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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ATTENDS HEALTHCARE PRODUCTS, INC., Petitioner,

v.

PAUL HARTMANN AG, Patent Owner.

IPR2020-01477 (Patent 8,152,788 B2) IPR2020-01478 (Patent 8,784,398 B2) IPR2020-01479 (Patent 8,771,249 B2) IPR2020-01480 (Patent 8,708,990 B2)

Record of Oral Hearing Held: December 2, 2021

Before: PATRICK R. SCANLON, HYUN J. JUNG, and NEIL T. POWELL, Administrative Patent Judges.

APPEARANCES

ON BEHALF OF THE PETITIONER:

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ON BEHALF OF THE PATENT OWNER:

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The above-entitled matter came on for hearing on Thursday, December 2, 2021, commencing at 1:00 p.m. EST, by video/by Telephone.

1 PROCEEDINGS 2 JUDGE JUNG: Hello. This is Judge Jung and with me 3 are Judge Scanlon and Judge Powell. This is the oral hearing 4 for IPRs 2020-01477, 2020-01478, 2020-01479, and 2020-01480. 5 In these proceedings Petitioner Attends Healthcare Products, 6 Incorporated challenges claims of U.S. Patent numbers 7 8,152,788, 8,784,398, 8,771,249, and 8,708,990, all of which 8 are owned by Paul Hartmann AG. 9 Starting with the petitioner's counsel and followed 10 by Patent Owner's counsel, please state your names for the record. 11 MR. ALBRIGHT: Good afternoon, Your Honors. This 12 is Jeremy Albright from Norton Rose Fulbright and I am a backup counsel for Petitioner. I'll be doing the argument 13 14 today. And with me is Eagle Robinson also from Norton Rose 15 Fulbright, and he is our lead counsel. 16 JUDGE JUNG: Thank you, Mr. Albright. MS. DALEY: Hi, Your Honor. This is Kathleen Daley 17 18 with Finnegan. I'm backup counsel for Patent Owner Paul 19 Hartmann, and I will be doing the argument today. And with me 20 in the room is lead counsel Josh Goldberg. 21 JUDGE JUNG: Thank you, Ms. Daley. 22 Because this is a video hearing, a few reminders. 23 First, if at any time during the hearing you encounter any 24 difficulty please let us know immediately for example by

- 1 contacting the team members who provided you with connection
- 2 information. Second, when not speaking please mute yourself.
- 3 Third, please try to identify yourself each time you speak.
- 4 This helps the court reporter prepare the transcript. Fourth
- 5 and finally, the panel has the entire record including
- 6 demonstratives. When referring to demonstratives, papers,
- 7 exhibits, please do so by slide or page number, and please
- 8 also pause a moment to give us time to find it. This also
- 9 helps with preparing the transcript. And I want to verify
- that there are no objections to the demonstratives.
- So Mr. Albright, is it correct that Petitioner had
- 12 no objections to Patent Owner's demonstratives?
- 13 MR. ALBRIGHT: That's correct, Your Honor.
- JUDGE JUNG: And Ms. Daley, same question. Is it
- 15 correct that Patent Owner had no objections to Petitioner's
- 16 demonstratives?
- MS. DALEY: That's correct, Your Honor.
- JUDGE JUNG: Okay. Thank you. Each party has 90
- minutes of total time to present its arguments, and each party
- 20 may reserve time for rebuttal. I will track argument time and
- 21 interrupt when you have only a few minutes remaining.
- So Mr. Albright, you may begin when you're ready.
- MR. ALBRIGHT: Thank you, Your Honor. And I'd like
- 24 to start with Petitioner's demonstratives. Looking at slide 1
- 25 which is just, you know, the intro slide. And before we dive

- 1 into the issues, I wanted to provide an overview of the
- 2 relevant part and how it had evolved even well before the
- 3 challenged patents. And so up until the early 90s diapers
- 4 generally had film backsheets and adhesive tape fasteners and
- 5 so the adhesive tape fasteners would attach to the film
- 6 backsheet. But these film backsheets were not pleasing to the
- 7 touch, and they were cold and clammy.
- 8 Further, adhesive tape fasteners were susceptible
- 9 to contamination such as with baby oil and baby powder which
- 10 reduced their reliability. Once the adhesive tape becomes
- 11 contaminated it doesn't stick as well. And so to address
- these issues the art shifted to using film nonwoven backsheets
- in which a nonwoven is laminated to the outer surface of the
- 14 film so it defines the outer surface of the diaper which
- provided diapers with a desirable cloth-like feel and the art
- also shifted to using mechanical or hook-type fasteners
- because they were less susceptible to contamination.
- 18 Initially, these mechanical fasteners included both
- 19 a hook component and a loop component, so a distinct loop
- 20 component, where the loop component was placed on a diaper to
- 21 define a, quote, landing zone, it's a term of art, to which
- 22 the hook component could be attached. Eventually, however,
- and well before the challenged patent's priority date, the art
- 24 recognized a synergy between these film nonwoven backsheets
- and hook-type fasteners. A hook component could be made to

- directly engage the nonwoven of a film nonwoven backsheet
- 2 eliminating a need for a landing zone, reducing cost, and
- 3 providing enhanced size adjustability.
- 4 Also known by the time of the challenged patents
- 5 were that a diaper's side parts or wings needed to be strong
- 6 because they're subjected to pulling force and that's where
- 7 the fasteners are often attached to hold the diaper on the
- 8 wearer and the diaper's backsheet needed to be soft to provide
- 9 the desired cloth-like feel that a film nonwoven is known to
- provide. And persons of ordinary skill in the art knew how to
- accomplish that too, and it was by using a higher-basis-weight
- 12 nonwoven in the wings, which more fiber material it's going to
- be stronger, and a lower-basis-weight nonwoven in the backsheet.
- So at this bottom this known diaper configuration
- 15 that is a film nonwoven backsheet and fasteners that can
- 16 engage the nonwoven of the backsheet and the nonwoven wings of
- the diaper where the wings have a higher-basis-weight for
- strength, that known diaper configuration is what the
- 19 challenged patents are directed to. There's nothing special
- about the nonwovens or the hook-type fasteners that the
- 21 challenged patents broadly describe and recite which include
- 22 those that were commercially available, I mean even just
- 23 looking at the example in the challenged patents. Instead,
- 24 the challenged patents simply claim the natural result of this
- 25 known diaper configuration. The higher-basis-weight wings

- 1 will have more fibers available for fastener engagement and
- 2 thus provide higher fastener retaining forces than the lower-
- 3 basis-weight backsheet nonwoven.
- 4 The petitions advance two main combinations. The
- 5 first one is Karami '772's integral wing and chassis diaper.
- 6 So the wings and the chassis are sort of -- they're integral
- 7 so one backsheet extends across the wings and the backsheet.
- 8 And we've modified that diaper to have separate foldable wings
- 9 like pinning to facilitate manufacturing.
- The second combination is Benning's diaper modified
- 11 to include a film nonwoven backsheet and mechanical hook-type
- 12 fasteners like Karami '626 to achieve the benefits that were
- 13 just described for both of those components where each of
- 14 those diapers, the Karami '772 diaper modified in view of
- Benning, and the Benning diaper modified in view of Karami
- 16 '626, has higher-basis-weight wings for strength where it's
- 17 needed and a lower-basis-weight nonwoven backsheet for user
- 18 comfort. And so with that overview I'd like to move to slide
- 19 2 and discuss the diaper --
- JUDGE JUNG: Mr. Albright, before you move on to
- slide 2, this is Judge Jung, how much time did you want to
- reserve for rebuttal?
- MR. ALBRIGHT: Can I reserve 15 minutes, Your Honor?
- JUDGE JUNG: Fifteen minutes. Okay. And also
- 25 before you move on, Patent Owner complains in its sur-reply

- 1 that you have presented new combinations or new arguments in
- 2 your reply. So for the Karami '772 and Benning combination,
- 3 what exactly are you modifying?
- 4 MR. ALBRIGHT: So yes, Your Honor. So to answer
- 5 your question directly, what we are modifying in the Karami
- 6 '772 diaper is we are taking its integral chassis and wings
- 7 construction, and we are going to a separate wings
- 8 configuration like in Benning, and we do that because it's
- 9 going to facilitate manufacturing in that you're not going to
- 10 have scrap because in a unitary or hourglass diaper like
- 11 Karami '772 you actually cutout a portion of the backsheet to
- make the leg openings, but if you go to a separate wing design
- 13 you don't have that scrap which is going to reduce cost.
- 14 And the other primary reason we advance for going
- to a separate wings configuration is to provide manufacturing
- 16 flexibility and really that's about the ability to choose
- different materials for the wing nonwoven and the for the
- backsheet nonwoven notably to facilitate the use of a higher-
- basis-weight wing which is really the final modification we
- 20 make to Karami '772 to provide strength.
- 21 And I think the second part of your question was
- about the alleged new arguments that Patent Owner pointed to
- 23 in the sur-reply and I'd like to turn to slide 23 please. And
- 24 so Karami '772's diaper has -- and in fact it probably is
- 25 helpful to start with slide 22 because we have a picture of

- 1 Karami '772's diaper which is going to help me explain.
- 2 So Karami '772's diaper has this stay-away zone
- 3 (160) which is an untreated portion of his backsheet. And
- 4 around that stay-away zone there are treated portions of his
- 5 backsheet because Karami '772 explains the entire front waist
- 6 portion of the diaper can be treated meaning apertured and/or
- 7 water jet treated except for a portion of the backsheet that
- 8 then becomes the stay-away zone because it is untreated. And
- 9 in the petition -- well, the challenged claims require
- 10 retaining forces between the mechanical closure means and the
- side parts that are higher than the retaining forces between
- the mechanical closure means and the backsheet.
- 13 And in the petition we identify two portions of the
- backsheet as meeting the requirement for retaining forces that
- are lower in the backsheet than in the wings. The first
- 16 portion we point to is the stay-away zone which has diminished
- affinity for fasteners but in the petition we also pointed out
- that there is a portion of the backsheet that's not the wings
- 19 that is treated just like the wings and once you go to a
- 20 configuration where you have a lower-basis-weight nonwoven in
- 21 the backsheet and higher-basis-weight nonwoven in the wings
- 22 that treated portion of the backsheet is also going to meet
- 23 the requirement for lower fastener retaining forces in the
- backsheet than in the wings.
- 25 And Patent Owner, going back to slide 23, contends

- 1 that we did not identify those treated portions of Karami
- 2 '772's backsheet as meeting the lower retaining forces in the
- 3 backsheet limitation and so they contend it's a new argument.
- 4 But even Your Honors in the Institution Decision recognized
- 5 that we did in fact make that argument and on the right side
- 6 of this slide we've got the Institution Decision in the 1479
- 7 proceeding at page 20 and the board said -- Your Honor said,
- 8 As noted above, the petition asserts that, one, the fasteners
- 9 can attach to containment assembly (120) in both its treated
- zones and its untreated stay-away zone. And then we address
- 11 the differential retaining forces for both. And so it's our
- 12 position that that's absolutely not a new argument.
- JUDGE JUNG: Just a follow up. So you are
- 14 confirming that you will not -- your proposed combination
- doesn't contain a further treatment of the stay-away zone in
- any form?
- 17 MR. ALBRIGHT: That's right, Your Honor. It does not.
- JUDGE JUNG: And you're also contending that the
- treated zone, there will not be two separate treated zones so
- 20 that one has slightly less retaining force than the other?
- MR. ALBRIGHT: So I think that's right. Just to
- clarify, if you take Karami '772 as it is, it's a unitary
- 23 configuration and you would have a treatment applied across
- 24 the whole front waist portion of the diaper except for that
- stay-away zone, and our position is you would still go to the

- 1 separate wings configuration and go to a higher-basis-weight
- 2 wing, and once you have a higher-basis-weight wing than the
- 3 backsheet the retaining forces in the wings are going to be
- 4 higher than the retaining forces in the backsheet including in
- 5 its treated zone and of course in its untreated zone.
- 6 JUDGE JUNG: Okay. Thank you, Mr. Albright. Now I
- 7 kind of want to shift over to inherency. In the Petitioner's
- 8 Reply it appears Petitioner is arguing that it is not
- 9 presenting any arguments in the petition that relies on
- inherent disclosure in any of the references. So would you
- agree with the statement that this panel does not need to
- reach an inherency analysis for its final written decisions in
- any of these proceedings?
- MR. ALBRIGHT: So there are I believe three points
- where inherency is at play and those would be, one, whether
- 16 Karami '772's untreated portion of its backsheet, its stay-away
- zone, would have sufficient retaining forces with the fastener
- to hold a diaper on a wearer which is something we establish
- 19 by looking at Karami '626 which discloses a conventional
- spunbond nonwoven of the same basis weight which Karami '626
- 21 tells us to engage fasteners. So that is potentially an
- inherency issue.
- We also have, two, that a higher-basis-weight
- 24 nonwoven is going to have higher fastener retaining forces
- 25 than a lower-basis-weight nonwoven when both nonwovens are

- designed to engage fasteners. I think that's an inherency issue.
- 2 And then third would be with respect to the
- 3 specific retaining forces and the Benning-Karami '626
- 4 combination. We have a position that these same materials
- 5 would have been obvious selections, or the materials that they
- 6 put -- that the challenged patents include in their examples
- 7 were obvious choices as confirmed independently by the prior
- 8 art, and there's a potential for some inherency there even
- 9 though that's really more of an obviousness position because
- we reach those materials through obviousness.
- I did see in the Sur-Reply where Patent Owner
- 12 contends that we disavowed inherency, and I would say that that
- is incorrect. I think there was a little bit of confusion.
- One, specifically with respect to the Benning-Karami '626
- diaper, Patent Owner contends that we are relying on inherency
- 16 to meet the diaper-holding requirement. So inherency to
- establish that the Benning-Karami '626 diaper would in fact
- have been capable of fastener attachment to the wings and to
- 19 the backsheet, but that's not in issue of inherency because
- 20 that's literally the impetus of the combination. I mean, a
- 21 person of ordinary skill in the art goes to a film nonwoven
- backsheet like Karami '626's for user comfort of course but then
- 23 additionally adds the fasteners like Karami '626 to achieve
- 24 size adjustability.
- And so it's our position that the diaper-holding

- 1 requirement for that combination is met through obviousness.
- 2 That's not an inherency argument. And so I think there was
- 3 some confusion there. And the other place I think there was
- 4 confusion was with respect to the Karami '772-Benning
- 5 diaper -- let me see. I got a slide. Well, maybe we don't
- 6 need it.
- 7 So we look at the untreated stay-away zone in
- 8 Karami '772, and how do we know that it's going to engage
- 9 fasteners sufficiently to hold a diaper on a wearer? Well, a
- 10 conventional spunbond nonwoven of an overlapping basis weight
- in Karami '626 is disclosed in Karami '626 as allowing for the
- 12 accommodation of both small and large-waisted wearers through
- 13 fastener attachment and thus Karami '626 tells us that the
- 14 nonwoven in Karami '772 is going to sufficiently engage
- 15 fasteners to hold a diaper on a wearer.
- And what Patent Owner pointed out was that Karami
- 17 '772 discloses a range, I believe it's 5 to 45 gsm, for basis
- weight, and Karami '626 discloses a range of 13 to 50 and
- 19 Patent Owner's position was that somehow we need to establish
- that the full range that Karami '626 discloses for that backsheet
- 21 nonwoven basis weight would have met the diaper-holding
- requirement, but that's incorrect because Petitioner's position
- 23 is based on a 10 to 30 gsm backsheet nonwoven which we
- establish would have been an obvious choice for the backsheet
- 25 because that's going to provide the user comfort and visual

