UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DR. SQUATCH, LLC
v.
THE PROCTER & GAMBLE COMPANY
Patent Owner.

IPR2024-01104 (Patent 11,540,999 B2)
IPR2024-01105 (Patent 10,966,915 B2)
IPR2024-01173 (Patent 10,905,647 B2)
IPR2024-01174 (Patent 11,497,706 B2)

Record of Oral Hearing
Held: October 22, 2025

Before SHERIDAN K. SNEDDEN, SUSAN L. C. MITCHELL and CHRISTOPHER M. KAISER, Administrative Patent Judges.

IPR2024-01104 (Patent 11,540,999 B2)
IPR2024-01105 (Patent 10,966,915 B2)
IPR2024-01173 (Patent 10,905,647 B2)
IPR2024-01174 (Patent 11,497,706 B2)

APPEARANCES:

ON BEHALF OF THE PETITIONER:

JUSTIN OLIVER, ESQ.
1850 Towers Crescent Placa
Suite 400
Tysons, Virginia 22182
(703) 821-8949

ON BEHALF OF THE PATENT OWNER:

DAVID M . MAIORANA, ESQ.
901 Lakeside Avenue
Cleveland, Ohio 44114
(216) 579-0212

The above-entitled matter came on for hearing Wednesday, October 22, 2025, commencing at 1:00 p.m. EDT, at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P-R-O-C-E-E-D-I-N-G-S

JUDGE MITCHELL: Good afternoon, everyone. We have a final hearing this afternoon in four interparty reviews. IPR 2024-01104, -01105, -01173, and -01174. I am Judge Mitchell. And with me by video conference are Judges Snedden and Kaiser. So I would like to start with getting appearances from the parties. So who do I have for petitioner?

MR. OLIVER: Justin Oliver from Venable on behalf of petitioner. With me I have Josh Calabro.

JUDGE MITCHELL: Great. Thank you and welcome. And who do I have for patent owner?

MR. MAIORANA: Good afternoon, Your Honor. David Maiorana from Jones Day on behalf of THE patent owner. I'm joined by my colleagues Andrea Jeffries and Marlee Hartenstein, and also representatives from Proctor and Gamble are here as well.

JUDGE MITCHELL: Great. Thank you and welcome. So as set forth in their oral hearing order each side has 75 minutes to present its case. Just a reminder, to assist us in following along with your argument and certainly for the clarity of the record when we look back and read through it, it's very important if you can refer to the exhibit that you're on. You know, you state the exhibit number and the page number, if you could remember to do that, to which you're referring. And when you're referring to a demonstrative, state the slide number and let us know -- I know there’s, you know, a lot of issues are similar in all these cases but if you have anything particular to one case let us know which case you're referring to because

we'll of course have one transcript for all four cases. So petitioner will present its arguments first as it bears the burden of showing unpatentability of the challenged claims. So let me ask you, petitioner, would you like to reserve some time for rebuttal?

MR. OLIVER: Yes. Twenty minutes, Your Honor.

JUDGE MITCHELL: Twenty minutes. Okay. Okay. And patent owner, you will have the last word if you wish, so would you like to reserve any of your time?

MR. MAIORANA: We'll reserve ten minutes, Your Honor.

JUDGE MITCHELL: Okay.

MR. MAIORANA: Thank you.

JUDGE MITCHELL: Thank you. So once I get the clock set up and whenever you're ready.

MR. OLIVER: Thank you and may it please the Board. The challenged patents recite basic compositions for natural deodorants which have been long known in the field. For instance, the idea of excluding ingredients such as aluminum and silicone was known before the critical date as acknowledged in the challenged patents themselves. Furthermore, the broad hardness range recited in some of the claims is described in the prior art as the typical range for Deodorant 6. In response, PNG argues that the standard needle for the hardness test as recited in the claims should not be understood to refer to that standard but instead to exclude that standard. For the reasons we'll discuss today, that contradicts the law and the facts. Aside from hardness, PNG's remaining responses to the applied grounds fail because the prior art provides clear guidance on preferred and substitutable

ingredients for natural deodorants, and in many cases no substitutions or combinations are needed because the Lesniak reference teaches all of the features of many of the claims. For these and other reasons we'll discuss today, the challenged claims are unpatentable.

With that, I'd like to direct the panel's attention to the slides specifically Slides 3 through 6. These slides indicate various grounds applied against the four patents in the four different IPRs. As the panel is already aware, these generally fall into three categories. First is the Lesniak category, meaning that Lesniak is a primary reference. Second is the Native as a primary reference. And then with respect to the ‘706 patent in particular there is an additional category which uses a Dr. Squatch reference as the primary reference. But generally speaking, those are the three buckets of grounds that are applied in combination with secondary references in many cases. I'd like to start by just summarizing some of the key arguments that we'll discuss today. Looking at Slide 8 of the demonstratives. First, with respect to Lesniak, Lesniak anticipates or renders obvious many of the challenged claims. Lesniak described antiperspirants which as we'll discuss today are, in fact, deodorants. They're simply a subcategory of deodorants. And Lesniak's compositions had to stability issues contrary to arguments presented by PNG. For those reasons as we'll discuss, Lesniak's grounds are proper. Also, with respect to the hardness issue which spans various grounds and categories of grounds, the claims recite a very specific or identify a very specific hardness test. That test, PNG asserts, should not be used and instead a modification should be read into the claims. That fails on the law and the facts. Moreover, as we'll also discuss today, it ultimately

doesn’t matter because even using PNG proposed modification to the standard hardness test, there would still be overlap of the hardness ranges in the prior art and those recited in the claims. Next, looking at Slide 9 of the demonstratives, with respect to the Native grounds, many of the arguments presented against Lesniak apply here. That is, in particular, that just because Native is a complete deodorant meaning it lists all the ingredients that are needed does not mean that a complete product could not be, based on the view of the person of ordinary skill in the art, modified enhanced, or otherwise changed. That simply is the understanding of the obvious law within patents. And ingredients such as baking soda and magnesium hydroxide were known to be interchangeable antimicrobials. We'll talk about those and other issues today. And then finally, with respect to the Squatch ground which only apply to the ‘706 patent, for that ground in particular there’s an issue of priority. Specifically, Claims 16 through 23 of the ‘706 patent are picture claims that recite a combination of 9 to 10 different ingredients for a particular deodorant. However, the priority applications do not provide written description support because they provide only laundry lists of possible ingredients and do not provide blaze marks to the specific combination’s claims. So overall those will be the areas I plan to cover today.

But before getting into those to specifically, I'd like to give a very brief overview of deodorant technology which will provide context for the discussion. And for that, I would direct the panel's attention to Slide 16 of the demonstratives. As we know, not only from the references here but just from our own personal experiences, deodorants are intended to inhibit the

formation and perception of malodor using antimicrobials and/or fragrances. And deodorant sticks in particular, which is the subject matter of the claims in the present patents, have a few typically simple ingredients. First and foremost, they have carrier oils. These career oils are intended to disburse the active ingredients, but because they are going to be in stick form, there's also structurants. Structurants give structure to provide the stick form. They essentially provide the hardness that makes it a stick as opposed to some other form. And then there's either one or more of antimicrobials which attack the microbes that cause odor, and fragrances which are used to mask odors. Ultimately, at base that is what a deodorant is, particularly a stick. Looking at the next slide, Slide 17 of the demonstratives, antiperspirants are a subcategory of deodorants. Specifically, antiperspirants add an additional active ingredient that may block or otherwise inhibit sweat pores. These microbes that cause odor feed on moisture and therefore by inhibiting perspiration, you also inhibit the growth or prevalence of the microbes at issue. As you can see from the slide and quotes from the prior art, all antiperspirants are deodorants. It's simply a subset of what a deodorant is. Looking at Slide 18 of the demonstratives, as I hinted at a few slides ago, a deodorant stick is made into stick form or hardened using a structure as was accepted and known in the prior art dating back to decades as can be indicated here from the PNG patent from the 1970's, the way the hardness was increased or decreased was just the ratio of the structurants to the carrier oil. Structurants are typically things like waxes. The more wax you provide, the harder the final product is. The less wax you provide relative to the carrier oil, the softer the product is. That's been well known for quite

some time in the field of deodorants and cosmetics generally speaking. And then one final point on the background before getting into the patents themselves and the arguments, and that is looking at Slide 19 of the demonstratives. There was a move towards what are called natural deodorants and "natural" here is provided in quotation marks because the term "natural" as used in this field generally means the exclusion of ingredients that consumers do not consider safe or that may consider harmful. For instance, ingredients such as aluminum or silicone, these are ingredients that a consumer is concerned may cause health problems and, therefore, the move to natural deodorants generally speaking was intended to refer to the exclusion of certain potentially harmful ingredients. It has been known as you can see from some of the citations on the slide that natural deodorants and the move to natural deodorants was occurring well before the critical date. And the patent itself acknowledges that there was a move to natural deodorants. With that background --

JUDGE MITCHELL: Can I ask you a quick question?

MR. OLIVER: Certainly.

JUDGE MITCHELL: Because I know when you're talking about hardness, and so one with skill in the art is going to be worried about that ratio between carrier oils and structurants, but is there any other consideration for one with skill in the art like, you know, if I want to add an ingredient, do I worry too much about how it's going to interact with what's already there, or can I just sort of add ingredients as I go to address different issues that somebody may need a deodorant or antiperspirant for, if that makes sense?

MR. OLIVER: Certainly, Your Honor. So essentially most of the other ingredients such as active ingredients are disbursed in oil. So generally speaking, hardness is just a ratio of that oil which may have other things mixed in and the structurants. So for a person of ordinary skill in the art, you'd just increase the structurant amount to increase hardness and lower to decrease hardness. The structurant is typically a wax, and a wax is obviously going to be much harder than an oil. So the more you have the harder it is. There's no indication in the record or in the prior art references that there are particular ingredients that might be used in the deodorant other the structurant carrier oil that would substantially affect hardness. It's really the ratio between those two is the driving factor.

JUDGE MITCHELL: Is there any consideration about any other ingredients interacting with each other?

MR. OLIVER: Not that the reference has explained.

JUDGE MITCHELL: Okay.

MR. OLIVER: So there's no indication such as, if you have this chemical it substantially affects hardness. There's no indication that that is a -- that there's any particular ingredient that has a strong effect on the ultimate outcome of the hardness other than the ratios.

JUDGE MITCHELL: Okay. Thank you.

MR. OLIVER: With that, I'll turn quickly just to talk about the patents. I'll note briefly that the '706 and '647 patents in the specification talk about what the purported invention is. And notably that is supposed to be the use of a specific antimicrobial named here in combination in specific ratios with other antimicrobials. Although in other claims at issue in these

four patents recite this purported advance in the field. Instead as we can see from Slide 21 the demonstratives, what the claims generally recite -- and this changes from claim to claim and patent to patent -- but at base, and I don't think there's much dispute on this, is the primary ingredients that we see across the claims are a carrier oil. In this case of the claims it's chosen into be triglyceride typically in amounts greater than 25 percent, a primary structurant that has a melting point of 50 degrees Celsius or above. This can be beeswax or something similar. At least one antimicrobial because deodorants typically have that, and also in these particular claims, there is a hardness requirement concerning the use of the ASTM D1321 needle. At base, that what most the claims are about although I will talk about some other features.

So with that, I'd like to address hardness first because particularly in the surreply it took up a lot of space and argument and because it stands the different grounds. It's not common to one particular ground. It sort of stands on its own. So I'll address that first, and I'll direct the panel's attention to Slide 23 of the demonstratives. In the field, there are a few different hardness tests, but one that's been generally adopted for the use of cosmetics products or cosmeceuticals such as deodorant, lipsticks, and things of that nature is a standard hardness test called the ASTM D1321. This test has been around for quite some time, and it was originally intended for providing a hardness test for petroleum waxes. It's been adopted in this field because in the field of cosmetics whether you're talking about a deodorant or a lipstick, often what provides the hardness is the amount of wax. So we're at base testing something that has a fair amount of wax.

Notably, as noted on the second bullet point of Slide 23, for decades it has been known that consumers typically prefer a range of hardnesses, specifically about 7 to 14 millimeters as tested by this method. And the test is basically a needle penetration method where the needle drops in. If the needle penetrates farther such that we have a high number it's softer, and if the needle doesn't penetrate very far, it's harder. In the parlance used in the claims, rather than the millimeter it's tenths of millimeters. So the ranges we'll be talking about today instead of 7 to 14 are 70 to 140 and similar scales. But 70 to 140 is what was described in the prior art as the typical hardness for deodorant sticks, with sticks outside of that range not being well accepted by consumers. Now, if we look at Slide 24 of the demonstratives, we can see example claim language concerning hardness, and it is that the stick having a hardness from about 80 to 140 as measured by penetration with the ASTM D1321 needle. Interestingly, the claim doesn't specifically refer to the test as a whole, it refers specifically to the needle used in that test which is not disputed here. There is no dispute that that needle has very specific dimensions, weight, so on and so forth. But obviously here the only identification for hardness is the identification of this particular hardness test. That test involves the use of a penetrometer, the needle obviously which has very specific requirements, and in the overall assembly there as a 50-gram weight along with the needle that provides the force that drives the needle down into the sample being tested.

JUDGE MITCHELL: So is it petitioner's position that when we're talking about in the claim this particular needle that there has to be some of

kind of test with it. There has to be some kind of force applied. Something for us to determine the 80 to 140 millimeter range?

MR. OLIVER: Yes. Essentially, I think the claim probably would have been clearer if it referred to the test. It refers specifically the needle. So if we were to be very literal, all this claim requires is use of that needle. However, we expect a person of ordinary skill in the art would say well if I'm going to use the ASTM D1321 needle, I would use the ASTM D1321 test. Because there's no other indication within the claim language other than that specific hardness test.

JUDGE MITCHELL: Okay.

