## OBVIOUSNESS PANEL

2 If we could have the panelists for 3 MR. LEMLEY: the Obviousness Panel come on up? We have a 4 5 distinguished panel. We are going to hear from Professor 6 Rochelle Dreyfuss at NYU; from Todd Dickinson who, for 7 the next week or so, is at Howrey Simon Arnold White, and will then become IP counsel at General Electric; 8 9 Professor John Barton at Stanford University; and, 10 finally, from Ron Laurie at Inflection Point Strategy. Everybody is going to talk for a very brief period of 11 time to enable us to have some conversations among the 12 13 panel, and then some conversations with all of you.

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14 MS. EISENBERG: Thank you very much. I am 15 losing my voice which is a good enforcement to be brief 16 in my opening remarks. I found this FTC report very 17 interesting. I look forward very much to reading the 18 National Academy's report. In wading through some of the 19 testimony in the Powerpoint slides and all of the wonderful resources from the FTC study that were up on 20 21 the web, I was struck by the widespread perception in various quarters that the non-obviousness standard has 22 been falling, has been dropping, that it is not therefore 23 2.4 doing the job that it had been doing in the past of 25 separating out the wheat from the chaff, of

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distinguishing those inventions that need the incentive 1 2 of a patent in order to be called forth from those that are likely to be forthcoming in short order. 3 In any event, because they are the low-lying fruit in the 4 5 particular art, something that is within easy reach of ordinary practitioners. And so I began reading through 6 7 the cases in chronological order and the picture that emerged was of the sort of systematic marginalization 8 over time of the views of the person having ordinary 9 10 skill in the art to the point of irrelevance, really, in recent decisions. This is very different than what you 11 would expect from looking at the language of the statute. 12 13 I apologize for having no Powerpoint slides, maybe you 14 can think back to Peter Munell's excellent slides 15 yesterday, and right now you see behind you the language 16 of the statute which says that "if a patent may not be 17 obtained, though the invention is not identically disclosed or described," blah, blah, blah, "if the 18 differences between the subject matter sought to be 19 20 patented and the prior art are such that the subject matter as a whole would have been obvious at the time the 21 invention was made to a person having ordinary skill in 22 23 the art." Now, reading that language, it sounds like the 2.4 person having ordinary skill in the art is the ultimate 25 determinant of what gets a patent. That is the person

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whose judgment and perceptions should control. 1 And that 2 makes sense, that is a sensible standard if the point of the requirement is to distinguish those inventions that 3 are likely imminent with or without a patent from those 4 5 that are not. So it seems to call for an examination of what the invention would have looked like at the time it 6 7 was made to the inventor's contemporary peers in the technological community. But this poses, of course, a 8 couple of administrative difficulties in implementing 9 10 such a standard. First is the time frame, this is a difficulty that has been much remarked upon by the 11 courts, particularly the Federal Circuit which is 12 13 constantly admonishing the examiners to avoid falling 14 into the hindsight trap. They are very aware of the 15 difficulty of telling today what would have been obvious, 16 you know, two years ago. The worry there, of course, is 17 that the standard will be set too high, that something that seems obvious enough once we have it in hand, in 18 fact, was not obvious before that point. 19 The second 20 difficulty, though, is the one that I am concerned with, and one that has been ignored, which is how do you bring 21 to bear upon these determinations the perspective of a 22 person having ordinary skill in the art if the standard 23 2.4 is administered and reviewed by people who do not have 25 ordinary skill in the art? The Federal Circuit, again,

has been obsessed with the first difficulty, but has 1 2 virtually ignored the second difficulty. When it speaks of the second difficulty, of the difficulty of discerning 3 the perspective of a person having ordinary skill in the 4 5 art, it conflates the two issues. It says the reason that we look to the level of ordinary skill in the art is 6 7 to avoid hindsight, when in fact it is a really different problem, and it is a problem that points in the other 8 The worry with hindsight is that the bar will 9 direction. 10 be set too low, the worry with the difficulty of implementing the ordinary skill level is that the bar -11 excuse me, it is the opposite - the worry with hindsight 12 is the bar will be set too high, the worry with the 13 14 PHOSITA problem is that the bar will be set too low.

15 Now, the Supreme Court in its decision in Graham v. John Deere listed level of skill as one of the 16 17 basic factual inquiries that needs to be determined en route to evaluating the obviousness of the invention, but 18 the Supreme Court never actually used that standard in 19 20 any way, used that skill level in any way, in figuring 21 out whether the particular invention before it was patentable, and that was true in other cases as well. 22 They would point to a level of skill as the statute 23 2.4 required them to do, as something you have got to 25 determine, but then once they determined that, they would

set it aside and they would look at the prior art and 1 they would do their own evaluation of whether the 2 differences between the prior art and the invention were 3 obvious or not. The lower courts have done the same 4 5 thing. They recite that they have refined level of skill, they make findings sometimes. They will say, you 6 7 know, the ordinary practitioner is somebody with a Bachelor's Degree in Mechanical Engineering and six years 8 of experience working on this or that, and then they do 9 10 nothing with it. Sometimes they forget to make those findings and then, on appeal, the Federal Circuit will 11 say, "Well, this is harmless error." And as they have 12 13 applied the standard, it has got to be harmless error 14 because it is not doing any work. So instead they all 15 focus instead on the prior art references, the written 16 record of prior art, and what it reveals. The person 17 having ordinary skill in the art is consulted as a reader of references, rather than as an evaluator of 18 obviousness. So they will refer to the skill level, to 19 20 the training, to discern what the reference would reveal, 21 but not to go beyond that and evaluate whether the invention would have been obvious. 22

There are a number of reasons, I think, why this has happened. First is what I call the "plotter presumption," the presumption in the case law that the

person having ordinary skill in the art is unimaginative, 1 2 uncreative, is not an innovator, thinks along conventional lines, and this was expressed most starkly 3 perhaps in a past issue they quote in the paper from 4 5 Judge Ritch in the case of <u>Standard Oil vs. American</u> Cyanamid, where he says, "The statutory emphasis is on a 6 7 person of ordinary skill and one should not go about determining obviousness under Section 103 by inquiring 8 into what patentees, i.e., inventors, would have known or 9 10 would likely have done faced with revelations of references. A person of ordinary skill in the art is 11 also presumed to be one who thinks along the line of 12 conventional wisdom in the art and is not one who 13 14 undertakes to innovate whether by patient and often 15 expensive systematic research, or by extraordinary insights, it makes no difference which." So he is 16 17 presuming, in other words, that the person having ordinary skill in the art is somebody who falls beneath 18 19 the skill level of patentees. This is, I think, a deeply 20 flawed approach that cannot possibly be right. It seems 21 inconsistent with the statutory language and it seems to be either circular or a downward spiral, more likely a 22 downward spiral because what happens is, if you exclude 23 2.4 patentees in determining what is the level of ordinary 25 skill, then you are constantly looking below that level

to figure out what ordinary skill is, but then the top of 1 2 that range, presumably, is patentable, right? And so then you drop the level down further. You exclude the 3 most innovative of the plotters and, then, because they 4 5 become patentees, so we have kind of a race to the 6 bottom. It sort of inverts the relationship between the 7 person having ordinary skill in the art and the standard of patentability. So rather than PHOSITA setting the 8 standard of patentability, we have the standard of 9 10 patentability setting a ceiling on the skill level that we are willing to ascribe to PHOSITA. It is just 11 completely inverted. So that is one, I think, 12 13 fundamental problem is that, by presuming that PHOSITA 14 has no capacity to innovate, we have made anything that 15 is different from the prior art appear obvious. Second 16 move, I think, that has accelerated the marginalization 17 of PHOSITA has been the Federal Circuit taking a strong position that the determination of non-obviousness, that 18 19 the ultimate determination of non-obviousness is a 20 question of law subject to plenary review, rather than a question of fact. And, of course, it is a mixed question 21 of law and fact. The standard itself is a legal 22 question, but the application of that standard to the 23 2.4 facts of particular cases is something that involves - it 25 is essentially a case specific factual determination.