- appeal that was sought by the inclusion of the film nonwoven
- 2 backsheet in the first instance. And so that's not in
- 3 inherency issue. That's also an obviousness issue.
- 4 JUDGE JUNG: So let me just summarize your answer.
- 5 You believe all the argument and analysis you presented in
- 6 your petitions do not have to rely on inherency, that they
- 7 would have been obvious; is that correct?
- 8 MR. ALBRIGHT: No, Your Honor. I would say that
- 9 some of the positions do rely on inherency, and I think the one
- that is probably the most lively disputed is whether between
- fastener engaging nonwovens one with a higher-basis-weight
- will have higher retaining forces. And I should say the
- petition has positions with absolutely no inherency in them
- whatsoever and that would be our Stupperich combinations.
- 15 JUDGE JUNG: Okay. Thank you, Mr. Albright.
- MR. ALBRIGHT: Of course. And so moving back to
- slide 2. We've touched on this a little bit, the diaper-
- 18 holding requirement. It's essentially that the retaining
- 19 forces between the backsheet and the wings, and the fasteners
- 20 need to be sufficient to hold the diaper on a wearer which we
- 21 shorthand as the diaper-holding requirement.
- And the first thing we wanted to point out on slide
- 23 3 is the '788 patent does not recite a diaper-holding
- 24 requirement. We've got the one -- and this is specific to the
- 25 '788 patent. The other patents do recite a diaper-holding

- 1 requirement. We've got claim 1 up here, and what claim 1 says
- 2 is the closure means are structured in dimension for
- 3 detachable fastening to the outer face of the main part and
- 4 the outer face of the side part. We asked Mr. Butterworth at
- 5 his deposition where the diaper-holding requirement appears in
- 6 the claims, and instead his answer was, "well, it appears in the
- 7 general narrative of the patent." So it's not in the claims.
- 8 In the Patent Owner Response, Patent Owner contended
- 9 that this detachable fastening language necessitated retaining
- 10 forces that were sufficient to hold the diaper on a wearer, but
- 11 the problem with that as we pointed out on reply is that the
- detachable fastening recited here is of the closure means to
- 13 the diaper parts, not of the diaper to a wearer. And beyond
- 14 that, there are specific retaining forces recited in the
- claims in all of the patents. In the '788 patent I believe
- 16 it's claim 2 and claim 3. But those retaining forces are user
- agnostic and are in values that are width normalized.
- 18 And so moving to slide 4, to know whether those
- retaining forces even were sufficient to hold the diaper on a
- wearer would satisfy the diaper-holding requirement you would
- 21 need to know the size, type, and number of closure means. You
- 22 need to know who the wearer was, what activities the wearer
- was engaged in, none of which the '788 patent recites. And
- 24 we've got some testimony from Mr. Butterworth on there where
- 25 he agreed.

1 And I think importantly, going to slide 5, and with 2 respect to all of the challenged patents, what we do know 3 about this diaper-holding requirement is that it is broad 4 because Mr. Butterworth testified that so long as a diaper 5 could generate sufficient retaining forces with a fastener to 6 stay on a slim wearer who was bedridden that diaper would 7 satisfy the diaper-holding requirement and that's even if the 8 patient got up, walked around, and then the diaper popped off. 9 So we're not talking about some extreme level of retaining 10 forces in this diaper-holding requirement. It's a low bar, and 11 it's met by Petitioner's combinations. 12 So then moving to slide 7, of course the Karami 13 '772-Benning diaper is going to meet the diaper-holding 14 requirement and at the outset Patent Owner agrees that the 15 wings being treated meet the diaper-holding requirement. I 16 mean a big part of their position is Karami '772 teaches that 17 you have to treat in order for fastener engagement so that's a 18 place where the fasteners can attach. 19 And Your Honor this is something we touched on 20 earlier is what the issue is and that's, well, what about the 21 backsheet here? And that's the red portion. And in the 22 petition we pointed to two different portions of that 23 backsheet as satisfying the lower retaining forces in the backsheet limitation. We've got the untreated portion in the 24 25 stay-away zone (160) and the treated portions around the stay-

- 1 away zone. And so for now, sticking with the stay-away zone,
- 2 the first takeaway is that Karami '772 tells us that there is
- 3 an affinity for fasteners in that stay-away zone. That's what
- 4 diminished affinity means. It doesn't say no affinity. It
- 5 says diminished affinity because it's untreated. So we know
- 6 that there is affinity there, it's just diminished.
- And so we move to slide 8, and this is where Karami
- 8 '626 really helps us out because Karami '626 discloses a
- 9 conventional spunbond nonwoven. It's got the same basis
- weight. It's got overlapping ranges of basis weight. And of
- 11 course as we discussed earlier, we focus in on the 10 to 30
- 12 for reasons of user comfort and visual appeal. And even more
- importantly is that Karami '626's same conventional spunbond
- 14 nonwoven is engaging with the same fastener in Karami '772.
- Both of these references are using this binder 25445 fastener,
- and in fact it's also the one that the challenged patents
- 17 recite in their example.
- And so moving to slide 9. Well, what does Karami
- 19 '626 tell us about that nonwoven and fastener combination?
- Well, it tells us that it secures a diaper on a wearer.
- 21 Specifically, he says the fastener can engage with any portion
- of the nonwoven surface constituting the front sheet, the
- backsheet, or the wings, and thereby the accommodation of both
- small and large-waisted persons is substantially simplified.
- 25 So Karami '626 tells us that the conventional spunbond that's

- 1 untreated in Karami '772's stay-away zone engages fasteners, and
- 2 it does so sufficiently to accommodate a person. So it meets
- 3 the diaper-holding requirement.
- 4 And so then we move to slide 10 and Patent Owner
- 5 sort of makes a variety of attacks here and the first one is a
- 6 contention that Karami '772 discloses that the nonwoven must be
- 7 treated for the fasteners to securely engage the nonwoven.
- 8 And so at the outset here PO is equating Karami '772's enhanced
- 9 shear and appeal strength which Karami '772 short hands as
- secure engagement with the diaper-holding requirement. But as
- 11 we discussed earlier, the diaper-holding requirement is met
- even if the diaper pops off which is a far cry from this
- enhanced shear and peel strength. And so it's our position
- 14 that the diaper-holding requirement doesn't have to result
- 15 from retaining forces that are commensurate with Karami '772's
- 16 enhanced shear and peel strength. It just has to hold a
- diaper on a slim wearer lying in bed. It's not a high bar.
- 18 And then the other point is Patent Owner's position
- 19 here conflicts with Karami '772's text. So while Karami '772's
- 20 inventive concept may be water-jet treating or aperturing a
- 21 nonwoven to provide portions with enhanced shear and peel
- strength, Karami '772 also acknowledges embodiments that don't
- have enhanced shear and peel strength and therefore do not
- involve water-jet treating or aperturing, and that's shown on
- 25 the right-hand side of this slide. Paragraph 8 in Karami '772 says

- 1 another object of his invention is to provide a fastener
- 2 assembly for an absorbent article which in at least one
- 3 embodiment affords enhanced shear and peel strength. And we
- 4 asked Mr. Butterworth about this. We asked him, "so looking at
- 5 Karami '772's paragraph 8, that means there are embodiments
- 6 encompassed by Karami '772 that don't have enhanced shear and
- 7 peel strength, right?" And he said, "well, that could be."
- 8 And so turning to slide 11. And we've touched on
- 9 this so I think we can be brief. Karami '772's disclosed
- 10 binder fastener. Again, that's the same fastener in Karami
- 11 '626 which Karami '626 tells us is for use only with
- 12 conventional nonwovens, and it provides a substantially high
- shear strength. So this fastener that's in our combinations
- is one that mates with conventional nonwovens, and it does so
- 15 quite well.
- And you know, just another quick aside, it's not
- even just Karami '626 that supports Petitioner's position
- 18 regarding the untreated portion of Karami '772's backsheet, his
- stay-away zone, because Damaghi is also at play here which is
- something we discuss in our Reply, and he teaches a
- 21 conventional 5 to 45 gsm nonwoven that engages with a hook-
- 22 type fastener sufficiently to hold a diaper on a wearer. So
- 23 the art is just rife with these conventional nonwovens like
- 24 that in Karami '772's untreated portion of his backsheet that
- engage fasteners to hold a diaper on a wearer. And so again

IPR2020-01477 (Patent 8,152,788 B2) IPR2020-01478 (Patent 8,784,398 B2) IPR2020-01479 (Patent 8,771,249 B2) IPR2020-01480 (Patent 8,708,990 B2) 1 it's our position that the untreated portion of Karami '772's 2 backsheet stay-away zone would indeed engage a fastener 3 sufficiently to hold a diaper on a wearer. 4 JUDGE JUNG: Okay. Mr. Albright, this is Judge 5 Jung. Just to confirm, if for some reason we can't rely on 6 Mr. Jezzi's testimony that the restraining forces in your 7 proposed combination with Karami '772 and Benning are actually 8 sufficient to secure and hold a diaper on a user, what other 9 evidence that you presented in the petition should we look at? 10 MR. ALBRIGHT: So I would say the primary evidence 11 in the petition is going to be Karami '626 because Karami '626 12 is sort of a key teaching -- it is a key teaching of a 13 conventional nonwoven that sufficiently engages a fastener, 14 the same fastener as Karami '772, to hold a diaper on a wearer. 15 So you literally have in the art the same setup that we have 16 in Karami '772 as well as a teaching of what it accomplishes 17 which is sufficient fastener engagement to hold a diaper on a 18 wearer. 19 JUDGE JUNG: Okay. If we have to go to Karami '626 20 shouldn't we also go into Damaghi, and its explanation of what 21 a stay-away zone is which is an area that the fasteners cannot 22 engage with? 23 MR. ALBRIGHT: So Damaghi's stay-away

fasteners cannot attach because in Damaghi the example that

zone -- absolutely, Your Honor -- it is an area to which

24

25

- 1 comes to mind is he attaches a film over a nonwoven in order
- 2 to prevent fastener attachment to the nonwoven. And my first
- 3 response would be that is a different structure than Karami
- 4 '772's stay-away zone because Karami '772's, the one we rely on,
- 5 is an untreated portion of the backsheet and Karami '772 not
- 6 only doesn't say there's no affinity, which is what Damaghi
- 7 explains, in this particular stay-away zone there's just
- 8 diminished affinity. So the structures and different.
- 9 And then the other point I would make is stay-away
- zone was not a term of art as Mr. Butterworth admitted. So I
- don't think it would be fair to import the functionality of a
- 12 structurally distinct stay-away zone from Damaghi that
- explicitly has no affinity onto Karami '772 which explicitly
- 14 has some affinity, and it's different structurally.
- 15 JUDGE JUNG: Okay. Thank you.
- MR. ALBRIGHT: And so moving to slide 13. Patent
- Owner's next attack here is based on values in Karami '772's
- table 1 and the argument goes like this. Karami '772's table 1
- 19 has a force value of 993 and change grams per two inches of
- shear force for a 20 gsm water-jet treated nonwoven. And
- 21 Patent Owner points out that 993 is less than 1300 which is
- 22 what Karami '772 sets as a preferred level of shear strength.
- But even looking at this slide the problem with
- 24 this argument is apparent. These two values are of different
- units. We've got 1300 grams per inch squared and 993 grams

- 1 per two inch. And neither expert was willing to sponsor this
- 2 comparison. It's not in Mr. Butterworth's declaration. In
- fact, in his declaration what he says is the tests that Karami '772
- 4 conducted were done so poorly that one of ordinary skill in
- 5 the art could not draw conclusions from or make generalization
- 6 based on the values.
- 7 And Mr. Jezzi largely echoed Mr. Butterworth, and he
- 8 said, "we couldn't make these sorts of external determinations
- 9 comparing values from table 1 to external values." But Mr.
- 10 Jezzi did explain that, well, if you're sticking within table
- 11 1 there's still some information. You can make comparisons
- 12 that are internal to the table. For instance, you can see
- that untreated nonwovens indeed have fastener affinity like
- 14 the one in Karami '772's stay-away zone, and you can also see
- 15 that the treatments increase shear force or fastener retaining
- 16 forces. And so we talked about that.
- 17 So moving to slide 15, and we already touched on
- this a little bit. It's the stay-away zones because there's a
- 19 dispute about the impact of these various stay-away zones,
- right. So we've got Karami '772's untreated stay-away zone.
- 21 We also have his alternate stay-away zone which is one in
- 22 which he literally cuts a hole in the nonwoven backsheet to
- 23 expose the underlying film and of course you can't attach
- 24 fasteners to a film. So that's a no affinity stay-away zone
- option disclosed in Karami '772.

1 And then we have Damaghi's which I explained 2 earlier is a film that is attached over the nonwoven on the 3 backsheet to prevent fastener engagement. And what's the 4 purpose of a stay-away zone? Well, Damaghi speaks to that, and 5 it is to ameliorate diaper mis-sizing because these fastener 6 systems, these fasteners like the binder fastener that engage 7 a conventional nonwoven like we have in Karami '626, like we 8 contend is present in Karami '772's untreated conventional 9 nonwoven that he calls a stay-away zone, the problem with 10 those systems is they allow fastening to just about any part 11 of the diaper and so a wearer for instance get a diaper that 12 was too big and using the flexibility of the fastening system 13 don that diaper even though it was too big which is wasteful. 14 And so the art said, or at least some references, 15 some folks were thinking that we need to curb that a little 16 bit because it's wasteful, right. The size adjustability is 17 great, but it's leading to this waste and so let's implement 18 these stay-away zones. And so in Damaghi he has a 5 to 45 gsm 19 conventional spunbond nonwoven backsheet and to prevent diaper 20 mis-sizing in this particular no affinity stay-away zone, he 21 puts a patch over a portion of that nonwoven, and it's our 22 position that that indicates that absent that patch the 23 portion of that nonwoven he covered up would have engaged 24 fasteners which is evidence that a conventional even 5 to 45 25 gsm spunbond nonwoven would engage with a fastener with

IPR2020-01477 (Patent 8,152,788 B2) IPR2020-01478 (Patent 8,784,398 B2) IPR2020-01479 (Patent 8,771,249 B2) IPR2020-01480 (Patent 8,708,990 B2) sufficient retaining forces to hold a diaper on a wearer because if it didn't there would be no need to put a film over it to prevent attachment. And we think an analogous argument is for Karami '772's alternate stay-away zone. There would be no need to cut a portion of the nonwoven away to ameliorate diaper mis-sizing if the portion you cut away wouldn't have satisfied the diaper-holding requirement anyway. And so that's what we contend is the correct way to interpret the impact of these stay-away zones. Okay. And changing gears a little bit. JUDGE POWELL: Sorry. I'm going to interrupt. MR. ALBRIGHT: Yes, Your Honor. JUDGE POWELL: This is Judge Powell. So if I understand correctly, then the table in Karami '772, you would say that we can rely on that as evidence that there's a difference in attachment force when you treat, but we cannot really rely on that for any sort of magnitude of the attachment force at least in comparison to other parts of this case with respect to the attachment ability of the non-treated portions of the nonwoven? Hopefully that all makes sense.