MR. OLIVER: I mean, it probably would have been more proper to recite the standard itself. But technically all the claims require the use of that needle which, in that case, you know, as long you're using that needle it would meet the requirements of the claims. Looking at Slide 25 of the demonstratives, it's undisputed that the prior art applied teaches the claimed range using the standard hardness test. Specifically, the two Bianchi references, Bianchi 518 and 524 teach making deodorant sticks having hardnesses in one case, Bianchi 518, of 70 to 140, and in the case of Bianchi 254 from 80 to 150. That is a very substantial overlap with the claimed range such that understanding it to be the standard test we would have that met by the claim features. The response, looking at Slide 26 of the demonstratives, is that the recitation of ASTM D1321 needle should be read to be a 50-gram total force ASTM D1321 needle. So there's being a limitation read in that does not otherwise appear in the claims and that limitation is intended to essentially modify the ASTM D1321 standard

which uses a 50-gram weight please a 50-gram needle assembly. So it's basically saying don't use the 50-gram weight. Of note, PNG has not asked for a form claim construction or proposed a formal claim construction, which I think probably in this case would have been difficult because the term to be construed would be ASTM D1321 needle. However, in this case there is no dispute over what that needle is. It is very explicitly defined by the standard. And there's no dispute here that that is what this claim language is calling for. So what seems to be happening is that there is a proposal without a formal claim construction of reading a limitation that does not appear in the claim into the claim. Looking at Slide 27 of the demonstratives, if that is the case, the case law is fairly clear, specifically the Phillips case. You should not read limitations into the claims absent a disclaimer are or an express definition. As we'll discuss, there is no express disclaimer or definition in the specification that would require the reading in of this limitation. And first and foremost, to be clear, the claim is clear on its own. But this is even if we were to go to that next step of having to look at the specification and say do we need any clarity, there would need to be under the law is that disclaimer which does not exist.

With that, I'd also like to note a few points looking at Slide 28 of the demonstrative, if you do look at the specification, I think even taking into account the disclosure the argument doesn't work because the specification does not mention force at all. That term that is being proposed to be read into the claims doesn't appear anywhere in the specifications of the four patents. The basis proposed for doing so is a language cited in the patent owner response that says the total weight of the shaft and needle is 50 plus

or minus .2 grams. However, that statement appears within what is called the periodic calibration, meaning you are calibrating your equipment to make sure it is what is it is supposed to be. It is not even within the summary of the test being performed. And, therefore, just because someone is to instruct that you calibrate their equipment to make sure the needle is the right weight, which is required by the standard already, does not mean that that is a proposal to change the test. In fact, the specification itself doesn't mandate any unconventional use of the ASTM D1321 needle. Nevertheless, PNG argues that if you look at the claim -- if you look at the specification, you would want to read this in because there's not an explicit discussion of using the 50-gram weight required by the standard. Notably, looking at Slide 29 of the demonstratives, PNG uses the opposite logic in applying the prior art. Specifically, Bianchi-254, which calls out the standard -- and I'll note that the two Bianchis refer to the standard slightly differently. Bianchi-254 refers to it as the DIN 51-579 which is essentially the German equivalent of the ASTM D1321. It's the same thing but just standard setting bodies on two different continents. It doesn't explicitly in its summary of the standard recite the 50-gram weight. But PNG’s expert as noted by the last bullet point there testified that, yeah, well it doesn't say the 50-gram weight, but because it refers to the standard, a person of ordinary skill in the art would understand that you would perform the standard which requires the 50-gram weight. That is the exact opposite reading that PNG is proposing to the specification. And that contradiction, I think, is indicative of why the same thing should not be done with respect to the patent specifications at issue.

With that, there is a separate issue here -- and I'm turning to Slide 30 of the demonstratives -- and that is that proposed reading into the claims of limitation on it in and of itself does not remedy the application for PNG of the prior art, the two Bianchi references. And that is because just because a different test is performed does not mean that the prior art still does not apply. There's a second step that PNG needs, and that is alleging that if you use this different test, the hardness recited in the claims with that modification and the hardness recited in Bianchi without the modification, those ranges of hardness would not overlap. For that argument PNG relies on the testimony of its expert who says there would be no overlap. However, he provides no citation to any evidence. He provides for corroboration whatsoever. He provides nothing to show that that might be the case. And, in fact, during deposition he admitted that he didn't routinely perform this test, and he couldn't remember when he last performed the test. In response, Dr. Squatch's expert contracted with an independent testing lab certified to do this type of testing and tested a number of samples. And what we found is that even with PNG's proposed modification, the claimed range in the ranges in the Bianchi would still overlap. And the easiest way to explain that, we can look at the next slide, Slide 31. And there's more than one example here. I'm going to talk about the Sephora example, which is highlighted, but the same would be true of Old Spice and the Lume deodorants, and that is that if you use on the same deodorant, same sample, tested using the standard as admitted to be used in Bianchi, you'll get something that falls within the recited range of the claims, in this case 117 .8. If you test that same sample, same deodorant using the proposed

modification, you get 80.3 which still falls within the scope of the claims. If we have a single sample that falls within the claimed range using either test, there is necessarily by definition overlap. And that simply contradicts the argument, the unsupported argument, made by PNG's expert. And I'll note one other point on that I think is certainly noteworthy, and that's the other highlighted deodorant on this page, Native, is one of PNG's own products. It is marked in PNG's online patent marking with the relevant patent, the '999 patent, which is relevant because of the particular range recited there. However, it only falls within the scope of those claims as shown by these results if you use the standard test. If you don't use the standard test and use PNG's modification, it does not fall within the scope of the claims. Suggesting that PNG is itself thinking they are using the lens of the standard test. For all of these reasons, I think the hardness argument simply does not work. And I'll add one last point on that before moving on. Looking at Slide 32 of the demonstratives -- but the last point is routine optimization. As discussed, going back to at least PNG patents from the 1970's it has been known that brittleness or hardness and softness is something that is taken into account in consumer preferences for deodorants, and it is also known that could be adjusted by moving up and down the amount of wax. So what we're talking about when we're talking about hardness is simply routine optimization. Thus, putting aside all those other arguments, we believe it would still be obvious for at least those reasons. With that, absent any specific questions on hardness, I'll turn to the grounds starting with the Lesniak group of grounds.

JUDGE MITCHELL: Can I ask you one quick -- and I think you said this in your presentation, but I want to make sure. So you're saying, even if we accept what patent owner's arguing in terms of construction, they still don't win because you have these overlapping ranges.

MR. OLIVER: Yeah.

JUDGE MITCHELL: No matter which way, how you test it.

MR. OLIVER: Exactly, Your Honor. There's basically two even if you accept the proposed limitation being read in, there's two reasons why it still applies. One is exactly what you just mentioned which is the ranges overlap. If we have a sample here and, in fact, we have three, the Sephora, the Lume, and the Old Spice, that fall within on both then there is by definition overlap. And for that reason -- and I should note, because I think it's in our slides here, Slide 30 in particular on the bottom with respect to the DuPont case. When there is overlap of ranges, there is a presumption of obviousness, and it becomes the patent owner's argument to overcome that presumption. There has been no argument here as to that. So if we have an overlap, which we do as we have a deodorant or multiple deodorant's that fall within the ranges in both cases, we have a presumption of obviousness and there's been no attempt here to make an argument as to why that presumption could be overcome. That is the primary reason. Secondary reason is routine optimization.

JUDGE MITCHELL: Okay. Thank you.

MR. OLIVER: Turning to the Lesniak grounds, looking at Slide 34 of the demonstratives. As a quick overview of Lesniak, Lesniak describes deodorant compositions or specifically antiperspirant as well as other

cosmeceutical formulations, particularly in stick form and particularly natural versions of those, which is not in dispute, the formulations in Lesniak have a carrier oil and in this case a liquid triglyceride. And Lesniak describes that the amount of that triglyceride is 25 percent or more, meeting the claim requirements. There is a primary structurant in Lesniak, it's particularly beeswax, although there are secondary structurants that are used as well. And beeswax does have the over 50-degree Celsius as far as it's melting point. There is an antimicrobial. In the case of Lesniak, it happens to be zinc oxide. And there are fragrances which in Lesniak are various essential oils. I'll note that the Lesniak reference is being applied by the examiner in continuation of the same family for teaching deodorant, for teaching the exclusion of the aluminum, just as a side note. But with respect to the specific grounds at issue here with that understanding of Lesniak, the responses to the facts that Lesniak describes this formulation which meets the requirements of most of the claims in many cases without need to go to a secondary reference, there are a few arguments presented by PNG and I'd like to address the main arguments in turn.

Looking at Slide 35 of our demonstratives, one of the arguments is that Lesniak's compositions are not stable, and we believe that this argument is wrong on the law and the facts. With respect to the law, "Enablement of prior art only requires that the reference teach a skilled artisan to make or carry out what is disclosed in relation to the claimed invention." I'm quoting here from the In re Antor case on the slide at the top point bullet point. What that means is, all that's needed on enablement for application is something that is enabled relative to what's actually disclosed and claimed in

the patent. The PNG patents at issue here, the challenged patents, do not disclose or a claim any requirements for stability, at least stability in the form of hardness or stick or that type of stability. Because there are no disclosures or requirements for stability, it's simply not an applicable issue as a matter of law. And, in fact, as noted by the case law at the bottom of the slide, for purposes of obviousness whether or not the reference is enabled is not necessarily relevant. But putting aside those legal issues, there is a factual issue here. In looking at Slide 36, Lesniak's compositions were stable. Lesniak achieved stability of its compositions. And let me be clear here, what Lesniak's goal was, was trying to overcome a high bar. Lesniak specifically wanted to achieve stability at very high temperatures, specifically above 120 degrees Fahrenheit, and it was trying to provide a way to do that. It ultimately decided and found as in Lesniak's invention, what he purports to be his invention, is that he used a secondary structurant and used a secondary structurant that has a high melting point. You're worried about something falling apart and melting at high temperatures? Add a structurant that has a very high melting point. That was the solution. When PNG -- so first and foremost there, there was a very high bar and just because Lesniak wanted things to be stable above 120 degrees doesn't require that something is not a deodorant because it's stable or not stable above 120 degrees.

JUDGE MITCHELL: So is the hardness limitation and the idea of stability, are those mutually exclusive? Do they -- is there some kind of interaction we could draw from them?

MR. OLIVER: I think they would be considered mutually exclusive, and I don't think this has been really developed in the record. But hardness is typically measured including a test at room temperature or there about. There's a specific requirement for the temperature you use and it's -- I think it's in the low 70's Fahrenheit where that test is performed. When we're talking about stability of a composition in the way that Lesniak's doing it, he's not caring about room temperature. He's caring, what if you leave your deodorant in a hot car? Is it going to separate where you have oil and wax and it starts to, like, fall apart? That's a different consideration. Obviously, you heat something up it doesn't matter -- you can heat steel up and at some temperature it's going to become soft. So when we're talking about hardness, we're talking about the specific room temperature-ish version of that thing. What's the hardness there. So I would view those as distinct.

JUDGE MITCHELL: Okay. Thank you.

MR. OLIVER: Now, also with respect to the argument that Lesniak did not have stable compositions, what PNG is really looking at -- and I'm going to direct the panel's attention to Slide 37 of the demonstratives -- was the comparative examples. PNG's pointed to this pass/fail at the bottom. But the ones that failed are --have asterisks at the top because they're comparative versions. Lesniak did achieve stability even at 120 degrees because that's what his invention is. So compositions 8 and 11 are, in fact, stable. And we can see there, that was achieve simply by using castor wax in addition to the primary structure beeswax. You don't want your deodorant to fall apart at 120 degrees? Add a wax that stays stable above

120 degrees and you can solve that problem. So it was a simple solution to what Lesniak was trying to achieve.

With that, the next argument that PNG presents in response to Lesniak we can see at Slide 38, and that is that PNG argues that aluminum should be read into the Lesniak reference and the Lesniak compositions within that reference even though Lesniak does not mention aluminum at all. The reason for that is that PNG says well Lesniak describes what it's -- one of the descriptions of the formulation antiperspirant and that the FDA requires for labeling purposes that if you're going to label something as an antiperspirant it have aluminum in it. And, therefore, PNG takes the next step and says, well, therefore we just have to -- even though Lesniak doesn't say so -- we should read in aluminum. First, as the law states, as we can see from the Almirall case at the top the Slide 38, "[A] reference need to the state a feature's absence in order to disclose a negative limitation." Lesniak describes compositions of deodorant where there is no aluminum. That itself meets the limitation of a negative exclusion or exclusion of aluminum. Also, Lesniak is describing alternative active ingredients. Specifically, Lesniak's talking about zinc oxide as the active for its deodorants, which the challenged patent themselves as noted on the third bullet point here indicate are alternatives to the use of aluminum as we can see from the highlighted sections there. For those reasons, there's a disclosure through a listing of the complete composition of a deodorant that does not have any aluminum of a deodorant that doesn't have aluminum.

Next, looking at Slide 30, I think a somewhat related argument presented by PNG is that Lesniak should not be understood as a deodorant

because it calls itself an antiperspirant. As we discussed and as we can see from the highlighted section at the top of Slide 39 "[A]ll antiperspirants are deodorants." That's disclosed in the art. And in looking at the second -- or actually third to the last bullet point also highlighted there PNG's own patents incorporate by reference disclosures that explain that antiperspirants are deodorants. We can see there, "the antiperspirant active in a deodorant." Antiperspirants and simply a subset of deodorants. For that reason the argument simply fails.

Looking at the next slide, Slide 40 another argument made, and I'll just touch on this very briefly, is that Lesniak fails to disclose a deodorant because it's concentration of zinc oxide an antimicrobial is 11 to 20 percent and according to PNG that's too high for it to be a deodorant. However, the challenged patents themselves indicate that the be antimicrobial may be present in weights up to 30 percent. So the patent itself says that deodorants can have antimicrobials in these ratios. And as we can see from the last bullet point, there's other prior art of record showing deodorants that have antimicrobials particularly zinc oxide up to this amount. So it is not a problem to have 11 or 20 percent of zinc oxide in your deodorant.

With that, there are some separate arguments PNG makes with respect to the combination of Lesniak with some secondary references. Looking at Slide 41, a general argument that is made for both Lesniak and Native is that because they are themselves complete formulations, meaning it's already describing all the ingredients of the deodorant, that there would be no motivation whatsoever to ever change it. And that's just simply not how obviousness all works. It is expected that the person of ordinary skill in the

art would understand that even if the reference itself doesn't identify a flaw or thing to improve that the person of ordinary skill in the art's knowledge and this is noted in the DyStar case cited in page -- Slide 48 would understand that you can make modifications. And PNG's own expert admits to that on the bullet point citation in this slide. So I won't spend much time on that, but I will talk about some of specific arguments looking at Slide 42 the demonstratives. The use the magnesium hydroxide. Phinney describes and it's combined with Lesniak the use of magnesium hydroxide. Lesniak as we've discussed uses zinc oxide as its antimicrobial. It was known that zinc oxide as not the most potent antimicrobial. It was an antimicrobial, but a very low potency one. What Phinney teaches is that magnesium hydroxide was not only good as a deodorant on its own, but it had particularly synergistic affects when combined with zinc compounds. For that reason, a person of ordinary skill in the art would understand that you could add magnesium hydroxide to a deodorant because it helps out zinc oxide-based deodorants. It's really that simple. There's no problem with that type of logic for a person of ordinary skill.

