these far better than I do.

I think you hopefully have heard the other panels, [and] I think the problems are well set up. We are going to go right into really how does this affect companies and where are the bar associations at on some of these proposals.

We have heard a lot about concern about patent quality, [but] what does it mean in practice and what [about] the people who know these things best as practicing attorneys? What is their reaction to these proposals? I think it is very important here to bear in mind that even companies that have a lot of patents do not necessarily think, "Oh, stronger patents, more patents is better." It is not that simple. In fact, many of them with many patents are concerned that there are too many bad patents out there at the same time. In addition to the industry representatives, let me just mention those associations and the people can speak more about that: the ABA Intellectual Property Law Section, the AIPLA, the Intellectual Property Owners, BIO, and the U.S. Council for International Business. One of the good things here is that a number of these organizations are in the process of responding to evaluating the FTC proposals, so we will be able to hear where they are at. In most cases, they do not have the formal final approvals yet, but we will be able to get an early read on when they are coming out and I think that is very, very helpful.

First, I am going to give each company representative a few minutes to tell us about how the patent system and flaws in the patent system really affect his company. What do they care about? How is this causing problems in the real world for their businesses? And where is their company most concerned and most interested in change? Then, we will spend most of our time walking through the FTC proposals one after another and getting the sense of where people are at. Is there a consensus or not on certain proposals? . . . [W]e start with Robert Barr from Cisco.

BARR: Okay, thanks Carl. First, since you are asking us to do this, I want to object to the dismissal of this kind of evidence as anecdotal.¹ I have heard it a few times now in reaction to the FTC Report and one person's anecdote is another person's case study is the way I look at it. I think the FTC did a great job of synthesizing a lot of anecdotes into a very coherent report that showed, I think, what you are about to hear: that some of us in the industry, that more than one of us in the industry, have some issues. That said, I want to say we are a stakeholder in the patent system, we are a major owner of patents and an investor in the system. We want patent quality. We want patents to be respected. I do think it is pretty simple. Patents are like children and yours are good and everybody else's are bad, so our patents are therefore of high quality.

Secondly, in addition to being a patent holder, we are what I can only call a potential defendant, or a deep pockets, or a company with revenue, whatever you want to call it. So we have an interest in avoiding infringement. In fact, if I could choose my job and do it, I would say my job is to avoid infringement like I do with copyrights and trade secrets and laying down the law, as it were. But with patents, that is pretty difficult. We used to call it a minefield out there. Thanks to Carl [Shapiro], we now call it a thicket, which I think is a better image because it is not just a bunch of mines that we have to avoid, it is an overlapping morass of patents that is virtually impossible to avoid. In corporate-speak, that is a risk management problem of the highest order. It is virtually impossible to avoid all those patents because of the sheer number of them, but in addition to that, the unpublished patents, the published patents that you do not know what they are going to turn out to be, the numbers are pretty big, and Intel representatives have quoted numbers like 80,000 patents on a microprocessor. It is just a clue to what is going on.

Why have we gotten to this situation? For one thing, to many people, patents are a business in and of themselves. They are a revenue-generating operation that has high margin and relieves them of the terrible responsibility of bringing innovative products to market. They just tax others. So patents are a business. But, secondly, the reason we are in this situation is because those of us who are involved in the thicket contribute to it. We stockpile patents. We increase every time we find out that everybody else is increasing patents, we increase. So you have a vicious cycle of stockpiling of patents, mutually shared destruction. What is wrong with that? It is

1. See *supra* p. 1068 (remarks by Q. Todd Dickinson, General Electric (former Director, U.S. Patent & Trademark Office)).

a drain on resources, money, engineering time that could better be used for innovation. That is all I want to say. Thank you.

SHAPIRO: Thank you. Next, Bart Eppenauer from Microsoft.

EPPENAUER: Thanks. It is a pleasure to be here today. I will put my comments in the context of the Report itself in terms of the issues that we see. And first and foremost the issue of the law of willful infringement, and it is really good to see the report come down the way it does, and we are hopeful that the *Knorr-Bremse* decision comes out the right way. But, regardless, we wholeheartedly agree with Judge Whyte that it is a real pain for companies to deal with willful infringement allegations. We face it in just about every case that comes against us, regardless of whether we had any knowledge of the patent, if the patent was issued the day and the next day we get sued. We will get a willful infringement allegation based on some press release, perhaps, that was issued about the filing of the patent five years previous. I mean, we really have had to deal with a situation like that, and it is one where we completely agree that willful infringement ought to be limited to cases where there is specific written notice and, going even further, specific identification of patents and the claims, and how the claims apply to the products so it is really before that willful infringement allegation triggers, you have that.

Another difficult or tenuous willful infringement allegation that we faced before is in cases where a company's patent was cited in one of our own patents in prosecution, one of many thousands of patents we have, and it just so happened that this company's patent was cited, and now we are fighting a willful infringement allegation because it is just not clear what kind of knowledge is required. We certainly do not think that that kind of thing is at all sustainable and would put an incredible burden on companies. So we are really happy to see and we fully support the willful infringement change in the law. We hope the Federal Circuit does the right thing, and look forward to that decision, as well as the waiver issue on attorney-client privilege. That really is a difficult proposition, and we fully support having no adverse inference established based on whether or not you decide to disclose your attorney opinion because you just do not know how far that is going to go with a particular jurisdiction, if you are going to have to give up all your trial counsel notes and things, that is a difficult thing. First and foremost, that is really an important point to us.

The second point, perhaps, in relation to the post-grants review proceedings, I think it is pretty clear that there is a major increase in patent litigation in the IT industry and certainly Microsoft faces an increasing number of patent lawsuits where we are the defendant. And on top of that, we have many many more assertions prior to litigation where we spend a

fair bit of time negotiating and analyzing those assertions. In that respect, I do echo some of the comments I heard earlier today which is, it is not just an issue of what are the questionable patents, or what are the bad patents, if you will, but it is really an enforcement issue. . . . I think in that context, the post-grant opposition would be very helpful to try to avoid litigation disputes.

And one of the things that is interesting and [what] we would like to see how this plays out is the time duration. One year from issuance in some industries might work really well, and in a lot of the cases that we see come our way, it is many years after the patent is issued that we just first learn about the patent that we are sued, and it is not going to be real helpful to us, the post-grant procedure, if you can do something, some threat of a lawsuit or an actual lawsuit where you can institute this proceeding, and in some industries like ours where there are so many thousands of patents out there in the information technology space, it is kind of difficult to monitor all of that and to select the ones that you would want to pursue in an opposition proceeding. So it is going to be interesting to see that. That is it for me for now.

. . . .

SHAPIRO: Okay, well then we have Sean Johnston from Genentech.

JOHNSTON: Hello. Thanks. I will start by commenting or making the observation that Jim Pooley's comment earlier today resonated with me when he said the so-called sand in the gears are really in the enforcement system,² and that is the area that we have the most concern with. And, in particular, I will go quickly through three areas where we think the FTC has made some good observations.

First, is in the need for a new and improved post-grant review process. This was the topic of the discussion of the panel this morning, so I won't belabor the point, but suffice it to say that, like many other businesses, we encounter bad patents and have a hard time dealing with those. We end up in litigation too often dealing with bad patents, patents that we believe are invalid, that eventually are found invalid on appeal, and it is an extremely costly, time-consuming process not only in costs from the perspective of paying outside counsel to litigate these matters for perhaps many years, but also the opportunity costs of taking away scientists and engineers from work that they would better be devoting to scientific research, rather than to depositions and giving expert reports and the like.

2. See *supra* p. 1116 (remarks by James Pooley, Milbank, Tweed, Hadley & McCloy LLP).

The second thing is, as a number of people have commented, reigning in the proliferation of what we believe are unmeritorious, intrusive, willful infringement claims that, I am afraid, too often are brought just for strategic coercive purposes to try and exert the maximum amount of pain or potential pain on a litigant. And I think in this area, in addition to whatever the Court of Appeals may decide in the *Knorr-Bremse* case, at a minimum, we should codify some requirement that there be a bifurcation of the willfulness issue away from infringement and validity issues, and let the patent owner make out a willfulness claim, if they can, only after they have established validity and infringement of their patent claims.