1 They do not see it that way. But if it were seen as a 2 factual determination, then you could consult some person 3 out in the field there to figure out what it means. If 4 it is a question of law, then the evaluator's judgment 5 does not matter and, in fact, PHOSITA is incapable of 6 determining questions of law. PHOSITA has no skill in 7 the art of law.

Another move has been the elevation of evidence 8 of secondary considerations or objective evidence that 9 10 the Federal Circuit calls it, evidence of how the invention was received in the marketplace as bearing on 11 the question of obviousness. If you read the statutory 12 13 language, it talks only about the technological 14 evaluation of the evidence from the perspective of 15 technological workers of ordinary skill. The so-called 16 secondary evidence, or objective evidence, is all about 17 how customers receive the invention, how it was received in the marketplace, which, again, makes the perspective 18 19 of customers more relevant than the perspective of 20 technologists.

Another move has been the - and all of these were outlined again yesterday, I feel like I can refer to them in summary fashion - the suggestion test for combining the disclosures in references. If we go back how old is Winslow Tableau? If we go back something like

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30 years -- '63 - 40 years, 41 years. We pictured the 1 2 person having ordinary skill in the arts sitting at his bench surrounded by prior art references, able to cull 3 together these prior art references with ease in order to 4 5 innovate. Today, the Federal Circuit insists that there be some sort of explicit showing of motivating suggestion 6 7 to make the combination. They have retreated somewhat recently, say, allowing combination of references where 8 the nature of the problem seems to call for it. 9 Thev 10 seem to be retreating somewhat from what for a time seemed to be an ever-accelerating trend towards focus on 11 the written record of prior art in determinations of non-12 13 obviousness. But, still, the focus is primarily on the 14 disclosures of the prior art, detailed reasoning, and 15 away from the judgment of PHOSITA. And I think this 16 focus on prior art obscures an important dimension that 17 PHOSITA brings to bear upon technological problems, which is tacit knowledge, judgments, insights, the sort of 18 thing that is not articulated in prior art references, 19 20 things like a sense of whether the equipment is working 21 properly, for example, that somebody who is working in a field would have an intuitive feeling for, but you are 22 23 not going to find that by looking in the text of prior 24 art references. So how to get this tacit knowledge of 25 ordinary practitioners into the system of evaluating

claimed inventions is a problem. We have examiners who 1 2 are skilled, well-trained people, and that is one important source of information and it is a good reason 3 for the Federal Circuit to defer, in my view, to the 4 5 decisions made in the PTO about obviousness, much more so than they have done. But the examiners are not current 6 7 practitioners; they are, at best, former practitioners whose tacit knowledge is likely to be dated and 8 atrophying. Litigation experts in the particular patents 9 10 that matter most, who argue about the validity of a patent, are another source of input, but they are 11 12 adversaries, hired guns. There is too much at stake by 13 that point. It is not the sort of process that is likely 14 to yield dispassionate technical appraisal of how an 15 invention looks to real practicing technologists. So it would be better if we could figure out ways to allow the 16 17 PTO to consult with outside technological practitioners in making determinations of obviousness, that would allow 18 19 them to document obviousness in circumstances where the 20 written record of prior art is an inadequate foil for 21 making that judgment. And there are certain circumstances where there is particularly likely to be a 22 23 problem, like with the Patent System and into a 2.4 technology that previously was outside the Patent System, 25 like business methods, for example, where the written

record of prior art is a very inadequate source of 1 2 quidance as to what would have been obvious. Now, there are some difficulties in trying to figure out how to do 3 this. Any agency that makes technological determinations 4 faces this problem and most of them have some sort of 5 mechanism for consulting the views of outside 6 7 technologists, they will have scientific advisory boards, they will have peer review panels, they will have 8 something in place that will allow them to do that. 9 10 There are some challenges to bringing those kinds of mechanisms to bear within the PTO. 11

First of all, there is the extraordinarily 12 13 broad range of technologies that the PTO addresses. You 14 cannot really have a standing scientific advisory board 15 that would advise PTO across the broad range of inventions that come before it. The PTO makes many small 16 17 decisions, such as Mark pointed - was made so well by Mark Lemley and his "Rationale Ignorance at the Patent 18 Office." The PTO makes many decisions, most of which are 19 20 of no consequence to anybody whatsoever, and occasionally 21 they make a really important decision. It is very difficult to expend a lot of resources in getting all of 22 those determinations right up front, so you do not want 23 2.4 to have a really high cost system. If you get compared 25 to FDA or EPA, they make a lot of focused decisions where

there is a lot at stake, that is an easier context for
 bringing in this outside expertise.

Confidentiality is another issue that would 3 stand as an obstacle. We have a statutory requirement of 4 5 confidentiality for pending patent applications, even with 18-month publication you can opt out of that system 6 7 if you are not applying outside the U.S., and so that would be something that would need to be addressed. 8 Conflict of interest is obviously a serious problem. 9 If 10 you bring ordinary technology - ordinary practitioners the relevant technology in an area where you are making 11 decisions in industrial technology, those people may 12 13 often be working for competitors of the patent applicant 14 and have a material conflict of interest in the judgment. 15 Some of these issues also plaque journal peer review or 16 grant peer review, and I think there are ways of 17 addressing them and managing them. Okay.

MS. DREYFUSS: I just passed Becky something 18 that said "Stop." She is so good. Alright, well, we 19 20 want to thank Pam and Mark and the Berkeley Center for 21 allowing me to come here. I was a participant in a very small way in the FTC Study and on the NAS Committee, and 22 23 it is nice to have an opportunity to get some things off 2.4 my chest. The first thing I wanted to talk about was 25 confusion, as was talked about at this panel, you see

there are really three issues on obviousness, and unless 1 2 you disaggregate them, people wind up talking past each other. One issue is the way the PTO is implementing the 3 standard, and people talk about how, you know, the 4 5 teacher is doing a great job, the examiners are really dedicated, well, you know, that is terrific and it could 6 7 be true, but if they are being told the wrong thing to do, then their output is not going to be great. 8 The second thing is about the way the court is interpreting 9 10 the standard, and what we heard on that was, "Well, you know, the Federal Circuit is still citing Graham against 11 John Deere, what could be wrong?" Well, you know, is 12 13 citing John Deere a great sign? It is close to half a 14 century old, too, that case, and if it lays out a rule 15 and a methodology that are not suited to modern research, 16 then I it is not going to work out very well. Third, 17 people talk about the standard itself and that is really quite a different issue from the other two. So all three 18 issues, they need to be discussed separately. 19

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, but that is a big qualifier. And one issue is funding, and I take Mark's point, rationale ignorance, as well, that there

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are diminishing returns to increasing funding.