Looking at the next slide, Slide 43, the same type of issue. PNG argues it would not be obvious to combine Lamb. Lamb teaches the use of baking soda. PNG's argument is that it was known from this record and elsewhere that baking soda in a deodorant for some users cause skin irritation. But as we can see from the legal cite here, Allied Erecting, it is not a problem that a combination have some advantages and some disadvantages. That is a fact of life. And just because some users might have some discomfort from baking soda- based products, doesn't mean it

was not obvious to use baking soda because it was, as we can see here in the top bullet point, an excellent deodorant.

One last issue on Lesniak and I'll move on. Looking at Slide 44 of the demonstratives, with respect to the combination with Bianchi-254 aside from hardness, there also an argument presented against the combination because of the reliance on Bianchi's use of sterile alcohol. Put simply, Lesniak besides described that you could use fatty alcohols as structurants. But it doesn't specifically say what fatty alcohols to use. Bianchi-254 also notes the use of fatty alcohols but specifically says that sterile alcohol is of particular interest. That's all that a person of ordinary skill in the art would understand to provide a reason to use sterile alcohol where Lesniak only says fatty alcohols without directing as to which particular one to use.

With that, I'd like to turn to the Native grounds absent any specific combinations -- questions rather. Looking at Slide 46 of the demonstratives, Native is primarily combined with Bianchi-254. Native is a website as documented by the internet archive that provides an ingredient list, an ingredient list where the highest concentration ingredients are listed first, lowest concentration of ingredient are listed last. But there are no specific identifications of the specific quantitative amounts of those things used. We can see, however, there's a triglyceride as the carrier oil. We can see there's a sterile alcohol as your structurant. We can see there's baking soda as the antimicrobial. Native-254 provides the quantitative amounts typically used in deodorant sticks. This is essentially like having a recipe for a cake where it says you use flour, sugar, eggs, and milk, but it doesn't tell you how much to use. A baker would say, well, I want to know generally how much I

should use of each one of those ingredients. Bianchi is that. It's telling someone generally speaking for this type of recipe, this is how much carrier oil you use, this is how much structurant you use, this is how much baking soda you use.

Turning to Slide 48 of the demonstratives, I won't spend much time here. I've mentioned this already, the DyStar case. This same argument is made by PNG here that because Native is already a complete deodorant, there would be to reason to modify, change it, or do anything. And that's simply not the way the law views obviousness. A person of ordinary skill in the art can make known modifications to a complete product. That's typically what we do. We're not seeing many prior art references that show 75 percent of a product and, therefore, you have to go out and find the other 25 percent. There usually is a complete product, but there's knowledge in the field that some ingredients, some components can be swapped out for others, and that's the case here.

I'll address one of the combinations in particular looking at Slide 49 and that is Native is also combined with Easy Homemade. Easy Homemade teaches that magnesium hydroxide could be used. And specifically, as already noted, Native uses baking soda as its antimicrobial. Easy Homemade says that some people have issues with baking soda where there can be a skin irritant and, therefore, magnesium hydroxide is a good substitute. It literally directs a person of skill to substitute magnesium hydroxide for baking soda. PNG's argument essentially is, well, you can't have it both ways. You can't have something that says you can use magnesium hydroxide if it has baking soda or vice versa. It has to be one or

the other. It does not. Interchangeability is interchangeability. If these two things were known to be both good options that could be swapped for each other, it doesn't matter which way you're swapping it. It is a known alternative that was specifically described to be used as an alternative in the field. And for that reason, the combination works.

JUDGE MITCHELL: So would it be your position that if I'm going to buy into what patent owner is saying that you would pick one or the other, you're saying, no, there would have to be, like, at least a level of teaching way from baking soda for us to say, okay, I'm not gonna -- you know, one of skill in the art would not have included baking soda.

MR. OLIVER: I think that's a good way to point -- to put it, Your Honor. So, yes, I'd agree with that. In advance of today I was thinking about it and the analogy that popped into my head was peanuts. Some people have peanut allergies, but I can still go out and buy peanut products because not everybody has a peanut allergy. We know that just because some consumers prefer one thing, some consumers might have problems with it. There are things or ingredients that can or cannot be used depending on how you want to put your recipe together. There is nothing saying, do not use that particular thing in a deodorant. In fact, many of the references here specifically tell to use baking soda. Native is a PNG product. It's ingredient list includes baking soda. So that itself shows that these things are both acceptable uses. But to your point, Your Honor, yes, there's no teaching away at issue here.

JUDGE MITCHELL: Okay. Thank you.

MR. OLIVER: There is an argument that was raised too I'll touch on very briefly with respect to Easy Homemade about whether it was public, there was -- whether it was accessible to the public looking at Slide 50. The argument made there is that there wasn't evidence of indexing. However, the federal circuit in the Voter Verified case has said that indexing is not needed. All that is needed is that a person of ordinary skill in the art could locate it with reasonable diligence and the LG Electronics case from the Board at the bottom says that could be indicated by the fact that people did find website and we have provided in the record evidence that this particular website Soap Daily News was located by people because they left comments behind as to reviews and things of that nature which is the facts, I believe, of the LG Electronics case as well.

JUDGE MITCHELL: Is there any dispute over whether those people would be the relevant population to look --

MR. OLIVER: That's not an issue that's been raised.

JUDGE MITCHELL: Okay.

MR. OLIVER: I think the only dispute is that there are different pages on Soap Daily News, and there are reviews left on some and not on others. And I think the only argument that PNG's as really made is whether or not there were particular reviews on a particular page. But it is that the website itself was clearly being viewed by people who were interested in making deodorants because they were talking about making deodorants there.

JUDGE MITCHELL: Thank you.

MR. OLIVER: With the time left, I'd like to turn the Squatch based grounds starting on Slide 42 the demonstratives. This pertains only to the '706 patent. The reason for that is the '706 patent, specifically Claims 16 through 23 have picture claims. They are recitations of 9 to 10 different ingredients. And there is not support in the priority applications for these combinations. Specifically, the case law is clear, and the case law is provided at the bottom of the slide, that laundry list disclosures do not without suitable blaze marks provide guidance as to how to pick and choose among laundry lists. Here we have in the priority application 25 different possible emollients, 25 different possible antimicrobials, 25 different potential structurants, as well as options for the other of the 9 to 10 different ingredients, not even including the other references incorporated by reference in there which provide others. There is no guidance as to how to pick and choose from all of these different laundry lists to arrive at the specific combinations of the 9 to 10 claimed. And for that reason, there is not under the law support for priority. Once that is the case, both the Squatch reference and the Stirgus reference, Stirgus being on earlier publication until the chain of the challenged patents, become prior art. As far as the actual combination, I won't spend much time on it because it's very similar to the makeup in the Native and Bianchi. That is the Squatch publication is a website listing of ingredients where the ingredients are listed highest concentration to lowest concentration, but the quantitative amounts are not listed. Just as in -- as we've discussed before, what Stirgus provides is what those quantitative amounts would typically be or deodorant stick, since it's not explicitly stated in the Squatch reference. So the same logic

applies there. We're talking about you have a recipe, but you don't say how many eggs. This tells you generally how many eggs you use to make your cake or whatever you're making.

The primary argument raised with respect to this reference, and I'm looking at Slide 54 of the demonstratives, is the allegation of the lack of corroboration of the declaration which establishes that this -- these images from the website were, in fact, printed publications available on the website from Mr. Pinto. And the allegation is that he provided no corroboration, and that's simply not the case. He provided a number of exhibits of which I'll talk about a few of them, and they're listed here in the bullet points, information from a marketing repository showing the actual photographs used on the website, quality assurance records, website visitor records showing 12 million views of the website, time-stamped Shopify records showing sales from the website, a time-stamped YouTube video. There is significant amounts of corroboration here. Notably, PNG did not even depose Mr. Pinto. And I'll note the GoPro case said at the bottom here, the federal circuit rejected the challenge to a declaration to public accessibility on similar grounds. Specifically rejecting a challenge to an interested witness based on public availability where the -- and I quote, "Patent owner did not cross examine the employee and did not point to any reasonable doubt the veracity his testimony." We have here not only sworn declaration, but we have corroborating evidence provided with that declaration that shows these images were provided on a website that was viewed millions of times before the critical date. That is enough to show printed publication. For that reason, the challenge to that we believe does not work.

And with the remaining time, I have -- I'll turn to the final slide on the demonstrative, Slide 55. For clarity, the Squatch Stirgus ground in the '706 case -- '706 patent case is not the only ground applied to Claims 16 through 23. There's also a Lesniak-based ground as well as a Native-based ground. The arguments made by PNG in response to the Squatch-based ground strengthen the other two grounds. Specifically, in response to the argument concerning lack of priority of lack of written description of blaze marks to allow a person of ordinary skill to figure out which emollient out of 25 which -- and I'm quoting out of 25 -- would be selected. PNG argues in multiple places we can see the highlighted language here, that there's enough support because of the level the background knowledge of the person of ordinary skill. Specifically, PNG is saying that because the level of background knowledge of a person of ordinary skill is so high, that they would be able to select these ingredients on their own without any guidance. If that is accepted, it strengthens the other grounds because as we can note there from the Lockwood case at the bottom of the slide, written description is a higher bar than obviousness. If a person of ordinary skill in art is so knowledgeable that they could have picked all of these ingredients and put this thing together without any guidance for a written description, then they certainly for obviousness purposes would have been able to do the same from the prior art. So if this panel accepts the arguments presented here concerning support for priority, then it would also have to be the case logically that the claims would be unpatentable under the Native and Lesniak grounds. With that, absent any specific questions from the panel, I'll reserve is the rest of my time for rebuttal.

JUDGE MITCHELL: Thank you.

MR. MAIORANA: Just one minute to get the tech set up, Your Honor? Thank you.

JUDGE MITCHELL: Whenever you're ready.

MR. MAIORANA: Thank you, Your Honor. David Maiorana, from Jones Day on behalf of the patent owner Proctor and Gamble Company. May it please the Court. I want to mention one thing before I get into the specifics. We learned through public information that the petitioner was acquired last month by Unilever, PLC. And so we noticed that petitioner didn't update their mandatory notices within the 21-day period required to do that, so we brought that to their attention. They then filed something last night updated mandatory notices in all five of these IPR that says, "Squatch remains the petitioner and in an abundance of caution we note that Unilever indirectly owns Squatch." What that doesn't say is that Unilever is a real party in interest, and that affects the estoppel question. So we would ask respectfully that petitioner be required to state on the record, not necessarily today, maybe in a filing, whether or not they contend Unilever PLC would be estopped should estoppel attach at the end of these IPRs.

JUDGE MITCHELL: We'll take that request under advisement.

MR. MAIORANA: Thank you, Your Honor. A little bit of background here. Turning to our Slide 2, and these are -- our slides are Exhibit 2022. We need to understand the background of the technology here to understand the issues in these IPRs. Antiperspirant and deodorant products have been popular for decades, and that's because of combination of aluminum for odor prevention and silicones for smoothness. And

consumers have become accustomed to these products and their properties. And the Bianchi references we talk about in the papers and talk about today are perfect examples of these kinds of compositions of products. Aluminum and silicones almost half of the Bianchi compositions are made up of aluminum and silicones. But more recently the market has evolved, and customers, consumers are looking for natural products free of aluminum and free of man-made things like silicone. And as the PNG patents explain, prior art attempts at formulating natural aluminum-free products were too hard, gritty, sticky, and greasy. You could find that in column 1 of the '999 patent, Exhibit 1001 in that IPR. For example --

JUDGE MITCHELL: Can I ask you?

MR. MAIORANA: Yes.

JUDGE MITCHELL: Do you agree with petitioner's definition of what one of ordinary skill in the art would consider natural? So something that, you know, I guess not manmade or --

MR. MAIORANA: Yes.

JUDGE MITCHELL: And I'm sorry. I'm probably not repeating correctly the definition of "natural." But is that something -- does that sound a reasonable definition to you?

MR. MAIORANA: That sounds reasonable, Your Honor --

JUDGE MITCHELL: Okay.

MR. MAIORANA: -- based on what the specifications say about what "natural" is. And so I don't think there's any dispute in any of these IPR that silicones are not natural. Those are man-made products and I'm going to talk a lot about silicones today because those are important when

you're talking about whether a POSA would be motivated to combine either Lesniak or Native with the Bianchi references which are made up of about half of silicones.

JUDGE MITCHELL: Thank you.

MR. MAIORANA: Some prior art natural deodorants use ingredients that actually cause skin irritation. And you asked judge Mitchell, you asked counsel about whether customers -- customers prefer a certain range of hardness. Counsel answered your question, "Customers prefer a certain range of hardness." That's not accurate. Customers don't do hardness testing on their deodorants. What customers care about is what the ingredients are. And that's what claimed in these patents. It's a combination of ingredients. And the hardness is one way of evaluating those ingredients. But customers don't say, "I want to buy a deodorant stick that does a hardness on the ASTM test of 70 to 140." Customers don't say that. Customers look to the ingredients, and the ingredients are what give the stick its hardness.

You also asked about the interactions of ingredients and whether or not that has an effect on hardness, and counsel said no. And I respectfully disagree, Your Honor. The interaction of the ingredients absolutely matters. It's critical. And Dr. Lochhead in his declaration, which is your Exhibit 2011, he talks at length about the delicacy of these ingredients. These compositions are very finicky. And that's why Lesniak does stability testing and I'll get to that in a second. But I just wanted to make that point that we absolutely disagree that the ingredients matter for hardness. All the

ingredients matter for hardness, not just structurant. It's how the structurant and all the ingredients together is what effects hardness.

Turning to Slide 3, PNG's scientists identify a need for natural deodorants that have the preferred qualities of the prior art products that customers have grown accustomed to. But as I said, these kind of products are finicky. These polymer polyol compositions are notoriously unstable, and that's why Lesniak does stability testing. Table 2 of Lesniak there's a bunch of sunscreen creams and Lesniak finds that almost all of them are unstable. And the only reason to do the it stability testing is because you can't just take these ingredients and mix them all willy-nilly and say "routine optimization." That's not the case and Dr. Lochhead explained at length in his declaration.