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- MR. ALBRIGHT: That's right, Your Honor. That's accurate.
- JUDGE POWELL: And the other related question is -- well, so you say it's a low bar that a slender patient lying in bed would have the diaper retained on the patient,

- 1 but how do we know -- so this table won't get us there. Does
- 2 that make any sense what my question is? I can't rely on this
- 3 table to say that there's enough affinity in the untreated
- 4 part of the nonwoven to meet what you say is the scope of the
- 5 claim, that being hold the diaper on the patient when he or
- 6 she is in bed. Is that accurate too?
- 7 MR. ALBRIGHT: That's right. That's accurate, Your Honor.
- 8 JUDGE POWELL: Okay.
- 9 MR. ALBRIGHT: We go to, and Mr. Jezzi goes to
- also, Karami '626 in order to close that last remaining gap.
- 11 So I think what table 1 tells us is there is affinity, there
- is affinity there in the stay-away zone just like Karami '772
- tells us in our text because he did recover a shear force
- value. Now unfortunately we don't really know how he tested
- it, and his units are a little odd, so an external comparison
- 16 to say, oh, yeah, what he reported here in this table would
- meet the diaper-holding requirement, that's not something we
- can do and that's what Mr. Jezzi explained during his
- deposition. It's really when you go to Karami '626 who tells
- 20 us what that nonwoven with that same fastener is capable of
- 21 achieving that you know then that the stay-away zone would
- 22 generate sufficient retaining forces to hold a diaper on a wearer.
- JUDGE POWELL: So do we know in any sort of
- 24 numerical sense -- this perhaps is a silly question but the
- 25 standard for the claim -- the scope of the claim you advanced

- 1 in the narrower claims in this case is this slender patient in
- 2 the hospital bed. Do you we know in any numerical sense how
- 3 much retention force it would take to keep the diaper on the
- 4 patient in that circumstance and meet the scope of the claim
- 5 as you advance it to be?
- 6 MR. ALBRIGHT: No, Your Honor. There's no
- 7 objective measure of what is sufficient to hold a diaper on a
- 8 wearer sort of for all the reasons we discussed. We don't
- 9 know who the wearer is, what they're doing, and even those
- 10 specific forces, you have to know the fastener width at a
- 11 minimum and the number of fasteners and that's not something
- 12 that the challenged patents provide and it's not something
- 13 that Patent Owner has provided.
- 14 But it's not really -- it's not a problem for our
- 15 combinations because, for instance, in the Karami '772-Benning
- 16 diaper we've been talking about we know from Karami '626 that
- 17 even his stay-away zone has sufficient retaining forces to
- 18 accommodate both small and large-waisted wearers. That's what
- 19 Karami '626 says. And so it's our position that the diaper-
- 20 holding requirement is low. It's a low bar. We don't really
- 21 know what it is but certainly a material that is described is
- 22 engaging with a fastener to accommodate both small and large-
- 23 waisted wearers satisfies it.
- 24 And then with respect to the Benning-Karami '626
- 25 combination, the impetus behind the combination is to provide

- 1 size adjustability and of course a diaper with size
- 2 adjustability where you can attach it to the wings to
- 3 accommodate a larger-waisted wearer or to the backsheet to
- 4 accommodate a smaller-waisted wearer, and Mr. Jezzi goes into
- 5 detail about this, is going to be a diaper that satisfies the
- 6 diaper-holding requirement at each location or it just
- 7 wouldn't make sense.
- 8 JUDGE POWELL: Okay. Thank you.
- 9 MR. ALBRIGHT: And so then we change gears a little
- bit and go to slide 16. And Patent Owner contends that Karami
- 11 '626's teaching about size adjustability are overstated by
- 12 Petitioner because Karami '626 allegedly only teaches fasteners
- engaging the wings and not the backsheet. This is -- this not
- only neglects the combination which is applying Karami '626's
- teachings to Benning's diaper, it's limiting Karami '626 to a
- very specific T-shaped diaper which is just one of his
- 17 embodiments.
- 18 And sort of as an opening response to this
- argument, if you look on the right side of the slide, even
- with respect to that T-shaped brief Karami '626 explains that
- 21 fastener elements (41) (42) may engage directly with any
- 22 portion of the nonwoven surface constituting the front sheet,
- backsheet (32), or wings. And so even this specific diaper
- 24 that Patent Owner relies on includes disclosure of fastener
- engagement to the backsheet which defeats Patent Owner's point

- 1 here that the fasteners only engage the wings. It's not true.
- 2 And then I want to go to slide 18 if we can. And
- 3 it's not only the paragraph 40 sentence that we just discussed
- 4 which discloses fastener engagement to the backsheet. Karami
- 5 '626 has broader teachings in other embodiments. And so
- 6 looking at his paragraph 8, which is excerpted along with 11,
- 7 16, and 55 on the right in Figure 10, Karami '626's invention
- 8 is a fastener assembly composed of a hook-type fastener
- 9 element and a nonwoven where the hook-type fastener engages
- the nonwoven and Karami '626 specifically explains in paragraph 11
- that that invented fastener assembly can be an absorbent
- 12 article including a diaper and a pull-up in addition to a T-
- shaped brief. So right there is an indication that Karami '626
- is not limited to T-shaped briefs and in fact he says
- preferably the nonwoven is in the article backsheet or, in the
- 16 case of a T-shaped brief, the article wings which indicates
- when you have a diaper like we see in Figure 10 the nonwoven
- is in the article backsheet and of course that nonwoven is
- 19 part of his inventive fastener assembly which is receptive to
- a hook-type fastener to hold a diaper on a wearer.
- And so even from these paragraphs it's clear that
- 22 Karami '626 discloses a hook-type fastener that engages a
- backsheet. And Karami '626 embodies these broader teachings in his
- Figures 9 and 10, and that's where he shows us a conventional
- 25 diaper and what he says is, "the same or analogous improvements

- 1 in the fit," and those are the ones he does describe with
- 2 respect to the T-shaped diaper, are present here in the Figure
- 3 10 diaper.
- 4 And so going to slide 19. Patent Owner really
- 5 doesn't have that great of an answer for the Figure 9 and 10
- 6 diaper. We asked Mr. Butterworth about it. We asked him,
- 7 "well, could you attach those fasteners in the Figure 9 and 10
- 8 diaper to the backsheet?" And what his answer was, "you can
- 9 move the closure down the wings or across the front but it's
- 10 not clear where the extra closure would go." And what he's
- explaining here is he's talking about an additional mini loop
- 12 fastener element so that you could attach the fastener to the
- backsheet. And the problem with that is that is literally the
- 14 configuration that Karami '626 disparages and addresses with
- 15 his conventional nonwoven that engages a fastener. And so the
- position is essentially the Figure 9 and 10 diaper doesn't
- include Karami '626's inventive nonwoven hook-type fastener
- assembly despite, you know, his broader teachings and his
- depiction in Figure 9 and 10.
- And so we pressed Mr. Butterworth a little bit on
- 21 That, and we said, "well, wouldn't you expect that sort of
- 22 closure system -- again, that's the inventive one with just
- 23 the conventional nonwoven and the hook-type fastener -- to be
- present in Karami '626's Figure 9 and 10 diaper?" And I'm on
- slide 20. I'm sorry if I didn't say that. So would you

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- 1 expect that inventive closure system to be present in his
- 2 Figure 9 and 10 diaper? And Mr. Butterworth said, "well, it
- 3 could be, yes."
- 4 And then we asked him, "well, and if it did, if
- 5 Karami '626's Figure 9 and 10 embodiment included Karami '626's
- 6 invention would the hooks engage the backsheet?" And his
- 7 answer was, "yes, the hooks would engage but that's not what's
- 8 shown or described." And he went on to testify that the normal
- 9 process for achieving size adjustability with an adjustable
- diaper would involve moving fastener 76 away from one another.
- 11 So that would be more into the wings to fit a larger-waisted
- wearer and of course the corollary to this is moving those
- fasteners toward one another and onto the backsheet to engage
- 14 a smaller-waisted wearer which is exactly what Mr. Jezzi
- described.
- So if we accept that Karami '626's Figure 9 and 10
- diaper indeed includes the fastener assembly that Karami '626
- says it does then the fasteners are engageable with the
- backsheet and the wings to achieve the size adjustability that
- 20 is the purpose of that very fastener assembly.
- 21 And so now we get to slide 21. And this is -- I
- 22 think there was a question about Mr. Jezzi's testimony on the
- retaining forces in the stay-away zone earlier, and so I think
- 24 this is an important slide. Patent Owner contends that Mr.
- 25 Jezzi's testimony that the retaining forces in the untreated

- 1 stay-away zone of Karami '772's diaper and that those retaining
- 2 forces would be sufficient to hold a diaper on a wearer was
- 3 speculative, and what they point to is their questioning of Mr.
- 4 Jezzi about table 1 alone, and that's clear from his testimony.
- 5 He says, "looking at table 1 I was not able to make that
- 6 determination." And then he says, "it's just speculative either
- 7 way. Just with the '772 patent." And so they're asking him about
- 8 the '772 patent and table 1, and as we discussed earlier you
- 9 really can't tell just looking at table 1 whether those forces
- are going to be sufficient. And Mr. Jezzi even explained that
- 11 he knew that the retaining forces are sufficient based on new
- evidence, which would be Karami '626 which he didn't have in
- 13 front of him in his testimony in the earlier IPR.
- 14 And then we get to slide 22. And sort of at the
- beginning of this discussion of Karami '772 we talked about how
- we have two portions of that backsheet that we rely on. We've
- got the untreated stay-away zone which we've discussed now, but
- 18 we also had those treated portions that we pointed to in the
- 19 Petition. And as I explained earlier, it's our position that
- 20 it would have been obvious to use a higher-basis-weight
- 21 nonwoven for the wings and for strength and a lower-basis-
- weight nonwoven for the backsheet for user comfort and in that
- arrangement the retaining forces in the wings are going to be
- higher with a fastener than the fastener retaining forces in
- 25 the backsheet including its treated portion because you'd have

- 1 more fibers for engagement with the fasteners in the wings
- 2 with the higher-basis-weight and less in the backsheet with
- 3 the lower-basis-weight. And so that was our second position
- 4 for the lower retaining forces limitation in the Karami '772-
- 5 Benning diaper.
- 6 And so moving to slide 25. Patent Owner lodges a
- 7 number of attacks on this idea that higher basis -- not just
- 8 idea, this relationship that the '788 patent and the other
- 9 challenged patents tell us is essentially ensured and that is
- 10 a relationship between basis weight and fastener retaining
- 11 forces, a positive correlation between the two when we're
- dealing with fastener engaging nonwovens, and we've got
- 13 several slides on that.
- But specific to the Karami '772 treated portion stay
- away -- or the treated portion of the backsheet having lower
- retaining forces than the treated wings when the wings have a
- higher-basis-weight, as a specific attack to that position
- Patent Owner contends that Karami '772 shows us in his table 1
- that a 20 gsm nonwoven that was treated and apertured had
- 20 higher retaining forces than a 33.9 gsm untreated nonwoven, and
- so Patent Owner contends there's an example of a nonwoven with
- a higher-basis-weight but nevertheless having lower retaining
- 23 forces. But the problem with that is that's not our
- 24 combination because in our combination both the backsheet
- 25 portion around the stay-away zone and the wings are treated,

- and so this comparison between a treated nonwoven and an
- 2 untreated nonwoven, it's irrelevant to the combination.
- 3 Okay. Then we get to slide 27. The challenged
- 4 claims, as we've discussed, recite retaining forces, these
- 5 width normalized retaining forces in units of Newtons per 25
- 6 millimeter, and so we've got an example in claims 2 and 3 of
- 7 the '788 patent. They're in the other challenged patents as
- 8 well.
- 9 And moving to slide 28. And I think we've covered
- all of these points. So we know that evidence by Damaghi that
- stay-away zones were intended to prevent wasteful diaper mis-
- sizing were at least ameliorated. That's the language that
- 13 Damaghi uses. And we know evidenced by Karami '626 that Karami
- 14 '772's untreated stay-away zone would have engaged fasteners
- sufficiently to hold a diaper on a wearer but with less
- retaining forces than if the fasteners engaged Karami '772's
- treated wings which have that enhanced shear and peel strength
- because they're treated.
- We also know that there is a psychological impact
- 20 to these differential retaining forces, Karami '626 teaches
- 21 that, and wearers tend to attach a diaper's fasteners to
- 22 portions of the diaper that have higher fastener affinity.
- And so with all of that we now have the same conditions of the
- 24 challenged patents that led to the purported invention. We've
- 25 got a diaper with higher retaining forces in the wings and

- lower retaining forces in the backsheet, each of which were
- 2 sufficient to hold a diaper on a wearer, and we also know that
- 3 retaining forces psychologically impact a wearer in a way that
- 4 encourages them to attach the fasteners to various parts of
- 5 the diaper. So Karami '772, it's the same result as the
- 6 challenged patents, and it's the same means to achieve it which
- 7 are these differential retaining forces.
- 8 And then moving to slide 29. Even the very way
- 9 that the challenged patents measured shear forces and the
- units that they used for those shear voices -- so their over-
- abdomen retaining forces with their test method and the
- 12 Newtons per 25 millimeter unit, even those were conditions
- known in the art, and we see that in Stupperich because
- 14 Stupperich uses the same test method, and he even discloses a
- range of suitable forces from 5 to 80 which completely
- 16 encompasses the claimed ranges. So we've got a diaper that
- achieves the same result in the same way with differential
- 18 retaining forces. We've got those differential retaining
- 19 forces, and we knew of their characterization as over-abdomen
- 20 retaining forces, and we knew their suitable values.
- And so with all of that we move to slide 31. All
- 22 the challenged patents did was arrive at workable ranges for
- 23 those retaining forces within those art known conditions. And
- 24 that's <u>In re Aller</u>, and it's not patentable to just arrive
- 25 at workable ranges when the general conditions of your

- 1 purported invention were known in the art.
- Okay. And then we get to slide 33. And this is
- 3 really a -- it's one of the few modifications we actually make
- 4 to Karami '772, and we've discussed it before, but Karami '772
- 5 is an integral hourglass diaper with wings and a backsheet
- 6 that have sort of a single nonwoven extending throughout them.
- 7 And we contend it would have been obvious to go to a separate
- 8 wings and chassis configuration like Benning teaches and that
- 9 would be to reduce cost and improve manufacturability. Really
- 10 the reducing cost is reducing scrap because no longer do you
- 11 have to cut out the leg holes on the diaper and waste that
- material because you can just attach the separate wings. And
- the manufacturing flexibility is going to facilitate your use
- of different wing and backsheet nonwovens such as the higher-
- basis-weight ones in the wings and the lower-basis-weight one
- in the backsheet or having the film just in the backsheet and
- 17 not in the wings because you really only need the film in the
- backsheet to prevent leakage, and if you have it extended to
- 19 the wings then it's not going to be very breathable and
- 20 comfortable. And so these separate wings are allowing us to
- 21 achieve those advances.
- Moving to slide 34. Mr. Butterworth at his
- 23 deposition really agreed with Petitioner. He explained that
- with an hourglass diaper that's how Karami '772 starts. You'd
- 25 be chopping out -- to quote, "you'd be chopping out a good

IPR2020-01478 (Patent 8,784,398 B2) IPR2020-01479 (Patent 8,771,249 B2) IPR2020-01480 (Patent 8,708,990 B2) amount of waste material" which "becomes expensive." And he 1 2 affirmatively testified a POSITA would be inclined to put 3 those wings on separately for separate wings. So he agrees 4 with the desirability of the separate wing configuration. 5 Patent Owner came back and said, well, if you go with separate wings you're going to need equipment, 6 7 manufacturing and storage space, employee tracking and 8 planning, and these are cost contributing factors. But as Mr. 9 Butterworth explained, "investments are acceptable to achieve 10 cost savings." So to the extent you had to modify your line 11 that produced your diapers to allow you to go to this separate 12 wing configuration, that would be an acceptable investment and 13 eventually the cost savings of not having the scrap are going 14 to outweigh that investment. 15 Beyond that, the scrap handling, which you would 16 have to do without the separate wings with Karami '772 as is, also 17 required machinery, storage, employees, and precautions. So 18 really you go to the separate wings, you eliminate the scrap, 19 any investment you have to make to do that is going to pay for 20 itself. And frankly, whatever investment you do make you 21 would also have to make for a unitary hourglass design to 22 handle the scrap. So a little bit of a wash for the 23

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Then PO contends that there would be an increased difficulty of manufacture, downtime risk from a failure from

machinery, storage, employees, precautions, et cetera.