2 Nonetheless, I suspect that more funds would help. But, as important, there is a question about the source of the 3 funds and this notion of user supported PTO. 4 The 5 conflict you hear is about whether some funds should be diverted. I think that is a total red herring. 6 It seems 7 to me the rhetoric of user support is fine when you are talking about Yosemite, and when you are thinking about, 8 you know, public parks. And if you want, you can think 9 10 about examiners as a core of park engineers because - or park rangers, rather - because they are protecting the 11 12 public domain, but the analogy breaks down when you 13 consider the users. At Yosemite, it is the folks who 14 enjoy the public land, but at the PTO, the users are the 15 privatizors, the patent applicants. And I would like to 16 see this idea of user support dropped, in part because it 17 does not necessarily measure the amount of money that would be rational to spend on examination, but mainly 18 because the rhetoric fuels this notion that the PTO is 19 20 there for the applicants and not for the public. And it 21 is also symptomatic of a bigger problem. Although park rangers actually do see loggers from time to time, 22 examiners do not often see the people whose interest they 23 2.4 are protecting. And in that connection, I would like to 25 point out some side benefits of the opposition approach.

1 That is going to be talked about on a separate panel, and 2 the really key points, I am sure, will be touched upon there, but there are a couple of side benefits that are 3 worth considering. The people who are arguing for the 4 5 public domain, they are not often seen in current practice, as I said. And it would expose the Office to 6 7 the effect of its decisions on the public. It would also do something else, and that is it would create a career 8 9 ladder that might help retain examiners who would 10 otherwise go off to practice, and there might even be a ladder that would lead to a Federal Circuit appointment, 11 and that would bring to the Federal Circuit the PTO's 12 13 perspective on what its decisions do. And I think that 14 would be good too.

15 That brings me to my next concern, and that is 16 the Federal Circuit and how it interprets the standard of 17 obviousness. Now, I remember the days of Monday morning quarter backing, when the invention was used as a road 18 map for anticipatory prior art, and in that context, I 19 20 can see why the court did much of what it did. Thomas 21 Edison's paper showed that inventiveness can be about combining known art, and so requiring the examiner to 22 23 articulate why a person of ordinary skill would think of 2.4 combining is actually a good thing. As sciences mature, 25 the roots to making certain discoveries become known, but

sometimes without making it actually easier to accomplish 1 2 that result. And so the obvious to try doctrine is important because it focuses the decision maker on how 3 many alternatives the inventor faces and his actual 4 5 chances of success. Unlike my colleagues, including the one to my right here, I do see a potential for secondary 6 7 considerations. If they were seriously combined with a nexus requirement, I think they would help focus the 8 9 Judge on whether the inventor was unique among folks in 10 his field. But I, too, see reason for concern - the tacit knowledge problem Becky just talked about, the 11 obvious to try doctrine, it is fine to think about the 12 13 number of alternatives, but when deciding if a number is 14 a big number or a small number, the role that 15 instrumentation and automatic machinery now plays in 16 research really needs to be considered, and you do not 17 see that very much in the cases. And I also have to agree with Becky that in many fields, the level of skill 18 in the art is not only not right, but not much thought 19 20 about. Perhaps we need a different perspective on 21 collaborative work. Some people have suggested the PHOSITA, the team having ordinary skill in the art, and 22 23 we need factor in work that is done by instrumentation, 2.4 as I said. The court is still using the standards of In 25 Re Bell and In Re Devel cases that were decided - work

that was done decades ago, and John Duffey has alerted me 1 to a recent case on which the court introduced the 2 concept of nascent technology where a person of ordinary 3 skill in the art has little or no knowledge. 4 That is 5 Chiron against Genentech. If nothing else, that is likely to breed a lot of litigation on what nascent is. 6 7 So there is important work to be done in implementation. And I like Becky's idea of using experts to flesh out 8 9 some of this, it is certainly an intriguing idea and well 10 worth considering, but I do have some skepticism. First, who will these outsiders be? I have a hard time getting 11 my head around the idea of the expert on what is 12 13 ordinary. We could choose ordinary people in the art, 14 but how are we going to choose them, and once they are on 15 a panel of expert people, are they going to continue to 16 think that they are so ordinary? I think about my 17 colleagues and the elitist way in which they talk about people at other law schools, endocrinologists, what do 18 19 they know? And I have a concern that this expert panel 20 might drive down this standard of what is considered 21 ordinary, rather than driving it up. Also some process questions on how will these experts be utilized? Do you 22 23 have a standing panel of people? If people get called on 24 a lot of times, I think people tend to find it difficult 25 to serve under those circumstances. If it is an ad hoc

committee and one person serves only once, then there is 1 2 going to be learning curve issue, much like the one that the PTO faces in training its examiners. I am especially 3 concerned because this approach has been tried and found 4 5 wanting in other adjudicatory contexts. For example, the 6 FDA has tried it on Boards of Safety and they did one on 7 the safety of Aspartame, the sweetener and, in somebody else's words, I cannot remember who, it was a pig's 8 breakfast. It was hard to find people without any ties 9 10 to corporations, many people said that picking the experts effectively picked the results, and scientists 11 showed themselves to have a rather poor understanding of 12 13 distinguishing between scientific questions and legal 14 questions. Now, since the FDA tried that, there is an 15 extensive literature now on court appointed experts and 16 how to choose them and how to train them, and maybe that 17 would actually be a useful place to start looking to implement Becky's suggestion if it was thought to be a 18 19 good idea. I also think that experts at other points 20 would be good - the NAS report talks about the need to 21 help alert the PTO to emerging technologies so they can start gathering the right literature and staffing the 22 23 office correctly. Experts might be very helpful on that. 2.4 And I will talk in one more minute about some other areas 25 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 it likes the result of its being low, which is to say, in fact, that it likes narrow patents.

7 Remember, the PHOSITA standard applies not only to obviousness, but the Chiron case I talked about was 8 about what the PHOSITA knows for purposes of enablement. 9 10 And the less the ordinary artisan knows, the less she is enabled, and the narrower the claim. And I think that is 11 where the Federal Circuit is really going - to a system 12 13 of narrower claims. It is clear in other areas too, the 14 written description cases, their own opinions in Festo 15 and Hilton Davis betrayed a certain interest in having 16 very narrow claims. Unfortunately, the court has not 17 actually explained why that is so, so it is hard to 18 evaluate why they want to do that. In part, I suspect the court thinks that if a claim is narrow, it won't be 19 20 very dangerous, and that means that it won't matter so much if it is not examined right, or the level of school 21 and the art is not properly set. But I wonder if that is 22 23 really true. I think the court may well be following 2.4 itself. Narrow claims create lots of work for patent 25 lawyers, but what that actually means is high transaction

Patent thickets are a problem that many people on 1 costs. 2 this panel have written about, they create difficult entry barriers if you do not have a patent portfolio to 3 trade when assertions are made, then you are in real 4 The increased wear and tear on the Patent 5 trouble. Office because they exacerbate whatever problems there 6 7 are because people have to keep filing in order to protect their investment. So I think it is actually 8 9 foolish to think that narrow patents are less dangerous. 10 Of course, in part, the Federal Circuit may also believe that narrower patents correlate with better notice, but I 11 am skeptical about that too. If you have notice, you 12 13 need crisp edges to the claim, but what those crisp edges 14 contain, whether it is broad or narrow, that is not so 15 relevant to the question of notice.