JUDGE MITCHELL: So how do you define "unstable" or in the terms of Lesniak test, like, what is unstable?

MR. MAIORANA: So "unstable" means that the product will not stay in its current form. So if you put it on the shelf, you make a product to make a stick. You put it on the shelf, these products have to have shelf life. They have to be stable. You don't want to open up your deodorant and it's a bunch of goop on the inside. So whether or not it's high temperature or low temperature the point is these kinds of formulations are notoriously finicky, and that's why -- and the reason I'm saying that is because this entire case all these IPRs are premised on routine optimizations, routine optimizations, known, it's known. But they don't account for the fact that these compositions are very difficult to deal with. That's what PNG invented. That's the whole point of these patents, is to be able to get the properties of

the prior art deodorants that have silicone, man-made silicones, and get those properties in natural deodorants. That seems to have gotten lost in counsel's presentation. I want to make sure that that's at the forefront of our minds.

Now, on Slides 4 to 7, we've reproduced the challenged independent claims. And I just ask the panel, as you review PNG's claims and petitioner's grounds, it's important to remember none of the cited references in these trials disclose the problem that PNG identified or the solution that PNG identified. And the two primary combinations that petitioner proposes would have made to sense to a POSA. Lesniak discloses natural sunscreens and diaper creams. Lesniak does not disclose a deodorant stick. That's a really highly contested issue, Your Honor. We respectfully submit, it doesn't disclose a deodorant, and a POSA wouldn't understand that it discloses a deodorant. The petitioner proposes to combine Lesniak with Bianchi. Bianchi is one of the ones I talked about at the beginning. It's one of the prior art greasy ones with silicones in it. Bianchi is non-natural. And a POSA would not have been motivated to start with a reference disclosing a natural product and then look to a reference focusing entirely on a non-natural products. It doesn't make any sense. We can't throw out our common sense when we're talking about obviousness. And the same is true for the Native grounds. Native is a natural product. A POSA looking at Native or Lesniak would have no reason to go to Bianchi, which is 50 percent silicones which is what Lesniak is trying to avoid, and say, "I would be motivated to look at that reference to combine with these natural products."

JUDGE MITCHELL: But wouldn't one of ordinary skill in the art look to Bianchi and say, "Okay. There's certain natural ingredients that are effective, so I'm going to -- I'm going to look to maybe incorporate these into my natural deodorants." And that was sort of what I was getting at, is like how interactive are these ingredients? So would one of skill in the art sort of pick and choose and add in? I understand the hardness and stability aspects of it and that goes more to the structurants and how much oil do you have in and maybe there's some interaction with the other ingredients. But you're going to -- like, I would look to an essential oil, I would think, you would use in a natural deodorant stick. So why wouldn't you look to Bianchi for maybe some of the ingredients that you would consider natural that work and were very effective or Bianchi says are effective in their particular formulation?

MR. MAIORANA: I understand what you're saying, Your Honor. The problem is that this prior stuff and why would you go to look at Bianchi. There's nothing that Lesniak or Native would tell a POSA, hey, you need to fix me. I need to be improved. I need to be better. Bianchi doesn't give you that either. There entire case is Bianchi says it's known to have hardness. If you look at their slides almost the first 20 of their slides is everything is known, everything is known, everything is known. And they say because it's known it's obvious. That's not the law. In fact, counsel said there's no reason that these references couldn't be modified. I wrote that down. No reason that the references couldn't be modified. That's not the law the obviousness. There has to be a motivation to modify the reference. The fact that now today in 2025 they find no reason it couldn't be modified is not the

test for obviousness. And that's going to matter for all these combinations, Your Honor.

Turning to Slide 8 of our presentation. I list here the numerous important limitations that go across all these different claims in these patents. Again, petitioner's case here we heard a number of times, it's premised on the erroneous argument that propose -- their proposed changes are a matter of routine optimization. It be certainly easy to say routine optimization, but they have provided no evidence to back that up other than their say so. When you scrutinize their case what you see they're cobbling together multiple references looking all over the place, using the claims as a road map looking all over the place to find this, find tapioca, find that, oh, be obvious, routine optimization. It was known to use tapioca, so you could just routinely optimize it. That's not the test for obviousness. This isn't just a patent under hindsight, this is a significant flaw in all of these grounds. It's readily apparent looking at the petitions that they looked out in the art to pick and choose sometimes out of huge laundry lists of things and say, "Ah, that says magnesium hydroxide. I'm going to use that," out of 27 things. The only reason they're picking it out of there is because it's in our claims. This a hindsight-infected analysis across all these grounds. And I mention their slides, you look at their Slides 16, 18, 19, and 22, "well-known," "well-known," "it's known." They say hardness is known. Everything's known. That's not the test for obviousness. Everything -- if you just had to say it's known and it would be obvious to do it, there would be no patents. They have to have a reason in the references for why you would make these changes, and they don't provide any other than it was known.

Turning to the Lesniak grounds, Slide 9, this is across all four patents, Your Honor. Turning to Slide 10, there are multiple reasons why the Lesniak grounds lack merit. And these go across all four of these IPRs that we're discussing today. Lesniak doesn't disclose or enable aluminum-free deodorant sticks. A POSA would have had no reason to modify Lesniak. No reference or combination teaches the claim, hardness ranges, and a POSA would not have added Phinney's magnesium hydroxide to Lesniak. I'm going to walk through each one of those.

Starting with the first question, we respectfully submit Lesniak doesn't disclose or enable aluminum-free deodorant sticks. The petitioner acts in their papers as if the whole focus of Lesniak is deodorants. Lesniak's about sunscreen and diaper creams. All the claims for prior deodorant sticks -- I'm looking at Slide 12 -- each patent has claims that require deodorant sticks in the preamble and there's been no argument that the preamble isn't limiting here, and we submit that it is limiting. It is a limitation. But the reference Lesniak doesn't actually disclose a deodorant stick. That's a major deficiency of Lesniak grounds and it applies as to all four IPRs. Now, counsel said today that, oh, you can use zinc salts as an active for antiperspirant, and that's their Slide 38 of petitioner's demonstratives. Would you pull that up Mr. Eaton? Counsel showed you the slide Your Honors and they say, "Well, see. It says "zinc." I highlighted the word "zinc" there in the third bullet point. Zinc." Well, Lesniak uses zinc so that's inactive. What it actually says is, "inorganic and organic salts of aluminum, zirconium, and zinc." What Lesniak uses is zinc oxide. It's the stuff you put on your nose so you don't get sunburn. Zinc oxide is not a zinc salt. It's a

matter of basic chemistry. So is I wanted to debunk that argument that somehow because Lesniak uses zinc, it teaches an antiperspirant. It doesn't teach an antiperspirant.

Turning to our Slide 13. This is it for antiperspirant disclosure in Lesniak. "The composition can also be an antiperspirant." That's it. Everything else in this entire patent is about sunscreens diaper creams, creams. There's only one stick. There's a sunscreen stick. They don't measure any instability or anything of that. There's no antiperspirant -- there's no deodorant disclosure. And they say, "Oh, antiperspirant and deodorants are all the same." They're not. They're not the same. And how do we know that? Multiple ways. To call something an antiperspirant in this country, the FDA requires it has aluminum. I'm showing here on the left of our Slide 14 this is the monograph. Every single possible aluminum -- every single possible active you can use and call it an aluminum -- call it an antiperspirant in this country requires aluminum. Dr. Lochhead in his declaration, Exhibit 2011, he also said a POSA would understand antiperspirant requires aluminum. But even more, Dr. Squatch's own website, petitioner's own website says if the stick contains aluminum it's an antiperspirant. So a POSA reading Lesniak that says it cannot be an antiperspirant, the single sentence that mentions that in the entire patent would understand that there's aluminum there. All the -- the claims -- many of the claims challenged here require no aluminum salt. And they say, well, it's silent so it doesn't have to show it. It's not silent. It says antiperspirant. The antiperspirant requires aluminum. Turning to Slide 15.

JUDGE MITCHELL: Is that though a term of art that everybody would understand? I mean, would everybody look to what the FDA is saying and so one of skill in the art would find an antiperspirant has got to have aluminum.

MR. MAIORANA: Yes. That's a very important consideration when you're formulating and selling deodorants and -- I'm sorry, antiperspirants is what FDA allows to you to do. They have a micrograph specific to antiperspirants so people skilled in the art who are making and formulating antiperspirants would look to the micrograph. It controls what you're allowed to put in them. So a POSA reading Lesniak would understand when it says it can be an antiperspirant that would have aluminum in it, full stop. There's no debate about that. The fact that they say well it's silent because it doesn't say that had has aluminum, it does say that it has aluminum by the fact that it's an antiperspirant. A POSA would understand that.

JUDGE MITCHELL: So does that monograph control labeling? So if I go to market I can't call something an antiperspirant if it doesn't have aluminum?

MR. MAIORANA: Absolutely.

JUDGE MITCHELL: But I could still sell it, I just can't label it with "antiperspirant" is that how I understand.

MR. MAIORANA: You can't call it an antiperspirant if it has --

JUDGE MITCHELL: Okay.

MR. MAIORANA: You can't call it an antiperspirant unless it has aluminum in it.

JUDGE MITCHELL: Okay. Okay. Thank you.

MR. MAIORANA: So on Slide 15 of our presentation, I mentioned that these compositions are notoriously finicky and Dr. Lochhead talked about this at length in his declaration. One example is Exhibit 2011 of the '999 IPR at paragraphs 54 to 68. And Lesniak corroborates this. Lesniak tested the stability of every composition in this Table 2, for example, which I reproduce here on Slide 15, and the reason they did that is because slight is differences in the amounts of these materials can cause a stable product to become unstable. Just looking at the different compositions here, we pointed this out in our papers, only two of these passed and the differences between them are very small. If you look at the one on the far right composition 11 they use -- they have two percent castor wax. That addition now made it pass the stability test in Lesniak. So this point about is Lesniak stable or not, it's at 150 degrees or 180 degrees, you leave is in the car it melts, that's all irrelevant. The point of all of this stability stuff is that POSA wouldn't find it to be routine optimization to just change out all these ingredients. They have a drastic effect on the hardness on the stability. You can't just swap out ingredients. And that's what Dr. Lochhead's point, which has not been rebutted, is that these are finicky compositions. These are not you just throw it in a pot, and you make a deodorant stick. This is an art ss described in these patents. Now petitioner -- yes.

JUDGE MITCHELL: Isn't it true it mainly the oils in the structurant though, right, that really control that stability or hardness? But you're saying if I'm adding an essential oil the other things that I'm going to add in that that could all of a sudden -- you know, a little bit of something could destroy the hardness or stability. Is that what Dr. Lochhead would say?

MR. MAIORANA: That is what Dr. Lochhead said, Your Honor. And that's borne out in Lesniak Table 2. If you look at -- if you compare these failed ones to passed ones, there very small differences is composition. This isn't like you added in 80 percent of something different. We're talking about single-digit percentages, 1 or 2 percent different of certain things goes from failing stability to passing stability. That's the point that I'm trying to make and that Dr. Lochhead made is that you can't just swap out all these ingredients in these kinds of compositions. That's why I'm saying over and over again, it's not routine optimization. The fact that these are finicky compositions which a POSA knows -- Lesniak knew it, that's why Lesniak is testing for stability. A POSA would not say it's routine to just swap out all these ingredients.

JUDGE MITCHELL: But your claims don't -- none of the claims require a stability limitation, right? Just the hardness limitation.

MR. MAIORANA: That's right. And so that's why I said the point of all the stability arguing Your Honor is to counteract this overarching argument throughout all the petitions that it's just routine optimization. It's not routine. That's what Dr. Lochhead says.

Now turning to our Slide 16. The hallmark of obviousness grounds that rely on hindsight is a weak or inexistant motivation to the combine the references. And that's what's going on in all these IPRs. A proper obviousness analysis doesn't look at the challenged claims at all. A POSA -- what a POSA has before her is all the prior art and that's why hindsight is improper. You're only supposed to look -- the POSA is looking at the prior art, you're not using the claims as a guide. But if you look it these petitions,

they all use the claims as a guide. And that's why I was pointing out the slides and petitioner's saying, “It’s known, it's known, it's known.” Just because it's known, because you know, hey, hardness is a property doesn't mean it's obvious to modify hardness. There has to be a motivation to do that and a motivation to modify Lesniak and Native which are the primary references that they chose to use. So why do we say a POSA would have had no reason to modify Lesniak? Well, for one thing they stated in their -- all the petitions and in their expert's declaration that Lesniak teaches a complete deodorant stick, doesn’t require -- does not require additional ingredients.

JUDGE MITCHELL: But shouldn't we assume that, you know, a POSA is always going to look to improve, you know, almost everything, you know. Petitioner argued there's always going to be complete products. There's always going to be something -- when you’re patenting something it's going to be complete. Wouldn't we always look to improve? I mean, shouldn't I assume that a POSA is going to look to improve? It doesn't necessarily have to say in Lesniak, hey, this isn't maybe the best we could do. You could improve it. It doesn't necessarily have to say that for me to look and say, well, a POSA would look maybe start with Lesniak, if there is something to improve, do that even if Lesniak doesn't say that.

MR. MAIORANA: Well, I mean it's pretty rare situation that a reference says, here's my invention but this part of it really stinks. I wish somebody would improve on it, right. The law requires something. There's got to be something there. And they have been emphatic that Lesniak doesn't need any other ingredients, and counsel says that well all prior art is

complete, and so we still modify them ,so that means our obviousness arguments are okay. That's not the case. There has to be a reason to do it. And a POSA looking at Lesniak would not have any reason to improve it. And the same is true of Native, which I'll talk about when I get to those grounds. Those are complete -- they say they're complete deodorant sticks that don't need any other ingredients. Now, we don't agree that Lesniak discloses a deodorant, but if the Board accepts their argument that Lesniak discloses a complete deodorant stick, then there's no motivation to modify Lesniak.

JUDGE MITCHELL: Well, wouldn't the motivation be if I am a POSA and I know the market's going more natural and people don't want anything, you know, on their body on in their body had to could affect their health. I know aluminum certainly is in the news for possibly negatively affecting health, so people are trying to get away from that. Is that not a motivation to look and to make a combination that’s a natural deodorant as in the claims?