Regarding the FTC's comment on the so-called thicket of patents, I encourage focus on one particular patch or aspect of that thicket, which I know has been the subject of discussion by a number of different panels and groups along the time line here, and that is the patents that are directed primarily to materials, methods, and machines that are used solely in research activities. So some people would refer to these as the so-called research tool patents. The point here is not to take away or put these patents sort of in a second class status, but the fact of the matter is these patents are proliferating in number. Again, I may be hung up on transaction costs, but dealing with these sorts of patents on a one-off basis is extremely time-consuming, there are tremendous transaction costs, and I think we need to find a better way of dealing with that. For example, I think it is worth taking a look at the scope of the experimental use exemptions, seeing if there is some possibility of making some changes there, perhaps finding a market-based, more efficient way to license these things such as through a clearinghouse akin to the Music Copyright Clearing Houses, and just overall. Finding a way to deal with these in a more efficient way.

My last comment, then, will be just a general observation. I cannot help sitting and hearing the comments this morning, in particular people commenting—I think someone referred to it as the “willfulness game,” the proliferation of just an excessive number of inequitable conduct claims, the sort of cynical use of the Eastern District of Texas for filing cases. I think you cannot help but hear that and come to the conclusion as was once said, that we have met the enemy and he is us. I think it is perhaps ironic if we take a step back, this same group that is organized here today, that is complaining about this, that were often the ones who are going back to our offices, to our outside counsel, and actually making these sorts of claims, making these sorts of filings. At the risk of sounding like I have been in Berkeley too long, I think we all should take a step back and perhaps exercise a bit more self-restraint, self-discipline, and take a more far-

sighted perspective on how we approach these various issues and not rely exclusively on legislative or regulatory reform.

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SHAPIRO: Next, Jay Monahan from eBay.

MONAHAN: Thank you. If some of these problems are the sand in the gears, then eBay is in the business of building gears. We have built an E-commerce platform which, as you know, has met with enormous success. The interesting thing is, almost five years ago to the day I started at eBay, the only time I ever heard the word "patent" was if somebody was referring to patent leather shoes being sold somewhere on the eBay site. And there was a long period of virtual silence. Never got a letter, never got lawsuits, nobody ever talked about it. Then, starting probably three and a half years ago we started to see more letters. And the letters sometimes were followed by lawsuits. And many of the letters, in fact, I would hazard to say most of the letters, when you actually dug into them, you realized that were either facially ridiculous, or an incredible stretch of construction, and in my view if you applied a Rule 11 analysis to it, it never would have exceeded Rule 11.

Now, in fact, there was one case where I got a letter and I said, "You know, you have got to be kidding me." I cannot tell you how many times I have said that, but I went to Google to the Google News Groups, which I pray and thank Google for every day, and in two hours found dispositive killer prior art. And I said there is something wrong with this picture. It has driven the cost of my life as a lawyer at eBay up. I now spend more of my time on patent issues, both our own portfolio, as well as defensive issues, than any other single issue, which was clearly not true a few years ago. We worry about these letters because of things like the willfulness standard. It would be great if I could just say this is ridiculous and throw it in the trash can. We obviously can't do that. We engaged in a very reasoned analysis and, in some cases, we get very expensive opinions of counsel which, in some cases, sit on the shelf because you never hear again. In fact, most of the time you never hear again, but that does not mean it is free to me. We also get a lot of what I call "squirrelly" letters and this is an issue which will have to be considered when we talk about what a willfulness standard ought to be because many times the letters do not say "Dear Jay, Your X product is infringing my patent," it will say, "We noticed that you recently announced your such and such feature. We think that you might be interested or benefitted from taking a license to our portfolio." So are they accusing me of something? Well, I do not know the answer to that, but I can guarantee you if there is litigation, they are

going to say they did, and I am going to be dealing with that issue in litigation.

Lawsuits. Lawsuits, we are in a whole new world. The presumption of validity is a problem. It is something which is trumpeted by plaintiffs, it is something which is difficult to get over. Summary judgment is also difficult to get over. And I think that there is something that is outside the scope of this conference, which is what about the role of the judiciary? Because I think there is a reluctance among some members of the judiciary to do what I would say is the right thing, which is to grant summary judgment, to issue a Markman ruling that construes the terms and lets the chips fall where they may, and I do not think that happens as much as it ought to.

And, finally, big verdicts and big settlements. Verdicts happen and, by the way, I am litigating in Marshall, Texas, and in Delaware as we sit here today, and I have to balance as an eBay lawyer the need to fight these cases to demonstrate our resolve against these ill-conceived patents, but at the same time do what is right for the company when it comes to balancing risks. And, unfortunately, as the FTC Report points out, the balance has been disrupted. If there was a balance, there no longer is a balance.

And we are here pleased to be a part of this conference. We have some thoughts on some of the reforms that make the most sense which we are going to talk about in a minute, there are others which we have not yet formed full opinion on, but really welcome the opportunity to finally try to do something about this important area.

SHAPIRO: Thank you, Jay [Monahan]. Next I would like to turn to Kulpreet Rana from Google.

RANA: Thanks. So my perspective on this issue has really changed over time. I was thinking about it earlier and I remember when I was in law school thinking about the patent system from a very theoretical viewpoint and there are these interesting issues and tensions, and then I had the good fortune of clerking at the Federal Circuit, and that was also like a fairly academic perspective, though, thinking about some of these patent issues. You are still in a bit of an ivory tower as an Appellate Court. Next up was law firm practice, and that was a bit of a transition period. But it was not until I actually entered industry at Google that it became very evident to me what the real world impact is of the patent system. In short, I think it is really just a mess from the perspective of trying to deal with the issues that you face when you are in-house. As with other people on this panel, Google approaches this issue from the perspective of a company that obtains patents and also has patents asserted against it. And, you

know, I think it is hard to think about some of these things, generally, because there are places where the patent system is probably working fine.

Making generalizations tends to raise kind of concerns on other sides. But there are also places where it makes it difficult as a business person to provide the kind of advice that you need to, and one of the main high level areas of that is just in terms of the—and a few people have mentioned this before—the lack of certainty or predictability that is engendered. This ties into the examination process, and if you don't have a clear sense of what the quality is of patents that issue or what their value is, it becomes hard to make business decisions about that. There are those who would take advantage of that ambiguity by, you know, in conjunction with the presumption of validity, to try to extract value. And certainly the fact that litigation is one of the main ways of resolving that right now does not help because it is a high cost alternative, and so that encourages settlement even where it may not make sense. But that is just one context. That same ambiguity and uncertainty comes into play in other areas, as well. If we are trying to assess the value of patents that we have ourselves for purposes of licensing, it is difficult to do because of the uncertainty. If we are interested in acquiring another company or a portfolio, it becomes hard to evaluate that because of the uncertainty.

For us, having something that would create a little bit more certainty would help with making business decisions. So we certainly think that some of the FTC's recommendations are a useful step in that direction and we are happy to kind of participate in that discussion going forward. And I am going to grant the rest of my time to my colleague, Michael Schallop.

SCHALLOP. I wanted to just set the background for a couple of scenarios that are practical scenarios that I think similarly situated companies, software companies, of about Semantec's size will run into from an inside counsel perspective. So Semantec is primarily a software company, which means that we develop products and release those products in generally a six to nine month time frame. You are talking about a pretty rapid development cycle in a product life cycle that in a software product space may not exceed three, four or five years. It is characterized, I think, accurately in the FTC Report as an area where there is incremental innovation. We come out with a new product feature and, very shortly after, competitors, once they see that feature, if they had not already been developing it for their product, will soon enough develop that similar or maybe an improved feature along the same lines in their product. It is very front-loaded, kind of like law school, all the work and rewards are generated by the initial product development. The industry, because it is incremental innovation is correctly characterized, I think, in the Report also as a defen-

sive patenting area, which means that it is a numbers game. You have an incentive to try to patent as much of your distinguishable product features that you can get through the Patent Office, which from hearing from the staff, that is probably one area where we have certainty. You have a pretty good chance of getting a patent through, depending on claim scope.

As a practical matter, that means that we need to file patents on those distinguishing features, on key product features, and do these reviews for products, you know, fairly often. At the same time, you have engineers and developers who are under a lot of pressure to get new products and new features out. With that in mind, I think that the focus in some of the recommendations on patent quality may be the best way to start to make sure that we can address what is really, and I think Bob [Blackburn] would address it, as the MAD game. And it is always going to be a numbers game, even if we try to address some of the enforcement issues, whether it is standards of proof and presumptions with obviousness, because in a numbers game, just having patents issued, whether or not they are ever going to stand up in court, serves their purpose, depending on the different contexts with certain competitors. I do think that addressing the patent quality up front makes a lot of sense and has the advantage of putting more of the burden on the patentee to prove the patent is entitled to get through the Patent Office, rather than post-grant procedures which, again, the transactional costs are going to be born by the potential defendant or targets.

