

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Dr. Squatch LLC

Petitioner

v.

The Procter & Gamble Company

Patent Owner

Case IPR2024-01498

U.S. Patent No. 11,844,752

PATENT OWNER'S SUR-REPLY

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	PETITIONER DOES NOT MEET ITS BURDEN ON HARDNESS	2
	A. No Reference Teaches the Claimed Hardness	2
	B. Petitioner’s Post-Hoc Testing is Unreliable and Cannot Salvage Its <i>Prima Facie</i> Case.	6
	C. Petitioner’s “Routine Optimization” Argument Lacks Merit.	15
III.	THE LESNIAK-BASED GROUNDS ARE UNAVAILING	17
	A. Lesniak’s Struggle With Stability Shows That the Art Is Unpredictable.	17
	B. If Lesniak is an Antiperspirant, It Contains Aluminum.	17
	C. A POSA Would Not Have Combined Lesniak and Phinney.	19
	D. Petitioner’s Combinations With Lesniak Are Based In Hindsight.	21
IV.	THE NATIVE-BASED GROUNDS FARE NO BETTER	23
	A. Petitioner’s Combinations with Native Are Also Based in Hindsight.	23
	B. Petitioner Has Not Shown Public Accessibility for Easy Homemade.	24
	C. A POSA Would Not Have Added Tapioca Starch, Triethyl Citrate, or Sunflower Seed Oil to Native.	25
V.	THE SQUATCH-STURGIS GROUND ALSO FAILS.	27
VI.	CONCLUSION.....	28

EXHIBIT LIST

Exhibit No.	Description
Ex. 2001	File History of the '752 Patent (excluding copies of Foreign References)
Ex. 2002	<i>Intentionally Omitted</i>
Ex. 2003	Mayo Clinic, <i>Zinc Oxide (Topical Application Route)</i> , https://www.mayoclinic.org/drugs-supplements/zinc-oxide-topical-application-route/description/drg-20075525
Ex. 2004	Wayback Machine, Mayo Clinic, <i>Zinc Oxide (Topical Application Route)</i> , https://web.archive.org/web/20150102193922/https://www.mayoclinic.org/drugs-supplements/zinc-oxide-topical-application-route/side-effects/drg-20075525?p=1 (archived Jan. 2, 2015)
Ex. 2005	U.S. Patent No. 10,966,915
Ex. 2006	U.S. Patent No. 10,543,164
Ex. 2007	International Publ. No. WO 99/21528
Ex. 2008	Notice of Allowance of '647 Patent
Ex. 2009	<i>Intentionally Omitted</i>
Ex. 2010	<i>Intentionally Omitted</i>
Ex. 2011	Declaration of Robert Lochhead, Ph.D.
Ex. 2012	Deposition Transcript of Dr. Michniak-Kohn (April 17, 2025)
Ex. 2013	CeraVe, <i>Products Formulated with Zinc Oxide</i> , available at https://www.cerave.com/skincare/zinc-oxide#:~:text=Zinc%20oxide%20sunscreen%20works%20by,active%20ingredients%20in%20chemical%20sunscreens (last accessed May 1, 2025).

Ex. 2014	Nivea, <i>Deodorants vs. Antiperspirant: What's the Difference?</i> , available at https://www.nivea.in/advice/deodorant-vs-antiperspirant (last accessed May 1, 2025).
Ex. 2015	Dove, <i>What's The Difference Between Deodorant & Antiperspirant?</i> , available at https://www.dove.com/us/en/stories/tips-and-how-to/sweating-tips/antiperspirant-vs-deodorant-what-is-the-difference.html#:~:text=The%20key%20difference%20is%20the,you%20fresh%20throughout%20the%20day (last accessed May 1, 2025).
Ex. 2016	Secret, <i>What is the difference between an antiperspirant and a deodorant?</i> , available at https://secret.com/en-us/articles/antiperspirants-vs-deodorants-whats-the-difference (last accessed May 1, 2025).
Ex. 2017	Dr. Squatch, <i>WTF Is The Difference Between Antiperspirant and Deodorant?</i> , available at https://www.drsquatch.com/blogs/all-blog-posts/antiperspirant-and-deodorant (last accessed May 1, 2025).
Ex. 2018	<i>Intentionally Omitted</i>
Ex. 2019	DIN 51 579 Needle Penetration Test Standard (1965)
Ex. 2020	<i>Curriculum vitae</i> of Dr. Robert Lochhead

All emphasis has been added and all internal citations have been omitted unless otherwise indicated.

I. INTRODUCTION

Petitioner fails to address fundamental differences between its cited art and the claimed subject matter, including with respect to hardness. Petitioner's only reference on hardness, Bianchi-254, discloses aluminum- and silicone-containing compositions having hardness values measured using a *different test* than the '752 Patent. It was Petitioner's burden to establish—as part of its *prima facie* case of obviousness—a meaningful correlation between the two different methods sufficient to justify the use of Bianchi-254 in the Petition. Petitioner did not do so, and its Reply testing, if considered, does not remedy Petitioner's failing. Petitioner's after-the-fact testing of currently marketed products is irrelevant in any event: Petitioner's purported “correlation” is flawed and inaccurate.

Moreover, Petitioner's combinations still suffer from the deficiencies identified in the POR. Petitioner cherry picks ingredients from disparate prior art references—references that span completely different stick technologies—and, using the '752 Patent claims as a roadmap, contends a POSA would have combined them. Petitioner's so-called motivations to combine are conclusory, and often contradictory. For the reasons explained here and in the POR, the Board should confirm the claims of the '752 Patent as patentable.