MR. MAIORANA: Lesniak is a natural deodorant already. That was a point I was making earlier. Lesniak is natural and so is Native. So why would you look at Bianchi which is non-natural if your motivation is I want to be more natural? You’re already natural. Aluminum is -- the reason that the consumers don't want aluminum is because there have been studies saying that that can cause Alzheimer's and other things, right. It's the silicones that are the problem and that's what Bianchi is. Bianchi is 50 percent -- up to 50 percent silicones in every composition. So a POSA wouldn't looking -- starting with Lesniak and starting with Native wouldn't

look to Bianchi to modify Lesniak. Now, if Lesniak doesn't disclose deodorant sticks which is our position then all the Lesniak grounds fail because all the claims require deodorant sticks. So it's either -- these are complete deodorants. And in our view if that argument is accepted, then there's no motivation to modify Lesniak. If these don't disclose deodorant sticks, then their grounds fail because they don't meet limitation requiring deodorant sticks.

Now, I want to talk about hardness, Your Honor, and I'm on our Slide 19. And I want to reiterate here, this is a really important point. Lesniak discloses natural compositions, and I've shown on the left-hand side of our Slide 19 from Exhibit 1003, it would be desirable to formulate such compositions from all natural ingredients. That's what Lesniak says. And on the right side of Slide 19 is Bianchi-518 which has up to 50 percent of a volatile silicone which is man-made. So there's no motivation to -- when I'm looking at Lesniak, how can I make Lesniak better? Even if as you said, Your Honor, well, maybe we always want to improve things. I'm not debating that, but there's got to be some impetus here -- I certainly wouldn't look at Bianchi. I have a natural -- a reference that wants natural ingredients and I'm turning to one that's half non-natural ingredients. Why would I look to that? The reason they looked at Bianchi is because it has hardness. That's it. Hardness is well known. Everything is well known. That's the only motivation they have. That's hindsight. You don't even know about hardness. Lesniak doesn't say anything about hardness. Why would you look at Bianchi which is man-made -- 50 percent of their compositions are of man-made material silicone.

Now, I want to talk about the hardness testing the 50 grams versus the 100 grams and turning to our Slide 20, Your Honor.

JUDGE MITCHELL: Can I ask you a quick question before then?

MR. MAIORANA: Yes.

JUDGE MITCHELL: So on any of the claim limitations with the different ingredients, your position is you didn't come up with the particular ingredients to do the particular things that they do in the deodorant. It's that combination. So there's nothing new in your claim limitations that's not taught in the art individually for the ingredients as to what they do in your claimed deodorant, if you followed that.

MR. MAIORANA: I do follow that, and I respectfully don't agree with that characterization.

JUDGE MITCHELL: Okay.

MR. MAIORANA: And here's why.

JUDGE MITCHELL: Okay.

MR. MAIORANA: It's the combination of ingredients. Remember, I said at the outset of my remarks, the prior art deodorants had silicones and aluminum and that's what gave them the properties that consumers like. They're smooth -- they're hard yet smooth. That's -- but it's the combination of the ingredients that gives you those properties. It's not any one ingredient. That's why these -- they were called picture claims, I think. But that's why these claims are written this way because what PNG invented was the composition of deodorant stick that is natural, doesn't have aluminum doesn't have silicones, but it has all the properties that consumers were favoring and enjoying in the prior art. So it's not just one ingredient or

another ingredient, it's the combination of ingredients. Now, some of the claims quantify that in terms of hardness. But the fact remains that it's the combination of ingredients. That's why I started off addressing your question Judge Mitchell about what ingredients affect hardness. It's not just the structurant. The structurant does impact the hardness, but it's the interaction of that with the other ingredients. Because if all you had to do was just throw in some structurant and now I have hardness, then that would be easy. But as PNG describes in these patents, it's not that easy. And what they found was a way to have the properties of the prior art deodorants with smoothness without using silicones, and that's what Bianchi doesn't give you. And I'll talk about here in a minute with the hardness. Bianchi says I have hardness values for these compositions that have a lot of silicones in them, and then the petitioner says, well, hardness is known and that's standard, so I would use that hardness in Lesniak. But what they don't tell you is, how would a POSA formulate a deodorant with those hardnesses without using silicones? They don't tell you that. It's not just the motivation to improve, it's the how. How would you do it. The references don't tell you how. They just said it's route -- that's why they say, "routine optimization." When you can't -- when your references don't say how or why, you fall back to routine optimization. And that's what we've got here over and over again.

Now, turning to the specific issues on the hardness testing. I was kind of surprised to see that petitioner had a slide, it was number 25 -- can you pull it up real quick. It's undisputed that the prior art teaches the claimed hardness range using the standard ASTM D1321 test. It's absolutely disputed. It's one of the most highly disputed issues in these IPRs. We do

not concede that the prior art teaches the claimed hardness range using this standard. We don't dispute it. So back to our Slide 20. What we've pointed out in our patent owner response is that Bianchi uses a different hardness test. Bianchi uses a 100-gram weight whether it's the ASTM D1321 or the DIN, the European counterpart to that, they use a 100-gram weight. What PNG describes in its patent is a 50-gram weight. And that matters and what I'm show something here on the right-hand side of Slide 20 are excerpts from the PNG patents, Exhibit 1001. First of all, it says you should, "Ensure the total weight of the shaft and needle is 50 plus or minus .2 grams." So that's the shaft plus the -- the shaft holds the needle, so those two things have to be 50. And then it says -- and this is Column 11 lines 57 to 58, "The rod is then released and allowed to travel downward driven only by the weight of the needle or cone and the rod." So in other words, you don't add more weight. You don't add that additional 50-gram weight that the ASTM standard talks about. It's Just the shaft and the needle which have to be 50 which is what it says on the upper excerpt which is Column 12 lines 24 to 25 of the Exhibit 1001. That's why we say the test requires a 50-gram weight. That's what the patent says. So if you have a claim that says ASTM D1321, you have to read that claim in the context of the specification which it appears. And the specification makes clear you don't use that extra 50-gram weight. And the spec says that you use ASTM D1321 as described here in. That's at Column 3, lines 8 to 9. So they tell the POSA there is an ASTM D1321 test, but we use it as described herein. And how they describe it is, use only 50 grams, the needle and the rod. You don't add the additional 50-gram weight. That's why we raise this argument. What they do in Bianchi

is they use the extra 50-gram weight, or they use a total of 100 grams in the DIN test, which I'll explain in a second. But they use the 100-gram weight. So it's two different tests, and those values are -- there is no correlation between those values. They haven't shown any correlation, and I'll get to that in a second.

JUDGE MITCHELL: So can you explain to me how a POSA applies your claim here where you're talking about as measured by penetration with the ASTM D1321 needle. How would a POSA interpret that and what would you do to see if your deodorant stick satisfied that claim?

MR. MAIORANA: You would look to the specification to see if -- because -- a patentee can change a test, right. There's a standard test. He a patentee doesn't have to use the standard test. They can change the test. So what they say here in Column 3, lines 8 to 9 is use ASTM D1321 as described herein. That's right in the spec. So if I'm a POSA reading these patents and it says, okay, I see the claim says D1321, how do I determine whether I'm inside or outside that of that hardness range? Well the spec says I use D1321 as described herein, and I use only 50-gram weight. And the reason that they do that and Dr. Lochhead talks about this is the prior art natural sticks that I mentioned at the beginning of my remarks were a lot harder than consumers were used to. That's why they didn't do very well. So when you're doing a hardness test, you have to adjust the test to match the material that you're reviewing. If it's a really soft material and you have a heavy weight, it's just going to go right through the material and you're not going to get any measurement. So what PNG is doing here is they're formulating natural deodorants that have the properties of the prior art non-

natural deodorants, and they had to come up with a test to determine whether they would meet the hardness requirements because what consumers want is the hardness feeling, not the hardness test, but they want the hardness feeling that you get from prior deodorants. So to answer your question, is the POSA would look at these patents and say use ASTM D1321 as described herein, and what's described is what I have on the screen on Slide 20. And by the way, Your Honor, the petitioner has gone a long way to try to rescue the hardness measurements here and I'll get to their new testing -- the related testing that we think was improper. But any ambiguity here about do the references have the hardness or not have the hardness, any ambiguity about that has to be held against the petitioner because they bear the burden. So they're trying to make it seem like oh, this is just all overlapping ranges, which it isn't. But I just want to make the point legally if there's any ambiguity here it has to be held against the petitioner.

So turning to Slide 21. Again, I'm showing that PNG's patents talk about using 50 plus or minus 2 grams. And then Bianchi-518 and the ASTM D1321 standard they're talking about 100 grams. But there's a fundamental truth here about the hardness, Your Honors. No reference in any of these grounds teaches the claimed hardness ranges. And when a patent claims a parameter like these do, it has to be determined through testing. It's critical -- critical for a POSA to understand the test protocol that's required to obtain the claimed values, and Section 112 requires the patentee to put enough information in the spec about a parameter so that a person of skill in the art can reproduce the test without undue experimentation. And that's exactly what PNG did here. They explained to

you on ASTM D1321 as described herein and what's described is a 50-gram weight.

Turning to Slide 22. Both Bianchi references use a 100-gram weight which is twice as heavy as what is described in PNG's patents and in what is claimed in those patents. Dr. Lochhead explained this in his declaration. For example, the '999, Exhibit 2011 at paragraph 94. And the PNG patents made clear that PNG scientists modified the test to use a 50-gram load. And as I said, this makes sense because they were seeking to address the problem of prior art natural deodorant sticks that were too hard. And the test that may have been appropriate for these two hard sticks would need to be modified to assess the hardness of a softer stick. And Dr. Lochhead also said something I want to point out here, it's on our Slide 22. There's no formulas to convert the results of one of these tests to the other and a POSA would have understood that the hardness range values in Bianchi indicate significantly harder sticks than those in the PNG patents.

Another point getting to the ingredients, Your Honor, on our Slide 23. Bianchi teaches -- both the Bianchis teach their hardness ranges through the use of ingredients that are prohibited in the PNG patents. Remember I mentioned that Bianchi-518 says you can have up to 50 percent silicone. So the hardness values in Bianchi are relevant to the compositions in Bianchi. So they're plucking out the hardness values and saying, ah, those seem to overlap with the values in PNG's patents. But those hardness values have to be read in the context of Bianchi references which are full of silicones. And they don't give my explanation how a POSA could translate the hardness from Bianchi to Lesniak without the silicones because you can't use the

silicones in Lesniak. Lesniak's a natural deodorant. Lesniak is a natural sunscreen or diaper cream or antiperspirant if you accept that single step.

And the point here on Slide 24, Your Honor, it says the federal circuit has made clear knowledge of the goal doesn't render it's achievement obvious. That's what's going on here. They say, hardness is a goal, hardness is known, this is known, that's known, so therefore all routine optimization and you can just willy-nilly mix all these things together and you'll just get the hardness. But the instability of Lesniak's compositions would have prevented a POSA from arriving at the claimed hardness through routine optimization.

Now, counsel mentioned the DuPont case. I want to address that briefly. The DuPont case is the quintessential case in which the only thing that was different between the prior art and the claims at issue was the values in the range. So the patents claimed arrange and the only thing that was different from the prior art was the specific value and those values overlap. That is not the case here. Here, as I've said over and over, there are differences between the ingredients, the formulations. So this is not a DuPont situation where all we're doing is we have overlapping numbers and, therefore, it's obvious and there's a presumption somehow. There's no presumption here because we don't have overlapping ranges. There is no evidence here that Bianchi's hardness at a different test for different ingredients overlaps with the hardness ranges that are in the claims. And I'll explain that in more detail here in a second.

I do want to address whether this belated testing data should be permitted into the trial. We had asked for permission to file a motion to

strike, and Your Honors authorized us each to file a brief. I respectfully submit the issue of whether the testing -- the issue of whether the testing should be admitted is still up in the air and I want to give a few minute's discussion about why we think it shouldn't be considered. So here, there's no question. Petitioner bears the burden. And the ownness was on the petitioner to address the hardness testing issue in the petitions, not on reply after we pointed out in our patent owner response that there's a difference between is the 50-gram testing in the 100-gram testing of the art. They should have had this in the petition. And counsel said this is a claimed construction argument and PNG didn't do a claim construction argument. Well, if it's a claim construction argument that's worse because that should have been in the petitions, and there's a rule that expressly says that. If there is a claim construction issue, petitioner was bound to address that in the petition. This isn't discussed anywhere in the petition at all. It's only discussed in the reply, and they did new testing in the reply which we think is improper and shouldn't be considered. And I point you to our supplemental brief which in the '999 IPR is paper 22. But on top of that, the testing is riddled with problems each of which renders it unreliable. So to the extent that Your Honors allow the testing to come into the record, you should give it no weight and I'm going to explain why.

First of all, what is seems to us in the reply is that petitioner is making an inherency argument. That if you run the Bianchi test with 100-gram load you will inherently get some hardness values from the PNG patents. But inherency requires a very high standard in the law, and it can't be shown by mere possibility or probabilities. Can I have petitioner's Slide 30 please, Mr.

Eaton? What they say in their Slide 30, Your Honors, says the same deodorant can fall within the claimed range under both tests, can fall. That's not inherency. Inherency -- it cannot be shown by possibility probabilities. They said right here on their own Slide 30, the same deodorant can fall. We don't agree that it can, and I'm going to explain why. But even they say just maybe it will fall in there maybe it won't fall in there. That's not inherency. And they were make an inherency argument in their reply accompanied by this testing that we think shouldn't be permitted.

Now, there's other problems, going back to our Slide 26. They just pick some random deodorants that are on the market today and ran some tests. They don't say what those compositions are made of. They don't say what the ingredients are. They don't say anything about them other than the pictures that you're looking at our Slide 26. They also are not representative of the prior art. If they wanted to say that Bianchi's hardness values overlapped with the patent, they should have tested Bianchi's compositions. Bianchi says what they are. They could have made them, and they could have tested them. They just went and bought some random things off the shelf and ran a bunch of tests and said, "Aha, it shows a correlation." But it doesn't show a correlation. Turning to our Slide 27. On the left-hand side of Slide 27 you see these data points of their hardness measurements. It's just a scattering of disparate data points. It doesn't show any correlation. You can't draw a line through those points. Looking at our -- Item 2, if you order the -- their products under PNG's method from hardest to softest and then you do the same for their testing presumably the Bianchi method -- so they're testing PNG's 50-gram method and Bianchi's 100-gram method.