The second scenario that we often face is, if you are a company that has a revenue stream, you are inevitably going to be a target by either your competitors and/or what the report refers to as “hold-ups,” “patent hold-ups,” or referred to earlier today as “trolls.” Addressing the patent thicket issue, I think, requires you to have really good information as to what patents are out there and the Patent System today is designed to disincent you from actually studying your competitors or other third party patents out there, which I think really disrupts the balance of the Patent System, which is, you know, the disclosure is the exchange to encourage innovation and is the basis for the Patent System’s goal of evolving technology.

SHAPIRO: Thank you. So our last industry representative here in this first part is David Simon from Intel.

SIMON: I thought the best way is to try to make it a little bit more clear as to how the uncertainty is a problem, use something that Professor Shapiro may be aware of in terms of LBJ’s One-Handed Economist. Early on in my career at Intel, I got called in to handle a problem. It was a problem with nine zeros after it, and I, just having been outside counsel for my entire career, started with, “Well, on the one hand,” whereupon the Senior

V.P. who I was talking to's hand came down on top of mine and said, "David [Simon], if another hand hits the table, I cut it off. What do I do?" This guy was a little scary, by the way, so that was particularly unnerving. But, the problem that we all, those of us who are in-house, all face, is we have to give advice on what are we going to do and we are facing a huge amount of uncertainty. If you just think about some of the FTC issues such as the willful infringement issue, I am the guy they [the company executives] turn to, saying, "What do we do?", whenever somebody sues us. I have to say what we are going to do. Well, that is an opinion. Immediately I say what we are going to do, now is that going to be open for discovery? It raises a whole host of issues that just completely raise too many uncertainties. Similarly, we get these patents in which you take one look at and you say, "You know what we ought to do with this patent," but you have to go through all that analysis, you have to go talk to your engineers, and it is very distracting and it is very taxing. And, in fact, it also causes us to, of course, both for prior art purposes and to make sure that we have lots of stuff out there of our own, it causes us to file what I personally think is an inordinate number of patents, and every year my CEO says, "Go get more," to the point where my patent filing budget and prosecution budget is now more than half the size of our Corporate Research Lab's budget. That, to me, seems to be out of kilter. And by the way, that does not include litigation—that is a separate budget which is also roughly the same.

You are looking at a huge tax on the industry and you are looking at a whole host of problems that come with that. Every case that we have brought, we have got to take our leading engineers, particularly the most senior ones who really have the intimate knowledge of what is the prior art, pull them off of the projects they are doing—and, by the way, these guys work eighteen, nineteen hours a day, six to seven days a week, they are incredible—and say, "I need you to help me find prior art on this," or "I need you to help me explain why we do not infringe on this." And that is a huge task which I really do not think society is getting the benefit for. Just to give one practical example. . . . We got sued several years ago on a patent where we felt we could get the license for \$2 million. By the way, this is the case that we used the term "patent terrorist" which got us sued for libel. But the point being that it cost us \$3 million of outside counsel fees to win on summary judgment and get it affirmed on appeal. We probably could have gotten the license for \$2 million, and I am not throwing into that literally hundreds if not thousands of hours of various engineers' time on helping us on this case plus in-house counsel work on this case, as I think my time has some value, at least. And when you looked at that and said what was the right thing? Should we have paid?

Should we not have paid? I asked my CFO that and he said we did the right thing because it only cost \$3. I said what if it was \$10? And he said, "I am not going to give you that answer today." Thank you.

SHAPIRO: Thank you. Thank you, all. So next we are going to walk through each of the FTC's proposals in order. I am going to frame it up and then turn to certain of the panelists to give reactions, where they are at on that proposal, pluses and minuses. The goal here is so we can really hear, try to learn where there is consensus, where there is not, and get a sense of where this process could go from people who really live and breath this stuff. So let me start. I will read each of these briefly just to make sure we are all on the same page since you may not have your handy dandy copy in front of you.

FTC Proposal 1, this is the post-grant review: "As the PTO recommends, enact legislation to create a new administrative procedure to allow post-grant review of and opposition to patents." There was a whole panel on this, this morning. And yesterday Rob Merges, I think, laid out some of the basic facts—180,000 patents a year are issued, seventeen hours per patent on average by the examiner, it takes over two to three years. I think he gave a number of \$3,000 dollars spent for a patent. I think Mark Lemley gave an impassioned piece this morning on why the PTO's structure is not set up really to [thoroughly examine applications]—it is a quick look. And I think maybe Joe Farrell described it as "error prone," but of course there would be those that would dispute that. So, at the same time, there is a reexamination procedure, but it is basically not used at all. I think Rob Merges reported that it was only used twenty times in the past five years. Okay, so a trivial number of times. That is not working, at least not useful and effective.

I will add that the National Academy of Science's Report calls for an Open Review Procedure, basically of third party challenges before Administrative Patent Judges at the PTO, so they are on the same page here, or close to it. Where are folks at on this? Is this something that everybody wants and can go forward? And, if so, how would it be designed? Because, as a number of people have said, even if you want this, how are you going to structure it? The devil may be in the details. I would like to turn first to Robert Sacoff.

SACOFF: Thank you very much. I am the Chair of the ABA IP Section, and we are one of the organizations that Professor Shapiro was referring to when he talked about some of the organizations being mid-stream in their policy formulation, so I have to state the disclaimer that my views as I state them are not really capable of being attributed to the ABA, which really requires a lot of procedures to go through, or the ABA IPL

Section. . . . We have had a lot of really good and hard work done at the committee level, resulting in resolutions in some cases in the various recommendations, and some other cases, not resolutions, but reports. The post-grant opposition procedure is one that the developing view, as I will call it, is to support. We have a resolution that will be adopted, finally, or voted down, and that is always possible, at our June summer conference in Toronto, favoring in principle legislation creating a post-grant opposition review procedure in which the patentability of issued claims, without any limitation on issues subject to the procedure, can be reviewed by Administrative Patent Judges, the Board of Patent Appeals and Interferences. And some of the details, obviously, are yet to be determined. It is always a major step when you create a new procedure, and I do not think we know exactly what it is going to look like yet, or what we would like it to look like yet, but the suggestions in the deliberations and the developing views include filing an opposition within nine months of the date of the patent grant, allowing all patentability issues to be challenged, not just obviousness or nonobviousness and novelty, to provide complete *inter partes* proceedings, some discovery—we do not quite know how much discovery because that affects a great deal the cost and the length of time that it is going to take. The view is that we would like to see such a challenge conclude within a year and to have appeal ability by any of the parties to the Court of Appeals for the Federal Circuit.

SHAPIRO: Would you say it is the tentative position that a cost-effective post-grant review procedure is really crucial to having the patent system work properly, and we do not have that now?

SACOFF: I think that is a little bit of an overstatement to what the resolution is. This is a procedure that we are in favor of, and we would not be in the favor of it if it were not considered an improvement to the patent system. We start putting adjectives about crucial and indispensable, and I am not sure that those are going to be in our position, but we favor it.

SHAPIRO: Okay, fair enough. I would like to go next to Gary Griswold, then.

GRISWOLD: Gary Griswold, I am representing the AIPLA. I am past President of AIPLA, but in this particular circumstance, I was Chair of the committee that put together the report that responds to all of the recommendations of the FTC Report. We are further along than ABA, apparently. We have the report in its basically final form, closely ready to go. I can tell you [that] we support basically six and a half of these guys and we don't support three and a half. So I can tell you which ones those are if you want me to later.

SHAPIRO: Yeah, why don't we do that? We will go through one by one, but let's focus on the first proposal now.

GRISWOLD: And that is what I was going to do. . . . And what I will say on that is that we do support oppositions. We have developed the details of a proposal relative to how opposition should be handled, and that was approved by the Board this week. It does involve a nine month period for bringing the opposition. We do not believe that this process should be available, except on agreement of the parties, throughout the life of the patent. In other words, we want to walk before we run. . . . Our deal is that we would not include all issues of patentability, only those issues that can reasonably be tried without significant discovery, and those are 102, 103 based on patents and publications, 112, first and second paragraph, no best mode, non-statutory double patenting. It would be based on the written record. There would be cross examination of the affiants put in the evidence. There would be a hearing before the Administrative Judge. There would be a limited estoppel. . . .