II. PETITIONER DOES NOT MEET ITS BURDEN ON HARDNESS

A. No Reference Teaches the Claimed Hardness

The '752 Patent recites a specific hardness range for its aluminum-free, silicone-free compositions that only makes sense in the context of the 50-g load version of the ASTM D-1321 test used to measure it. (*See, e.g.*, Ex. 1081, 110:8-16; Ex. 1001, 12:24-25). The parties agree that the claimed hardness range, as measured by this method, is not disclosed in any of Petitioner's references.

Petitioner tries to circumvent this roadblock by advancing two improper arguments: First, that the claimed hardness range is *not* tied to the testing method described in the '752 Patent; and, second, it overlaps with the *differently tested* hardness range in Bianchi-254. Both arguments are unavailing.

As to the first, Petitioner contends the POSA would not understand the claimed hardness range with reference to the 50-g load ASTM D-1321 method, but instead with reference to a method not at all described in the '752 Patent, *i.e.*, the 100-g load ASTM D-1321 needle penetration test. But the '752 Patent never invokes that 100-g load method. Instead, it reported hardness testing according to results of “a needle penetration test *under ASTM D-1321 (as described herein)*.” (Ex. 1001, 3:8-9.) And, the *only* testing “*described herein*” is a version of the ASTM D-1321 test method that explicitly requires “the total weight of the shaft and needle is 50±0.2 grams when the shaft is in free fall,” with no additional load added: “The rod is then

released and allowed to travel downward, driven only by the weight of the needle (or cone) and the rod.” (*Id.*, 11:57-58, 12:24-25.)

As Dr. Lochhead explained, it is “common” for a POSA to modify a test method based on the material being tested. (Ex. 1081, 109:1-7). This makes sense in the present context in particular because the invention was seeking to address the problem of, *inter alia*, too-hard natural deodorant sticks. A test that might have been appropriate for these too-hard sticks would need to be modified to assess the proper hardness of a softer stick. That is, a load of greater mass appropriate for a hard material could penetrate straight through a softer stick material and provide no read-out (and conversely, a lesser load useful to assess the hardness of a soft material might not penetrate a harder material at all, and provide no read-out).

Petitioner attempts to wave off the 50-gram total load language of the ’752 Patent by calling it “not part of the test at all” and merely “[p]eriodic calibration.”¹ (Reply, 12). But it would be nonsensical for a patent to call for calibration of an instrument using a different load than what is used during its test. As the ’752 Patent explains, the “periodic calibration” is to “[e]nsure” the instrument’s total load

¹ Petitioner also argues this “[p]eriodic calibration” comports with the ASTM D-1321 standard,” but the standard does not include any such calibration. (Reply, 12; Ex. 1087.) The only calibration in ASTM D-1321 is with respect to the indicator scale as to penetration depth. (Ex. 1087, 461.)

remains consistent and within proper parameters (*i.e.*, “50±0.2 grams”) *upon use*. (Ex. 1001, 12:24-25; *see also id.*, 12:29-34.)

Petitioner’s “calibration” argument is further belied by the plain language of the ’752 specification that explains—within the description of the “Hardness Test Method,” which is notably outside of the so-called “periodic calibration” section—that “[t]he rod is then released and allowed to travel downward, *driven only by the weight of the needle (or cone) and the rod*” (*i.e.*, with no extra load). (*Id.*, 11:57-58.) A similar method is also described in an older P&G patent that Petitioner cites. (Reply, 11 n.5.) That patent provides an ASTM method where the “total weight of the needle and shaft in the penetrometer is 50.00±0.05 grams.”² (Ex. 1025, 12:41-55.) Petitioner paradoxically touts Patent Owner’s use of the 50-g method in one instance, and claims it does not exist in the next.

Unlike the 50-g test of the ’752 Patent, Petitioner’s hardness reference, Bianchi-254, uses a 100-g load to measure the hardness of its aluminum- and silicone-containing antiperspirant compositions. Petitioner argues Bianchi-254 does not use a 100-g load, purportedly because “Bianchi-254’s ‘Hardness Method’

² Petitioner did not assert Ex. 1025 as a primary or secondary reference in any invalidity ground because that patent is directed to a gel deodorant with completely different properties and ingredients than claimed in the ’752 Patent. (*See generally* Ex. 1025.)

identifies only the relevant needle (‘a 2.5 gm brass/steel tapered needle (DIN 51-579)’), without describing any additional weight or explicitly mandating full compliance with the DIN 51-579 standard.” (Reply, 19.) Petitioner is wrong.

A POSA would have understood Bianchi-254’s disclosure to refer to the 100-g DIN 51-579 needle penetration testing method. (Ex. 2011, ¶¶ 79-82.) Unlike the ’752 Patent, Bianchi-254 does not include an express disclosure modifying the amount of load to be used. Where a hardness test references a standard method without modification, a POSA understands it to require the load as specified in the published standard method. (*See id.*) Even if that was not the case, the only weight specified in Bianchi-254 is the 2.5 gram needle. If it is Petitioner’s position that Bianchi-254 does not require an additional load, and thus its penetration test is driven by the fall of a 2.5 g needle, that is *still* a different method than the ’752 Patent (though Petitioner’s interpretation would lack reason, as a 2.5 gram needle would not be capable of penetrating the compositions to the extent reported in Bianchi-254).