They don't even match up. They're all over the place. And sticks of similar hardness under one test have vastly different hardnesses on the other. So there's no correlation. This is testing done at the last minute on reply that should have been done. They had all the time in the world to do this kind of testing and put it in the petition. They didn't do it because we pointed out rightfully so that the testing in the patent is at 50 grams and the testing in the reference is at 100. So you can't just take Bianchi's hardness values and say, oh, they're the same as what's in the patent. You wouldn't do that if it was a melting point measurement. You wouldn't say, this melting point measurement gives me 27 and this melting point measurement gives me 43. Those are the same values. They're not. They're two different tests. They give you different values. Same here. The data doesn't show any correlation between the different hardness tests.

But there's even more problems with this testing. Petitioner's expert Dr. Michniak-Cohn, she brought in a third-party lab to do this testing, and she says the instructions for the test were taken from the specification of each of the patents. We've reproduced that herein the upper left-hand corner of our Slide 28. But they didn't follow the tests that were in -- described in PNG's patents. The PNG patent say do not remove deodorants from original containers and melt them. But on the picture on the right-hand side of Slide 28, they did exactly that. These are little cylinders where it looks like they took the deodorants out the packaging, somehow melted them down, did something, and put them into these cylinders to run the test. That's exactly what you're not supposed to do because that can affect the hardness. So they

didn't even follow the testing that's required in PNG's patent. So yet another reason why this testing is unreliable shouldn't be permitted.

JUDGE MITCHELL: Did patent owner ever make an attempt or ask to depose the expert here on reply?

MR. MAIORANA: No, we did not. But deposing the expert wouldn't change all these deficiencies. It's right in the papers themselves so we don't need Dr. Michniak-Cohn to confirm that these materials were taken out. Also, there's very little information given about what will exactly this toasting lab did. We really just got this one picture and then a bunch of data points. That's it. So deposing them wouldn't make the test any better or any clearer. The tests were deficient as evidenced by the information that they provided.

JUDGE MITCHELL: Okay.

MR. MAIORANA: Turn to go our Slide 29. If this related testing shows anything, it shows that the hardness varies depending on the formulation. That's the point I've been making in any entire presentation, Your Honor, and in addressing your question to counsel. It’s the combination of all the ingredients that affects the hardness. We can see that from their own testing. Now, they mention that the marked Native product doesn't fall within the range that's in PNG's patents, but that just shows that that their testing is unreliable. They tested Native product they said, oh, it's marked with PNG's patents, but it doesn't follow up on range. That, to me, is an indictment of the testing. And there's all kinds of problems with the testing as we’ve pointed out in our papers and in our presentation.

Now, as a last ditch effort to try to save this testing and show some kind of correlation, they argue routine optimization. But that requires a target to shoot for which they say is Bianchi. Their target is Bianchi. But as I said, Bianchi provides the wrong target. It uses a different test, and it is discloses much harder sticks full of man-made silicones which Lesniak and Native don't want.

Now, let's talk a little bit about magnesium hydroxide. All the PNG patents have claims with magnesium hydroxide in them and I mentioned that all these different ingredients are important, and how much you use of them is important, and they all impact the stability and the hardness. So you can't just say I can swap out magnesium hydroxide for baking soda and it's routine optimization. It's not routine optimization. But the Phinney reference has problems beyond that. Lesniak and Phinney describe entirely different uses for metal oxides. Lesniak uses zinc oxide which, again, not a zinc salt. And Phinney uses -- so they argue Lesniak used -- teaches zinc oxide while Phinney teaches combining magnesium hydroxide with zinc oxide to improve antimicrobial properties. But Lesniak is using zinc oxide for sun protection. That's shown on the left-hand side of our Slide 32. That's that white stuff you put on your nose, you don't get sunburn, that's zinc oxide. That's what Lesniak uses zinc oxide for. Phinney uses it for odor protection. So two different uses. Why would a POSA starting with Lesniak turn to Phinney to use zinc oxide for odor protection -- I'm sorry, why would they turn to Phinney to use magnesium hydroxide instead of zinc oxide when Phinney is using zinc oxide for odor protection? Totally different uses. Lesniak doesn't use zinc oxide for odor control at all. He

uses it to protect the skin in a sunscreen and to protect against diaper rash in a diaper cream. And also, Lesniak uses extremely high compositions of zinc oxide. You need to have that zinc oxide to block the UV rays if you're using it as a sunscreen.

Another problem with the Phinney Lesniak composition is that Phinney's magnesium hydroxide is part of a multi-ingredient combination. And petitioner just plucks out the magnesium hydroxide from Phinney's 3- or 4-ingredient combination of odor control and says that, oh, it would be obvious to just pluck magnesium hydroxide. Well, you know what that is? That's hindsight. The only reason they're even looking for magnesium oxide is because that's what -- the only reason they're looking for magnesium hydroxide is because that's what's in the PNG claims. There's nothing in Phinney that would tell you, I should pluck magnesium hydroxide out of this 3- or 4-combination cocktail that Phinney describes to combat odor. It has magnesium hydroxide, zinc hydroxide, and potassium chloride and/or potassium sulfate. And petitioner's expert admitted that. That's the only time that Phinney discloses magnesium hydroxide is in that combination of 3 or 4 things. Why are we -- where's the motivation to pluck magnesium hydroxide out of all these? Why don’t you bring the rest of it in? They don't discuss that. They just by hindsight take out magnesium hydroxide. But Phinney doesn't have zinc oxide. Phinney has zinc hydroxide.

Turning to our Slide 34. Phinney emphasizes the need for zinc hydroxide, not zinc oxide, stating that the zinc hydroxide lowers the pH of the magnesium hydroxide perspiration, odor controlling formulation of the invention to avoid skin irritation. Now, Phinney doesn't teach, as petitioner

would have it, a combination of zinc oxide and magnesium hydroxide at all. Now, petitioner's expert admits that Phinney doesn't disclose magnesium hydroxide without zinc hydroxide and the other ingredients.

JUDGE MITCHELL: But does that matter if you have a comprising claim? If I have extra stuff, does it matter? Because your claim could encompass the combination, right?

MR. MAIORANA: But that's not the argument that's being made here, Your Honor. They're not saying take all of those over and then the extra ones don't matter because it's a comprising claim. They're saying single out the magnesium hydroxide --

JUDGE MITCHELL: Okay.

MR. MAIORANA: -- out of the combination and pluck it and put it into Lesniak. So I agree if they had other things that they could justify a reason why you would pull it all over, the fact that those other things may not be at issue because we have a comprising claim. But the problem is there's no motivation given here for why you pluck the magnesium hydroxide out of the Phinney combination here. JUDGE MITCHELL: All right.

MR. MAIORANA: And the other problem is that Phinney discloses, you have to mix a lot of water in to turn zinc oxide into magnesium -- I'm sorry. You have to convert the oxides into their hydroxides. I've shown you here on our Slide 35 that Phinney says you have to add water and mix it until the magnesium oxide and zinc oxide are converted to their hydroxides. But Lesniak is anhydrous as shown on the right-hand slide of Slide 35 in the abstract. It says, “an anhydrous personal care composition.” Well, they

don't even address what do you with all this water. Phinney is using zinc hydroxide by adding a whole lot of water, and they're saying you have to -- that's also -- the reason you can have magnesium hydroxide is because you add all this water. Well, they just ignore the water and say, oh, we'll just leave that behind. We'll pluck it out of Phinney and put it into Lesniak. But they doesn't address that problem.

And then there's yet another problem with the Phinney Lesniak combination is that the amount of metal oxide and hydroxides in Lesniak and Phinney are drastically different. Lesniak has upwards of 20 percent zinc oxide, whereas Phinney uses 0.5 to 1.5 of zinc hydroxide. And Phinney requires the magnesium hydroxide to be substantially in excess of the zinc hydroxide. That, as Dr. Michniak-Cohn admitted, is a 3 to 1 ratio. They don't even address that. They don't address that POSA reading Phinney would say you've got to have the certain ratio thing. They just pluck out the magnesium hydroxide and say put it into Lesniak, and that is not a proper obviousness combination.

So to summarize the Lesniak Phinney combination on Slide 37, there's no reason to pluck magnesium hydroxide out of Phinney and combine it with Lesniak zinc oxide. They have different uses for the compounds. Phinney teaches magnesium hydroxide in a multi-ingredient combination. Phinney's combination uses zinc hydroxide and Lesniak is anhydrous. And they have different -- vastly different amounts of their metal oxide and hydroxides. And what is petitioner's answer to these criticisms? Routine optimization. That's what we get over and over again. Routine optimization. The POSA could figure it all out.

So we summarize on our Slide 38, these are the failures of the Lesniak grounds that apply across all four IPRs and there are some grounds that fall short specific to particular IPRs, and we've got -- those are listed out of our Slides 39 through 53.

And I'm going to focus on the silicones, Your Honor. We've been talking about those a lot today. Looking at our Slide 41, Claims 5 and 6 of the '999 patent say that the composition is either substantially free of silicones or are limited to 0 to 5 percent. Remember, the Bianchi references have up to 50 percent of silicone. Now, the reason that petitioner says these claims are supposedly met is because Lesniak describes the deodorant stick without silicones and you would take the hardness from Bianchi. And again, for all the reasons I've said and said in our papers, there's no motivation to make that combination. And also, Bianchi's hardness values don't have any correlation to the hardness that's in the PNG patents. But even if the Bianchi hardness testing had some relevance to the claimed hardness ranges, which it doesn't, they fail to address in their discussion of Claims 5 and 6 how you would maintain Bianchi's hardness without all those silicones. That's routine optimization. The POSA could figure it out. No, it's not routine optimization because these compositions are finicky. As we show here on the right-hand side of our Slide 41, Bianchi-518 has up to 50 percent silicones. And they say, well, you would take those hardness values and just put them into Lesniak. But they don't explain, where did all the silicones go. What are you going to do with those? The silicones in all the ingredients have the combined impact on the hardness, but they don't explain how a POSA could maintain the hardness range in Bianchi-518 out the silicones.

JUDGE MITCHELL: So wouldn't structurants somewhat interchangeable though? I mean, I know what you're saying about you've got to look at all the ingredients as a whole to make sure your combination works and has the right hardness. But wouldn't you be able to use another natural structurant and then just kind of adjust the hardness using that different structurant and not -- you know, even though you're looking at a combination with silicone, wouldn't one of skill in the art know you could use another structurant in lieu of the silicones?

MR. MAIORANA: Well, the silicones are there to provide the feel, right. As I mentioned at the beginning of my remarks, the silicones are there to provide that smooth feel when you're putting on a deodorant.

JUDGE MITCHELL: So it's more than just to hold it together.

MR. MAIORANA: Yes. It's more than just -- it's the combination of -- silicones provide a benefit, the structurant provides a benefit. But it's also how those things interact. And Dr. Lochhead explained this at length in his declaration, Exhibit 2011, that there's crystallization that happens and there is interstices within the crystals, and all those things impact the stability and hardness of these compositions. So this isn't just taking out 2 percent silicone, half of Bianchi's compositions are made up of silicones. You have to account for that. They don't even address that. And you wouldn't -- they don't provide any reason how a POSA could take the Bianchi hardness which is driven by this 50 percent silicone and put it into Lesniak to meet these claims that require no silicone. It's just not there. They don't explain it.

I'm going to move on in the interest of time to the Native grounds, so to our Slide 54, Your Honor. There are failings of the Native grounds across all the IPRs. We summarize those in our Slide 55. And I'm going to walk through each of those here. But the main argument here, the main problem is, there's not a single reason identified why a POSA would have been motivated to modify the Native product. The only thing that they point to is hindsight. There's no reason to modify Native. The Native product was a complete deodorant. It was raved about online. It was a great product. So why are we modifying it? The only reason they are proposing to modify it is hindsight. Native doesn't give any percentages of its ingredients. These compositions are very finicky, as I've said a number of times, and you need to know the composition of the ingredients. The Native reference doesn't give any guidance to a POSA where to even start or what to modify. And the evidence does not establish that Easy Homemade is prior art and that a POSA also wouldn't have been motivated to combine Native and Easy Homemade.

So turning to our Slide 57, I've reproduced here Exhibit 1007 at page 8. These are ratings online from Native. They're all raving. They're raving about the Native product. It's a fabulous success and it's highly rated online. And petitioner's expert conceded, there is nothing in the Native reference that indicates any problem with the Native stick that would have motivated a POSA to modify it. Now, when I mentioned that before on Lesniak, Your Honor, you said, well, aren't we always looking to improve things? And I don't dispute that. That's the point of our patent system, right. You disclose your inventions so others can improve on it. But there's got to be some

motivation here either in the primary reference or the secondary reference as to why you would make these modifications. And certainly Native doesn't give you any reason why you would look to modify it.

JUDGE MITCHELL: But was the Native ground -- and maybe I'm understanding. But, you know, because I know the Native reference doesn't have the percentages, right. It just shows the list of ingredients and it's always what the first ingredient is the most in terms of the listing, but that's all you could really tell is what's in there. And then the secondary reference is used to show you, no, this is what Native would have had in terms of percentages or what was part of the combination if it's made up by each particular ingredient. That's not necessarily modification for that, right? You're saying it explains. I mean, and you can disagree that it, you know -- are we sure that with this combination that you would arrive at this particular, you know, limitations, but it's not necessarily a modification.

MR. MAIORANA: Well, the modification that they propose is Native plus Bianchi-254. But the problem is that combination doesn't give you the ingredient percentages that are in the claim. So even if you would combine them, which we submit you wouldn't, or a POSA would not, still the combination doesn't give you what the claims require. The combination still has to disclose the claims, and they don't have that. And they say, oh, well if routine optimization. You would know to use this percent or that percent. But again, I've said this many many times, it's critical here. It's not routine optimization to change the ingredients and the amounts in these kinds of compositions, which is Dr. Lochhead's point. So what they do to try to overcome the lack of the amounts in Native is they say, oh, routine

optimization. There's no criticality here. But there's no motivation for a POSA to even make this combination in the first place. You don't even get to routine optimization. And the reason why is one of the same reasons I said with Lesniak, Native is a natural deodorant. Bianchi-254 uses silicone oil. It's a man-made material. It's not natural. So a POSA looking at Native -- even if they said this thing is being raved about online. It's the greatest product ever. But how am I going to improve it? They wouldn't go look at a Bianchi reference that's full of silicone that's non-natural. Why would you start with a Native natural material and go to a non-natural reference? It just doesn't make sense. And combining them would defeat the core objective of Native, which is to provide aluminum-free, natural deodorant products.