SHAPIRO: Thank you, Gary [Griswold]. Next, Herb Wamsley.

WAMSLEY: Thank you, Carl [Shapiro]. I should say who Intellectual Property Owners Association is, particularly since three members of the Board of Directors are on this panel, which causes me to state things carefully. As we go through these resolutions, I will be giving our tentative view, which has passed the first review by the Board, which will be reviewed again by the Board next week. IPO's members, which really overlap as a practical matter a lot with the ABA and the AIPLA, but the members of the Board are Chief Patent Counsel of larger companies primarily, including Microsoft and 3M and Intel. We think we are in favor of post-grant opposition. We are still trying to sort out the details, not quite as far along as AIPLA, but we are definitely in favor of it. We are looking at two models, I guess, mainly, which are similar, the FTC Report and the Patent and Trademark Office's *21st Century Strategic Plan*. It was issued in 2002, which has a very detailed proposal.

I think there is not complete consensus yet on whether the time period for opposing a patent post-grant should be a limited period such as nine months or a year, or whether it should be a longer period. And there is a lot of variations on that. As you may have heard earlier in the program, the PTO, for example, proposed a period for opposing for several months post-grant plus the opportunity to propose any time during the life of the patent, and I believe within a four-month period after you are subjected to a reasonable apprehension of suit. So that is one area.

I think another area we are still trying to sort out is just how broad these proceedings should be, how many issues you should be able to raise,

and what the costs should be. But I think IPO members—and my feeling would be large U.S. patent holders in general, seem to have a pretty broad consensus on needing a procedure post-grant that is substantially more expansive than the *inter partes* reexamination proceeding that was enacted in the American Inventors Protection Act in 1999. And on where we are at, I would say that [for] IPO, the post-grant opposition is one of our big three [issues], at least, if not the biggest one.

SHAPIRO: Good, thank you. I would like to turn next to Jeff Kushan who represents BIO.

KUSHAN: Thank you. BIO is a trade association that represents the biotechnology industry, has a membership of about a thousand companies, and the only common trait about those companies—really 85 percent of them—is that they do nothing but lose money. And the only asset that they have is either a patent application or a patent, and so they are a bit sensitive about patent issues, probably more sensitive than any other industry. On the issue of post-grant opposition, most of the members of BIO strongly support a rigorous post-grant opposition procedure. That view is not uniform and, in large part, that non-uniformity is because the critical issue is what are the attributes of the system that have to be there and have to be identified before we can actually have a consensus view? And, in fact, most of the discussion within BIO so far has been to start to focus in on those attributes of the system. Many of the things you heard earlier today and that have been repeated are the variables that are in discussion now. I can touch on a few things and give you some insight into the deliberative process that is going on now.

One issue is, and it was foreshadowed in the comments from Eli Lilly this morning, is that, unlike most industries, there is a special need for certainty in the area of pharmaceuticals and biotech inventions. When you are about to launch a product, or when you are about to build a plant or when you are at that really critical part of development down the path, you do not want to have the patent thrown back to the Patent Office in a proceeding that could end up putting a large cloud over that investment. And so one variable seems to be the period of time during which one can raise issues, and I would say, at least with regard to the non-prior art based issues, there seems to be a view that about a year, or a little bit longer, than that might be the window that should be appropriate. It is important in this process to appreciate that you are going to have a trade-off in that time limit because most biotech inventions are not going to have a known commercial value in a year, but there is still enough monitoring activity that you can engage in to make a step in.

A second issue that seems to be supported is to actually extend the issues to 112 grounds. That topic, in particular, is a dominant topic for many patent applications in the biotech sector where there is not a lot of prior art—well, there is a fair amount of prior art, but the main issue in a lot of cases is 112.

The third variable that seems to be supported is the need to have better management of the proceeding, and here it is kind of a trade-off right now because many of our members want to have a simplified procedure for simple issues that does not make it a really expensive proceeding like litigation. Yet you also want enough adult supervision in the proceeding so that you know you are not just going to get a rehash of the original examination.

And then the last issue that we are struggling with is, there has been some debate about how to make the proceeding more rigorous, and that goes into the area of discovery-like activity in a proceeding. And many of our members, a small minority in total, but many of our members have lived through enough litigation now that they don't want to see the torture of litigation imported into a Patent Office environment.

And so, while there is a legitimate need to have experts and deposition of experts, there is a great reticence about turning it into a proceeding that essentially replicate[s] the cost of litigation for no benefit in the Patent and Trademark Office. I am going to stop at that point because we are still struggling with a lot of other parameters that have not been talked about in the discussions so far, and we do not really have uniform views.

....

SHAPIRO: Thank you, Jeff [Kushan]. Next, Ron Myrick who represents USCIB.

MYRICK: Thank you very much. First, I would like to make a little disclaimer. My views here are being expressed as my own. Except where I specifically attribute them to the USCIB, they are not the views of my firm or any client.

I am delighted to talk about this issue. I think it is an easy issue in one sense to support, it is hard as the dickens to make happen. When I got started in this profession a rather long time ago, we were privileged to be provided something called reconsideration at that time. Some of you will remember it. It was a pilot program. It was the forerunner to reexamination. So we have been working on making this kind of post-grant review work for a very long time. Have we succeeded? I do not think so. And I think the devil is in the details, absolutely. The comments that Jeff [Kushan] just made about cost are going to be determinative. The

real success of any post-grant procedure is going to be determined by whether or not it is used. And Dr. Harhoff's comments this morning were very worthwhile in regard to the success in Europe. However, he also made a passing comment, in that the numbers or percentages have been going down in Europe. And it is an important note because, frankly, I know some senior IP counsel of some major companies in Europe, and they have abandoned the opposition system in Europe. And why? Because they paint a target on themselves. So I think one of the issues, and it has not even been addressed in the panels this morning or thus far, is how do you handle the fact that having raised your hand to be an opposer, you have told the other side how interested you are in their patent, and you may not win that opposition. So it is a very important issue.

I think the other issue that is determining whether or not this will be a successful system [is] the issue of estoppel, whether or not you are going to be bound by what comes of this result and permanently bound, perhaps. Somebody mentioned *res judicata*. I do not think that *res judicata* is going to get very far if you want to be able to use this system and make it a success. So I think there are lots of devilish details to be decided in connection with opposition that will determine entirely whether it is a success. And, remember, it is only a success if people really use it, and we have been trying for nearly thirty years to make reconsideration, then re-examination work, and, still, nobody uses it.

SHAPIRO: Thank you, Ron [Myrick]. I want to just turn briefly to a few of the other panelists so they can indicate where their companies are at. Bart, where is Microsoft on this?

EPPENAUER: We do favor this and the devil is going to be in the details. We want to be able to use this procedure and, clearly, as Ron [Myrick] points out, within a one year time frame if we start opposing patents, that will raise a flag that we are very interested in [the patent]. If we lose [the opposition], I am sure we will be dealing with it for a while. . . .

SHAPIRO: Okay, Sean Johnston?

JOHNSTON: We are supportive of this. I agree with Ron [Myrick], it has got to be a system that is economical, it has also got to be fast and efficient or we will just be repeating the litigation process all over again.

SHAPIRO: But do you want to limit the time to the nine months or the one year?

JOHNSTON: I think that is a wise component of the overall process, to put some time limits and nine to twelve months seems like a reasonable one, somewhat akin to what the European system is.

SHAPIRO: David [Simon], do you want to speak for Intel on this?

SIMON: I think what you have is a real dichotomy between the bio and pharma and the electronics, software and probably much other. Generally no reason for me to challenge a patent unless it becomes a problem for me, because otherwise I would be challenging lots of patents that I have no incentive to challenge in the ordinary course, other than to paint that big target, as Ron [Myrick] said. So if, in the general case, if it has got a time limit, I won't use it much unless there is somebody I know who is going to be a problem for me out of the chute, and this is my best shot at them. If there is no time limit, I will use it a lot, and I think that is the real consideration. And I understand that the incentives in bio and pharma are very different, and it may even be that what we need is a two-industry approach or multi-industry approach.