Next, Petitioner argues a POSA would have looked to Bianchi-254’s hardness disclosure to modify Lesniak because Bianchi-254’s hardness “range is not specific to Bianchi-254’s compositions, but rather relates to the consumer preference for antiperspirants/deodorants generally.” (Reply, 11 n.5.) Not only is this incorrect—the hardness described in Bianchi-254 *is specific* to its aluminum- and silicone-containing antiperspirants—Petitioner does not even cite Bianchi-254 to support its

argument. (*See id.*) Bianchi-254 says nothing about consumer demand or preference for its hardness range generally. And Petitioner does not otherwise rebut P&G's argument that Petitioner fails to explain why a POSA would have modified Lesniak's disclosed hardness in the first place. (POR, 31-32, 36-37.)

Finally, Petitioner relies on the inapposite *Conopco* case. (Reply, 13, 16.) The challenged patent in *Conopco* claimed a series of indices that served as proxies for optimized and arguably subjective shampoo parameters. Unlike hardness—which is a common parameter used to describe a key and well-established metric across the cosmetics industry (including within Petitioner's prior art)—the proxies in *Conopco* were not standard parameters. Instead, they represented new tests outlined in the challenged patent.

Patent Owner's specific implementation of the objective hardness test employs the common method of measuring hardness in a particular way, adapted to its composition, that it has used in prior publications. It is not a new, unusual, subjective method. As discussed, different compositions may require adaptations of analytical methods. This standard practice is distinguishable from the creation of new subjective proxies in *Conopco*.

B. Petitioner's Post-Hoc Testing is Unreliable and Cannot Salvage Its *Prima Facie* Case.

In a further attempt to address its failed showing on hardness, Petitioner advances a false correlation, on Reply, between Bianchi-254's test methods and

the '752 Patent. Without saying as much, Petitioner appears to be making an improper inherency argument: that a POSA seeking to achieve the hardness range disclosed in Bianchi-254 would (unbeknownst to her) hit the '752 hardness range for the claimed compositions.

The Board should disregard this new and improperly submitted testing for the reasons set forth in Patent Owner's October 23, 2025 submission, Paper 19.

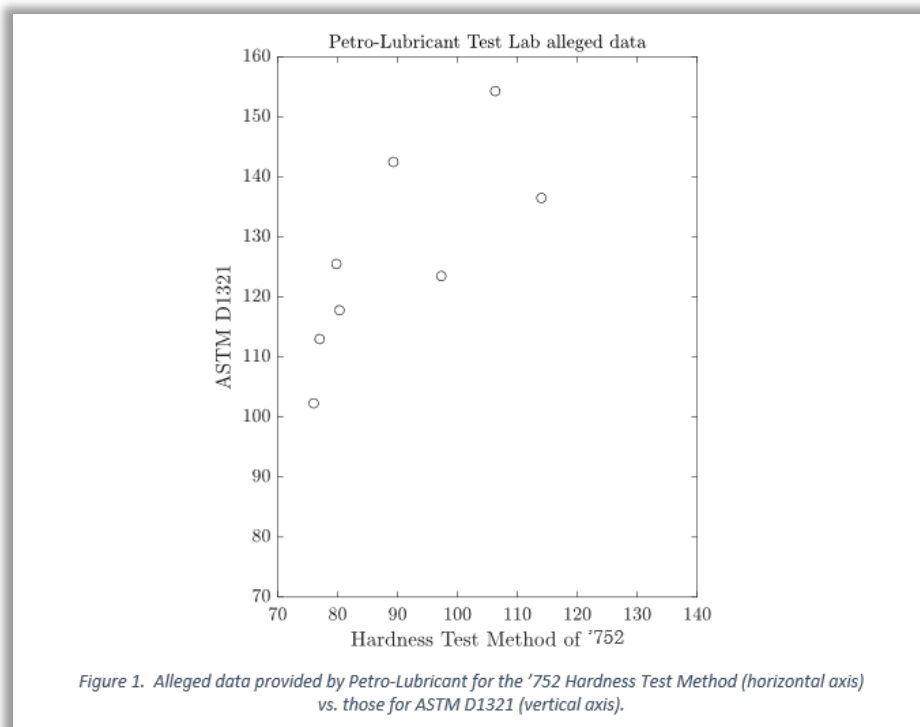
If considered, Petitioner's testing is not what Petitioner contends. The tests were performed with obvious outcome-determinative bias, and, in any event, the results fail to establish any scientifically significant correlation sufficient to provide the predictive value Petitioner claims.

As to this first problem—outcome determinative bias—Petitioner's testing was performed on a highly selective set of deodorant sticks of undisclosed formulations, and none with ingredients matching Bianchi-254 (or any other reference in Petitioner's Grounds).³ As such, the tested sticks are not representative

³ Petitioner has not provided any details regarding the products it tested, such as formulation, date purchased, lot codes, manufacture date, expiration date, etc. It appears Petitioner tested a currently marketed Native deodorant, which is a P&G product that has a significantly different formulation than the Native stick used in Petitioner's Grounds.

of prior art compositions at the time of invention. And of course, Petitioner may not have disclosed other testing that was unhelpful to its carefully crafted narrative.