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- 1 someone to deliver the wings or wing separation from improper
- 2 bonding. And so basically PO's argument is someone is going
- 3 to have to come over with these wings and bring them to the
- 4 diaper line so they can then be attached to the diaper and
- 5 then maybe someone does a bad job bonding them. But as we
- 6 established in the petition and as Mr. Butterworth agreed, the
- 7 wing production could occur inline. There were diaper
- 8 manufacturing lines that created the wings and attached them
- 9 to the diaper obviating the need for someone to come from a
- different portion of the factory with a bunch of separate
- wings. So that argument really doesn't hold water.
- 12 And then also Mr. Butterworth was unaware of
- improper wing bonding based downtime. And that also neglects
- 14 the level of ordinary skill in the art because presumably a
- person of ordinary skill in the art is going to be capable of
- 16 effectively attaching wings to a diaper just like Benning does
- 17 without having a problem.
- 18 And then the final point to make here is Mr.
- 19 Butterworth explained that scrap from the unitary hourglass
- design, and that's the scrap that we get rid of by going to
- separate wings, was problematic, and he explained that if you
- don't get the scrap away from the machine fast enough it could
- become entangled in the machinery which of course is a
- 24 problem.
- And then moving to slide 37. Patent Owner doesn't

- 1 address the advantageous manufacturing flexibility that you
- 2 get from separate wings and chassis and again that's
- 3 facilitating the use of different materials for the wings and
- 4 different material for the backsheet such as a higher-basis-
- 5 weight wing for strength and a lower-basis-weight backsheet
- 6 for user comfort and visual appeal.
- 7 Okay. And then we get to slide 39. And here
- 8 Patent Owner contends that if you use a higher-basis-weight
- 9 nonwoven on the wings you're going to unnecessarily increase
- 10 cost and decrease comfort. Well, the first point is Mr.
- Butterworth admitted to the wings being subjected to more
- pulling and tension than the backsheet directly and that makes
- sense because the wings are -- they're a smaller piece of
- 14 material. They're what you pull on to attach the diaper.
- 15 They're what the fasteners attach to, and so they're subjected
- 16 to more pulling and tension than the backsheet.
- 17 And moving to slide 40. As a result of that you,
- this is per Mr. Butterworth, "end up with a heavier
- basis weight at the side parts" because that's going to provide
- 20 the strength and tear resistance you need at the side parts.
- 21 And he further explained the necessity, contrary to Patent
- Owner's position, of the strength and tear resistance
- 23 testifying that certain things you have no choice over. You
- 24 don't want these side tabs to tear off so that it gives you
- 25 certain properties you must have which would be the higher-

- 1 basis-weight for the wings for strength. So to the extent
- 2 there would be some decrease in user comfort, which there's no
- 3 evidence of, you have to -- you don't want the wings to tear
- 4 off, and so you have a higher-basis-weight wing because if your
- 5 wing tears off your diaper is not going to be useful.
- 6 Okay. And now we get to slide 42. And changing
- 7 gears to the Benning-Karami '626 combination. And at the
- 8 outset here, and we touched on this earlier, Patent Owner's
- 9 arguments regarding the Benning-Karami '626 diaper neglect the
- 10 combination because that combination is one in which the
- 11 fasteners sufficiently engage the wings and backsheet with
- retaining forces sufficient to maintain a diaper on a wearer.
- 13 That is the combination. And Patent Owner does not contest
- 14 the desirability of that combination nor the achievability of
- 15 that combination.
- And so going to slide 43. This is a statement of
- exactly what I just described. In the Petition we explain
- that a POSITA would have been motivated to use a film nonwoven
- 19 laminate like Karami '626's for Benning's underlayer (30) and
- 20 fasteners like Karami '626's to improve size adjustability by
- 21 allowing the fasteners to directly engage with a backsheet
- 22 nonwoven or its nonwoven wings. And so that's the combination
- 23 which includes meeting the diaper-holding requirement
- otherwise you don't recover the size adjustability which is
- one of the key motivators behind the combination, and so that's

- 1 an obviousness position, that's not an inherency position.
- 2 And then we get to slide 44. Patent Owner contends
- 3 that a POSITA would not have replaced Benning's underlayer
- 4 which engages fasteners with Karami '626's T-shaped diapers
- 5 backsheet that purportedly does not engage fasteners. And of
- 6 course, as we discussed earlier, Karami '626's T-shaped diaper
- 7 is disclosed as having backsheet engagement and its broader
- 8 teachings confirm -- or its broader teachings about non T-
- 9 shaped diapers also disclose backsheet engagement with a
- fastener and that's embodied in its Figure 9 and 10 diaper.
- 11 So that argument fails for those reasons.
- 12 And the other thing I wanted to mention here is
- that in the Sur-Reply, and also the POR Patent Owner contends
- 14 that Mr. Jezzi testified that the Karami '626 diaper -- or that
- 15 Karami '626, sorry, only discloses fastener wing engagement,
- but he didn't because he specifically testified about Karami
- 17 '626 paragraph 40 on redirect where he explained that the
- 18 fasteners even in the T-shaped diaper attach to the diapers
- backsheet, not just its wings, explicitly as Karami '626 says I
- 20 mean on its face.
- JUDGE JUNG: Mr. Albright, you have 15 minutes
- before you start using your rebuttal time.
- MR. ALBRIGHT: Okay. Perfect. Thank you, Your
- Honor. So I'd like to move to slide 51. And there was a
- 25 little bit of a dispute about Karami '626 and specifically an

- 1 interstices size argument, and what they pointed to
- 2 was -- well, what Patent Owner pointed to was that Karami '626
- 3 describes this preferred nonwoven, the conventional nonwoven,
- 4 as having interstices that Patent Owner contended were
- 5 significantly larger than the fibers themselves so it would be
- 6 hard for a hook to engage fibers in that nonwoven. But that
- 7 on its face doesn't make sense because Karami '626's nonwovens
- 8 are indisputably for engaging hook-type fasteners.
- 9 And so what does that tell us? If Patent Owner's
- 10 interpretation of interstices size would result in a nonwoven
- that had a hard time engaging a hook-type fastener it can't be
- 12 right because Karami '626 tells us its nonwovens, its
- 13 conventional nonwovens, are for engaging hook-type fasteners.
- 14 And we asked Mr. Butterworth about this interstices size
- during his deposition and he testified that, well, interstices
- size wasn't a typical parameter specified. He didn't know how
- 17 it was measured. He didn't know what about the interstices
- that it actually described. And when we pointed him to Karami
- 19 '626's use of differing units for the same value, sometimes
- 20 it's 644 micron which is what Patent Owner relied on. Other
- 21 times it's 644 micron squared which is what we have over here
- on the right side of the slide. Mr. Butterworth was unable to
- 23 say if it changed his opinion. And so for those reasons not
- 24 only are Patent Owner's arguments about interstices size
- 25 incorrect because they contravene Karami '626, they're also

1 unsupported.

- 2 Okay. Turning to slide 55. And so we discussed
- 3 specifically for Karami '772 in Benning the desirability of
- 4 having higher-basis-weight wings for strength and lower-basis-
- 5 weight nonwoven in the backsheet for user comfort and of
- 6 course that is our position for both the Karami '772-Benning
- 7 diaper and the Karami '626-Benning diaper. And specific to the
- 8 Benning-Karami '626 diaper, Patent Owner contends that a
- 9 higher-basis-weight nonwoven in the wings would have been
- directly against Benning's teachings because the sides should
- be, "less rigid than the main body portion." And what we
- pointed out in Reply is that Benning explains that its wings
- are skin friendly, and it discloses a range of basis weights
- 14 for those wings that extends to 150 gsm which is quite a high
- basis weight. It's a stiff wing.
- And then moving to slide 56. Mr. Butterworth
- during his deposition testified that even a nonwoven material
- with 150 gsm basis weight would be less rigid than the chassis
- of Benning's diaper because the chassis of Benning's diaper is
- 20 more than just the backsheet. It's got the backsheet. It's
- 21 got the absorbent core. It's got the top sheet. It's got, as
- 22 Mr. Butterworth testified here, maybe a distribution layer.
- 23 And so Patent Owner's argument that a higher-basis-weight wing
- 24 would be more rigid than the chassis fails, and it's not
- against Benning's teachings to use a higher-basis-weight wing

- 1 than you do for the backsheet.
- Okay. And then moving to slide 59. And I think
- 3 this is one of the key disputes in these IPRs, and that
- 4 is -- well, it's our position that when you have as between
- 5 two fastener engaging nonwovens you have a higher-basis-weight
- 6 one and a lower-basis-weight one. The higher-basis-weight one
- 7 is going to provide higher fastener retaining forces than the
- 8 lower-basis-weight one.
- 9 And let's start with slide 60 which is our
- 10 evidence. And so first we have Mr. Jezzi who explains, and it
- 11 makes physical sense, if you have more fibers per unit area,
- which is a higher-basis-weight, there are more fibers with
- which a mechanical fastener can interact, and so the retaining
- 14 forces between the fastener and a nonwoven are going to be
- 15 higher with a higher-basis-weight. There's just more material
- 16 to engage the fastener. And this opinion he supports citing
- 17 to Gorman and Gehring. Gorman explaining that with a higher-
- basis-weight more loops are available for engagement by a hook
- 19 portion of a fastener and Gehring which explains that, well,
- 20 more hooks and loops engaged gives you a higher peel and shear
- 21 strength.
- And beyond this we also have the admissions in the
- challenged patents themselves. And so these are two excerpts
- 24 from the '788 patent. This language appears in all of the
- 25 challenged patents. And the first one is that higher fastener

- 1 retaining forces are, quote, essentially ensured by a higher
- 2 mass per unit area of a nonwoven component. And a higher mass
- 3 per unit area, that's just a basis weight. And so a higher-
- 4 basis-weight essentially ensures higher retaining forces. And
- 5 that's not the only admission because we look at the '788
- 6 patent at 7:19-26, and what it tells us is that due to the
- 7 higher mass per unit area of the nonwoven component for the
- 8 side parts a higher closure retaining force is possible. And
- 9 so due to a higher-basis-weight you can achieve a higher
- 10 fastener retaining force.
- JUDGE POWELL: This is Judge Powell. I have a
- 12 question about the excerpts from the specification of the
- challenged patents here. Can you cite that evidence in
- support of a position that it would have been obvious that the
- higher-basis-weights would have provided greater retention
- 16 force in support of a position that it would have been
- inherent or both? Hopefully that makes some sense.
- MR. ALBRIGHT: No, that makes perfect sense. So I
- 19 know for inherency you absolutely can cite a patent's
- admissions that a property was inherent in a given structure
- or a given item, and that's <u>In re</u> Kao for example which
- 22 was cited in our Reply. As to whether you could use this for
- an obviousness argument, I believe you could, but we're
- 24 really -- we are in the inherency context with respect to this
- 25 issue. And the Federal Circuit has told us that when the

IPR2020-01477 (Patent 8,152,788 B2) IPR2020-01478 (Patent 8,784,398 B2) IPR2020-01479 (Patent 8,771,249 B2) IPR2020-01480 (Patent 8,708,990 B2) 1 patent itself tells you that something necessarily results 2 from something else you are allowed to rely on that. 3 JUDGE POWELL: Okay. And when you say you're in 4 the inherency realm, you mean with respect to the citation of 5 the excerpts from the challenged patents. Is it safe to 6 assume that the citations to Gorman and Gehring would possibly 7 support either position, either an inherency position or an 8 obviousness position? Is that accurate? 9 MR. ALBRIGHT: Yes, I think that -- that is 10 accurate. That's right. JUDGE POWELL: Okay. Thank you. 11 12 MR. ALBRIGHT: And so not only do we have, and 13 we're still on slide 61 for a second, these explicit 14 admissions that tell us that retaining forces are essentially 15 ensured and due to -- higher retaining forces are essentially 16 ensured by and due to higher-basis-weights, there are other 17 admissions in the challenged patents. I'd like to touch on 18 those in going to slide 68. 19 And because I'm jumping around a little bit, just 20 some context here. What Patent Owner came back and did was 21 list a laundry list of parameters that allegedly might impact 22 a nonwoven's retaining forces with a fastener and so they 23 said, well, look, so you can't say that it's just basis

weight, which isn't what we said, because there are these

other factors that might impact retaining forces. And it's

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- 1 our position even looking at Patent Owner's own factors that
- 2 just like the '788 patent's explicit teachings the breadth of
- 3 the '788 patent's disclosure is going to show us that these
- 4 factors aren't drivers in fastener retaining force, and this
- 5 is a perfect example on slide 68.
- 6 You go to the challenged patents and we say, okay,
- 7 the conditions by which the fabric was made, these parameters
- 8 of the fibers, what do the challenged patents say about that?
- 9 Well, what the challenged patents say is in particular all
- 10 nonwovens are suitable that contain at least one initial
- 11 component based on a thermoplastic polymer. That is an
- incredibly broad class of nonwoven materials. And then they
- give a laundry list of fiber materials, everything from
- 14 thermoplastics to cellulose to bi-component or multi-component
- 15 fibers. We get a laundry list of nonwovens, carded nonwovens,
- spunbonded nonwovens, et cetera.
- 17 And so this is an admission that the conditions by
- 18 which the fabric is made, the size -- the type, size, shape,
- and density of the fibers, et cetera, are not going to be
- selected in a way that defeats the fundamental correlation at
- 21 issue here which is the positive correlation between basis
- weight and retaining forces. Presumably what the '788 patent
- 23 tells us is essentially ensured is going to be present across
- 24 the range of nonwoven materials that the '788 patent tells us
- are suitable.