SHAPIRO: Would it help if said maybe prior art could be handled one way and other issues another way? Would that help bridge this gap between the different industries?

KUSHAN: This is a good topic to engage on because I think it is something we have to start out. I think the 112 issues may be more time relevant, so even if we looked back five years, a written description as we have seen and applied five years ago compared to what it is today is very different as a legal principal. And also evidence in that area may change over time. I think one question is, what we do not want in the pharma bio industry is to have a crippled system to fight about our patents, take over the patent, and dispose of it in the PTO. And so maybe the question is, if you allow challenges after some window that we know we can take it back to a District Court and fight there because it is too commercially important to us to leave it in the hands of the PTO with the limited discovery or limited proceedings around it. And I do not know if that is something which is going to be digestible to the software and non-biotech sector, but I think the critical factor is [that] you just do not want to have your patent in the Patent Office when you have spent \$800 million getting a drug and you are about to launch. It is just a very uncomfortable discussion to have with your CEO. So it may be not the best fear, but it is a legitimate fear of these companies, and we have to find some kind of reality in limiting the access.

SHAPIRO: I think that shows that the estoppel issues, the ability to appeal relates to the time period. There is a complex set of factors that has to be crafted. We are not going to be able to do that now, but some of these associations that have grappled with this. It will be a really good next step to see what they are doing.

GRISWOLD: The reality of all this when we debated this for AIPLA was can we put together a proposal that actually has legs and can get through Congress, because we have been involved heavily in the

legislative front for a long time and the AIPA [American Inventors' Protection Act] was a big event. I do not think we have anybody here that is an independent inventor. I can tell you that there are issues here that are compromised based on what we think would be acceptable in the independent inventing community. For example, a limited estoppel. And also the idea of when you can bring these activities. So you have to keep in mind what is passable and what you can get started with. The other piece is, I still believe it is important that we walk before we run. We heard a lot about how the PTO operates, and I think we better be careful that we have a process in place in a nine-month period that works, and then maybe we can take it on until later on in the patent's life. That is our view.

....

MONAHAN: The other issue that I think is important, at least from our perspective, is retroactivity. Assuming you can do that, because if I cannot deal with patents that have been applied for or issued, say, since '95 or '92 or '93, then before there was a second-look policy, a lot of my problems are coming from a particular time frame, so I think I need to be able to apply this, whatever these procedures are, to those. And then, going forward, perhaps there would be a time limit. I actually like the idea of a time limit of some sort, but having basically all bets are off once somebody threatens me, and then, what was the reasonable apprehension of litigation, I would have some rights triggered at that point.

SHAPIRO: Let's summarize. My sense [is] there is a lot of incentive to do something, there [are] probably areas where people can come together, but work needs to be done to get that drafted, something that is going to work politically, and we will be talking at the end how to make things happen.

So on to [Recommendation] 2. The second proposal is: "To enact legislation to specify that challenges to the validity of a patent are to be determined based on a preponderance of the evidence." Of course, rather than the current clear and convincing evidence. Again, we have heard about that earlier today. I think many people would think, most people think, this is a very big deal. There are few people that think it would not matter, but I think most people think it would be a very big deal. I think part of his impassioned plea this morning, Professor Lemley presented very nicely the argument in favor of this, which I would summarize as saying, "Why should patents get that big presumption if it is such a quick look going on now?" That raises the issue of how this proposal interacts with other proposals. I think one could take the reasonable view, if you fix a lot of the other problems so the patent quality goes up, then the maybe clear and convincing would be warranted, but it is not warranted now. So

we get into interactions. I think people would say strong medicine and the question is, do we need to do that or maybe we should work on other pieces first?

GRISWOLD: I would like to comment on this because no one has come forward with the comments that AIPLA—how they analyzed this. And it actually is kind of relevant to this whole discussion on how we looked at this issue. I think we ought to get out in front on what we really have today, because no one today stated this the way our people analyzed this.

SHAPIRO: I think there is a fair bit of consensus among the associations about this, not the details, but not being thrilled with this proposal, so if you could say why and where you guys are at

GRISWOLD: What we didn't hear today, unless I was missing it, are the people that looked in this for the AIPLA—which does not support this proposal, by the way—[is that] you have to separate the presumption of validity from burden of proof. Now, we are looking at the burden of proof, and that is what this recommendation is about. Our people say that, today, the standard for factual predicate for invalidity is clear and convincing. The standard for the persuasive force of that factual predicate is preponderance. . . . And our people would say that this would convert, they believe, the standard for the factual predicate to preponderance, and move it from clear and convincing. . . .

SACOFF: Basically that is right, I mean, to the extent that looking into our membership is a window into the IP lawyer community, I think you will find that this is probably one of the more controversial recommendations in the report.

SHAPIRO: That means you are against it, right?

SACOFF: The developing view in the ABA IP Section, I think, is to oppose this. I think the general thinking is that lowering the burden of proof for the facts, as Gary [Griswold] correctly points out, lowers the confidence factor and raises the unpredictability factor for all patents and not just patents that we might call questionable or dubious. And the feeling is in our section that, when correctly applied, the current standard is appropriate and conducive to the right level of certainty.

SHAPIRO: My sense, talking with other people, is that other organizations that are similarly placed. Isn't that right, Herb [Wamsley], for IPO?

WAMSLEY: That is right, Carl [Shapiro]. We are against it, too. Basically we are into fixing other things in the system and trying to fix them fast, and we are into fixing the Patent and Trademark Office,

willfulness, post-grant. And those are things that can be done, but this one we are against.

SHAPIRO: Jeff [Kushan], very quickly, from BIO.

KUSHAN: BIO has a lot of concern about this one, so we are opposed. I have to slip in a couple of rebuttals to Mark [Lemley]'s characterization earlier. First, one of the big problems we face in the Patent Office is they chop our patent applications up into a hundred separate applications. So if you take his math, that is 1,700 hours per invention that they are getting for each one of our inventions of processing time, not seventeen. And that is an important factor to keep in mind. The second thing is there are about three million patents, four million patents, enforced today, and about 5,000 of them are in litigation right now, and we have a lot of licensing behavior which is predicated on the presumption of validity. . . .

SHAPIRO: I could see why the patent holder is in a stronger position because of the presumption, but what do you mean "predicated on"?

KUSHAN: In our sector, quality is not a big problem. We certainly have issues of validity of patents, but it is not perceived to be as bad as other sectors. And I will say this because we have a better prior art foundation, all of our art is in the literature, our issues are fairly mature, and, again, the Patent Office is chopping up our patent applications into microscopic pieces, and so a patent examiner gets twenty-five hours to take a little tiny piece in our world, he is going to get a pretty good answer. And in that setting we feel generally comfortable that many of the patents that get out are going to be valid, and I think that concerns that other sectors have may not be as pervasive as they are on the biotech sector.

SHAPIRO: So the presumption you feel maybe more warranted in your area. . . .

. . . .

MYRICK: This is one position that USCIB does have. I do not necessarily agree with it fully myself, but I want to state it on the record that USCIB is against Recommendation 2. However, I do believe personally now that, to the extent that clear and convincing applies to something that is unexamined, it is unjustifiable, so I think there is a balance here that can be drawn, but for the record, I need to say that USCIB is against this provision.

SHAPIRO: I think we got a good sense of there is sort of the lack of support, at least in those quarters.

Number 3, having to do with obviousness: "Tighten certain legal standards used to evaluate whether a patent is obvious." This touches on the

commercial success test and the suggestion test, both raised here. Maybe Bob [Barr], you wanted to talk about this one.

BARR: . . . Going back, the presumption of validity is in the statute, a burden of proof is not, so [the burden of proof is] a judicial creation that I do think is unjustified. The reason I went back to that is because people have said, "Well, let's fix the other stuff first." This is pretty easy to fix, the burden of proof, if we decide to fix it. The issues around obviousness are much harder to fix, I think. It is harder, and we had a really good panel this morning on it. I learned some things and some new ideas, but I do think the standard itself as written is correct. I think as applied by the court and the Patent Office as told to apply it by the courts, because I do not blame the Patent Office, I know they try to reject some things that they think are obvious, and then the court reverses them, so I will try to only make one enemy with these comments. But I think it is a subjective standard, and the attempt to apply objective tests to it have led to a lowering of the standard. The basic cause of the problem that we face of people of ordinary skill in the art—don't let my engineers know I called them that—by people in the art sort of stumbling into potential infringements of patents that should not have issued, because it should not have worked that way.