As to the second issue—the absence of a scientifically valid correlation—there are too many problems with Petitioner’s testing and analysis to count. *First*, Petitioner’s “average delta” of “about 37 mm*10” is a jerry-rigged number. (See Reply, 14.) This so-called “average delta” is not based on any consistent, or even close to consistent, difference between two numbers. It is just a literal averaging of a widely disparate and disconnected set of data points that provides no reliable correlation or relationship between them. Indeed, plotting Petitioner’s data from the two methods reveals a cluster of points that cannot be reasonably fitted with a line or curve:



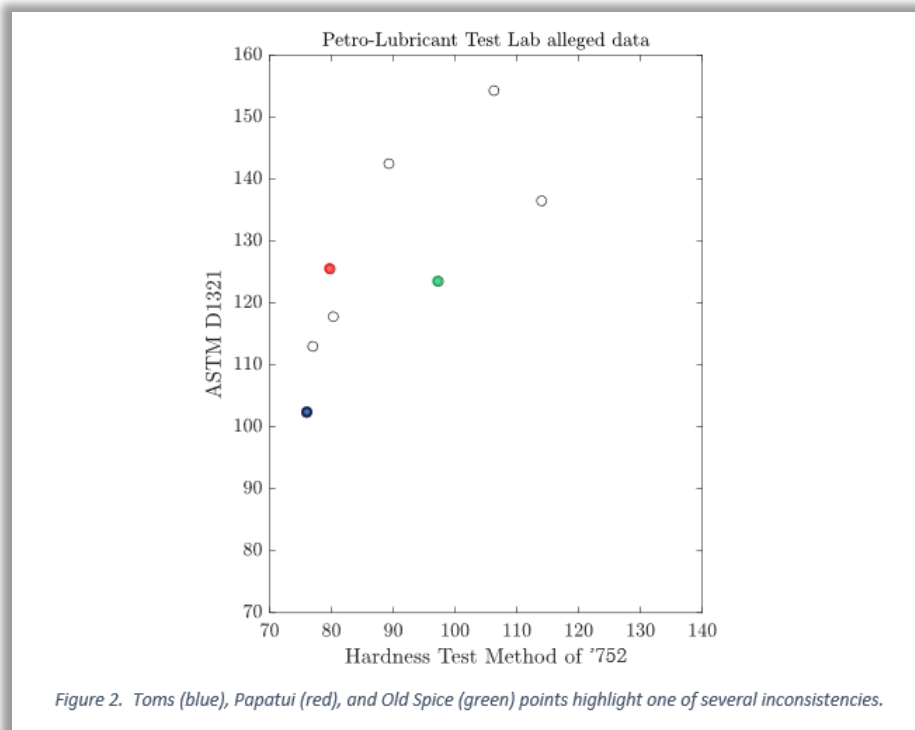
(Ex. 1078.)

Second, as additional evidence that Petitioner’s alleged “correlation” is no correlation at all, the ordering of the hardness values (hardest to softest) of the tested deodorants differs based on what method was used. The below table shows the order of sticks tested under the ’752 Patent method, as compared to the order as tested under the ASTM D-1321 method. Again, correlation fails, with all but the hardest formulas being scrambled in their order.

P&G Method		ASTM D1321
Toms	→	Toms
Native	→	Native
Papatui	→	Sephora
Sephora	→	Old Spice
Billie	→	Papatui
Old Spice	→	Lume
Dove	→	Billie
Lume	→	Dove

Neither Petitioner nor its expert explain why the ranked hardness differs across the methods, and why that does not evidence a failed correlation. (It does.)

A *third* illustration of the inconsistencies preventing any kind of reliable correlation is shown below in Figure 2. The point in blue corresponds to Toms, the point in red to Papatui, and the point in green to Old Spice.



(*Id.*) For Toms and Papatui, the alleged hardness results under the '752 Patent method are 76.0 and 79.8, respectively, for a difference of 3.8. However, the alleged hardness results for those same two sticks using the ASTM D-1321 test method are 102.3 and 125.5, respectively, for a difference of 23.2, or a relative difference of over 20%. (*Id.*) So here, although the sticks have close to the same hardness under the '752 method, their hardness differs by over 20% using the ASTM D-1321 method.

The same irregularities can be seen in the reverse, where sticks with nearly identical results under the ASTM D-1321 method have much larger differences under the '752 test. For example, Papatui and Old Spice have a relative difference of just 1.6% between their hardness values under the ASTM D-1321 method, yet

their '752 method hardness values yield a relative difference of about 20%. Petitioner and its expert failed to address these inconsistencies yet contend there is a clear correlation between the data.

Fourth, if Petitioner's data is reliable in the slightest (it's not), all it shows is that hardness is highly dependent on product-formulation specifics. Notably, Petitioner failed to disclose the formulations of the tested products, and therefore they cannot be taken as representative of Bianchi-254's sticks. If Petitioner wanted to show any meaningful correlation as to the hardness ranges disclosed in Bianchi-254, Petitioner should have tested Bianchi's sticks, or at least sticks with the same components. Petitioner did neither.

Fifth, Petitioner's testing methodology itself is suspect. In providing direction to the testing facility Petro-Lubricant, Dr. Michniak-Kohn stated "[t]he instructions for this test were taken from the specification of the '752 Patent"⁴ (Ex. 1086, n.1.) But Petitioner provides scant evidence that Petro-Lubricant's testing followed the method in the '752 Patent. Petro-Lubricant provided only one photo in Ex. 1079 depicting samples in the test set-up, reproduced below. Circled in yellow appear to

⁴ In admitting the specification of the '752 Patent provides these "instructions for [a hardness] test" that is different than the ASTM D-1321 standard method, Dr. Michniak-Kohn contradicts Petitioner, who insists the '752 Patent does not provide a modified method. (*See Reply*, 12-13.)

be brass cups to which the samples were transferred for testing. This is inconsistent with Dr. Michniak-Kohn's instruction that unambiguously states: "Do not remove deodorants from original containers or melt them." (*Id.*, Ex. A.)