16 Now, I highlight this issue not just to 17 criticize the Federal Circuit on narrowness, but also to demonstrate another point about this concept of PHOSITA. 18 When the Court sets the level of skill to accomplish a 19 20 narrowing function, what it is doing is creating a 21 construct, a social construct to achieve a particular qoal. In this sense, PHOSITA is not a snapshot of 22 23 reality, it is not meant to be a fact-based historical 2.4 measure of inventiveness. As we see, it does not much 25 mirror what we know about invention, or inventors, or

artisans of ordinary skill in the art. It is a concept 1 2 that is constructed so that the system does what the Court wants it to do. And if we think it is the wrong 3 standard, it is not because we know of specific patents 4 5 that should never have issued; rather, we think it is wrong for systemic reasons, because systematically we 6 7 think there are too many patents, transaction costs are too high, etc. And so at the end of the day what we 8 really need to think about is getting the system to 9 10 operate in a way that we want it to. We need to think about obviousness for sure, but also the scope of claims 11 that best serves industrial and creative needs, the 12 13 distance between inventions on the innovation ladder. 14 Should the boundary of one invention touch on the 15 boundary of the next invention? Which is the way it 16 works right now. As we have it structured, PHOSITA is 17 key to all of those concerns, but do we really want the same standard of PHOSITA for everything? Maybe we need 18 19 different standards in there. What should the standard 20 be for each thing for which PHOSITA is used. For that, a panel of experts could be useful, but I would not use 21 them as retail adjudicators of particular cases, rather 22 23 wholesale in helping us to think about all the roles, the 2.4 non-obviousness and the knowledge of persons with 25 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.

MR. DICKINSON: Thank you very much. Let me 3 join the others in certainly thanking Berkeley for 4 5 hosting today. As some of you know, I am getting ready to move back to the East Coast, so I was packing up and, 6 7 actually, movers are at my house today. I was packing up my office yesterday and I made sure that in the box that 8 went directly to my office I put my Berkeley Law and 9 10 Science Technology Journals there to make sure I had a good set of references. I also want to thank my - as was 11 suggested I am going to go work for GE, and I want to 12 13 thank Ron Myrick who is here today, who was my 14 predecessor, for doing a great job there and leaving me 15 with a great legacy to build on. I often get cast as the 16 pragmatist, I guess, as a former Commissioner of the 17 Patent and Trademark Office in a lot of these panels. Maybe the reality check or the - certainly with panels 18 19 with a lot of folks who are academics on it, bringing a 20 different point of view. What is interesting I said to 21 somebody else is that I end up sort of in the middle of the road broadly speaking. I go this afternoon, for 22 23 example, to give a speech at the nano-biotech conference 2.4 in the city, and their principle concern is the PTO is 25 too tough on them, that they cannot get what they need

out of it, and that they do not spend the resources they 1 2 need. So there are interesting and robust debates about what the Patent System in particular means today and how 3 we deal with it, and in the characterization of this 4 5 form, reform it, which is also interesting because traditionally, I think, or at least the last couple major 6 7 times we had patent reform in this country, starting with the '52 Act, and then the reforms in the 1980s around the 8 CFC, and most recently in the American Inventors 9 10 Protection Act, much of that reform was driven by the IP community, the insiders, if you will. And a lot of the 11 discussion we are having here today, at the FTC, at the 12 13 NAS, the IPO panel on Monday in Washington is coming from 14 outsiders, are traditionally those who are outside the 15 system, so it is a very interesting and I think 16 appropriate debate. But, again, I am the pragmatist. As 17 we have sat here this hour, I am going to guess that the Patent and Trademark Office will have allowed 100 more 18 In the next hour they will allow another 100 19 patents. 20 patents, and after that they will allow another 100 It is not a stream, it is a torrent, and it 21 patents. keeps coming very rapidly. So a lot of what we have to 22 talk about and remember as we talk about the reforms or 23 2.4 the issues around obviousness or anything else, are the 25 fact that we are dealing with a very big process which is

hard to change, is susceptible to it, 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.

Let me talk about - one of the things I have 6 7 talked about the FTC report a lot and testified before it several times, and also was a participant in the NAS 8 report at certain places. One of the premises about the 9 10 FTC report is that there are questionable patents out there, and that is actually the phrase that gets used. 11 Ι 12 think that probably everyone would agree that there are 13 patents that have issued that should not have for one 14 reason or another, or that raised a concern of one sort 15 of another. But the challenge, I think, is that we have 16 not come to the place yet where we have really defined 17 what we mean here by questionable patents. And in so 18 doing, I would suggest we are not quite at the place yet where we have the evidentiary back-up to justify, 19 20 certainly politically justify, frankly, going to the 21 policy makers and getting the kind of changes that are suggested. And I think we need to continue to work there. 22 When we say questionable patents, do we mean the stick 23 2.4 patent that issued, or waiting-in-line-for-the-toilet-on-25 the-airplane patent that issued, the ones which people

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traditionally take a poke at because they sound odd or 1 2 ridiculous, or why did somebody spend the \$3,000 to get it in the first place? Or do we mean patents like 3 genomic patents which are getting in the way - perceived 4 5 to be getting in the way of research or a business method patent which maybe just offends somebody's sense of what 6 7 ought to be patentable in the first place. It is not quite - I am not quite sure. The critique comes from a 8 lot of different aspects and a lot of different places, 9 10 and so I think we need to be a little more clear about what we mean by questionable patents and why we should 11 reform a system in view of them. How many are there? 12 13 One of the issues we will get into later today is 14 lowering the standard of review from clear and convincing 15 to preponderance of the evidence. Well, you lower the standard of review for questionable patents, you lower it 16 17 for all patents, and you make patent portfolios and individual patents less valuable, and when you do that, 18 19 you start to cut into I think significantly the 20 intellectual base of the - or the intellectual capital of 21 the country, not to say it is not justified, but why are we doing it and how many are we doing it for? 22 I still think we need to take some care to define. 23

Also, because, don't forget, the statute basically allows the applicant to get a patent unless it

is anticipated or obvious, and that is just - you could 1 2 argue that maybe it should be the other way around, and people do, but that is the current statutory standard. 3 So I think we need, with all due respect to the FTC and 4 5 to the NAS, I think we need more evidence of this lowering of obviousness that is perceived to be out 6 7 there. Do I believe it is there viscerally? I think I could make a case in some areas that that is the case. 8 Do I believe that uniformly that is happening and 9 10 happening in such a way as to warrant wholesale changes? I think that is a much tougher case to make. 11 I think the evidence for the lowered standard of obviousness is thin 12 13 at this point. And if we are going to proceed in some of 14 these ways, I think we have to take a lot more time and 15 care and put some more energy into developing it. And we 16 have got great economists who, I think, and great patent 17 folks, who are in a position to develop that. For example, the FTC report was almost all based on anecdotal 18 19 evidence. There was very little empirical evidence 20 adduced at all. The NAS did a few more studies on many 21 topics, and I think it backs that up a little bit more.

22 With regard to the U.S. Patent and Trademark 23 Office, they have traditionally been more conservative, 24 frankly, than the courts, traditionally. They have 25 proceeded very cautiously in terms of moving into new

subject matter traditionally, and they have been very 1 2 rigorous, I think, in terms of how they tend to implement the obviousness standard, at least initially. Because I 3 say, one of the biggest complaints I often have to deal 4 5 with in my current practice is the complaint that folks have that the office will not allow their case, despite 6 7 the fact they believe it is clearly allowable, and they cite - they write extensive briefs to back that up. 8 One of the interesting things about - I think about the NAS 9 10 study - is that it is going to use at least two examples, genomics and business method patents, which frankly is 11 about three or four percent of the number of patents 12 13 issued each year, to drive the change in obviousness. 14 Now whether that should drive that change at 3 or 4 15 percent, should drive that change or not, we can argue as 16 well. But business method patents have now, because of 17 the second level review, only 17 percent of them have been getting allowed - only 17 percent of business method 18 patents in Class 705, on average, get allowed. 19 The 20 bigger complaint from the folks who want those patents 21 is that they are not getting them out of the office, not that too obvious business method patents are issuing. 22 So I think we have to examine that a little more closely. 23 2.4 Some issues - I think there are some areas where we ought 25 to look. I proposed two rules that affect this area when

I was in the office, one is what is called Rule 105, that 1 2 one made it, and that allows the examiner to make an inquiry of priority of the applicant on their own 3 initiative. It is relatively under utilized, as I 4 5 understand at this point. I think it could certainly stand to be utilized more. It was widely opposed by the 6 7 Intellectual Property Community, by the patent bar, in particular. But we held the line on that one and that 8 9 one became implemented.