SHAPIRO: Let's again hear from the association representatives about this obviousness proposal, maybe Gary [Griswold], want to do this again?

GRISWOLD: Our view on that one was that we put this in a support category because, and the way we looked at it, it really was not advocating a change in existing law. If is not to change existing law, then we are okay with it. But if it is a change in existing law, put it in the case law.

SHAPIRO: Wait, it says tighten certain legal standards. Are you in favor of tightening the standards? Or do you just want to leave them where they are?

GRISWOLD: I want them to be applied the way I think most of us think the existing law is, and that is what our view was. You will see it in the paper. That is the way of art.

SHAPIRO: Okay, Bob [Sacoff]?

SACOFF: We do not favor changing existing law.

SHAPIRO: Or tightening standards?

SACOFF: We think the standards are correct and, if applied correctly, that is the way it ought to be.

SHAPIRO: Herb [Wamsley], do you want to talk some for IPO on this?

WAMSLEY: We do not favor changing what we have perceived to be the case law currently. Let's say on that suggestion to combine issues, it

appeared to some of us that, just about the time the Federal Trade Commission started its hearings a couple years ago, there were two or three cases that came out of the Federal Circuit that might have been aberrations, and those cases appeared to say that you had to have an explicit teaching of a motivation to combine in the references. But I think even the final report of the FTC has a footnote or a clause in it acknowledging that some of the cases that came a little later seem to be swinging back. And I think if you look at the group of the cases decided from the Federal Circuit over the last two, three or four years, or at least that is what some our people think, is that they were really consistent with what the FTC Report is recommending. So we do not see a need to change anything.

SHAPIRO: I think we will leave that wonderful clarity on that question and move on. I want to kind of lump together to some degree the fourth and fifth proposals. The fourth one says "Provide adequate funding for the PTO." Now I found very few people who favor inadequate funding for the PTO, and the National Academy of Science certainly is on board here, too, with supporting. So the question, I think it really is how much money? What does adequate mean? Should we think of that in terms of fee diversion or what? But I think the bigger set of issues are, are we going to link resources to performance or some sort of reform or pressure? Is there a quid pro quo? Because people won't say, well, it is fine to give them more money because they are overworked and these workload statistics are pretty clear, but if they are just going to issue you more questionable patents, I do not want to give them more money.

So I just want to wrap the funding issue together with Proposal 5, [which] talks about modifying certain PTO rules and implementing positions of the PTO's *21st Century Strategic Plan*. I want to kind of frame that together. Just a quote from the *21st Century Strategic Plan*, it says: "Today the USPTO is under siege. Patent application filings have increased dramatically throughout the world. There are an estimated 7 million pending applications in the world's examination pipeline, and the annual workload growth in the previous decade was in the range of 20-30 percent. Technology is becoming increasingly complex, and demands from customers"—I think that is patent applicants—"for higher quality products and services have escalated." And they talk about this plan will make them agile and productive. I fear that productive might mean more patents, but I am not sure about that. They do say that the U.S. industry and the public will benefit from stronger, more enforceable intellectual property rights. So there is a little bit of flavor. And there is a whole set of proposal questions. Many people here know better than I do what they propose to do and would like to do with more resources. And I think you

have heard about this notion that there is a culture maybe that they are trying to issue patents, the incentive structure there. So I guess I want to push everybody a little bit into not just the money, but whether, in addition to implementing their plans, kind of how we can really ensure in that process that patent quality goes up. Ultimately, we are here talking largely at this stage is patent quality. There are a series of sub-proposals here, I won't read them, but I will let people speak to them as they will. I would like to start with Herb [Wamsley]. I know you have been close to this process, certainly the funding side of it. . . .

WAMSLEY: Well, this is one of our favorites at our association. We do lobbying and this is our #1 lobbying issue right now. I think this is one where something can be done to change the patent system this year. There is a bill that is already past the House and it is in the Senate, H.R. 1561, and that is a bill that brings about \$200 million additional into the PTO, it has a provision to stop Congress from diverting that money to unrelated government programs. And the people that are working on this, Carl [Shapiro], in answer to your point, consider that their support for this bill is contingent on the Patent and Trademark Office improving quality in the several ways that the PTO has outlined in our *21st Century Strategic Plan*. That plan is very detailed, it has some things mentioned here like the second pair of eyes, but they also are calling for money for more recruiting of talented examiners, for better training of examiners, for recertification of the competence of examiners, and a number of other things. And we think the appropriators and the Judiciary Committees in Congress are looking at this as a commitment by the Patent and Trademark Office to do these things if the bill passes. I do not think that giving this money means more patents, although it does mean working off this terrible backlog in the electronics areas, but it means more quality, too.

SHAPIRO: Gary [Griswold]? I know you are close, as well, to this process.

GRISWOLD: I have personally spent a lot of time on this legislation and also on the *21st Century Strategic Plan*. Definitely, we would not support this extra funding if it wasn't because we thought the *21st Century Plan* would turn into something. And we will be watching every step of the way. So that is the way we look at it.

We support an end of diversion. We will not accept increasing our fees 15-25 percent, which is substantial for everybody, without having an end to diversion. That money has to go to the PTO to fix the PTO, and that fix is in there. Looking at Recommendation 5, we supported the second pair of eyes and the forging the balance between the public interest and the applicant's interest. We always looked at it that way, but I think there was a

period where the PTO got a little off on a tangent of talking about customers. The public is a big customer at PTO.

SHAPIRO: My polling of the panel is that everybody is really there in terms of more resources for the PTO and it is a question about how to make sure they are used well.

MYRICK: One thing that is not in the Strategic Plan, the *21st Century Strategic Plan*, at least explicitly, and I think it is implicitly, in fact, avoided. As Mark [Lemley] well described today, and I think as was mentioned earlier by Jeff [Kusham], in most of the org units, they have seventeen hours to do the entire job as examiners. In the bio art units, I think they get twenty-five. That is an awfully little amount of time to be able to do the job they have to do. The *21st Century Strategic Plan* does not address the fact that examiners need more time. And I would personally like to see, and this is a personal opinion, some reallocation of some of those resources to give examiners more time to do the job because I am not sure how you get more quality if you are trying to jam more stuff through the same mental pipes in the same amount of time.

SHAPIRO: I would just point out that, of course, if you do this post-grant review procedure, that is going to take a bunch of resources, too, so it puts a little more pressure on it.

SACOFF: I just wanted to add a quick note on the anti-diversion. Everybody lines up on that, but this is the one thing we actually do have ABA policy on. Calling for an end to the diversion of the PTO user generated fees not only is a policy of the ABA IPL Section, it actually has been escalated to a policy of the American Bar Association. It was actually escalated to one of the eleven or twelve legislative priorities of the American Bar Association, along with death penalty issues and everything else. That is how important this is viewed in the ABA as a matter of jobs in the economy.

....

KUSHAN: We do have a slightly different perspective in BIO than in some of the other trade associations on some of the minutiae of this question. As I mentioned before, in the biotech area, we are being subjected to a process which yields way too many patent applications sitting inside the Patent Office, and that has created an overhead and a backlog which is essentially artificial. So there needs to be a more coherent look at how the Patent Office has structured its examination policies to get a better work product out. There are two elements of this, one, which we have great passion about, is this issue of dividing of the applications unnecessarily. That is very inefficient to take and essentially segment over time and

among different examiners a single invention for examination. The second thing which has kind of dropped off the radar screen, which we think is unfortunate, is the idea of deferred examination, or non-mandatory examination of every single patent application that comes in. There is a huge wave of patent applications that lands at the Patent Office every year, and very few of them two years out, or one year out, have the same passion of commercial value for the applicant.

SHAPIRO: So are you willing to pay more to have yours sped up?

KUSHAN: Well, that is one model that many countries follow. And the question that we are struggling with, and obviously there is a balance of letting these things languish as land mines in the Patent Office, which we very much do not want to have, but at the same time, if there were an obligation on a patent applicant to pay to trigger the examination within a certain period of time, by default, a certain percentage of the work the PTO has to do would drop off, drop off their workload. And so that kind of thinking needs to be done and it has not yet been done by the FTC.