Dr. Michniak-Kohn argues these melted deodorants do not "indicat[e] the lab's departure from the provided instructions," because there is a "melting step required by the ASTM D-1321 test." (Ex. 1086, 3 n.2.) According to Dr. Michniak-Kohn, the above picture apparently depicts the lab's performance of the ASTM D-1321 standard test, and not the modified test under the '752 Patent. (*See id.*) Dr. Michniak-Kohn overlooks that the measurement in the picture reads "75.1," which

reveals that the testing method being depicted is, in fact, the modified method using a 50-g total load. (See Ex. 1078, 2 (showing penetrations of 75 mm*10 using the modified method, and nothing lower than 99 mm*10 using the standard ASTM D-1321 procedure).) Petro-Lubricant does not appear to have followed the testing method of the '752 Patent or Dr. Michniak-Kohn's own instructions, and instead removed the test product samples from their containers, and melted down and packed the samples into small metal testing cups. Such manipulation of samples could affect the hardness values measured, and calls into question the integrity of the testing. This is another reason why the Board should give no weight to Petitioner's late-filed testing and declaration.

In short, Petitioner failed to show the Bianchi range overlaps "at all"⁵ with the claimed range in its Petition. That was Petitioner's burden. The post-hoc, unreliable "correlation" does not salvage its *prima facie* case.

Nor can Petitioner's misplaced reliance on *E.I. DuPont de Nemours & Company v. Synvina C.V.*, 904 F.3d 996, 999 (Fed. Cir. 2018). (Reply, 15). *DuPont*

⁵ Petitioner repeatedly highlights P&G's statement that the disclosed ranges were not overlapping "at all," but rather showed similar values for different methods, as if it is incorrect. The Petition did not show ranges that overlap "at all"—it showed ranges that reflect very similar penetration values for very different load weights. (POR, 14.) All P&G and Dr. Lochhead did was point out Petitioner's failure of proof.

involved a well-known oxidation method with a known problem: increasing yield. The main issue on appeal was whether certain reaction conditions used to increase yield would have been obvious to a POSA. The Federal Circuit found the claimed oxidation conditions obvious because “the only relevant difference between [the prior art references and the challenged claim] is in the disclosed ranges” of two well-understood result-effective variables (temperature and oxygen partial pressure), and “discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.” *Id.* at 1010. Thus, unlike here, in *DuPont*, the prior art references explicitly disclosed various reaction conditions in ranges that overlapped those of the claims at issue. Here, it is undisputed that the claimed hardness range does not overlap with a range explicitly set forth in the prior art, and moreover, that the challenged claims further include compositional elements. This is not a situation of overlapping ranges, but one of different compositions that have different hardness ranges dependent on those compositional features (*e.g.*, the hardness range of Bianchi suited to its compositional mix of over 50% aluminum and silicones). Ultimately, Petitioner has failed to show any deodorant stick references in the prior art with the ranges of ingredients and a hardness range that overlaps with the challenged claims.

C. Petitioner’s “Routine Optimization” Argument Lacks Merit.

When all else fails, argue “routine optimization”—that’s exactly what Petitioner tries to do as a last ditch effort on hardness. (Reply, 15.) To no avail.

Petitioner contends “adjusting the amount of structurant (e.g., beeswax) to achieve a desired hardness was a matter of routine optimization well within the skill of a POSA” (*Id.*) Petitioner’s argument requires the POSA to have a “desired hardness” to shoot for, which according to Petitioner’s *prima facie* case, is supplied by Bianchi-254. But Bianchi-254 provides the *wrong target* for the reasons discussed above, including because it uses a different test and discloses much harder sticks. (POR, 31-38, 53-57.) And importantly, the hardness values disclosed in Bianchi-254 represent ranges for sticks containing vast amounts of aluminum and silicones. (*Id.*) The desired hardness for a majorly silicone-containing stick (which is slick) is different than what would be desirable for a natural stick with no silicones. Indeed, Patent Owner’s invention is just that—an *invention* that provides for aluminum- and silicone-free compositions with the optimal hardness for deodorant sticks “compris[ing] consumer-perceived natural ingredients, while offering a pleasant consumer experience in terms of its hardness.” (Ex. 1001, 3:57-60.)

Petitioner puts forth P&G’s prior patent (Ex. 1041) as an alleged admission that a POSA could have “easily” adjusted the hardness of the stick by increasing or decreasing the amount of wax. (Reply, 7, 16.) The “easily” language comes from a

1975 patent on antiperspirants containing aluminum and optionally silicone, and does not speak to the state of the art for natural deodorant sticks. As the '752 Patent explains, prior to the invention, no one had figured out how to create natural deodorants having similar consumer-preferred characteristics (including as to hardness) as their non-natural, silicone- and aluminum-containing counterparts. (Ex. 1001, 1:10-23.) Petitioner's mischaracterization of Ex. 1041 also does not change the fact that, even if it was "easy" (it's not), the POSA would have required a target for its routine optimization goal, and Petitioner provides none that match the requirements of the claims.

Petitioner's "routine optimization" contentions are further contradicted by its own expert and by Lesniak, which as explained below, shows that varying hardness requires more than merely increasing or decreasing the amount of structurant (e.g., wax) to maintain a stable, non-separated stick. As Dr. Lochhead explained and Dr. Michniak-Kohn agreed, hardness and other physical properties are highly dependent on not just the amount of structurant, but also its interactions with the other ingredients in the composition. (Ex. 2011, ¶ 67; Ex. 2012, 46:13-20.) Plus, it is un rebutted that neither Petitioner nor its expert could provide a starting point for the POSA as to Lesniak's hardness in the first place, and could not tell if Lesniak was too hard, or too soft, as compared to the claimed range. (POR, 36-37.)