1 JUDGE POWELL: I struggle a little bit -- this is 2 Judge Powell again. How do you best reconcile that position? 3 It seems like you pretty clearly recognize that water-jet 4 treatment can have a big effect on the retention strength. 5 How do you reconcile -- how best do you reconcile those two 6 things? 7 MR. ALBRIGHT: Sure, Your Honor. And so in the 8 Benning-Karami '626 diaper nothing is water-jet treated. So 9 the impact of water-jet treatment is irrelevant because it's 10 not part of the combination. And then in the Karami '772-11 Benning diaper the stay-away zone isn't water jet treated, the 12 wings are, and so any water-jet treatment is going to support 13 Petitioner's position that the retaining forces are going to 14 be higher in the wings. And then as between the treated 15 portion of the backsheet and the wings, it's just the basis 16 weight relationship, and they're both treated. So the impact 17 of treating one nonwoven and not another doesn't impact our 18 combinations. Because that's the other thing is these 19 parameters -- sorry. 20 JUDGE POWELL: Okay. So it's the specific -- so 21 there are limits -- I think I understand then there are limits on how widely this provision regarding -- this understanding 22 23 that the basis weight provides greater retention. Of course 24 there are limits on the applicability of that, but you are 25 saying that your combination falls within those limits. Am I

1 understanding that correctly? 2 MR. ALBRIGHT: Absolutely. 3 JUDGE POWELL: Okay. 4 MR. ALBRIGHT: And I think that raises a good point 5 that I'd like to make and that is that Patent Owner's 6 parameters, they don't even address the combination, and so in 7 that way they are irrelevant. Sort of like the water-jet 8 treatment that we just discussed, and let's go to slide 64 for 9 example. And so we look at what they actually say, what Mr. 10 Butterworth testifies to about these parameters, and first of 11 all neither Patent Owner nor Mr. Butterworth ever even alleges 12 that a person of ordinary skill in the art would have varied 13 one of these parameters in a way that resulted in a diaper with higher-basis-weight wings and lower-basis-weight 14 15 backsheet yet had higher retaining forces in the backsheet 16 than in the wings. 17 So they never even make an allegation that somehow 18 in a combination encompassed by Petitioner's positions you 19 would defeat the positive correlation between basis weight and 20 retaining forces. All they say is look at all of these things 21 that could impact retaining forces. They never actually even 22 allege the relevant conclusion, and so there is no evidence 23 except for Petitioner's as to the ultimate issue which is as 24 between fastener engaging nonwovens and the Benning '772, 25 sorry, the Karami '772-Benning diaper and the Benning and

- 1 Karami '626 diaper, as between the fastener engaging nonwovens,
- 2 the higher-basis-weight wings -- you have the higher-basis-
- 3 weight wings. The natural result of that is higher retaining
- 4 forces in the wings.
- 5 That's the ultimate issue and they never allege
- 6 that any one of these parameters is going to be changed for
- 7 one nonwoven or another and then in that situation you're not
- 8 longer -- you're going to break that correlation between basis
- 9 weight and retaining forces. And I think that silence on
- that, that lack of an allegation is really telling especially
- in view of the '788 patent's admissions that it really is all
- 12 about basis weight. It essentially ensures the retaining
- forces and the '788's patent's breath or silence on all of
- 14 these factors.
- 15 And even beyond that, let's look at what they
- actually did provide, and this is -- I like this example
- because it's about fiber material, fiber cross-sectional shape
- and crimping, and diameter and finish. And this is Mr.
- Butterworth's testimony, and what he says is, well, the fibers
- 20 could be too fine so they will inhibit penetration of the
- 21 mechanical hooks, and those that do snag fibers will find they
- do not have adequate load bearing capability. Or the fibers
- can be too coarse, and they will not properly engage with the
- 24 parts of a mechanical closure.
- Well, this is outside the combination. A person of

- 1 ordinary skill in the art -- it also neglects the level of
- 2 ordinary skill in the art. A person of ordinary skill in the
- 3 art isn't going to select fibers that are too fine to
- 4 detachably fasten to a hook-type fastener in combinations that
- 5 are designed for detachable fastening to hook-type fasteners
- 6 nor are they going to pick a fiber size that's too coarse to
- 7 engage a mechanical fastener. And so really this -- I mean
- 8 this is irrelevant. It's irrelevant to Petitioner's
- 9 combinations.
- And another place we can look is paragraph 103 in
- 11 Exhibit 2004, and what he explains there is that this
- 12 parameter, these fiber parameters, and others are selected,
- which he refers to as, "engineered," to create a suitable
- re-fastenable component with steps, "quite specific to"
- disposable diapers. Well, that is -- what our combinations
- are is disposable diapers, and Patent Owner never contested the
- 17 achievability of our combinations or the desirability of the
- size adjustability. So you can achieve the size adjustability
- and its desirable. But what's interesting is Patent Owner now
- seems to be arguing that a POSITA would have abandoned this
- 21 engineering when implementing the Benning-Karami '626 diaper or
- the Karami '772-Benning diaper and then, for instance, went
- 23 with a fiber size that was too thick to work. It doesn't make
- sense. And that not only neglects the combination, but it
- 25 neglects the level of ordinary skill.

1 JUDGE JUNG: Mr. Albright, this is Judge Jung. 2 You're into your rebuttal time. Do you wish to continue? 3 MR. ALBRIGHT: I think I'll stop for now and save 4 my rebuttal time. JUDGE JUNG: All right. Thank you. You have 12 5 6 minutes remaining for your rebuttal. 7 Ms. Daley, you may proceed when you're ready. 8 MS. DALEY: Thank you, Your Honor. Hopefully you 9 can hear me. 10 JUDGE JUNG: Yes, I can hear you now. 11 MS. DALEY: So good afternoon and thank you. As 12 you know, as we've been talking about, this proceeding 13 involves four patents, and I'm going to refer to them as the 14 Beckert patents, or I may refer to them by numbers but that's 15 my nomenclature. And just to start I want to note -- you 16 know, and this has been discussed some, but in the Beckert 17 patents the inventors disclose and claim an improved diaper 18 that encourages the proper fastening of the diaper so that it 19 would be secure on the wearer, won't leak, and even if 20 improperly fastened it permits the diaper to be re-fastened so 21 it can be re-fastened securely. 22 And there's been some discussion of size 23 Adjustability, and I just wanted to note that the Beckert 24 patents aren't seeking size adjustability. So this isn't an 25 instance where the Beckert patents have come up with a size

- 1 adjustability. They aren't seeking some one size fits all
- 2 diaper. They're seeking to have a diaper that is correctly
- 3 fastened, so that it's comfortable, and the risk of damage to
- 4 the backsheet is reduced. And in that situation what they
- 5 have come up with and they found surprisingly is that if the
- 6 retaining forces on the side front parts are higher than the
- 7 front -- and these diapers, they seek to have them engage on
- 8 the front side parts. That's what they think is the most
- 9 comfortable, and that's what they think would prevent damage to
- the backsheet.
- So that's where they want them to be engaged, and
- they found surprisingly if the retaining forces on the side
- and front are higher than in the front of the diaper people
- surprisingly actually fasten it correctly. They feel sort of
- more secure that way. At the same time, if they do fasten it
- incorrectly it will stay on, you're not going to spoil the
- diaper, and it will work, and they'll have the opportunity to
- re-fasten it so that it can then be fastened correctly. So I
- 19 just wanted to explain that that's a different concept than
- 20 size adjustability.
- And even just to start I'll just briefly go through
- one of the claims which is claim 1 of the '398 patent, and it's
- 23 actually shown on slide 10. And just again to go
- 24 through -- we've talked about some of these requirements, but I
- 25 just wanted to note that the claimed invention is to a diaper

- 1 having a chassis and four discrete side parts, in some of the
- 2 patents are called ears. The rear side parts, the side parts
- 3 in the back of the diaper, they have closure means with
- 4 mechanical closure aids that are configured for selective
- 5 detachable fastening to the outer face of the chassis and to
- 6 the front -- in the front of the diaper and to the side parts
- 7 in the front of the diaper. And so these rear side parts are
- 8 actually pulled around and attach to the front.
- 9 And there was some discussion earlier about the
- 10 kind of pulling forces, and that's the kind of forces you're
- talking about when you're talking about these side parts.
- 12 You're pulling the rear wings forward to attach to the front,
- and so those aren't the fastener engaging surfaces that are
- 14 getting pulled. It's the rear wings pulling to the front.
- 15 And claim 1 also specifies -- then it gets into
- very specific language about the retaining forces, and it
- specifies that the retaining force between the closure and the
- outer face of the chassis secure the diaper on the wearer when
- in use and be lower than the retaining forces between the
- 20 closure and the outer face of the side part. So there's two
- 21 requirements there that the retaining forces are both lower,
- and that they secure the diaper on the wearer. So it's not
- enough that the closure --
- JUDGE SCANLON: I'm sorry to interrupt. This is
- 25 Judge Scanlon. I wanted to -- regarding the retaining forces,

- 1 I wanted to ask you how you responded to Petitioner's
- 2 assertion that sufficient retaining forces would be a slim
- 3 person who was bedridden and that they could even -- the
- 4 diaper could pop off if the person got up and walked around.
- 5 MS. DALEY: Well, I would respond saying that
- 6 that's not really -- I know he cited some of Mr. Butterworth's
- 7 testimony saying that it might still work if it pops off a bit
- 8 there, but that wasn't his complete testimony and these
- 9 diapers are re-fastenable. And I don't have a slide on this,
- 10 Your Honor, but in Exhibit 1054, this is his deposition
- testimony, at 85, lines 16 through 18, he explained that the
- secure engagement means adequate retention forces to withstand
- use conditions. And he went on for -- between lines -- this
- is again Exhibit 1054 lines -- or page 85, 16 through 86, 4,
- and he talked about how these adequate use conditions include
- being worn for every step: when you're putting on the diaper,
- when you're sliding it under the body, when you bring it
- around to the front, when you're fastening the hook to
- 19 closures. Under those conditions of normal donning of the
- 20 product that it will give in use which can be walking,
- running, lying in bed will not allow the closure to become
- 22 unfastened. Also at the same time to be able to fill what it
- called the re-fastenable, re-closeable feature.
- So I wouldn't say that it was so limited. I think
- 25 it's actually in terms of not being broad but just saying it

- 1 has to be able to withstand it under use conditions which can
- 2 be lying in bed and rolling over, but I can be getting up and
- 3 walking and exercising too. And I think, you know, the
- 4 patents actually teach what those retaining forces are and
- 5 give the specific ranges. So it's not this broad force. It
- 6 actually -- you have to meet all of those conditions, so I
- 7 would say it's actually narrower than the petitioner suggests.
- 8 But in any event, the patent is very specific about what those
- 9 retaining forces should be.
- 10 JUDGE SCANLON: Okay. Thank you.
- 11 MS. DALEY: All right. So the claims -- and back
- to, which I've shown on slide 10, the retaining forces. And
- 13 none of the prior art references actually teach using these
- 14 different retaining forces. None of them teach using
- different retaining forces to encourage proper securement of
- the diaper, and that's why we're in this situation where
- 17 Petitioner is trying to use basis weight as a proxy for
- 18 retaining forces or all of their proofs on whether these
- 19 claims are met. And so they have essentially taken the
- 20 position if they can come up with a reason to use a higher-
- 21 basis-weight then it has shown that there are higher retaining
- forces since a higher-basis-weight nonwoven will have higher
- 23 retaining forces, and the premise of Petitioner's argument is
- 24 flawed. A higher-basis-weight nonwoven does not always have
- 25 higher retaining forces than a lower-basis-weight nonwoven.

- 1 We've talked about Karami '772 makes that very point. It shows
- 2 that you can treat it, and it gives examples in the table 1 of
- 3 a lower-basis-weight nonwoven has a higher retaining force
- 4 than a higher-basis-weight nonwoven. And even Petitioner has
- 5 said that you can make those comparisons in table 1.
- 6 JUDGE JUNG: Ms. Daley, before you go on --
- 7 MS. DALEY: So to under -- sure.
- 8 JUDGE JUNG: Ms. Daley, before you go on, where in
- 9 the claim does it require that the retaining forces are
- different so that you've reached proper securement instead of
- 11 proper size?
- MS. DALEY: So, you know, each claim are -- so on
- claim -- in the '398 patent which is slide 10 there is claim 1,
- 14 and what it does say there is that the -- it says that it has
- 15 closure means configured for selectable detachable fastening
- 16 to the outer face of the chassis and to the outer face of the
- side parts. And so -- and then it says the retaining forces
- between the closure means and the outer face of the chassis
- secure the diaper on the user body when in use. So the lower
- 20 retaining forces have to secure it in use and then are lower
- 21 than the retaining forces between the closure means and the
- outer face of the side parts. So it specifically says that
- 23 the front when it engages in the chassis has lower retaining
- 24 forces than if it engages the front side parts. And because
- 25 the lower retaining forces at the front have to secure the

- diaper on the wearer, the higher retaining forces would do the
- 2 same as well because they have higher greater retaining
- 3 forces.
- 4 JUDGE JUNG: But would you agree, Ms. --
- 5 MS. DALEY: Turning to --
- 6 JUDGE JUNG: Ms. Daley, so you would agree that the
- 7 claim doesn't explicitly state the purpose you argued before
- 8 that the retaining forces are lower in a certain area so that
- 9 you get proper securement?
- MS. DALEY: No, I would actually say it's quite
- 11 explicit because it says in here that you -- it uses the word
- secure engagement. I think what Petitioner was referring
- 13 to -- and Petitioner doesn't actually dispute that. What
- 14 Petitioner was referring to is the '788 patent which has
- slightly different language than the '398 patent, the '249
- patent, and the '990 patent. But Petitioner hasn't actually
- disputed that with regard to the other patents that there is
- 18 this requirement that there be higher retaining forces on the
- sides than in the front and that both of those retaining
- 20 forces be sufficient to secure the diaper on the wearer
- 21 because the '398 patent specifically refers to securing the
- diaper on the wearer in use when it's engaged in the front of
- 23 the diaper with lower retaining forces which means that
- 24 they -- and by saying it has lower retaining forces on the
- 25 front than the sides, the sides obviously have higher

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IPR2020-01480 (Patent 8,708,990 B2)
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- 1 retaining forces because there is that comparison expressly
- 2 made in the claim.
- 3 JUDGE JUNG: Okay.
- 4 MS. DALEY: And turning to --
- 5 JUDGE JUNG: I'm sorry, Ms. Daley. Before you move
- 6 on, since we're on the topic of the --
- 7 MS. DALEY: No, sir. No, of course.
- 8 JUDGE JUNG: Since we're on the topic of the '788
- 9 patent, claim 1 in particular, in the Patent Owner Response
- 10 Patent Owner argued that even though it's not expressly stated
- 11 it's necessarily part of claim 1 that the restraining forces
- that are recited must be sufficient to fasten and hold the
- diaper on the user. So can you expound on that? It was just
- 14 a one-sentence argument. I don't think there was much more to
- it than that. But why is that?
- MS. DALEY: Certainly. I even have a slide on that
- point, Your Honor. So let me -- well, the '788 patent is
- actually shown on -- claim 1 of it is shown on slide 13. And
- 19 when you look at the language of the claim in the context of
- 20 the patent it's Patent Owner's position where it talks about
- 21 the closure means being structured in dimension for detachable
- fastening to the outer face of the main part and to the outer
- 23 face of the side parts in the front area. And it goes on to
- specifically say that the retaining forces between the
- 25 mechanical closure means and the outer face of the main part

- 1 are lower than retaining forces between the mechanical closure
- 2 means and the outer face of the side parts.
- 3 And it's Patent Owner's position that particularly
- 4 in the context of this patent when you look at the -- when
- 5 it's talking about the detachable fastening there, it is so
- 6 that it can secure the diaper on the wearer. That's the point
- 7 of the patent. It does not use that same language of the
- 8 secure the diaper as the other three patents do. We
- 9 acknowledge that. But we think when viewed in the context of
- the patent as a whole -- the other point we'd make is claims 2
- and 3 require specific retaining force ranges, and Petitioner
- doesn't dispute that those would require securement of the
- diaper on the wearer when in use.
- And one other point I will make on that, it's on
- slide 20 that in the petition -- on the left side here on
- slide 20 there's a reference to the petition for the '788
- patent and that's the -01477 proceeding. And there they had
- 18 a -- Petitioner made a statement, "moreover, specific evidence
- 19 herein was not substantively considered including Karami '772's
- 20 explicit teaching of claim 1's variable retaining forces
- 21 sufficient to hold a diaper on a wearer." So in the Petition, I
- 22 would say that they conceded that this is a claim requirement
- 23 in their Petition. And there's other cites from there, but I
- 24 think there they specifically refer to claim 1 as having that
- 25 requirement, if that answers your question.