10 I also proposed another rule. It would allow examiners to apply general knowledge that they had. 11 This is a topic of several speakers, it is a topic of general 12 13 discussion, and I would disagree with Professor Eisenberg 14 I think examiners are not these stale to a degree. 15 Ivory Tower folks who are not keeping up with the art at 16 all; on the contrary, they are on the cutting edge of the 17 art all the time. It is coming across their desk in a 18 steady stream and they deal with the state of the art at this level, of the current state of the art at a very 19 20 high level. So I think there are opportunities for them 21 to apply general knowledge if they are aware that they are able to now. The CFC really does not let them do 22 23 that, they have gone so far - I respect and admire Judge 24 Newman enormously, but she wrote an opinion last year and 25 went so far as to say - or two years ago - that examiners

could not even apply common sense to the examination of 1 2 patent applications, and I think that is really pushing the line a little far. But, having said that, that rule 3 that I proposed was shot down. It was so widely opposed 4 5 that we had to back off of that rule. With all due respect to the panelists, I do not remember any of them 6 7 sending a letter and saying that rule was a good idea.

The FTC dealt with obviousness in two 8 particular ways, commercial success and motivation to 9 10 combine. Commercial success, I take the point of the study, I do, Graham says that you can use commercial 11 12 success as support for non-obviousness, and the report 13 suggests that we may be getting undue balance to that, I 14 think is the phrase. That may be happening in the 15 courts, it certainly does not happen in the office, 16 frankly, because people do not have a lot of commercial 17 success to bring to the PTO at the time the application is pending, and it is very difficult to get that kind of 18 evidence introduced, so I do not - while I take the point 19 20 that the FTC makes, I do not think it is that big a deal, frankly, in commercial success, though it is not a bad 21 issue to take a look at. 22

The motivation to combine is a tougher one principally because the CFC has continued to push the envelope, I think, on that issue. However, one reason

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why they do it is that it is awful easy. It is awful 1 2 easy to apply hindsight once you have got references in front of you. And to have Reference A which has got 3 Element A, B, C, D, which has three more elements, and D 4 5 has three more elements, and to say, "Well, look, anybody could have put those three things together, they are in 6 7 front of me right now, I see it." That kind of hindsight is easy, and perhaps too easy, and so what I think the 8 CFC is saying is you need to come up with even more 9 10 rationale for combining those. Could we change that? Could we tweak that a little bit? Sure, we could. 11 But I 12 am, as most of you know that have heard me speak, I am 13 more of a calibrator than a wholesale change quy, and so I think that is a calibration. What the real issue I 14 15 think - well, let me talk to the peer review thing real 16 quickly. I think that Professor Dreyfuss articulated a 17 number of the problems with it. A peer review panel for those last 100 patents that we just have issued, or the 18 one patent that issued in the last minute I have got here 19 20 is a big challenge. I get it if you are going to have 21 peer review panels for genomics, or you are going to have them for very sophisticated technologies. Where is the 22 peer review panel for that largest of classifications in 23 24 the PTO - golf equipment? Where is the peer review panel 25 for boxes? Where is the peer review panel for what we

used to euphemistically call "vermin control," or 1 2 mousetraps? They are out there, but getting those folks together for a peer review process is a pretty daunting 3 task. We do do parts of those things. The Office, 4 5 rather, does parts of those things now. They have for very advanced technologies biotech, business methods, now 6 7 nanotech. They have quarterly customer partnerships where anybody who wants to can come in and meet with the 8 examiners as a group, they can meet with the senior 9 10 leadership, there are structured learning that go on, there are seminars that go on. They are very valuable. 11

Also, when a new technology comes along, to the 12 extent they can, the Office - I did it with business 13 14 methods - tries to draw on those communities to help 15 teach the Office. We brought in, for example on business 16 methods, the Securities Industry Association, the Check 17 Cashing Association, the American Banking Association, a number of those organizations to train examiners both on 18 19 the art itself and also where to find the art, and I 20 think that is a pretty reasonable mechanism to work on. So where does that lead us? The PTO needs more money, 21 frankly, the examiners need more time, and that is a 22 function of money, each hour of additional time across 23 2.4 the PTO costs between \$15 and \$18 million, so they need 25 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.

Let me try to concentrate on a 4 MR. BARTON: 5 particular example. I think I am pretty much known as a non-obviousness hawk, but I am going to try to give a 6 7 more balanced picture if I can and describe a little bit of what is at stake and sort of the philosophical 8 differences on where you go with different non-9 10 obviousness standards. And I am going to concentrate on one of the principles of the CAFC, the principle of 11 12 obvious to try, and I must say I was very helped in my 13 study of this by Brad Wah (phonetic) who is sitting right 14 there in the third row, who did a lot of work for me in 15 this area while he was a student at Stanford. 16 Obviousness to try at one point was a basis for saying 17 "You can't get a patent." In other words, this patent 18 results from a research effort that you suspect is going to lead to an answer to a problem, you undertake the 19 20 research effort, get the answer, and since it was obvious 21 to try this particular research effort, you should not get a patent. Judge Rich came along and stated as 22 23 follows, "Slight reflection suggests, we think, that 2.4 there is usually an element of obviousness to try in any 25 research endeavor, that it is not undertaken with

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complete blindness, but rather with some semblance of a 1 2 chance at success, and that patentability determinations based on that as the test would not only be contrary to 3 statute, but result in a marked deterioration of the 4 5 entire Patent System as an incentive to invest in those efforts and attempts, which go by the name of research." 6 7 In other words, we want people to do research even though it is obvious to try the research and, to encourage them 8 to do the research, we therefore grant a patent. 9 Now, 10 interpreting the CAFC's obviousness to try cases is a nightmare, and they certainly have ended up somewhere in 11 between those two extremes, and I think sort of a basic 12 13 situation of where they are is you can get the patent in 14 spite of the fact there was obvious to try in their 15 strategy, depending on how likely success looked when you undertook what was going to be obvious to try. 16 Okay, now 17 let me apply that to a particular example, the genomic patents. At one time, of course, it was genuinely very 18 19 difficult to get the sequence of a gene. Today, we can 20 get the sequence of a gene from a machine. We can get an 21 insight like whether or not a particular mutation is associated with a particular disease and know what I am 22 23 thinking, now particularly if things are like the 2.4 diagnostic patent such as the breast cancer patents which 25 have been issued and have been so controversial in many