For all of these reasons, Petitioner's Lesniak and Native Grounds fail as to the hardness limitation of all claims.

III. THE LESNIAK-BASED GROUNDS ARE UNAVAILING

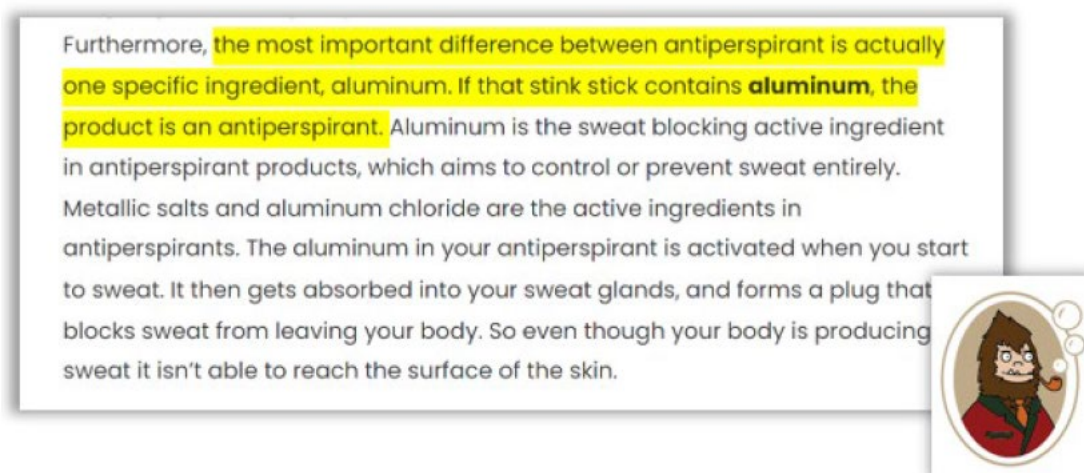
A. Lesniak's Struggle With Stability Shows That the Art Is Unpredictable.

Petitioner misapprehends Patent Owner's arguments as to Lesniak's instability. Lesniak shows that even small changes in a composition can yield unstable results. This is contrary to Petitioner's "routine optimization" claims that stick properties, like hardness, can be "predictably chang[ed] based on the amount of structurant" (Reply, 15.) As Lesniak shows, and as explained in more detail in the POR, changing the amount of structurant, even in the slightest, can produce an unstable stick. (POR, 24-28; Ex. 2011, ¶ 63.) Moreover, as Dr. Lochhead explained, a POSA would have known that beeswax forms large spherulite crystals in some oil carriers, but needle-like crystals in others, affecting properties like hardness. (Ex. 2011, ¶ 67.) Thus, hardness and other physical properties are highly dependent on not just the amount of wax, but also its interactions with the other ingredients in the composition.

B. If Lesniak is an Antiperspirant, It Contains Aluminum.

Lesniak is non-enabling as to a "deodorant stick," for the reasons explained in the POR. (POR, 23-29.) In this case, Petitioner relies on Lesniak's one-sentence disclosure of "antiperspirant," to argue Lesniak's compositions could be deodorant

sticks. (*E.g.*, Petition, 20.) But a POSA’s understanding of “antiperspirants,” now and at the time of Lesniak, is that they contain aluminum. (*See, e.g.*, Ex. 1081, 60:12-14; Ex. 2011, ¶¶ 52-54.)⁶ Petitioner asks the Board to ignore FDA requirements, a POSA’s understanding in light of such requirements, and *Petitioner’s own statements on its website*, and find that antiperspirants do not contain aluminum. They do, and Petitioner has made that clear:



(Ex. 2017, 2.)

⁶ Petitioner inappropriately mischaracterizes Dr. Lochhead’s testimony regarding a book that he co-edited as an attempt to “evade” what was written that “undercuts his credibility.” (Reply, 3 n.3.) Dr. Lochhead did not “evade” anything—he testified that he did not write the portion of the book Petitioner highlights but did participate as an editor, and also noted that the research presented therein was never practiced. (Ex. 1081, 89:13-99:22.)

Petitioner relies on *Persion* in urging the Board to disregard FDA requirements, but the district court there *did* consider FDA submissions as evidence of what “would have been relevant to a person of ordinary skill,” and the Federal Circuit found “no clear error in the district court’s findings on the relevance of [the FDA] data to [the POSA].” *Persion Pharms. LLC v. Alvogen Malta Operations Ltd.*, 945 F.3d 1184, 1193-94 (Fed. Cir. 2019).

If Lesniak enables “a deodorant stick in the form of an antiperspirant stick” in light of a POSA’s knowledge (Petition, 20), then it contains aluminum, an ingredient the claims prohibit.⁷

C. A POSA Would Not Have Combined Lesniak and Phinney.

Petitioner does not overcome the many issues with the Lesniak-Phinney combination that Patent Owner presented in the POR. (POR, 40-46.) Petitioner argued in its Petition that a POSA would have combined Lesniak and Phinney because “Lesniak teaches using zinc oxide (a known antimicrobial), while Phinney teaches that combining magnesium hydroxide with zinc oxide improves

⁷ Petitioner also contends “Lesniak’s supposed necessity of aluminum is further belied by the fact that Lesniak’s compositions include zinc oxide,” allegedly supported because “[t]he ’752 Patent expressly states that antiperspirant actives include zinc salts” (Reply, 4.) But Lesniak’s disclosed zinc oxide (ZnO) is not a zinc salt (e.g., ZnCl₂).

antimicrobial properties.” (Petition, 27.) In its Reply, Petitioner disregards the distinction between zinc oxide and zinc *hydroxide*, ignoring that Phinney combines zinc *hydroxide* with magnesium *hydroxide*. (Ex. 1004, 5:31-33, 52-60.) Contrary to Petitioner’s assertions, there is no Phinney composition where zinc oxide and magnesium hydroxide appear together. (*Id.*; *see also id.*, 4:48-51, 8:22-41 (explaining magnesium oxide and zinc oxide are both mixed with water to become their respective hydroxides).) Because Lesniak is anhydrous, there would be no conversion of zinc oxide to zinc hydroxide if Lesniak and Phinney were combined, leaving a POSA without the antimicrobial combination taught by Phinney. (POR, 42-43.)