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- 1 JUDGE JUNG: Okay. Thank you, Ms. Daley. That
- 2 does. Now before you go on, a couple of housekeeping matters.
- 3 Do you want rebuttal time?
- 4 MS. DALEY: Yes. Thank you, Your Honor. I should
- 5 have mentioned that. 15 minutes as well for me.
- 6 JUDGE JUNG: Okay. 15 minutes. And before you
- 7 jump back into your presentation I have a few questions about
- 8 level of skill in the art. In Mr. Butterworth's declaration
- 9 he proposes a level of ordinary skill in the arts. He even
- states that it's slightly different from what Petitioner
- proposed. But he said later that it doesn't affect the
- 12 analysis in his testimony. Do you agree that any difference
- in the proposed level of skill in the art doesn't make any
- significant difference to your legal analysis and arguments as
- well?
- MS. DALEY: I agree, Your Honor.
- 17 JUDGE JUNG: Okay.
- MS. DALEY: I do. I don't think the
- 19 differences -- to answer, I don't think the differences in the
- 20 parties' level of ordinary skill has an impact.
- JUDGE JUNG: Okay. Now do you also agree that it's
- still within the ordinary skill in the art to select an
- 23 appropriate basis weight for the purpose of strength or
- 24 comfort? For example, the basis weights described in the
- 25 cited references of the Petitioner?

1 MS. DALEY: I think one of ordinary skill in the 2 art is going to select a lot of factors, not just basis 3 weight. They're going to select a whole range of factors to 4 design their nonwoven to suit its purpose. 5 JUDGE JUNG: Okay. 6 MS. DALEY: You know, the nonwoven has to be 7 engineered in a way to create it suitable for its purpose and 8 I think that one of ordinary skill in the art would consider 9 basis weight as a factor, but they would also consider a lot of 10 other factors including that you can achieve a lot of things 11 such as these higher retaining forces with a lower-basis-12 weight by modifying the nonwoven. So I think that would be 13 something that one of ordinary skill in the art would 14 understand. JUDGE JUNG: Okay. Thank you. And is it also 15 16 within the ordinary skill in the art to select an appropriate 17 combination of fasteners and nonwoven materials so that you 18 come up with a diaper that stays fastened and secured on the 19 user? 20 MS. DALEY: But if one is designing a diaper 21 they're going to look at the fasteners as well, because that 22 impacts how it can engage the nonwoven and what it's going to 23 do. So I think if one of ordinary skill is going to engineer 24 a nonwoven they would look at all of that and select it. Now 25 what they actually choose is the hard part. I mean actually

- 1 coming to and deciding what factors to use to achieve those
- 2 goals, that's what all the patents that we're looking at
- 3 are -- a lot of them are about on how you choose and which of
- 4 the factors you pick and what you use and that's part of what
- 5 one of skill in the art would consider.
- 6 JUDGE JUNG: Okay. And just to verify, do you
- 7 agree with the statement that Patent Owner has not disputed
- 8 any of the Petitioner's proposed claim interpretations? For
- 9 example, the means plus function interpretations for the '788
- 10 patent?
- 11 MS. DALEY: Yes, I -- well, the means plus function
- 12 I would agree with. I'm not sure if I can think of other ones
- 13 that they have made. To the extent that -- I did think that
- 14 they had said something about retaining forces but then have
- kind of changed their view on that. So I don't know that I
- would say that if they have given an interpretation of what
- 17 retaining forces mean that we agree with that, but we don't
- 18 dispute that means plus function instruction.
- 19 JUDGE JUNG: Okay. And based on what Mr. Albright
- said about the Patent Owner's arguments regarding new
- 21 arguments in the Reply, do you still maintain that the
- 22 Petitioner presented a new position in its Reply?
- MS. DALEY: We do, because I think what Petitioner
- said is that they -- when we're talking about Karami '772 and
- 25 the stay-away zone in this supposedly not defined well region

- 1 that's outside of the stay-away zone but within the
- 2 containment assembly, the Petition briefly referenced that it
- 3 might have a lower retaining force. What it didn't do was
- 4 actually say that you would secure the -- fasteners could be
- 5 secured there to secure the diaper on the wearer. That's a
- 6 distinct -- and it's a different limitation. That requirement
- 7 that you secure the diaper is a distinct limitation from the
- 8 differing retaining forces.
- 9 And in fact -- let's see. I can take you
- 10 to -- slide 32 is a statement from the Petition where they're
- applying the prior art. This is where they've alleged their
- prior art combination, and they're applying it to the
- limitation that it secures the diaper on the wearer. And so
- 14 this is their allegation here, and what they say at the
- beginning here in claim -- it's for limitation 1(c)(4) and
- again it's slide 32. It says because the outer nonwoven of
- wings 131, 133 are treated while stay-away zone (160) is not
- the retaining forces, e.g. shear strength, between fasteners
- 19 150(a) through 150(d), and the outer surface of the containment
- assembly (120) are lower than those between the fasteners and
- 21 the outer face of the wings.
- So here they're starting this with the distinction
- between the treated wings and the stay-away zone. And in the
- 24 next sentence they say even in the stay-away zone (160)
- 25 retaining forces between fasteners 150(a) to 150(d) and

- 1 backsheet (130) were sufficient to hold the diaper on a
- wearer. So it's the sufficient to hold a diaper on the wearer
- 3 they were focused on the stay-away zone. And that's what the
- 4 argument has been is that region is sufficient. So that's our
- 5 position that that's what the combination was, not that
- 6 there's been alternative it could secure this other region.
- 7 And I don't think it's fair to say you can just
- 8 necessarily secure it to that other region if there is a
- 9 region outside of the containment zone for a number of
- 10 reasons. One is they haven't specified what the treatment is
- 11 that's done. And again, if you look at that table it shows
- that you can have even a treated lower-basis-weight nonwoven
- that has higher retaining forces than a treated higher-basis-
- 14 weight depending on what the treatment is.
- 15 If you also look at -- they pointed to -- I've got
- a slide here. If we go to -- oh, I think it might be earlier.
- 17 Yeah. If you go to slide 28. So this is what they pointed to
- in terms of this alternate region that's within the
- 19 containment assembly that's treated that's outside of the
- stay-away zone, and they point to those hashmarks. But you
- 21 can't actually rely on those hashmarks as an accurate
- depiction of the stay-away zone. The case law is clear that
- you can, and the Federal Circuit has said that you can't rely
- 24 on those just without the -- unless the patent specifically
- 25 says the dimension and I'll get the case right here in a

1 second.

2 So the case that I'm referring to is Hockerson-3 Halberstadt v. IVA Group, and it's 222 F.3d 951. And what the 4 Federal Circuit has said there is that the patent drawings do 5 not define the precise proportions of the elements and may not 6 be relied on to show particular sizes if the specification is 7 completely silent on the issue. So the general hashmarks 8 there can't be used to really show what the size is, what that 9 region is in the drawing itself. But even looking at the way 10 the drawing is done, those fasteners that they're showing 11 there is much larger than that region. So it's not even clear 12 there would be enough of this other region to sufficiently 13 engage fasteners to secure the diaper on the wearer. But the fact is the Petitioner hasn't addressed any 14 15 of that. They haven't described what that region is, what the 16 size of that region is, shown that there would be enough of 17 that region to engage the fasteners or even said what kind of 18 treatment is done or shown that it would actually have enough 19 even if treated to engage the fasteners or that it would 20 actually be lower than whatever the treatment was done on the 21 sides. So our position is that that really wasn't part of the 22 combination. But in any event, they haven't shown that that 23 would meet the requirement of securing the diaper on the wearer or having the lower retaining forces. 24 25 JUDGE JUNG: Ms. Daley, does your answer change at

- all if we bring in Karami '626 or at least the Petitioner's use
- 2 of Karami '626?
- 3 MS. DALEY: No, it doesn't. So I think part of the
- 4 problem with all of this is that what Petitioner has done is
- 5 just said they're going to rely on a conventional nonwoven, and
- 6 all they have to do is mention the basis weight. But there is
- 7 no such thing as a conventional nonwoven. All of the
- 8 nonwovens are different, and they have different factors and
- 9 so -- and anytime you raise one of those other issues they say
- that's outside of their combination. But there is no such
- thing. You can't know what the nonwoven is unless you know
- all of those factors that they say are outside of it.
- And Karami '626 isn't some general treatment that
- 14 any conventional nonwoven will work, and in fact it says
- in -- if you look at Karami '626 which is Exhibit 1004, if you
- look at paragraph 4 it talks about the background in paragraph
- 4 of Karami '626 and it says, "Thus conventional woven or
- 18 nonwoven articles have had affixed to the surface thereof a
- mini loop fastener element of greater longitudinal dimensions
- than the corresponding mini hook fastener element." So what
- 21 it's saying there is in the prior art your, quote,
- "conventional nonwoven have used these mini loop fastener
- elements that they want to get rid of." So you can't just say
- 24 a conventional nonwoven is going to be able to engage
- 25 fasteners.

1 And another problem with the Karami '626 is that 2 what Petitioner has pointed to or what they had wanted to do 3 to modify as the backsheet for the new Karami '772-Benning is 4 they looked to the T-shaped diaper, and they wanted to use the 5 backsheet of the T-shaped diaper, and that's in particular 6 paragraph 65 of Karami '626, because -- and they wanted to use 7 because there it was mentioned as for the T-shaped diaper that 8 optimally you would want to have on the backsheet an optimal 9 20 gsm nonwoven. So they wanted a reason to pick a 20 gsm 10 nonwoven. The problem is in the T-shaped diaper the backsheet 11 of the diaper is not used to engage fasteners in the T-shaped 12 diaper. In the T-shaped diaper all of the fasteners engage 13 the wings, and that is something that Mr. Jezzi actually 14 acknowledged. And I can go through Karami '626 and explain 15 that if that is something that would be helpful to go through 16 now. 17 JUDGE JUNG: Let me --18 MS. DALEY: Or that might be farther afield than 19 what your question was. 20 JUDGE JUNG: We have -- we kind of shifted from one 21 challenge to the other. So originally we were talking about 22 Karami '772 as modified by Benning, and Petitioner brings in 626 23 to explain that the stay-away zone in Karami '772 must also 24 engage with fasteners because the exact same nonwoven is 25 discussed in 626 with the exact same fastener. And in there

- 1 in 626 that fastener and that nonwoven are able to engage and
- 2 retain the diaper on a user. So do you have an argument to
- 3 break that link at all between '626 and '772?
- 4 MS. DALEY: Yes, Your Honor. I do. And the point
- 5 being they are -- they haven't shown that they are the exact
- 6 same nonwoven. They haven't shown that all these aspects of
- 7 it -- again, the only thing they've pointed to is the
- 8 reference to both saying a conventional nonwoven and that in
- 9 and of itself isn't enough to show that they're the same
- 10 nonwoven. It doesn't give any of the details of what those
- 11 nonwovens are. And the patents don't say they're the same
- 12 nonwoven. They have some overlapping features in terms of
- things that you can pick from to choose the nonwoven.
- 14 And, you know, it might also be helpful to point
- out that Karami '772 doesn't, and 626, they don't actually
- describe a specific nonwoven. They talk about features that
- 17 you can pull from and pick from to design a nonwoven. So it
- isn't actually teaching a specific nonwoven. It's teaching
- 19 features. And they don't -- haven't shown that those features
- are all the same. And in fact the one item Petitioner had
- 21 pointed to that they talked about as being the same was this
- 22 (indiscernible) where they did specify a nonwoven, but that is
- a nonwoven that's used on the sides, not as the backsheet. So
- it doesn't give them some correlation from the backsheet from
- 25 the Karami '626 to the Karami '772.

1 So our response to that is they haven't actually 2 shown that they're the same nonwoven, and they haven't shown, 3 more importantly, that what you're selecting from Karami '626 4 necessarily would have engaged the fasteners when used in the 5 Karami '772-Benning diaper. I understood Petitioner to now 6 agree that that is an inherency issue, and inherency requires 7 not just that it be possible, not that it even be probable, 8 but it has to show that it would necessarily flow. And they 9 haven't shown that the Karami '626 diaper is the exact same 10 nonwoven that Karami '772 is using in their stay-away zone. 11 JUDGE JUNG: Okay. 12 MS. DALEY: So it can't be evidence that it would 13 necessarily be able to engage fasteners particularly when 14 they've picked a 20 gsm nonwoven from Karami '626 supposedly 15 that isn't designed to engage fasteners. You can't say Karami 16 '626 is saying that necessarily engages fasteners because 17 they're not using it on the backsheet of the T-shaped diaper 18 to engage fasteners. 19 JUDGE JUNG: Okay. Sort of a follow up. Earlier 20 you talked about level of skill in the ordinary art and that 21 it's probably within ordinary skill to pick the correct 22 combination of nonwovens and fasteners so that the diaper will 23 stay on. So this hypothetical person of ordinary skill in the 24 art is looking at Karami '626 and trying to modify Karami '772, 25 isn't it within skill to just pick the correct fastener and

- 1 the correct corresponding nonwoven that will keep the diaper
- 2 fastened on -- keep the modified Karami '772 diaper fastened on
- 3 a user?
- 4 MS. DALEY: One of ordinary skill, if they wanted
- 5 to design a diaper to keep the fastener on a user they would
- 6 be able to probably pick parameters and do that. But the
- 7 question is what is the teaching in terms of how do it and so
- 8 what we have with this stay-away zone in Karami '772 is it is a
- 9 stay-away zone. It is something where you don't want to
- 10 fasten the diapers there, but they're saying it inherently
- 11 could be able to do it. And so what they haven't shown is why
- one of skill in the art would have sought to do that or that
- 13 it inherently does it. They're starting from a premise where
- 14 you have a stay-away zone, but now we're going to modify it so
- 15 I can make sure that it isn't a stay-away zone. And so I
- don't think that the question is wrong as to whether somebody
- 17 could do it, the reason is why would they do it.
- 18 And also, what Petitioners have really failed to do
- 19 is saying what is that combination. They haven't identified
- what that actual nonwoven is. Sure, once you -- one of skill
- 21 might be able to get there, but they haven't said what they're
- even alleging the nonwoven -- that one of skill has got to.
- 23 They said they -- all they have to do is just say nonwoven and
- since one of skill can do it they've shown that it would have
- been obvious. That's not how obviousness works. They have a

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- 1 proposed -- it's their burden to propose a combination and to
- 2 say exactly what that combination is and what that nonwoven is
- and that it necessarily -- the nonwoven they have shown that
- 4 one of skill in the art would have chosen to do would
- 5 necessarily engage fasteners at the stay-away zone, and they
- 6 haven't done that, and I don't think it's enough to just say
- 7 we're going to use a conventional nonwoven because that
- 8 doesn't give you enough information to know that it would
- 9 necessarily engage fasteners.
- 10 JUDGE JUNG: All right. I think my questioning has
- kind of driven you off your presentation, but if you want to
- 12 continue on with this first --
- MS. DALEY: No, it's more helpful.
- JUDGE JUNG: -- proposed combination, and then move
- onto your second.
- MS. DALEY: I appreciate that.
- JUDGE JUNG: I'll just save my questions for the
- second combination until you get there.
- MS. DALEY: Okay. But no, if you have others I'm
- 20 happy to discuss them. Okay. So -- well, I'll just touch a
- 21 little bit -- so what I was planning to -- thought it might be
- worth doing is talking a little bit about the background of
- 23 the diapers and some of this we've done so if I start even on
- slide 2. I did want to note that there are three different
- 25 basic types of diapers, and I think it's important to

- 1 understand this because they have different uses, and they're
- 2 designed differently.
- 3 And so looking at slide 3 would be what we've
- 4 talked about is the T-shaped diaper, and this really is a
- 5 different design than the conventional diaper, and it's called
- 6 a belt diaper and when using this T-shaped diaper the long
- 7 wings of the belt are overlapped -- of the wings are
- 8 overlapped so they form a belt and then the body of the diaper
- 9 is passed through the legs of the wearer and it hangs from
- 10 that belt. And so everything is engaging the belt and the
- weight of the diaper is on the belt. And then slide 4 shows
- the conventional diaper which we've talked about briefly that
- has the four side parts where the back side parts move around
- to engage the front. And another type of diaper in slide 5 is
- 15 the pull up diaper which kind of operates according to -- like
- 16 underpants.
- But I also wanted to talk a little bit about how
- 18 nonwovens are made, and Mr. Butterworth in Exhibit 2004
- discusses this in paragraphs 100 to 104. But basically to
- 20 create a nonwoven you start by creating these sheets of fibers,
- and it can be done in a number of ways, but spunbond is I think
- 22 what has been referenced the most, and it's frequently used, and
- 23 that's created by excreting a molten thermoplastic onto a belt
- 24 for a moving screen. So you extrude a thermoplastic onto a
- 25 moving screen, and heated gas is used to extrude it into either

1 randomly or evenly distributed manner.