Now, turning to our Slide 60. They admit that Native doesn't expressly teach the percentage of each ingredient that's in -- rely on the dependent claim. But they say Bianchi-254 establishes that the claimed concentrations of be ingredient were conventional. Again, that's because it's known it would be obvious. That's not the law. The fact that it's known doesn't make it obvious. There has to be some reason for motivation for a POSA to make the combination that they're contending. They ignore Bianchi's inclusion of these ingredients. I'm showing on Slide 61, this is the aluminum active AAZG, 15 to 30 weight percent of the antiperspirant active. They ignore that and they just say when formulating a natural aluminum-free deodorant based on Native, a POSA would have looked at publications describing other stick compositions like Bianchi. But Bianchi is an aluminum containing full of silicones. A POSA would not be motivated to look to Bianchi-254 even if they were interested in improving Native.

Now, I'm not going to belabor the hardness point, but the same issue here. Bianchi-254 uses the DIN standard which also has 100 grams of weight as opposed to the 50 grams that's called out in PNG's patents. And they never explain why Bianchi-254 does not disclose a natural aluminum-free deodorant stick. And they don't cite any reference in the Native grounds that discloses a deodorant stick with the claimed hardness. They admit Native doesn't disclose the hardness of the stick. So we don't know the ingredients percentages, and we don't know the hardness. But they say that the reason it would be obvious is because Bianchi-254 establishes that the claimed hardness range was standard. Standard for what? It just discloses some hardness values. Standard for -- they don't give explanation of standard for what. Again, this is just saying it was the known, therefore, it's obvious, and that is not the law. And they rely on the same false equivalents of Bianchi-254's hardness testing with those of the patents. And for the reasons I explained, that is not -- there's no correlation and there's no overlap between the values.

JUDGE MITCHELL: Do you agree with petitioner that the DIN test is basically a European equivalent to the ASTM test?

MR. MAIORANA: Yes. They do the 100 grams a little bit differently in those two tests. So you'll see in our Slide 63 in the DIN test they use a needle that's 2-1/2 half grams and then the rod is 97.5 grams. So you have a total of 100 grams. Whereas the ASTM does it a little bit differently in that they add an additional 50-gram weight. The point is, yes they're both 100-gram weights. The amount of weight makes a difference -- makes a huge difference because that's going to dictate how far the needle

will penetrate into the material you're testing. But yes they both use 100-gram weights. I don't know standing here right now if DIN is exactly the analog of the ASTM, but for what's relevant for these IPRs it is.

JUDGE MITCHELL: Okay. Thank you.

MR. MAIORANA: Now, even if the Bianchi-254 teaches the hardness range of the PNG patents which we respectfully submitted doesn't, their arguments still fails. Native is silent on the hardness and the specific formulation. And Bianchi's hardness comes from prohibiting ingredients, the aluminum and the silicone which the PNG patents don't permit. And again the knowledge of the goal here is that it was standard somehow or known doesn't render achievement obvious. Now, petitioner said in its slides that the Native product is comparative formula one and comparative formula two. I've highlighted those on the right side of our Slide 66. Well, those -- both those products are too hard. If you accept their representation that they think that's the Native prior art formula, then those sticks are too hard. A POSA wouldn't be looking to those stick to see try to achieve the patent that is mentioned.

Now, let's talk about Easy Homemade and Native. I know I'm running short on time. But all the patents have magnesium hydroxide claims. Now, Easy Homemade is publicly accessible? We talked about there's a declaration from a Squatch employee, and they said, "Oh, look as all these things he corroborates it with." The problem is that it doesn't show what he says it shows. It doesn't show what the composition is of the product on these websites. Now, he says that -- well, they criticize us for not deposing him. Were not questioning the witnesses whether he's lying, but

the problem is what he's showing doesn't show you -- it doesn't establish what was actually sold. To the extent there was something sold, it doesn't show you what it is. That's the shortcoming of the Squatch prior art. The Easy Homemade issue is just a blog, and they say they don't have to show indexing. And they say, "Counsel said it was accessible because people left reviews." But there's no evidence that that actually happened before the priority date. They have to show that the reference was publicly accessible before the priority date. The fact that somebody sometime was able to access it and make -- post some comments about it doesn't mean that it happened before the priority date. Now, they point to Easy Homemade and they say, this is evidence that you would remove baking soda. But Easy Homemade doesn't teach the removal and substitution of baking soda. Easy Homemade starts with the baking soda-free composition, so there is no discussion about removing any ingredients and their expert agreed as shown on our Slide 70. But there's no reason that you would modify Native's baking soda. The reviews are all positive. They don't mention anything about skin irritation. And Native contains shea butter and coconut oil which are included to account for skin irritation. So their reason for making this change is, well, baking soda could cause skin irritation. But there's no evidence that Native was causing any skin irritation or had any problem. So a POSA looking at Native wouldn't be motivated to make that change.

Let's turn to Slide 74. These are the silicone -- no silicone Claims 5 and 6 of the '999 patent, Your Honors. I talk about this with Lesniak. The same problem here with Native. There's no motivation to combine. But as it relates to Claims 5 and 6, petitioner failed to show how a POSA would have

maintained the hardness range supposedly taught by Bianchi without using any silicones. The hardness is dictated by the composition of the material. And they would have to remove aluminum and all of the silicones in order to transfer Bianchi's supposedly overlapping hardness to Native. And they don't explain how a POSA could have done that. It's not routine optimization. It's more than half the formulation that you have to account for.

And then last point I'll make on the baking soda is that they both say that a POSA would be motivated to remove baking soda when it suits their purposes for certain claims, and a POSA would be motivated to use and add baking soda when it suits their purpose for other claims. That's just more evidence of hindsight reconstruction here. Picking and choosing different references, sometimes combinations of four references to try to achieve the patented mentioned. And I'll reserve the rest of my time, Your Honors. Thank you.

JUDGE MITCHELL: Thank you. When you're ready.

MR. OLIVER: Thank you, Your Honors. I'd like to address and respond to a few of the arguments that were made. I'll start with the -- what I'll call the finickiness argument. And that is that these formulations were very finicky and, therefore, you have to be very precise on the mixture of the carrier oil and structurant and specifically which carrier oils and structurants.

I will first direct the panel's attention to our Slide 18, petitioner's Slide 18. There's a quote there from a PNG patent from the 1970's that not only says there's a known structurant amount is what is adjusted to make something brittle, such as hard or soft. But that a person of ordinary skill in

the art could easily have done that. That's back in the 1970's. It was known to be easily accomplished. And I think that responds specifically to deposition that has been set forth. But I think there are a few more important flaws to be noted. One, if it's true that the invention here is that there was a very precise selection of ingredients and ratio of oil to structurant that was allowed to make this hardness work, where is it in the claims, first? Where is it in the specification, second? Looking at independent claims, the examples of which are provided in our slides starting at Slide 11, Claim 1 of the ‘999 patent has no requirement for an oil whatsoever and there's a structurant but there's not amount given. If we look at the Claim 1 of the ‘915, there's 25 percent or more of a triglyceride. How much more? We don't know. And there's a structurant again but no amount given. And it doesn't even require what structurant is to be used. Same with the ‘706 patent. Twenty-five percent more of a triglyceride, so on and so forth. If that's the invention, why is it in the claims? And more importantly, if that that was so important, why is it in the specification? And I direct the panel's attention to, for an example, the ‘999 specification. Looking at the ‘999 specification at for instance Column 3 around line 46 and on, it says to use up to 25 percent of a liquid triglyceride -- or excuse me, at least 25 percent of a liquid triglyceride. Which triglyceride? Apparently it doesn't matter. How much more than 25 percent? Not stated. Looking at Column 4, there's a discussion of the structurants, and that starts around line 14. Primary structurant may comprise from about 5 to about 20 percent. So I guess anything in that range. But if you actually read down further after the gap around line 48, it says the -- in some embodiments, the structurant could

be less than about 1 percent. So according to the specification, a person of ordinary skill in the art would have enough information to make what is claimed just by saying that you typically use 5 to 20 percent of a structurant, whatever that structurant may be, or you could use less than one percent. Don't worry, you'll figure it out. If in the 1970's PNG was saying this was easily done and the patents here provide no specific guidance on here is the magic formula, then there is no issue here that credible issue that one of the ordinary skill in the art would not have been able to achieve these hardnesses using the ingredients known in the field. Because if it couldn't, PNG would have had to explain that and said, hey, this is our invention. This is what the problem is, and this is the specifics, the finickiness that you'd have to overcome. And that's simply missing here.

With respect to the argument that a person of ordinary skill in the art would never look to a secondary reference that was anything other than a natural deodorant, I direct the panel's attention to our Slide 48. And the bottom bullet point there has a citation and a quote from PNG's own expert who was asked about this type of issue of why would a person of ordinary skill in the art making natural deodorants look to prior art deodorants that used aluminum or silicone, things that weren't natural. And his answer was, “That's what a person of ordinary skill in the art does.” That, I think, is very telling. Where PNG's own expert agrees that a person even making a natural formulation would take guidance from prior formulations that may not have been purely natural, then person of ordinary skill in the art would do that in a combination as well. There would be no reason not to.

With respect to the zinc oxide -- and actually, you know what? I'll come back to that, the zinc oxide. Staying on this oil issue, there is some arguments concerning Bianchi. I know there's a lot of discussion of Bianchi's up to 50 percent of a silicone oil. Just for clarification on the record, the silicone is a silicone oil. It's a carrier oil. So it's not the structurant. It is the carrier oil. And in Bianchi, there is discussions of using amounts of carrier oil. I'll note though particularly with respect to Bianchi-524 -- and I'll direct the panel's attention to Bianchi-524, paragraphs 15 through 17. What Bianchi describes is using a carrier oil. And then Bianchi goes on to state that carrier oil could be a mixture of a silicone oil 20 to 40 percent of weight, but also could include in that combination a non-silicone oil. In other words, a natural oil. And I believe triglycerides are even mentioned there in paragraph 50 of Bianchi. I think the analogy here is that this is like going back to my baking analogy. If someone had a list of ingredients but was looking at how much to use and their ingredient list called for a half a cup of vegetable oil -- or excuse me, consume called for vegetable oil but didn't say how much to use, that person might go and look at other recipes and say, well, if I'm going to bake a cake and it needs oil how much oil do I use? Now, the reference recipe for finding the quantitative analysis could say, you could use a mix of vegetable oil and sunflower seed oil. However, the total should be about whatever, a cup, a half a cup. Well, if you only had one of those oils, then you would generally understand that I should use the total amount of oil called for rather than just the amount of the oil that I happen to have in my cupboard. The issue is the same here. There is a carrier oil used. What that carrier oil is can be any

one of a number of things including, as described in the specification, a number of different percentages, amounts. Whether or not the oil is particularly a silicone oil or a triglyceride oil is not the relevant issue. The prior art is very clear that triglyceride oils were used as carrier oils in deodorant sticks. All that Bianchi really tells you is generally how much oil do you use in a deodorant. That would have been very clear to a person of ordinary skill in the art.

With that, I'd like to turn to the zinc oxide argument because I think there's a little bit of maybe confusion sewn over this issue. There seems to be an argument presented or responded to by PNG where Lesniak is a complete deodorant and therefore you wouldn't modify anything. The quotes that PNG relies upon from Dr. Squatch's expert on Slide 17 of PNG's exhibits, the witness was being asked about what would you have to add to Lesniak to make a particular composition of deodorant? And her answer was quite simple. It is a deodorant. It is already a deodorant. So that's the argument they seem to rely upon to say, oh, it's complete and therefore you would never modify it. But I think that really is missing the point about what the witness is saying. The compositions described in Lesniak are deodorants. Also, with respect to the idea of whether or not we should understand Lesniak to be aluminum-containing because the FDA, I will point out with respect to Slide 38 of our demonstratives that there's a case law said on the bottom Persion Pharmaceuticals that FDA regulations are not relevant to obviousness. So that the FDA requires certain things for labeling does not mean that that dictates what would have been obvious to a person of ordinary skill in the art. As to whether or not a person of ordinary skill in

the art would consider anything called an antiperspirant to necessarily require aluminum, I direct the panel's attention to the second to last bullet point on that slide, which is a quote from PNG only patent that says, “The antiperspirant actives may include any of the antimicrobials discussed above which include baking soda, zinc carbonate, magnesium hydroxide.” Goes on to list organic salts and goes on to list also zinc. PNG itself explains in its patent that antiperspirants are not limited to only aluminum-containing formulations based on the very description provided in the patents. That would be the understanding of a person of ordinary skill in the art.

JUDGE MITCHELL: So did your expert opine on that? I mean, I'm assuming she did. To say, antiperspirant one mean to one of the ordinary skill in the art X.

MR. OLIVER: Yes, she did opine on that. I'll also note that she indicated -- and going back to the introduction, antiperspirants block perspiration. They clog a pore or shrink a pore. She did testify during her deposition transcript, I believe it's Exhibit 2012, and I believe it's page 53. She was asked about this, and she said look zinc oxide is an astringent. It is going to shrink pores. I expect that Lesniak called zinc oxide or called it's composition a antiperspirant because if zinc oxide is an astringent as she testified to in which I don't think is really anything that would be controversial as far as a statement, it is going is to shrink pores. And if it's shrinking pores, it is going to reduce perspiration in some way. So that is likely why it was characterized as an antiperspirant more specifically within the subcategory of deodorants. Zinc oxide, it is not disputed here, is also an antimicrobial. It may not be the best antimicrobial in the world, but it is

accepted in the record, and I don't think there's any dispute that zinc oxide is an antimicrobial.

JUDGE MITCHELL: So let me ask you a quick question, because I know you say here FDA regulations are not relevant to obvious. And I get that as a general, you know, statement. And you quote a case here Persion Pharmaceutical or Persion Pharmaceutical, with the FDA approval requirement, you know, really don't play in as much to an obviousness inquiry. But here, when you're talking about labeling and so a company can't even label as an antiperspirant and sell it. I mean, it seems like that would play more into in my view what a POSA would consider an antiperspirant.