Petitioner also does not dispute the fact that Phinney and Lesniak’s metal oxides/hydroxides have entirely different uses, and a POSA would not have looked to combine their teachings on this topic. (POR, 41.) Petitioner further had no answer to the ratio issues Phinney presents, including that it teaches to use three times the amount of magnesium hydroxide as zinc hydroxide. (*Id.*, 44.) Ignoring the difference between zinc oxide and hydroxide for the purposes of argument, that would call for upwards of 60% magnesium hydroxide in Lesniak. (*Id.*) Lesniak and Phinney are incompatible and the POSA would not have been motivated to combine their teachings.

D. Petitioner's Combinations With Lesniak Are Based In Hindsight.

Finally, Petitioner's combinations with Lesniak, including regarding additional or modified ingredients like stearyl alcohol, triethyl citrate, tapioca starch, and arrowroot powder, fail for the reasons presented in the POR, including because they are deeply rooted in hindsight. (POR, 39-40, 46-51.) Petitioner uses the '752 Patent claims as a roadmap, selecting disparate pieces of prior art that disclose each of the ingredients, and forcing them together in an attempt to turn Lesniak's sunscreen into the claimed deodorant. Petitioner's combinations and motivations are contradictory, and ignore fundamental differences in the references. (*See id.*)

As one example, Petitioner alleges a POSA would have been motivated to reformulate Lesniak to change its "structurant" from beeswax to stearyl alcohol. (Petition, 17.) In both the Petition and Reply, Petitioner provides no reason for a POSA to fundamentally change the main structurant in Lesniak's compositions. Instead, Petitioner merely argues that stearyl alcohol was a "known structurant[]." (Reply, 17.) This omission is particularly damaging in light of Petitioner's argument that Lesniak teaches stable compositions due to the presence of two waxes: a first wax (that purports to serve as the primary structurant) and "a secondary wax." (*See* Reply, 7-8 (citing Ex. 1003, 1:39-54 (requiring "a first wax... present in the amount of 5 to 25 weight %" and "a second wax ... presented in an amount of 0.5 to 15 weight %").) Petitioner does not address how a change in the primary structurant,

from Lesniak's "first wax" to Bianchi-254's stearyl alcohol, would yield a stable composition in light of Lesniak's teachings.

Lastly, Petitioner's attempt to paint Dr. Lochhead's discussion of the '752 Patent's written description support as somehow "confirm[ing]" obviousness is disingenuous. (Reply, 17-18.) Dr. Lochhead's opinions regarding the POSA's understanding of the challenged claims is connected to the '752 Patent's specification, which provides much more detail regarding the formulations of natural deodorant sticks than the prior art. (*See* POR, 69-71; *see also* Ex. 1081, 61:23-75:17 (discussing the '706 Patent's written description in a similar manner).) Moreover, the *Lockwood* case upon which Petitioner relies is inapplicable, because in *Lockwood*, the claim limitations at issue were not present in the specification at all, but were concededly "obvious variants" of what was described; here, the '752 specification provides adequate, *in haec verba* written description of its claim terms (*see* POR 70-71). *See Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571-72 (Fed. Cir. 1997).

For all of these reasons, Petitioner's Lesniak-based Grounds do not render the claims obvious.

IV. THE NATIVE-BASED GROUNDS FARE NO BETTER

A. Petitioner's Combinations with Native Are Also Based in Hindsight.

Regarding the Native-based Grounds, as explained in the POR, Petitioner cherry picks disclosures from prior art and contends a POSA would have been motivated to combine them with Native, merely because they were purportedly known ingredients and/or weight percentages. In doing so, Petitioner ignores the fundamental differences in the references to be combined, and for certain limitations, ignores the fact that Native already has ingredient(s) providing the same function Petitioner contends that the POSA would have been motivated to add. (POR, 51-53, 57-67.)

For example, a POSA would not have been motivated to combine Bianchi-254's weight percentages with Native's ingredient list, because over half of Bianchi-254's stick comprises silicones and aluminum. (POR, 57-59.) Petitioner argues in its Reply that Bianchi-254's disclosure of aluminum and silicones is irrelevant, because "Native already achieved a silicone and aluminum-free deodorant stick, so a POSA therefore would not have to draw on Bianchi-254's teachings for those features," and that "Bianchi-254 simply provides a POSA with guidance on the quantitative amounts of those ingredients and preferred hardness." (Reply, 20.) Petitioner ignores that Bianchi-254's "guidance" on the quantitative amounts of the

ingredients in question is influenced and scaled by the presence of over 50% aluminum and silicone in Bianchi's sticks.

As another example, Petitioner incorrectly contends in its Reply that "P&G's argument[] regarding the inclusion of tapioca starch" is based on "misplace[d] reliance on supposed stability issues." (Reply, 23-24.) Not so. Patent Owner and Dr. Lochhead explained that a POSA would not be motivated to add tapioca starch "to absorb moisture and sweat" because Native already includes arrowroot powder, which serves that function. (POR, 66-67.) This stands un rebutted.