2 But at this point you have basically a sheet of 3 loose fibers, and you need to do something to join them 4 together to give them strength. It wouldn't at this point be 5 able to engage fasteners and so this is where you end up 6 having to join them or bond them together, and there are a 7 number of ways to do this bonding of the fibers so that 8 they're strong enough to engage fasteners because you have 9 this sort of kind of dual issue that when you're creating 10 these nonwovens you want to make them strong enough that 11 they'll stand up but also have some ability to have a surface 12 area that can engage hooks of a fastener. 13 So one way to bond is mechanical bonding with a 14 physical entanglement or through like needle punching or 15 through a hydroentanglement that causes the fibers to 16 interlace. Another way to bond them is thermal bonding such 17 as through like calendaring and embossing, and this is when you 18 use heat to fuse the fibers together. So like for instance 19 for calendaring you're going to run the surface through heated 20 rollers. 21 But each of these different techniques have an 22 impact on the nonwoven and the amount of fibers that are 23 available to be snagged. So you need to design them or have 24 to engineer them to be able to snag the nonwoven. For 25

instance, the thermal treatments can sometimes melt the

- 1 nonwoven so that it's smoother, and the fibers are tied down a
- 2 bit, and there's not enough there to be snagged so you're going
- 3 to have to do something further to the nonwoven so that they
- 4 can engage fasteners.
- 5 And there are also finishing treatments that can be
- 6 used and Mr. Butterworth explained this in paragraph 102 of
- 7 Exhibit 2004, you know that once the fabric has been bonded
- 8 and formed you can use finishing treatments to make it
- 9 suitable for whatever your end is, and one of those is
- laminating a film to it, and you can do that through wet or dry
- lamination. You can do an adhesive applied to bond the film.
- With dry lamination it will be like a heat sensitive material
- that can then use heat to form it to it. And the Beckert
- patents explain that this -- particularly even through this
- 15 lamination process you can laminate a film to the nonwoven, and
- that can make it be less receptive to engaging fasteners, or it
- 17 can be used to increase the nonwoven's ability to engage
- 18 fasteners.
- 19 You know, and for example in the '398 patent which
- 20 is Exhibit 1 in the -01478 proceeding, it discusses in column 8
- 21 that many of the lamination methods impair the plushness of a
- 22 nonwoven component reducing its retaining forces, but it
- 23 explains that if you use a foil laminate that can be
- 24 temperature treated you can cause the foil to shrink which
- 25 causes the nonwoven it's laminated to kind of buckle and

- 1 raise up and that gives you more area in which the fasteners
- 2 can engage. So it's a way of increasing its retaining forces,
- 3 but you're not actually increasing its basis weight or
- 4 anything. You've actually engineered it through this
- 5 lamination process to have better retaining forces.
- 6 And if we turn to slide 7, and this is something
- 7 that Mr. Butterworth explained that there are many factors, and
- 8 all of these factors impact how and whether a nonwoven can
- 9 retain a fastener. And there's all of these factors which
- are, and they mention a lot here, which is the fiber cross-
- sectional shape, the crimping, the diameter of it, the density
- of it, the thickness, how is it bonded, thermal stabilization,
- 13 the bonding density of the pattern, the depth of the bonding,
- 14 what's raised. There's just many factors that can impact the
- end nonwoven and how well it can engage fasteners. And basis
- weight is a factor, but it's just there's many other factors as
- 17 well. And this is something that Mr. Jezzi on slide --
- JUDGE JUNG: But Ms. Daley, do you think Mr.
- 19 Butterworth would agree that if you held all of these other
- 20 factors constant between two different nonwovens, the only
- 21 difference being basis weight, would he agree with Mr. Jezzi's
- statement that the heavier basis weight or the higher-basis-
- 23 weight would probably result in a greater retaining force than
- 24 the lower-basis-weight?
- MS. DALEY: I would think he would say it could.

- 1 But there are other things even just with the basis weight as
- 2 to what the density of it is and even how thick it is and
- 3 sometimes if it gets too thick they can't engage, and that's
- 4 even what he's talking about with the coarseness of the
- 5 fibers. And so I would think he would say that could, it
- 6 could be, but I don't -- he wouldn't say that it would
- 7 necessarily because there are other factors that can come into
- 8 play in terms of what that nonwoven is and what it's
- 9 ultimately -- how that nonwoven was designed.
- 10 JUDGE JUNG: Thank you.
- MS. DALEY: And looking at slide 8. I just wanted
- to demonstrate that Mr. Jezzi -- it's a sample of some of Mr.
- 13 Jezzi's testimony where he acknowledges that factors other
- 14 than basis weight can impact how well a nonwoven can engage
- 15 fibers, and he acknowledged that you can use an embossing
- pattern to either enhance or detract how a nonwoven engages
- 17 fibers. He also testified that the nonwovens could be
- 18 engineered through some post-treatment to engage fibers better
- such as heating, ring rolling, corrugating. And he testified
- you could engineer the nonwoven to be less receptive by, you
- 21 know, through embossing or other methods. So there really is
- 22 no dispute that there are factors other than basis weight that
- 23 can impact the retaining forces of a nonwoven.
- And I also wanted to mention on slide 9, if you
- 25 could turn to slide 9, again there was a lot of discussion of

- 1 the conventional nonwoven and what Petitioners have selected
- 2 as a conventional nonwoven. And Mr. Butterworth explained
- 3 here on the left that there really is no such animal as a
- 4 conventional nonwoven, that all nonwovens are different, and
- 5 that there are nonwovens that you can buy that will engage a
- 6 hook-type fastener, there are a lot of nonwovens that are made
- 7 that will not engage, and there are some that might engage
- 8 some but not sufficiently or might not have the range or the
- 9 minimum level. And so there's a notion that there's some sort
- of kind of conventional nonwoven that's just going to work
- isn't true. There is no real type of conventional nonwoven.
- 12 In fact, nonwovens are engineered for specific purposes.
- 13 And, you know, this is recognized by prior art that
- 14 Petitioner has relied on. For instance, Karami '626, which is
- Exhibit 1004, and I don't have a slide on this, but it says in
- paragraph 68, for instance, that the number of fibers, the
- extent to which they're bonded together in a nonwoven provide
- the strength necessary to provide a high level of shear
- strength. And in paragraph 69 it says that the pore size in
- 20 the nonwoven, that is the size of the interstices formed by
- 21 the fibers, typically affects the peel strength. And again,
- there is a patent to Jacobs that Petitioner has cited, Exhibit
- 23 1007. And again, Jacobs is describing this process on
- 24 how -- describes a process on how a laminate can improve
- 25 retaining forces by heating the laminate to it. And again, it

- 1 raises this issue of shrinkage of the film layer it says
- 2 causes the fibrous layer which has the lower latent shrinkage
- 3 than the film layer to gather up and bulk up and provide
- 4 adjacent bond sites. And it calls it a three-dimensionally
- 5 texturized laminate improving the textural properties of the
- 6 laminate. So, you know, even a lot of the prior art that
- 7 Petitioner relies on notes that there are a lot of ways to
- 8 engineer or to change the retaining forces of a nonwoven.
- 9 And I did want to turn to the (indiscernible), and
- we went through the claim language so I'll skip that but in
- slide 14 again -- and this is just where they summarize the
- invention, and I had said this earlier that what it's trying to
- do is to have secure engagement, not necessarily -- not size
- 14 adjustability. And what they have found is these differing
- retaining forces where they can both secure the diaper on the
- wearer provide that secure engagement and surprisingly
- encourage the proper securement of the diaper. And the patent
- also gives you the specific retaining force ranges, these
- 19 over-abdomen retaining force ranges that help you achieve
- 20 that.
- 21 And on slide 15 I have a -- there's a Figure 1 of
- the '398 patent and I wanted to note that you see that it's
- 23 marked (40) there are hashmarks, and in the specification they
- indicate that's an embossing pattern but the '398 patent
- 25 expressly says that embossing pattern extends across the

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- 1 entire diaper. That's not present in the Karami '772 where it
- 2 used the hashmarks. It doesn't actually say that it's
- 3 representative of size or how it's done. And I think what
- 4 this also shows is the use of hashmarks in patents is common
- 5 as a kind of general pointing but it's not necessarily a size
- 6 representation. And I also wanted to point out for the -- so
- 7 one of the --
- 8 JUDGE POWELL: Sorry. This is Judge Powell. I'm a
- 9 little slow interjecting. When we're on the subject of
- 10 hashmarks and the drawing, I think I'm on the same page as you
- 11 likely with respect to the drawing, but if we turn to your
- slide 28, what would you say if I think maybe the sentence in
- paragraph 53 of 772 that begins with "alternatively", the text
- itself possibly indicates that there are -- that the front
- 15 waist portion includes water-jet treated portions that are not
- part of the stay-away zone? So what would your response to
- that be? I guess is my question on the point about how big is
- the stay-away zone on the front waist portion?
- MS. DALEY: Sure. Well, Karami '772 doesn't
- describe what this outside of the stay-away zone portion would
- 21 be or how big it would be. So it doesn't actually describe
- 22 that. It doesn't -- Karami '772 doesn't suggest using that
- part of the diaper to engage fasteners. It never
- 24 teaches -- never suggests engaging fasteners to the stay-away
- 25 zone or this other part of the containment assembly outside of

- 1 that. And so what you don't know from it -- it isn't showing
- 2 that you actually even have a sufficient area in there in
- 3 which to engage fasteners because it doesn't teach doing that.
- 4 And you can look at the closures they provided there that
- 5 there doesn't even look to be -- which I don't think is
- 6 representative of what the hashmarks are, but even what's
- 7 represented, there's not enough room there to engage the
- 8 fasteners. So I just don't think it sees Karami '772 as
- 9 seeking to engage fasteners there.
- But it's also I think important to remember that
- 11 Karami '772 doesn't use different wings, and so in Karami '772
- all of those region, even this region outside of the stay-away
- zone within the containment assembly, would have the same
- 14 retaining forces. And so what we have with Petitioner's
- 15 combination is trying to remove it so you just have a little
- sliver that's going to have maybe some different retaining
- forces, and you haven't shown that that region -- what that is
- that it's going to actually lower retaining forces or that
- 19 little region is enough to secure the diaper on the wearer.
- And Your Honor, on this point I would actually like
- 21 to make one other point about at least claim 1 of the '398
- patent which I believe was on slide 10. Yes. Up at the very
- 23 first part of that in claim 1 where it talks about the chassis,
- 24 it also says the entire area -- and this is about one, two,
- 25 three, four lines down -- it says wherein the entire area of

- 1 the outer face of the chassis is constituted by a first
- 2 nonwoven material. And so the '398 patent expressly requires that
- 3 this chassis area be all of a single nonwoven, and I think that
- 4 would also be different than having these two different
- 5 regions where you've created two different nonwovens through
- 6 your treatment or your untreatment. So I had meant to raise
- 7 that earlier, but I just wanted to say that I think that that
- 8 claim has its own distinction from this region outside of the
- 9 stay-away zone.
- JUDGE POWELL: Thank you. And sorry for the detour
- 11 there.
- MS. DALEY: No. Thank you. I welcome all the
- 13 questions. If you have questions I'd like to answer them. So
- 14 thank you. And there were a couple of other -- well, since
- we're on Karami '772 I'd like to turn to slide 22. And again,
- slide 22 here is a statement -- on the left side here in
- paragraph 3 was similar to what I had read in Karami '626 where
- 18 it says that conventional woven or nonwoven articles had
- 19 affixed there to a mini loop fastener element strip. So if
- 20 this conventional nonwoven could always have engaged fasteners
- 21 then there wouldn't have been where they're referring to the
- 22 conventional nonwoven as having used these fastener element
- 23 strips. So again, I think this notion of some conventional
- 24 nonwoven is misplaced.
- 25 And what Karami '772 says in paragraph 25 is that

- 1 what it's doing to eliminate the use of these mini loop
- 2 fastener strips is they're able to securely attach to a bonded
- 3 nonwoven surface that has been subject to water-jet treatment
- 4 or endure aperturing. And Petitioner has made the argument
- 5 that Karami '772 has some other embodiment in there that's not
- 6 even treated at all, and we would disagree with that. And in
- 7 fact if you look at slide 24 in paragraph 42 there's a
- 8 statement that water-jet treating and/or aperturing the
- 9 nonwoven wings obviates the need for the corresponding loop
- type landing zone to mate with hook-type fasteners. And so
- they expressly say it's the water jet treatment that's
- required to obviate the need for the landing zone.
- 13 And they say again that it's the treatment that
- enables it to be securely fastened. And, you know, they say
- 15 this throughout that it's the -- the nonwoven is treated so
- that it can securely fasten and in fact they call this the
- inventive concept, and they say that three times. So I think
- 18 to suggest that, you know, that Karami '772 has some
- 19 alternative diaper that's just not treated at all is just not
- 20 consistent with what Karami '772 is doing. The whole purpose
- 21 of it is that it wanted to create a nonwoven that could
- 22 engage fasteners.
- And turning to slide 27. I did want to talk about
- 24 the table a little bit because that had come up. And there's
- 25 been some discussion about -- you know, and the fact that

- 1 Karami '772 thought you needed to treat it was he conducted
- 2 tests to show that you could do this to actually get enough
- 3 peel strength in order to remove the loopless fastening
- 4 elements and the testing -- I think as everyone has said, the
- 5 tests aren't well described. They don't say how it's
- 6 modified. But there was a discussion about what can you use
- 7 those values for, and I believe Petitioner says you can use
- 8 them within each other to represent what they are to one
- 9 another. I would submit if you're going to use Karami '772's
- 10 numbers then it is actually fair to also use them to what
- 11 Karami '772 says it's seeking to achieve. You know, it gave
- minimum shear and peel forces, and so I think using its numbers
- comparing it to its own number is a fair use.
- But what this really shows is at least from what
- 15 Karami '772 is teaching is that it's showing that the different
- 16 nonwovens with different treatments cause different retaining
- 17 forces, and there are examples where the -- you can have a
- lower-basis-weight nonwoven have higher retaining forces than
- 19 a higher-basis-weight nonwoven, and that's just shown from the
- 20 tests that are done here, and even Petitioner said you can
- 21 compare those kind of numbers to each other.
- JUDGE POWELL: One more -- this is Judge Powell
- again. Sorry. Another detour. Perhaps somewhat of a strange
- 24 question. If we with respect to Karami '772 and you
- acknowledged that claim 1 of the '788 patent is broader in some