circles from the medical perspective. You know how to do 1 2 that now. You know, you know now how to run all the things on a chip and run a lot of tests of a lot of 3 people and find out with pretty high confidence, you 4 5 know, if you put enough money into it, you can design a project to determine what genetic sources are associated 6 7 with a particular disease. Similarly, and what I put together with the genomic Patent System, and that is just 8 my perspective, it is now pretty obvious - again, 9 10 sometimes very difficult - but pretty obvious how to get the precise structure of a biological crystal, a 11 12 biological protein. And yet I can now get a patent on 13 the protein coordinates, I can now get a patent on the 14 use of the knowledge that gene sequence is associated 15 with disease Y; I can now get a patent on a gene itself, I mean, subject to - I mean, obviously you do not 16 17 infringe the patent, but the separated gene, design of pharmaceuticals based on the gene, and so forth. 18 Alright, so then in some sense obviousness to try 19 20 precisely affects the patentability of these categories 21 of information. And I do want to put it as information because we are really patenting information in these 22 contexts, and there is an obvious question whether or not 23 24 this should be patentable subject matter - that is 25 another set of issues which is related to genomic

patents, but certainly now that we know how to get these 1 2 sequences by an automatic mechanical process - I am overstating a little bit, of course - are they not 3 obvious to try? Alright, and the CAFC has, in effect, 4 5 told us no. It is obvious to try a particular research direction, but knowing how to do the research direction 6 7 does not tell you the shape of the protein, does not tell you the sequence of the gene, therefore it is not obvious 8 what the result of that research project is going to be. 9 10 Alright, so that this is a case in which the obviousness to try principal is one which the CAFC tells us to use, 11 12 and you can see Judge Rich is looking for it, it is one 13 of the reasons why we issue patents which, in some 14 people's minds, raise some questions.

15 Now, I promised to give you a balanced 16 perspective and, in fact, currently, because I read so 17 much about this set of patents, and I have written much 18 about it, I also want to understand the industry, so I am trying to investigate the diagnostic genomic industry, 19 20 understand better how it works, and understand better the 21 role of patents in that industry. And it is becoming abundantly clear to me that a large amount of money is 22 being invested as a result of the fact - almost certainly 23 2.4 as a result of the fact - that patents are available. In 25 other words, the Patent System is in this context serving

its role of providing an incentive to investment. 1 Just 2 as Judge Rich suggested, the Patent System is serving its role as an incentive to carry out research - even if you 3 know the research is going to automatically succeed - so 4 5 that we are then faced, and this is sort of the dilemma I want to put you with, if we accept Judge Rich's 6 7 perspective with the obviousness to try arrangement, then we are going in the genomic context to say, "We grant 8 these patents because there is a genuine incentive factor 9 10 there, and it is genuinely working." And we face the cost, the cost being it is very hard for Affymetrix to 11 put together a chip which scans for all the different 12 13 genomic mutations which a baby might have because they 14 have to go back and get a license from a zillion 15 different companies in order to produce that chip. 16 Similarly, it is very hard for a pharmaceutical company 17 to work with drugs against a protein crystal X, with incyclical kind of analysis of the technologies, because 18 somebody has a patent on the use of those coordinates and 19 20 theoretically the company could simply go out and measure 21 them, so that we are indeed creating some incentives and we are also creating a set of complications. 22 If I broaden that to industry, in general, what Judge Rich is 23 24 saying is, "We want a system which rewards routine 25 research and encourages routine research because it is

good," and he is absolutely right. But the counter 1 2 argument is, "Don't I want to preserve the monopoly, the Patent System, for those cases in which the research 3 level is a little bit above sort of the normal level of 4 research in the industry?" If I am going to reward sort 5 of the normal process of industrial innovation, if I am 6 7 going to reward that with patents, you know, sort of Model A to Model B, if I am going to do that, then I am 8 going to increase the number of patents and I am going to 9 10 create significant problems of having to negotiate crosslicenses and all that kind of stuff. So I want to 11 suggest what the tensions are here. You know, my 12 13 ultimate bias is pretty clear and my proposed, you know, 14 to put my standard - but I want to make sure that you see 15 both sides of it before I do that. You know, my bias 16 would be the CAFC is currently saying the standard is 17 whether the invention would certainly have been made by a person of minimal skill in the art who was unable to 18 19 integrate the different concepts present in the art, and 20 I would like to turn that into "to grant a patent only if 21 the invention is more substantial than that regularly made by a person of average skill in the art, being 22 23 funded and supported in a way that is typical in the 2.4 relevant industry." And at least my proposal as to how 25 to do that is a little bit different from Rochelle's and

Becky's, but it is - you know, but I think that is one of 1 2 the dimensions we need to be talking about because, there is no question, it is a hard standard to apply, it is a 3 judgment standard in any call, and I think that has a 4 5 strong tension, given the actual pressures present on the examiners of driving it down, particularly given what the 6 7 CAFC is saying. But at least my proposal would be to try to include what the patent application - or maybe in some 8 other context - some kind of indication of sort of the 9 10 way routine innovation is going in this industry. How much do you change the technology from the pentium 11 computer, from the pentium chip to the itanium chip? 12 13 That is sort of the standard baseline. Does this go 14 above that baseline or below? Now that is a judgment 15 call, too. But I am wondering if there is a way to get 16 that kind of evidence into the process.

MR. MYERS: Ron?

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MR. LAURIE: Thanks, Mark. I just wanted to say 18 what a pleasure it is to be on this panel and part of 19 20 this program. I just wanted to give you a little bit of 21 disclosure on my particular perspective, which I think is different than anyone else up here, and that is that - I 22 take great pleasure in telling people that I used to be a 23 2.4 lawyer - I am now operating at the intersection of 25 patents and capital formation in a firm that calls itself

an IP Investment Bank, and I can tell you absolutely that 1 2 patent quality is essential to ensure that financial markets make correct investment decisions in connection 3 with technology. I see this every day. Any uncertainty 4 5 about the value of a patent creates misallocation of resources in the financial community. I would like to 6 7 make just introductory remarks on the "but for" test that is set forth in the report. I think the "but for" test 8 is a useful contextual construct in many cases, and 9 10 certainly reflects one of the key policies underlying the patent laws, and that is, of course, the policy of 11 incentive by reward. If the incentive is not necessary 12 13 to produce the invention and its commercialization, then 14 there is no point in offering the reward. I think, 15 however, there are two other policy bases for the patent laws that the "but for" test does not address. 16 One is 17 the public disclosure or dissemination of technology policy. The "but for" test ignores the possibility that, 18 19 even though an invention would have been made and 20 commercialized, that in some cases it would have been kept secret. And this, of course, affects a very 21 delicate balance between the patent laws and the trade 22 Certainly many, in fact probably most, 23 secret laws. 2.4 inventions will be disclosed upon commercialization, but 25 there is a lot that will not, particularly in the

software area where past practice was to distribute under 1 2 confidentiality. The other policy that I do not think "but for" adequately addresses is what I call the "forced 3 improvement policy." That is the motivation to design 4 5 around existing patents and thereby advance the technology in ways that would not have happened but for 6 7 that forced requirement to avoid doing what is claimed in the patent. With regard to the issues of motivation and 8 commercial success, I absolutely agree with Todd that the 9 10 PTO has got it right, there is no lowering of the bar at the PTO in terms of obviousness. The cases that I see 11 being examined, especially in software and business 12 13 method areas, are - if anything, the PTO is taking a very 14 tough position. And I would refer you not only to the 15 MPP which applies to all subject matter areas, but 16 particularly to the recently published examination 17 quidelines on obviousness in connection with business There are, I think, 20 some examples -18 method patents. fairly detailed examples, of how tacit knowledge and 19 20 nature of the problem to be solved, and mere conversion -21 mere automation of a manual process, and many many other things that are not explicitly taught in any of the 22 references that are combined, how those are folded into 23 2.4 the obviousness decision by the Patent Office. To the 25 extent that the Federal Circuit does evidence a trend