Petitioner's piecemeal approach to modifying Native, with no clear motivations to do so, is hindsight that cannot (and does not) render obvious the claims.

B. Petitioner Has Not Shown Public Accessibility for Easy Homemade.

Petitioner contends that although it failed to prove the Easy Homemade blog was indexed by search engines, Easy Homemade is still prior art because it purportedly "contains reviews from interested persons that show such persons not only could have located—but actually did locate—the website, confirming its public accessibility." (Reply, 23.) There are no such "reviews" in Easy Homemade. (*See* Ex. 1009.) Rather, Petitioner cites *different posts* from the website that contain reviews, and tries to use that as a proxy to show a POSA could have located the Easy Homemade blog. (*See* Reply, 23 (citing Exs. 1016, 1018).) These additional

blogposts do nothing of the sort; their few, non-substantive, “thanks for sharing!” and “cute labels!” style comments do not evidence public accessibility of Easy Homemade to the POSA. Petitioner has not shown that the individuals who left these reviews were even POSAs to begin with. In any event, a POSA would not have been motivated to combine Easy Homemade and Native with any reasonable expectation of success, for the reasons provided in the POR. (POR, 50-51.)

C. A POSA Would Not Have Added Tapioca Starch, Triethyl Citrate, or Sunflower Seed Oil to Native

Finally, Petitioner’s combinations with Native, including regarding additional ingredients like tapioca starch, triethyl citrate, and sunflower seed oil, fail for the reasons presented in the POR, including because they are deeply rooted in hindsight. (POR, 62-67.) Petitioner’s combinations and motives are contradictory, and ignore fundamental differences in the references or ignore pre-existing ingredients that serve the same function. (*Id.*)

For example, Petitioner argues a POSA would have been motivated to add tapioca starch to Native to “absorb moisture and sweat” (despite Native’s pre-existing arrowroot powder serving the same purpose), because “substituting a known option for another does not render claims nonobvious.” (Reply, 24.) But nowhere does the Petition argue for *substitution* of arrowroot powder for tapioca starch; it asserts *addition*. (*E.g.*, Petition, 60-62.) The Petition does the same thing in proposing to add sunflower seed oil to Native despite its inclusion of tocopherol—

and Petitioner itself recognized the ingredients provide similar properties. (Petition, 54-57.)

The Petition makes a similar argument for triethyl citrate, arguing that a POSA would have been motivated to include it for antibacterial or deodorant properties “after reducing or eliminating [Native’s] baking soda,” despite arguing elsewhere for the same ground that magnesium hydroxide would have replaced baking soda in whole or in part. (Petition, 55-56.) Because Petitioner already reduced or replaced baking soda with magnesium hydroxide, there would no longer be motivation—under Petitioner’s own rationale—to include triethyl citrate. This is especially true because Petitioner does not explain why a POSA would be motivated to add yet another antimicrobial alongside magnesium hydroxide. (POR, 63-64.) And Petitioner’s alleged motivation to include triethyl citrate “to prevent the degradation of triglycerides” is belied by Petitioner’s failure to identify a need in Native to prevent such degradation, which Petitioner did not rebut. (POR, 64.)

P&G’s arguments that Petitioner failed to provide sufficient motivation to introduce these *additional* ingredients thus stands unrebutted. (POR, 62-67.) And for the reasons explained above, the ’752 Patent’s inclusion of ingredients for written description purposes has no bearing on Petitioner’s obviousness case.

V. THE SQUATCH-STURGIS GROUND ALSO FAILS

Petitioner's Squatch-Sturgis Ground combines an employee declaration that is not a "printed publication," with a patent publication that is not prior art. This combination does not render obvious the challenged claims for the reasons provided in the POR. (POR, 67-71.) It is undisputed that Petitioner failed to provide the Dr. Squatch November 2020 webpage on which it purports to rely; instead, Petitioner tries to cobble together "corroboration" as to what the website displayed five years ago. Without an actual prior-art "printed publication," Petitioner's Squatch-Sturgis Ground should be denied outright.⁸

Further, the Sturgis application is not prior art because claims 15-19 have adequate written description support in the priority application, including by explicitly disclosing each of the claimed ingredients in the specification, explaining reasons for choosing them, explaining how to make the deodorant sticks, and by otherwise relying on the background knowledge of a POSA, all of which conveyed

⁸ Petitioner's reliance on the *GoPro* case is inapplicable for this reason. In *GoPro*, the publication at issue was a catalog, and the parties did not dispute its existence, contents, or the fact that it was distributed at a trade show. *See GoPro, Inc. v. Contour IP Holding LLC*, 908 F.3d 690, 694 (Fed. Cir. 2018). (The issue in *GoPro* was whether the trade show was sufficiently advertised to the public.) *Id.* Here, unlike in *GoPro*, there is no printed publication to begin with, as Petitioner failed to present any actual depiction of its November 2020 website.

that the inventor was in possession of the claimed invention. (POR, 69-71; Ex. 1081, 63:3-72:24.)

VI. CONCLUSION

For the above reasons, the challenged claims are not unpatentable.

Date: November 10, 2025

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to Rule 37 C.F.R. 42.24(d), the undersigned hereby certifies that, based upon the word count of the word-processing system used to prepare this Sur-Reply, the number of words in this Sur-Reply is 5,592.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. 42.6(e), I certify that I caused to be served on the counsel for Petitioner a true and correct copy of the foregoing by email on November 10, 2025, at the following address:

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