SHAPIRO: Just to frame the whole pendency question, in the *21st Century Strategic Plan*, the PTO says they hope to achieve twenty-seven months overall patent pendency as a goal by 2008. I was not impressed particularly, but I guess it is a lot of work, so that is the sort of thing we are talking about anyhow. So it is not about to go away. Kulpreet [Rana], you had a quick comment here?

RANA: Going back to some of the comments that were said yesterday, as well, I think a lot of people here are in favor of the increased funding, and Carl [Shapiro], to your question about whether it should be linked to some requirements that the PTO actually improve its process, I would hope part of what we would be able to do is to actually get the PTO to buy into some of the changes that we all think need to be made. And rather than trying to motivate them with specific requirements, if we had buy-in, I would think that would be a better process, or in combination.

SHAPIRO: I will glide over number 6 and go to number 7. Number 7 says, "To enact legislation to require publication of all patent applications 18 months after filing." To remind you all that the 1999 legislation end[ed] up causing publication of apparently about 90 percent of the patent applications, according to the FTC's Report. This would then kind of do the extra ten percent.

Rather than go around the table, I will represent to you that everybody here is in favor of this. There is a range between "in favor" and "strongly in favor." Of course, part of this is to prevent submarine tactics and hold-up. It helps promote the disclosure process.

Ron [Myrick], I think you had an interesting point about how we can deal with the concern that somebody might file a patent, the application would be disclosed, then the patent would get rejected and they would say, "Oh, this is really not fair. I had to disclose all that stuff and I didn't get anything in return."

MYRICK: There is a quid pro quo here. People are giving disclosure of their vital information which they otherwise could keep as a trade secret for some period of time, an exchange for a patent. However, with the current pendency, or the target pendency at twenty-seven months, 2008, they may not even know on the date of eighteen months that they have to have their application published, whether or not they are going to get any patent at all. And I think it is incumbent upon the system to not put the applicants in the bind of having to bet on the outcome. They do not know whether they are going to get an examination that is going to give them a patent when they have to let that disclosure go, so they may have to let it go in the dark, and that is not fair. I think what we should be targeting is the First Office Action, telling [applicants] whether or not they have got anything at all in prospect, to be provided to them sufficiently in advance of the eighteen month publication date so that they can decide whether or not they want that publication to go forward, or would like to withdraw the case. Now, that is only fair. And because they are giving up significant rights by that publication and they do not know anything at this time, at least in some arts, particularly in the longer pendency arts such as the computer arts and the information arts. So it is I think a challenge to the system to improve the system at least that much, in many of the arts. By the way, I have to say, having been with a rather large company that Todd [Dickinson] mentioned recently, that we did not have a lot of this problem in many of the businesses we ran. Of course, we ran a lot of businesses, but I think it is a problem that is endemic in some of the information technology businesses.

....

BARR: Although I agree it is a problem, I always thought it was a great feature when I was a prosecutor that we could just tell the client they could decide at the end whether to give up their trade secrets. But, Ron [Myrick], if it is something valuable, then [aren't] the chances of getting a patent are pretty high? So if your assumption is they are giving up something valuable, why wouldn't they get a patent?

MYRICK: It depends upon whether or not they know how valuable it is going to be at the time they have to make that decision.

SIMON: If I may? I take a very different view than Ron [Myrick] because, in my view, the function of the patent system is to get technology

out to society. And people are taking up a public resource, which is I believe a very valuable public resource, and if you are saying, "Well, you can start playing and then decide based on where you think it is going," I think you are really undermining one of the features of the Patent Office, and this is a real problem because a lot of technology changes very fast, and if you don't get the stuff out fast, you are going to have a real problem.

SHAPIRO: I view that as sort of a nuance, possible angle, and the one area where somebody might object to this But overall, extremely strong support for that and, again, many patents have been subject to this already so we have evidence that it does not appear to be causing problems. So this is kind of clean it up and get it done for 100 percent.

Proposal 8 has to do with prior use rights: "To enact legislation to create intervening or prior use rights to protect parties from infringement allegations that rely on certain patent claims first introduced in a continuing or other similar application." There has been some discussion about this. I think a fair bit of concern about continuation practice, and how it can ensnare companies and be part of hold-up problems. My own research is on prior use rights, so I am particularly interested in this area. It seems like there is really almost unanimous support for this, and I would like to have a few of the folks just explain where they are at, who have crafted proposals.

GRISWOLD: I have been a prior use buff since the early '90s when the Senate first passed a bill that was a broad prior user right, which did not pass the House in time. But, the AIPRA view on this is that we don't believe there should be a prior use right that attaches to something—a use that begins after the effective filing date. We believe that the prior user right statute today that has some limitations on subject matter, has a requirement that there be a one-year reduction in practice one year prior to the filing date, and does not include substantial preparation. That the statute should be changed to fix those things. But we don't support moving the date downstream so that would occur during the prosecution. You get into all sorts of unintended consequences where we are not even sure of, including more derivation questions, and so we don't support that. We think that the publication of patent applications helps us. All applications will help us on the issue of some patent claims showing up later that will be a problem, not perfectly, but that is our direction and belief.

SHAPIRO: Bob [Sacoff], want to talk to the ABA?

SACOFF: I think we are pretty consistent with that. Just in the interest of brevity, let me read you the pending resolution that we have got subject to adoption. "It is resolved that the Section supports in principle the com-

mercial use, including substantial preparations for commercial use should be recognized as a personal defense to patent infringement if undertaken in good faith by a person who has reduced the patented invention of practice prior to the effective filing date of the patent. Specifically, we support an amendment to the American Inventors Protection Act in '99 providing for such rights to remove restrictions on the enjoyment of such rights inconsistent with this principle." And those are some of the limitations that Gary [Griswold] was referring to.

....

[Speaker unknown]: Tentatively, we are in agreement with the other associations. And another point is that the type of prior user right that Gary Griswold is talking about, which is somewhat different from what is in the FTC Report is what you have in several countries abroad now and that has worked well and we would like to see the more limited prior user right that was in the '99 Act expanded that way.

SHAPIRO: So, I think we have a lot of affirmation here for what the FTC is proposing.

BARR: What are you saying? You are saying that the industry representatives support it, but the organizational ones don't. Is that what you are saying?

SHAPIRO: No.

BARR: What you said is obviously important. I just heard all the industry organizations opposed the FTC proposal. Did I get that wrong?

SHAPIRO: I think that they are all supporting it.

GRISWOLD: What we support is expanding the present prior user right, but the present prior user right has its effective date, the effective filing date of the patent application. What the FTC's proposal was to also provide a prior user right that could occur by activity prior to broadening claims during the pendency of a patent application. That part, we do not support because we are concerned with the unintended consequences of derivation issues. We do not even know what would happen there. It gets into a whole bunch of questions of why a person's company prosecuted, or an individual prosecuted a case the way they did, and so we do not support that piece of it. So we support expanding the present prior user right, but not changing the date.

SHAPIRO: So it wouldn't just apply to business methods

GRISWOLD: It would apply to everything.

SHAPIRO: And you don't need to do it one year before the application

....

GRISWOLD: Right.

SHAPIRO: Any time before. You would support that, but not so much in this continuation.

GRISWOLD: If the claim was not there and then you had a broadened claim. I even figure where they have a broadened claim or not, it is a whole continuous snake pit.

SHAPIRO: I thank you for helping. I do not think I did make it clear, hopefully we have got it clear now.

BARR: I would like to support the FTC proposal. I wanted to highlight the difference between the industry representatives and the organizations.

SHAPIRO: Any other industry folks want to say, "Yeah, I really support the FTC" or not?

KUSHAN: I will mention that I am not really, either in this capacity, because BIO is a trade association made up of companies and not necessarily the lawyer associations. This issue is complicated and I don't know that it can get unqualified support in any reasonable sense, but what I think it is important to pull out the difference that has been pulled out, which is this is talking about vesting a right to any use of an invention after the filing date of a patent, and certainly there are instances where the continuing practice has been abused, but we have got a lot of applications pending now which have been chopped up again by the Patent Office.

....

MR. KUSHAN: Sorry to keep going back to that, but, you know, it bleeds over into a lot of different topics, and so I think it is much more complicated than the FTC gave it credit.