toward lowering the bar, I have read the cases, I think 1 2 many of them can be explained on other grounds. I think there is an increasing emphasis on requiring the Patent 3 Office to build a proper administrative record for 4 5 judicial review, and therefore there is a great antipathy toward what the Federal Circuit calls "conclusory 6 7 statements of the skill of the art." I think all that means is that the examiners and the Board of Appeals 8 9 members have to document the basis for their tacit 10 knowledge, and not just cite it as something they know. I think that is an easy hurdle to get over; for example, 11 in the Internet area, the tacit knowledge that one can 12 13 perform many business methods that were previously done 14 manually or in a face-to-face manner on the Internet, 15 that is the kind of tacit knowledge that will not 16 ordinarily appear in the references because it is so 17 totally obvious - forget that word. But it is not a problem because it is certainly easy to show with any 18 19 textbook or newspaper article that implementing physical 20 processes on the Internet is well within the tacit knowledge and skill of the art. I also think that the 21 trend - and I will defer to my academic colleagues on the 22 extent to which there is a trend - but a lot of the trend 23 2.4 can be explained on the basis of the general concept of 25 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 <u>Ruiz/Chance</u> 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 6 7 note, it seems to me commercial success comes up in two different ways and they ought to be treated differently. 8 9 The first case is where commercial success is coupled 10 with long felt need. There is kind of a common sense reaction that, if there is a long felt need for a 11 12 solution, and it is recognized that that solution will be 13 commercially successful - now, keep in mind, that is 14 commercial success measured prior to the invention - so 15 if there is a long felt need and a recognition that 16 satisfying the need will be commercially successful, I 17 think it is common sense to say that the solution is not obvious because making money is something that everybody 18 wants to do, and if the need is recognized, and the fact 19 20 that the solution will be commercially rewarding is 21 recognized, and the invention is not forthcoming, that is very strong evidence that it is not obvious. 22 On the other hand, where it is not coupled with long felt need, 23 2.4 but where commercial success is just a consequence of the 25 invention, then I absolutely agree with the report that

commercial success could be due to many other things than 1 2 the invention, and it is entirely proper for the burden to shift to the patent owner to demonstrate clearly that 3 the commercial success is tied to the patented invention 4 5 - that is in court. Now, I have a little trouble applying that to the Patent Office and having examiners 6 7 analyze submissions of commercial success. I mean, the introduction of business method patents caused quite a 8 disruption and a lot of people were saying that now we 9 10 have to get examiners with a background in computer science that had an MBA from Wharton in order to 11 understand the significance of the business method; ditto 12 13 in spades if the examiners have to start analyzing and 14 rebutting economic evidence of commercial success. Thank 15 you.

MR. LEMLEY: Let me ask a couple of questions 16 17 directed to the specific proposals that are before us today and then we will open it up to the floor for 18 19 questions. The first has to do with the issue of 20 combining references, right? And there has been some discussion of what Ron, I think, quite properly points 21 out as the meandering Federal Circuit case law on the 22 23 question of whether you must have an actual suggestion in 2.4 a reference in order to combine it with another 25 reference, or whether you can find motivation in some

other source. And I quess the question for the panel -1 2 Ron talked a little bit about this already - what is Is the FTC right here? I mean, are we to be 3 right? finding motivations to combine references outside the 4 5 documentary corners of the reference themselves? And, if so, where is it we are going to find it and how? 6 Right? 7 Is it testimony? Is it some base of examiner knowledge?

MS. EISENBERG: This whole approach seems to 8 9 me to be fiction upon fiction. You know, we start with 10 the fiction that the person having ordinary skill in the art has access to every single reference, you know, sort 11 of the Winslow Tableau fiction. And then we presume that 12 13 the person does not know how to combine references unless 14 there is some suggestion or motivation to do that. 15 Another point of inconsistency in the Federal Circuit's 16 decisions is, is the issue whether we are motivated to 17 combine references, which is this highly artificial question, as if, you know, somebody trying to solve a 18 technical problem goes to the library and tries to 19 20 identify references that will help them. Or is the 21 motivation to combine elements? It seems the combining of elements seems like a much more logical way to proceed 22 23 if the focus is on what can we expect of ordinary 2.4 artisans in the fullness of time, with or without patent 25 protection. On the other hand, if your focus is more on

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the prior art references themselves, then you start 1 thinking about whether there is a reference to combine. 2 Ron had an interesting point, I think, about the value of 3 disclosure and it may be that when the prior art 4 5 references themselves are weak, or when the written record of the state-of-the-art is weak, then there is a 6 7 stronger interest in using patents to bring about greater disclosure, even though maybe it is not bringing about 8 any greater innovation. So it might look different from 9 10 that perspective.

MR. LAURIE: Just a quick comment. 11 I absolutely agree with Becky because the inquiry is the state of the 12 13 prior art. And to limit the prior art to what Section 14 102 refers to as printer publications is absolutely 15 unjustified. Section 102a also includes "known or used 16 by others," "others" meaning the public. Well, that is 17 in many cases the glue that holds the references together, and to ignore that is to ignore the most 18 19 valuable method for combining references.

20 MS. DREYFUSS: Yeah, I mean, I think my point is 21 very similar to that one. We over-treat inventions as if 22 they are true monopolies, and Judge Rich has often said 23 they are not true monopolies for purposes of thinking 24 about what the patentee can or cannot do with this 25 monopoly, but they are also not true monopolies in the

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sense that there are not other inventions out there that 1 2 are like that or similar. And I think if you look within a field, you see the way that people within the field 3 think, and by taking an invention within sort of the 4 5 entire scope of inventions that are similar and thinking about why is it that people in the field look at - how do 6 7 they think about the direction in which they are doing research, you can start seeing trends in the way that 8 people in chemistry think, or trends in the way that 9 10 people in mechanics think. And I think all of that It does not have to be written down. You can see 11 helps. 12 the trends in the way that people think.

13 MR. LEMLEY: Let me follow-up on this if I 14 So if we want to look at the sort of general way in may. 15 which people think in the field, right, how they might think about combining elements, right? And if we want to 16 17 look, as Ron points out, not just at the printed publications but what is going on in the business, right, 18 19 the Section 102a art the public uses, and all of that stuff, and then we also talked a little bit about 20 secondary considerations, right, another element of the 21 FTC report, we want to look at economic evidence, 22 commercial indicators or success, what were people doing, 23 2.4 how does the industry react to the invention, right? All 25 of these are relevant questions for obviousness. They

also seem questions that the PTO is going to be 1 2 essentially unable to deal with, right? I mean, not only given the resource constraints, but also given the way in 3 which we structure the inquiry, right? The PTO does not 4 5 have the ability to go out and talk to everybody in the industry, right, to go out and collect evidence of public 6 7 use, to go out and collect evidence - economic evidence of commercial success. Are we necessarily by focusing 8 the obviousness inquiry on this broader question, are we 9 10 necessarily relegating it to the courts and saying the PTO is just not going to be able to do some of the things 11 we want to do in the obviousness inquiry? 12

13 MS. DREYFUSS: I think the examiner is doing a 14 lot of that stuff. I mean, that is just Todd's point. 15 The examiners are sitting there and they are seeing 16 everything that is in their piece of the world, and so 17 they are seeing each and every inventor as he comes along - or applicant - telling the PTO what it is that they are 18 doing. I think the examiners actually do get a very good 19 20 sense of what it is that is in the art. And I think 21 Becky's point that we should be deferring more to the examiners, that, to me, has a lot of resonance because 22 23 that, in fact, that part they do see. They are seeing 2.4 the way that people think about pushing the frontier 25 slightly forward, making incremental changes. And, you

1 know, not to push the NAS Committee Report, but I think 2 the opposition procedure is also a piece of that because 3 it brings people from the outside in in the cases in 4 which the examiner has not seen stuff that is in public 5 knowledge, but not in print.