MR. OLIVER: I think based on the discussions including the one in the patent themselves, I would disagree with that from the point of view of labeling requirements say, look, if you're going to label something an antiperspirant it has to have aluminum. You can't label a pharmaceutical that is only approved for one thing as a treatment for something else.

JUDGE MITCHELL: Right.

MR. OLIVER: If you go to your doctor's office though, the doctor will tell you, look, it also treats this other thing. It is not necessarily just this one thing. It's just we're not allowed to put it on the label. So just because something has to be -- have aluminum to be labeled that, doesn't mean that a person of ordinary skill in the art wouldn't understand that anything that fights perspiration, meaning it either blocks or shrinks sweat pores, is going to reduce perspiration and, therefore, is an antiperspirant. Now, they'll say, look ,we can't put that on a label that this is also an antiperspirant, you know,

it reduces perspiration. So the question is -- and our witness testified to this, it is an astringent. That's what it does. So I don't think there's any issue here. And also, I'll go back to the case law which is there are lists in Lesniak of everything that's in the composition. Nowhere is aluminum mentioned. If they're saying, here are our ingredients, and our active is zinc oxide and doesn't mention any other active, there is no real basis to say, oh, we have to assume there's aluminum. If they had aluminum, they would have listed it in all their ingredients list. But it appears nowhere. Person of ordinary skill in the art looking at a composition list saying this is the composition, would not assume that the person writing that composition, a scientist, would have had eight other things in there but just failed to write them down, and we'll just put down the things that are in there that we want to make clear. The composition is the composition. It does not contain aluminum.

JUDGE MITCHELL: Thank you.

MR. OLIVER: A few other points I'd like to make with my remaining time. With respect to the hardness issue, there is a discussion here about -- well, there's a discussion of a few things. I'll start first with noting that on Slide 27 of our demonstratives we cite the prior Board case Conopco in which PNG previously argued that when you recite properties in a claim, you can read into the claim unique tests that would somehow distinguish it over the prior art. And the Board there rejected that. Said, no, the claim is the claim. Situation is the same here. There should be no reading into the claims things are not there themselves. And with respect -- as I mentioned previously, with respect to the Phillips case, if we're going to read in an exclusion or limitation, it has to be a clear disclaimer in the

specification. And there is simply nothing in the specification that provides a clear disclaimer or a redefinition that that says, we are not using the ASTM past dimension in our claims. We are using a modification of that test and here how you modify it. Don't use the 50-gram weight. There's no mention of that whatsoever.

JUDGE MITCHELL: Well, let me ask you this. Because in looking at the claims and I know -- and I'm on the patent owner's demonstrative Slide 20. They have Claim 1 from the '999 here. And it talks about this stick hardnesses as measured by penetration with the ASTM D1321 needle. So it doesn't really say the test it says measured by the needle. And then when you look at what they say in the specification, and they talk about the tests that they ran, and the needle and the shot are what, 50 milligrams and you just let that fall. So why would I not look? Because it's not telling me the claims require a particular test. It's talking about using that particular needle and then further describes what that needle is in the spec. So why wouldn't I understand how that needle is used by looking at this spec?

MR. OLIVER: Well, I'd first start with a -- if we're going to look at the claims alone, then the claims actually don't require any particular test. They only require the use of that particular needle. There is no dispute that that needle is the needle used in Bianchi-518 and Bianchi-524. And I'll even note because it came up, the '999 patent Column 12 in the table at the top, the patent makes clear that the D1321 and DIN 51579 are the same. It only requires the use of the needle. That is what is shown in the prior art. So they use that and they got the right numbers. So that in and of itself should be enough from just a literal point of view, but I understand --

JUDGE MITCHELL: I mean, just in reading the spec here that's been highlighted by patent owner, it says, "The rod has been released and allowed to travel downward driven only by the weight of the needle or cone in the rod." And the needle is defined, you know, it's the 50 plus or minus .2 grams.

MR. OLIVER: So I've looked at that sentence, and I think at best it is inartful. But I think there's a few things to keep in mind. One, that is not a clear disclaimer or redefinition of the standard. I read that --

JUDGE MITCHELL: What if I decide they're not claiming a standard?

MR. OLIVER: If they're not claiming a standard?

JUDGE MITCHELL: Right.

MR. OLIVER: I would say a person of ordinary skill in the ,art unless you -- and again, as I mentioned earlier Bianchi-524 doesn't specifically mention using a 50-gram weight but their position there is that you'd have to use it because they're talking about the standard. So if that logic applies, it works. With respect to the specific sentence driven by only the weight, I think it is an inartful statement that's trying to say that this thing is in freefall, meaning driven only by the weight as opposed to any application of mechanical force. It is just gravity doing a work. Now, it doesn't explicitly say that that needle or cone and rod as described in the standard when pulled all together have 50 grams of additional weight on them. But if someone were to read the standard or know the standard, they would know that that is the case. It is that these things, in fact, in the standard have a weight attached so as to provide the right force. Now, I

know they point to the other point where it's the calibration. But there is a needle assembly, which has to have the right weight as well as a 50-gram that are put together on the rod. So that is all together. I would read this to be no mechanical pressure, you're using the rod. They doesn't explicitly say that if you look at the standard the rod has 50 grams of weight on it. But a person of ordinary skill in the art looking at that would say, yeah, but I have to I have to look at the standard and that's what it's calling for. You're just summarizing it here. You're not providing the entire standard.

JUDGE MITCHELL: So how do you explain then? It says "ensure the total weight of the shaft and needle is the 50 plus oor minus .2 grams."

MR. OLIVER: The that's the calibration.

JUDGE MITCHELL: Okay.

MR. OLIVER: So that's basically saying -- and if you look at the specification of the standard, the standard says, look, here's the needle. It has to have a specific set of dimensions. It has to have a specific weight so that is a replicable standard. It doesn't -- so you're going to make sure that your needle is the right needle, and it has to be 50 grams. You couldn't have, like, chipped something off of it. Check that you're needle is right. Why doesn't it say, calibrate the 50-gram weight? My guess is because a scientist who was told to do the 50-gram weight knows to use a 50-gram weight as opposed to someone saying, use the right needle, saying hey make sure that that needle spot on at 50-grams, otherwise it's going to affect your test. I think that's the distinction.

JUDGE MITCHELL: Okay. Thank you.

MR. OLIVER: And I'd like to make -- I know I'm a little bit over my time. But I'd like to make one last point.

JUDGE MITCHELL: Go ahead.

MR. OLIVER: And that is there's the argument concerning the test results. I'll point out that those test results, if you look at the tests across individual samples are very tight showing that these things were working quite well. The argument was made that the picture showed melting. And that you're not supposed to -- purportedly PNG's modification of it melting. If you look at the expert's testimony Dr. Michniak-Cohn -- Dr. Cohn, if you look at the end, she says this is exactly the instructions I gave and not to melt the PNG version of the test. However, the standard requires melting and the use the brass cylinders. The images shown of course have melted samples with brass cylinders because under the right standard you have to do that. If they would have deposed Dr. Michniak-Cohn, they would have understood that because she would explained that. It is clear and in the attached very specific instructions that are provided at the back of her declaration Exhibit 1086. With that, absent any further questions.

JUDGE MITCHELL: Thank you. Whenever you're ready.

MR. MAIORANA: Thank you, Your Honor. Couple of points to clarify. I want to make clear that when we're talking about the Bianchi hardness and why a POSA wouldn't look to Bianchi for hardness, they wouldn't look to Bianchi's hardness because that hardness applies to a 50 percent silicone stick. And we're talking about natural -- primary references are natural products that don't have silicones. Without the silicone, a different hardness is likely applicable. Silicone is slick and needs to be hard.

But without silicone, we don't know. They just say, oh, hardness and hardness and you can just routinely optimize it and arrive at the claimed ranges. But they don't deal with the fact that Bianchi's hardness is due to the presence of 50 percent of the things that the PNG patent forbid them including. Counsel pointed to the independent claims and said the ingredients aren't there. If the ingredients are so important, why aren't they in the claims? They're there in the hardness limitations and they're there in the dependent claims, all of which are challenged here. So I mentioned to you in my remarks that PNG's counsel in prosecuting these patents looked at different ways they could express this invention that they had achieved that no one had done before. One of the ways was through the hardness. Another way is through the ingredients. They did both of those. Counsel said, well, if these ingredients are so important, why don't PNG patents say it? Well, that's improper. You can't rook to the patent you're trying to invalidate to say why it would be obvious. You can't look to the patent in suit, the patent is being challenged don't exist. You're looking at the art. Remember the POSA has -- she has view of all of the art. You can't look at PNG's patent. You can't use disclosures in PNG's own patent to criticize our arguments on why it wouldn't be obvious. That's improper under federal circuit precedent. Counsel pointed to a 1970 patent and said that it says it's easy. But that patent is from the '70s. It's one of the patents talking about the prior art sticks with a lot of silicones and aluminum in it that I mentioned at the beginning of my remarks. So totally different context. The invention here as described in the patents challenged here is that PNG figured out how to create natural deodorants having similar consumer preferred

characteristics including hardness as the non-natural silicone and aluminum-containing counterparts. That's in Column 1 of the ‘999 patent, which is Exhibit 1001, lines 21 to 35. So to point to a patent from the ‘70s and say it's easy, it doesn't apply to these natural compositions that we’re talking about in the patents here.

Can you pull up our Slide 17, please, Mr. Eaton. Counsel criticized our pointing to their expert's question about Lesniak as a complete deodorant saying, well, she was answering some other question. They also said it three times in the petitions, which is on the left-hand side of Slide 17. So this isn't some tricky question that we were misrepresenting their expert's testimony. It's right out of their own words in the petitions. Lesniak's formulations are complete deodorant sticks that did not require additional ingredients.

Now, on the FDA point, I think, Your Honor, you asked a question I think mooted what I was going to say. But we're not saying that the FDA monograph makes these inventions obvious or non-obvious. We're saying that a person reading Lesniak when it says it's an antiperspirant would understand that that includes aluminum. That's what's required by law. So this case that they keep citing has no bearing on how we're using the FDA monograph. And it could be that Lesniak doesn't mention aluminum because a POSA would know that an antiperspirant has to have aluminum in it because of the FDA monograph. So the silence doesn't mention aluminum doesn't mean that its antiperspirant doesn't have aluminum. And Lesniak doesn't disclose any of these supposed other antiperspirant actives that counsel mentioned. Lesniak uses zinc oxide. The PNG patent says you can use zinc salts. Zinc oxide is not a zinc salt.

On the Conopco case, Your Honor, that was my case and I argued that for PNG. The difference is that in the Conopco case, the test wasn't in the claim. Here, the test is in the claim. The ASTM test is recited in the claim, so the holding in Conopco is inapposite.

On the calibration point, they point out, well calibration is at 50 grams. That's just calibration. But why would you calibrate the machine at a 50-gram weight when your test is supposedly is 100-gram weight? You're calibrating the test at 50 grams because that's what the patent tells you to do. The patent says to run the ASTM needle using a 50-gram weight. I think that's all my time Your Honor so I will --

JUDGE MITCHELL: Let me ask you one more question.

MR. MAIORANA: Yes.

JUDGE MITCHELL: So from what you just said are you agreeing that the claims require that ASTM D1321 tests versus just use of the needle to measure for that. And maybe that's a distinction without a difference that --

MR. MAIORANA: You can't use a needle by itself. You can't use a needle with your hand and do it. So a POSA reading the claims that say ASTM D1321 would look to the spec and the spec says you're using the test, the ASTM D1321 test as described herein. And as described herein they're using a 50-gram load. So yes, our position is that the claims require the use of the test. When they say the needle that's just a shorthand for the whole apparatus because you're not going to just take the needle in your hand. The needle is on a rod that drops from gravity, and you can either put an additional weight on there or you cannot. And the Bianchi patents both use

100-grams. PNG's patent says you use 50-grams. Totally different test. But the reason you modify all the different weights is because you might have a super hard material that if you don't use enough weight it's just going to kind of bounce off the surface of the material. Or if you have a soft material and you have too much weight, the needle will just go right through it, and you wouldn't get any measurement. You're trying to get the needle to stop somewhere in the material and then you measure the depth of the needle penetrated. So that's why for these particular compositions PNG modified the test. They explained that in the specification in detail that you're using a 50-gram weight and not the 100-gram weight of the standard as it's written. So yes. To answer your question, the claims do call out that you should use the 1321 test, and that a POSA would look to the specification to see how is that test being implemented here. It doesn't need to be a disclaimer. We're not saying it's a disclaimer or isn't a disclaimer. We don't need to apply disclaimer law to this. The point is they explain that you use a 50-gram weight and not the 100-gram weight that's prescribed in the standard.

JUDGE MITCHELL: But you would agree there is a standard -- a standard for this test for that.

MR. MAIORANA: Yes.

JUDGE MITCHELL: And I'm just saying it wrong. The ASTM.

MR. MAIORANA: ASTM D1321.

JUDGE MITCHELL: Yes.

MR. MAIORANA: There is a standard.

JUDGE MITCHELL: And that's the 100-gram.

MR. MAIORANA: That's the 100-gram. And then the DIN -- I appreciate counsel -- I couldn't remember if DIN was -- but counsel clarified yes, the DIN is the correlation to the ASTM. It also uses 100-gram weight. But PNG explained in these patents, we don't want to use the 100-gram weight when we used only 50 grams.

JUDGE MITCHELL: Okay. Thank you.

MR. MAIORANA: Thank you, Your Honor.

JUDGE MITCHELL: Well, thank you all. This has been extremely helpful. We always love it when you come and do our argument. We get our questions answered, so we appreciate it. If you all would stick around just for a minute and make sure with the court reporter there’s no questions on spelling or terms that you've said, that would be greatly appreciated. And we take the case under advisement, and we're adjourned. Thank you.

(Whereupon, the above-entitled matter went off the record at 3:34 p.m.)

IPR 024-01104 (Patent 11,540,999 B2)
IPR2024-01105 (Patent 10,966,915 B2)
IPR2024-01173 (Patent 10,905,647 B2)
IPR2024-01174 (Patent 11,497,706 B2)

PETITIONER:

Justin J. Oliver
Sarah S. Brooks
VENABLE LLP
joliver@venable.com
ssbrooks@venable.com

PATENT OWNER:

David Maiorana
Marlee Hartenstein
Jesse Wynn
JONES DAY
dmaiorana@jonesday.com
mhartenstein@jonesday.com
jwynn@jonesday.com