SHAPIRO: Let us move on to [Recommendation] 9, the willfulness: "Enact legislation to require as a predicate for liability for willful infringement either actual written notice of infringement from the patentee, or deliberate copying of the patentee's invention knowing it to be patented." There is a widespread view that the current willfulness rule is not working well, it is disrupting the disclosure, there are people who don't want to even read patents, and it gets involved with this whole issue of when you waive attorney-client privilege. And Mark Lemley has written a great article on this, like everything else. So there is a lot of support here. Of course, we get into the particulars. But I did find, in addition to the associations which want to see some change here, we do have the *Knorr-Bramse* case, so a lot of people are saying, "Well, let's wait and see exactly how that plays out and then we'll see what else we need," which seems to me is hard to argue with since it should happen this year. We heard a little bit from some companies. I was impressed with the strength with which a number of company representatives felt like this willfulness

thing is a real problem that can be fixed and they want it to be fixed. I don't know if you guys want to kind of weigh in on that, but I heard that a lot and I think that should come through today, not just from me, but from you guys.

MONAHAN: I think it is probably because this is one of the biggest distortions of the system. This is one of the greatest imbalances. All of those extra ten percent of applications probably doesn't do me much good because I'm afraid to look at them anyway. I have been threatened with letters with patent applications, not just patents, so I get to double my fun. I think that we support some standard that gives us some certainty. I want to know that something is required before I am on notice. I want to be able to act reasonably, I want to be able to act responsibly within my industry to try to do the right thing. Right now, there are a million different facts which are brought to bear and parties attempting to demonstrate willfulness. Oddly enough, notice is usually not one of them, at least in my experience. It is usually something which, again in my experience, was intentionally deceptively orchestrated by a plaintiff's lawyer or by a company. I am not asking to avoid responsibility. If you think I am infringing something, just let me know. But when you get these squirrely letters, or you get invitations to license which later get conveyed to a jury as a "you must have known, you must be willful," that is a problem. And, of course, the result is that when you do your settlement analysis, even as tough as we are in fighting these cases, you have to factor in that additional factor of, "God, what if the worst thing happens and we get treble damages?" And, you know, I have been lucky so far not to see treble damages, but it is a factor which, like punitive damages in civil cases, I think is out of control now, particularly in places like Marshall, Texas, which is why a lot of people are settling cases that are based upon patents which probably should not have ever gotten out of the Patent Office.

SHAPIRO: Kulpreet [Rana], how does this look from Google's perspective? Is it similar?

RANA: I think we face some of the same difficulties that Jay [Monohan] was referring to. We receive letters kind of regularly, increasingly as we have become more visible. We are a bigger target. I think we are definitely aligned with the FTC's proposal in the sense that if you deliberately copy with knowledge that something is patented that, you know, it makes sense that that would give rise to willful infringement. I would like to think a little bit more about the Notice Letter provision of the FTC's recommendation, just because I do kind of wonder what effect that will have on people's behavior and whether that will give rise to [more letters]. I already get plenty of notice letters, I do not particularly

want to get a ton more that I am going to have to spend a lot of time to review. And I think it would be interesting to maybe think about some kind of a consequence for people who issue notice letters, for example. And maybe that ties into things like post-grant review that we have been discussing earlier, where maybe if you issue a notice letter that creates sufficient reasonable apprehension that the person receiving it could initiate some kind of a review, and maybe the cost associated with that is enough to regulate the conduct of the people who are, you know, sending those out. So I think it is an interesting thought. There are some things to kind of think through a little bit more there.

SHAPIRO: Do you want to say something, Bart [Eppenauer]?

MR. EPPENAUER: As I said before, we strongly support this recommendation. In response to your comment, I think that if you have this burden placed on the letter writing, that will reduce the letter writing because in our experience when you challenge somebody to send you sort of a soft letter, to prove it up, it takes a long time to get that information from them, and yet you are still in a willfulness situation. So I think it is really going to help. We are strongly in favor of it and we are strongly in favor of removing adverse inference and trying to avoid the whole waiver of attorney-client privilege, which is a real problem in litigation.

MONAHAN: Let me just add that. Right now the letter writers have their cake and eat it too because they can send you a non-notice letter which costs them almost nothing, and then preserve the ability to make an argument later. I am intrigued by there being a consequence because if I had a dollar for every letter that either we never heard from again or never responded when we wrote to them, we would be rich. So I think this is an important area, and I am concerned about inviting more. But I really think if you put a consequence, you can put a standard on these things, that the incentive to write them would be reduced, and the people who wrote the letters would really believe that they have a claim. And that is what we ought to be dealing with.

....

BARR: First of all, when the letter writers go away, that is reward in itself, so I am okay with that one. I support the recommendation strongly and I just don't think anyone has mentioned what I think is the most important basis for it is that we can again allow engineers to read patents because, at least to me there is enough ambiguity in the case law that I have to discourage engineers from reading patents and in their prior art searches because that might be enough for willful infringement. But having said that, I will attempt to improve on what Mark [Lemley] said this time because he referred to his article, and I strongly recommend that you

read the article on willfulness—because the recommendation there, after [Lemley] discusses all the problems, he solves the problems by proposing that wilfulness can only occur at the time you develop the product. If you copy a product or a patent at the time you develop the product, then you could be liable for willful infringement, but just because you are down the road in what Professor Shapiro calls a hold-up situation, where it is very difficult to modify your product, now you get a notice and you get an opinion, but can you back out? That is a tough problem, and the triple damages penalty for not getting an opinion or not producing it in court or for not having one that satisfies the requirements is a little drastic in the hold-up situation. . . .

SHAPIRO: I want to close this part on I think that happy consensus that industry, I think, really wants change here, they feel this is my sense, and FTC has identified some specific ways to do that. Of course, there will be some more discussion about how to implement it. But I hope this will happen and it seems to me we have taken a step in that direction.

VI. CONCLUDING REMARKS

Mozelle Thompson, Commissioner, Federal Trade Commission

THOMPSON: I am very impressed that we are here at the end of a Friday afternoon and there are actually more people here than we started out with this morning. And that is very impressive because I began this morning by noting that today's event had the potential to be a watershed moment in the future of innovation in the U.S. Now, some might criticize that statement as a bit of puffery, but based on the excellent discussion that I have heard today, I am convinced that is true. So at the outset, congratulations, give yourselves a hand.

Now comes the hard part. How do we take our gaggle of bright ideas and keen insights about patent law and process and turn them into something more meaningful about innovation in our economy? Or how do we capitalize on this opportunity to make the patent system more accommodating to innovation in the world that we see today, especially in high technology and biotechnology? And here I might have a few suggestions.

First, I would encourage the people in this room to create an organized and continuing voice of technology and academics to take advantage of the opportunities to support innovation through improvement of our Patent System. I am always struck sitting in that strange place called Washington, D.C., that when you are considering some questions like these questions I am reminded of the movie *Ghostbusters*—"Who you gonna call?" And all

of these people have interesting views, and in looking at our report, it is important to recognize it took almost two years to locate all of those resources, and most policy makers are not in that position. So creating an organized and continuing voice is very important.

Second, I think it is also helpful to create an ongoing resource for policymakers so that we can understand how intellectual property is used in information technology and biotech. In the context of doing this report and being here, and listening to the many people, some of which are here today, I thought it was very enlightening to hear not only viewpoints, but positions and practices, anecdotes, and data. Sometimes that information doesn't filter very well back East. Holding yourself out as a resource is very important.

Third, I would implore you to continue the momentum generated here by developing ongoing mechanisms to discuss among yourselves the specific issues raised here today, and identify areas of consensus.

Fourth, and maybe this is something that is a bit of a challenge to all of us, is talk to the public about your stake in innovation and in intellectual property, and why it is important to them. And be able to talk about the markets that you deal in and how fast they change. In other words, tell people why this issue is important.

Now, I am happy to say that I can make an announcement here, and I don't want people to say that this is a light announcement because I think it is significant, that a core group of leading technology companies are willing to take the first step today by working together, and it may start by a public announcement, that they agree that there is an opportunity to make the patent system more responsive to technology and innovation, and that they agree to meet and have a continuing dialogue among themselves, academics, and policy makers about the proposals discussed here today. Now those companies include Cisco, Intel, eBay, Semantec, Chiron, Microsoft, and Genentech. So with that announcement, I think you are off to a very good start. And I thank you all for getting us to this point.

Now, although I may live to regret it, I look forward to sharing this ongoing relationship with you all as you refine your views and we consider how innovation can thrive in America. So, congratulations, and thank you all for being here.