Mark, I have a one word answer 6 MR. DICKINSON: 7 to your question - Google. You were listening to the NPR series on search engines this week. But let me elaborate 8 a little more on that, and not to put too fine a point on 9 10 it, because it obviously can still be improved, but the PTO has access to some of the world's most extraordinary 11 databases, and has very facile tools for accessing those 12 13 They also have print libraries with research databases. 14 librarians whose whole job is to try to help them dig out 15 that piece of priority. Do they not always get it? 16 Absolutely. Are there opportunities for improvement? 17 Always. But to premise the whole argument on the fact that the PTO's examiners are just sort of sitting around, 18 poking around, and doing a Google search is just not the 19 20 way it works. We also have another opportunity that gets 21 overlooked, it is another rule we put in place called Rule 99 because we have publication now at 18 months and 22 23 I think what most people would support what the FTC 2.4 Report does making publication universal, you have got a 25 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.

MR. MYERS: John.

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I just want to add that I view 8 MR. BARTON: 9 those secondary considerations as mainly applying not for the Patent Office, but when you review the patent later 10 in some kind of litigation. In some sense, to the extent 11 12 I consider secondary considerations as success in the 13 market, it means I do not know whether the invention was 14 non-obvious until ten years after the patent was issued, 15 and I am in litigation about it.

16 MR. LEMLEY: Let me push a little bit on this, 17 right, and then we will open it up to questions from the 18 floor. If the PTO has got all these great databases, right, and they have got this tacit knowledge that comes 19 20 from looking at all the patented inventions, and the 21 argument here seems - the consensus here seems to be that we owe greater deference to the examiners - why is it 22 23 that all the empirical evidence seems to suggest they are 2.4 not doing such a hot job of finding the right references? 25 Why is it that the European and Japanese Patent Offices

1 regularly find prior art references that the U.S. Patent 2 Office misses? But why is it that the courts, when you 3 go into litigation, you always end up litigating prior 4 art references that the Patent Office did not find? It 5 seems to me there is a felt sense, right, that the PTO is 6 not, in fact, finding all the most relevant prior art.

7 Well, that is not a bad point MR. DICKINSON: with regard to litigation. Do not forget, very few 8 9 patents actually get litigated, and when they get 10 litigated, enormous resources are brought to bear. I am not a litigator, but my firm, for example, is primarily 11 the litigators inside the group, and they just wheel out 12 13 the big big guns. Now, whether that is good thing or bad 14 thing, well, we can debate that, and there are a lot of 15 aspects to that. But when you start to apply \$10, \$15, 16 \$20 million to try to turn up that one piece of 17 invalidating prior art, yeah, that is a little different than the \$5,000 search you did or the 18 hours of 18 searching that is available to the Office. But that is 19 20 the flex in the system. Can we change that a little bit? Yeah, we could change it a little bit, but I think to de-21 cry the whole system because the examiner does not have 22 23 \$20 million worth of capability to find that one piece of 24 prior art hidden in a library in Russia somewhere, I do 25 not know.

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MR. MYERS: Joe. Please identify yourselves
 when you speak.

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

MS. DREYFUSS: But, you know, well, there are 8 really different questions packed into this, right? 9 One 10 is the question of finding the prior art, but the question we were talking about before is that question of 11 12 combining it, so you might want to take the view that 13 examiners are really good at thinking about that because 14 of the fact that they have seen it a lot, see it 15 continuously, see trends within what is going on, and are 16 able to abstract from those trends. That is a different 17 question from whether each piece of prior art that is out 18 there can be seen. So I think you have to -

MR. DICKINSON: We have talked about the issue of tacit knowledge, too, and I said it in those - that I think we need to give the examiners more leeway to apply tacit knowledge and what they know to be out there. And we can do that, I think, through rule-making, or we can do it -

25

MS. DREYFUSS: What they know to be known.

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I think we have much more play 1 MR. DICKINSON: 2 in that regard than we should have because, again, the examiners - I came into the Office as a knowledgeable 3 quy, but not really knowing it as thoroughly as being in 4 5 it - I was amazed at the level of commitment and knowledge that the average examiner tends to have. 6 Are 7 there exceptions? Sure, but it is really a very high level of commitment and knowledge. It was sort of 8 There are over 400 PhD scientists at 9 surprising to me. 10 the Patent and Trademark Offices. It is more than at NIST (phonetic), it is roughly how many are in NIH, I 11 12 mean, that is a lot of brain power. And that is, you 13 know, not a lot of engineers get - those are mostly in 14 genomics and in biotech areas, for example.

15 MS. DREYFUSS: And there is also a difference, 16 I mean, a third issue is the application of law to the 17 facts that they know, and that is another question where, whether or not you give as much deference to the 18 19 examiners - I just do not know the answer to that 20 question about how much examiners - the general examiner 21 knows about law and knows about the application of law to facts. But each of those are different issues --22

23 MR. DICKINSON: I was very pleased to put 24 back in full scholarships to law school for any examiner 25 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 26
 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.

6MR. MYERS:Identify yourself, please.7MS. : [From Audience - off mike]

8 MR. LEMLEY: For benefit of the people in the 9 back who are having trouble hearing this, the question is 10 why is it that the EPO regularly finds references that 11 the USPTO --

How much does Chevron and 12 MR. DICKINSON: 13 Texaco - and I used to work at Chevron and Texaco - how 14 much do they pay at the EPO to get a search and 15 examination as opposed to the United States? They pay 16 roughly three times as much. That is not to say --17 believe me, I agree with the general concept, there are many times when it is perceived that the EPO, you can get 18 a higher quality search, in certain technical areas, in 19 20 particular. There is now, I think, given some challenges 21 they are facing in terms of resourcing and staffing and other things, they have had a freeze on hiring for a long 22 23 time, for example, I think that that may be a little more 2.4 differentiateable than it may be currently, but I think 25 traditionally the belief was you would get a better

search, principally because they have more money - which
 leads to more time.

Yes, sir. 3 MR. MYERS: [Audience - off mike] 4 MR. : 5 MR. BARTON: Obviously, we are skating into the territory of the panel which will discuss the 6 7 presumption of validity. The question is to what extent must the court accept that presumption, to what extent 8 9 should we accept the presumption that the examiner did 10 not make any mistake, and then the related question, to what extent should we be installing procedures that are 11 somewhere in between the two, that are designed to test 12 13 the validity of patents, or designed to provide, you 14 know, as in the European Office procedure, some 15 opportunity for the public to bring additional prior art 16 and, additionally, counter-arguments against the patent 17 because, after all, the patent is necessarily granted, 18 even in Europe, in an ex parte, you know, proceeding that has to be a fairly low cost, or it would just be insane. 19

20 MR. LAURIE: The fact that the litigation is 21 so many orders of magnitude more expensive than the 22 prosecution, to me, is the best reason why the 23 prosecution ought to be as absolutely good as it possibly 24 can be in order to avoid tremendous misallocation of 25 resources.

1		MR. LEMLEY	ζ:	Alright,	please	join	me	in
2	thanking	the panel.	[App	lause]				
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