- 1 sense than the other ones. If we construe the retaining
- 2 forces between said mechanical closure means and said outer
- 3 face of said main part in claim 1 of the '788 patent, if we
- 4 construe that to mean any retaining force whatsoever, if we do
- 5 construe it that broadly can you still win on the challenge
- 6 based on Karami '772 and the Benning reference?
- 7 MS. DALEY: We have not presented that argument.
- 8 We have said that the -- because we think that for the diaper,
- 9 and what it's saying to work that it would have to -- it would
- 10 be forces to secure the diaper on a wearer. So we have not
- 11 made that argument. But we have argued that claims 2 and 3
- which have the specific retaining forces more clearly call out
- 13 the retaining forces. So, no, we haven't -- we at least have
- 14 not presented an argument under the claim construction that
- 15 you've raised.
- JUDGE POWELL: My hypothetical, right. Okay.
- 17 Thank you.
- MS. DALEY: And then turning back to -- unless you
- 19 have another question. Turning back to slide 28 and the stay-
- away zone and the notion that somehow because they're
- 21 alternates they have different purposes. I think it's clear
- 22 nobody disputes that the first described stay-away zone
- couldn't engage fasteners at all. And, you know, that is to
- show what the intent of the stay-away zone is, that it not
- 25 engage fasteners. And this alternate one is just a simpler

- 1 way of achieving that same goal where you don't have to cut
- 2 something out because, you know, you've done it -- you have a
- 3 nonwoven that's not been treated so it's not going to
- 4 sufficiently engage the fastener so it will serve as a stay-
- 5 away zone. I think the idea that they could -- you could have
- 6 one stay-away zone where you can't engage fasteners at all, and
- 7 then have something be an alternate to that in which not only
- 8 engages fasteners but it securely adheres them onto the wearer
- 9 is just nonsensical. I don't think that that's what you can
- 10 call an alternative something that's completely opposite.
- JUDGE JUNG: Ms. Daley, this is Judge Jung. You
- have about 20 minutes left before you've used your rebuttal
- time. So I know you haven't actually covered the second
- proposed combination, but I just want to warn you that you're
- 15 getting close.
- MS. DALEY: I appreciate that. And I think that it
- 17 would be a good sense to -- well, there is one -- thank you
- 18 for that. One thing I would like to get to is Mr. Jezzi's
- 19 testimony on this point, and I think if we turn to -- you know,
- 20 because we talked some about the inherency of the stay-away
- 21 zone, and under the law of inherency, it's clear you have to
- show that it would necessarily be the case, that it would
- 23 necessarily have those forces. And his testimony is on -- and
- 24 he has testified and then there's been some discussion about
- 25 what his testimony was about that. But at the end of the day

- 1 what he had said is that he really -- that it would be
- 2 possible I think is the language. I'm trying to find my
- 3 specific slide on that.
- 4 It's on slide 45 when he's asked more generally
- 5 about the retaining forces. Because in his first -- the first
- 6 IPR he said he didn't know if it would be sufficient, and in
- 7 this case he had said, "well, I can tell based on table 1 in
- 8 Karami '626." But table 1 he subsequently has agreed that
- 9 it's -- he can't rely on table 1 and so now they're just
- relying on Karami '626. But even after that on the second page
- of this slide on 185 what he says is today I would probably
- say they have sufficient retentive forces to hold the diaper
- next to the body, probably. And that's just not what's
- 14 required of inherency. It has to be necessary. So I wanted
- 15 to make that one last point.
- So turning to Karami '626, slide 47 is one of the
- 17 figures for the T-shaped diaper. And most of the disclosure
- in Karami '626 is about the T-shaped diaper, and I went through
- 19 how that is donned before. You put the wings together to form
- a belt and you pull the diaper up through it.
- And on slide 48 they do show Figures 9 and 10 of
- 22 the conventional diaper but there is literally one sentence
- about it. It's shown as one solitary nonwoven. So there's no
- 24 disclosure in Figures 9 and 10 of differing retaining forces
- or using different nonwovens. That's just not found in Figure

- 1 9 and 10.
- 2 And on slide 49 is a reference to Benning, and what
- 3 Benning was really trying to do is shown on slide 49 and slide
- 4 50 is they're working on the high-speed manufacture of these
- 5 Wings, and so they fold it so that they're more easily
- 6 manufactured.
- 7 And on slide 50 is a Figure 4 of the Benning diaper,
- 8 and this is a -- your more conventional diaper has four wings.
- 9 The wings will be brought around from the back to the front of
- 10 the main part of the diaper. And Benning says that it seeks
- 11 to engage the main part of the diaper.
- 12 And then turning to slide 52 is where it talks
- about the material sections on the side, and it does state very
- 14 clearly that what Benning wants is the side sections to be
- more flexible. And not just more flexible than the chassis.
- 16 It actually says in particular the backsheet. So what they
- want it to be is more flexible than the backsheet in
- 18 particular. So, you know, I think conflating it to saying it
- 19 has to just be more flexible, the chassis, isn't actually what
- 20 Benning is saying there, and they say in particular the
- 21 Backsheet, and so they want it to be more flexible, so that it
- 22 has -- basically softer and skin friendly on the side.
- And on slide 53 is just some testimony of Mr. Jezzi
- 24 where even under his reasoning using softness would tend to
- 25 show a lower-basis-weight. So what Benning is actually

- 1 suggesting is the lower-basis-weight.
- 2 And so, you know, Petitioners have talked about
- 3 wanting to use a higher-basis-weight on the sides for comfort
- 4 and for strength but a higher-basis-weight on the side is
- 5 going to be less comfortable. That's what Mr. Jezzi has said.
- 6 And Benning actually wants it to be more comfortable. So that
- 7 would counsel for the lower-basis-weight. They also say it's
- 8 needed for strength, and they had cited some testimony of Mr.
- 9 Butterworth, but what Mr. Butterworth was explaining there,
- when you're talking about the pulling, and I said this
- earlier, you're talking about pulling the back wings. They
- 12 contain the closures that get moved around to the front and
- those are what gets pulled. And he explained part of the
- problem with using separate wings and chassis is that they can
- get pulled off, and even the Beckert patents teach about
- reinforcing those. So the pulling you're talking about
- there, that's not the fastener engaging surface in the front.
- 18 That's not a reason to use it even on the side parts and the
- 19 front even if you're going to use something that's stronger
- there.
- And the other point is you can have a stronger wing
- 22 to avoid this pulling that actually can't engage fasteners at
- 23 all or very little, and in fact you can use that on the back of
- 24 the wings because they don't engage the back or the side
- 25 parts. They get moved around to the front to engage the front

- 1 of it. So the notion that you're going to change the
- 2 fundamental operation of Benning which is softer sides than
- 3 the main part for some sort of strength is not necessary, and
- 4 it doesn't follow because what Benning really seeks to do is
- 5 to have these soft side parts, and there's really no reason to
- 6 change the fundamental principle to make them actually heavier
- 7 than the main part of the diaper. It would be one thing even
- 8 if you're saying they're going to be the same nonwoven.
- 9 There's no reason to make it actually a heavier. And Benning
- makes a point in there that these side portions are actually
- wider than the belt that you would use on adult diapers. So
- once you've added an even higher-basis-weight to those you've
- really made this a much heavier diaper and less comfortable
- 14 diaper.
- So the main thing I would like to get to is there
- was a lot of talk about paragraph 40, and this is on slide 55
- 17 of Benning '626 -- Karami '626.
- JUDGE JUNG: Ms. Daley, before you move on, I just
- want to go back to the heavier wings versus the lighter
- 20 backsheet. So in Benning it seems to indicate, and Petitioner
- 21 cites to this, that the wings should be around 25 to 50 grams
- per square meter, and then Karami '626, they're proposing to
- 23 modify the backsheets of Benning with Karami '626's and Karami '626
- prefers something that's 20 grams per square meter. So it
- 25 seems like you have met -- or Petitioner has met Benning's

- 1 stated objective of a softer wing because Petitioner is not
- 2 modifying the wings. It's still at 25 to 50. And then the
- 3 backsheet is now down to 20 grams per square meter and now you
- 4 have a difference in basis weight which Petitioner argues will
- 5 lead to a difference in retaining forces. So with that
- 6 understanding how does your argument change that Benning still
- 7 leads away from Petitioner's proposed combination?
- 8 MS. DALEY: Well, one because what it actually
- 9 wants is it to be more flexible than the backsheet. So it
- 10 isn't in that scenario more flexible. And I think one of
- things Petitioner has said is, oh, you want the comfort for
- the backsheet but this actually, and Mr. Butterworth
- explained, that that's the portion that actually has to carry
- 14 a lot of the weight because of it gets the discharge from the
- body, and so I would still say that the principle of operation
- of Benning is that you -- Benning seeks to engage the diapers
- 17 to the front of the diaper and have soft, more flexible sides,
- and what they're seeking to do is completely change that to
- being more rigid sides and engaging on the sides and there's
- just no reason to change this fundamental principle of
- 21 operation of Benning.
- The only real reason -- the stated desire is really
- because they're looking in hindsight based on the Beckert
- 24 patents. They are trying to come up with a reason to use a
- 25 higher-basis-weight on the sides. None of the prior art

- 1 teaches that. The only one that even suggests it, that even
- 2 mentions the higher-basis-weight is the Karami '626 and the T-
- 3 shaped diaper, but in that embodiment they don't use
- 4 the -- and that's what I'll get to and explain. They don't
- 5 use the backsheet of the main part of the diaper to engage
- 6 fasteners. So it is not actually teaching engaging fasteners
- 7 on different basis weights.
- 8 And so I understand Petitioner had said at the
- 9 front that it's well known to use higher-basis-weights on the
- side and that's just not so. They actually don't cite any
- reference to use the higher-basis-weights on the side. This
- is all coming from the claims -- the Beckert patents and the
- claims of the patent trying to match that. And so you're
- 14 taking a diaper in Benning that is designed to engage in the
- 15 front and be soft on the sides and completely flipping it
- around, and there's no real good reason for that other than the
- 17 hindsight analysis.
- 18 JUDGE JUNG: Okay. Thank you, Ms. Daley.
- MS. DALEY: Sure. And so if we turn to paragraph
- 40 in the Benning-Karami '626 slide, and this is in Karami '626,
- and it's this paragraph in which Petitioners have argued this
- shows that the fasteners in the T-shaped diaper can engage the
- backsheet of the main part of the diaper. And I'll note on
- 24 the right side Mr. Jezzi did acknowledge that the actual
- 25 embodiments disclosed in Karami '626 and how it describes doing

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- 1 it is -- they all engage the wing or the belt of the
- 2 fasteners, none engage the backsheet.
- And so in this paragraph 40 it says, "on the other
- 4 hand when the T-shaped brief (12) is made according to the
- 5 present invention so that the fastener elements (41) and (42)
- 6 do not require landing zones and may engage directly with any
- 7 portion of the nonwoven surface constituting the front sheet
- 8 (30), backsheet (32), or wings (40) of the brief the
- 9 accommodation of both small and large-waisted persons by a
- single brief 12 with elastic wings is substantially
- simplified." So it's a set reference to front sheet (30),
- backsheet (32), or wings saying that it's saying it can do the
- 13 front sheet or the back.
- When you look at the rest of paragraph 40 it's
- actually talking about the wings, and the focus is on the
- wings, not on the main body portion. And it explains that
- since the wings are elastic, one side could be pulled more than
- 18 the other side during the process of forming the belt. And I
- 19 don't -- and if you -- I think it's more -- this is really
- 20 explained if you look at the preceding paragraph in paragraph
- 21 39 in Karami '626. And I don't have a slide on that. But
- paragraph 39 states that wings (40) can be made of an elastic
- 23 material and that the, quote, degree of overlap in the
- 24 connection between the wings (40) to form the belt (44) will
- vary with the waist size of the wearer. While a large-waisted

- person may have each of the first pair of fastener elements 42 contacting respective wing (40), a small-waisted person may
- 3 have both the pair of fastener elements contacting a single
- 4 wing (40) which almost completely overlaps the other wing.
- 5 So in this paragraph 39 what they're describing is
- 6 how the T-shaped diaper works with small and large-waisted
- 7 users. The fastener elements (42) are on the front sheet of
- 8 the main part of the diaper. They get pulled up to be put on
- 9 it, and what it's saying for the large-waisted wearer because
- the wings may not fully overlap, those get pulled up, they're
- going to be on each of the wings. And then it's talking about
- 12 how when you have a smaller person the wings overlap more, and
- so the fastener elements are going to attach to just the outer
- wing. So in 39 it's describing again the operation of the T-
- 15 shaped diaper.
- And so going on the rest of paragraph 39 it
- states, quote, "in a conventional T-shaped -- in a conventional
- 18 T-shaped brief this would present a problem in suitably
- 19 locating the loop landing zones, that is the conventional
- 20 theme of fastening elements along the garment facing surface
- 21 (33) each wing (40) if the brief were to be suitable for use
- by both large and small-waisted wearers."
- So this is the paragraph that precedes paragraph 40,
- and what they're saying is what they want to do is eliminate
- 25 those loop landing zones, and what it's saying is where these

- 1 loop landing zones were located that was a surface -- the
- 2 garment facing surface (33) of each wing (40). Actually, I'll
- 3 note that it left out the word "of" so there is a typo there.
- 4 It said garment facing (33) each wing 40 but there should be
- 5 an "of" there.
- 6 So if you actually turn now I think Karami '772 to
- 7 paragraph 74, it specifically says that the backsheet of a wing
- 8 refers to the garment facing surface. So in this paragraph 39
- 9 what it's saying is the loop landing zones were located on the
- backsheet of the wings (40). And so when you get down to
- paragraph 40 it's really not unreasonable to see that -- and
- 12 this is what Mr. Butterworth has explained -- what they
- disclose, what it teaches, and what it's really saying there
- is you can engage any portion of the nonwoven surface
- 15 constituting the front sheet (30), backsheet (30) of wings
- 16 (40). I mean in the previous patent they -- in the previous
- paragraphs they left out the word "of". The petitioner had
- talked about the interstices size, and one of their arguments
- is in one part of the patent it refers to it wrong than it
- does in another part of the patent.
- So the reality is that Karami '626 and the other
- 22 Karami is actually replete with a number of errors. For
- 23 instance, in the abstract Karami '626 says that they want at
- least 60 grams per two inch of shear strength and -- of peel
- 25 strength and at least 1300 grams per two inch of shear

- 1 strength, but yet in another part of the patent they refer to
- 2 wanting 60 grams per square inch and at least 1300 grams per
- 3 square inch.
- 4 I'll also note that peel strength is measured in
- 5 force per length, so when it talks about it in square inch, it's
- 6 wrong. So the reality is -- and you can go through a number
- 7 of these -- is there are many errors in this. And the fact on
- 8 that paragraph 40 you can't take that one sentence where it
- 9 says "or wings" as some disclosure that the backsheet of the
- 10 Karami '626 diaper is used to engage fasteners. It's nowhere
- disclosed, they haven't shown how that would work, and I think
- you look at the paragraphs 39 and the rest of it it's pretty
- 13 clear that -- and as Mr. Jezzi agreed in terms of his
- 14 testimony that the fasteners engage the wings and not the
- 15 backsheet.
- And then again Petitioner has pointed to Figures 9
- and 10 in Karami '626 and those figures again use -- well,
- before I get to that I just want to point out -- so the point
- being of this size adjustability issue is what it's showing is
- you can adjust the size of the diaper by fastening anywhere on
- 21 that same nonwoven surface. It doesn't teach using different
- 22 nonwovens and different retaining forces for size
- adjustability and nor would you. If your actual goal is to be
- 24 able to have secure engagement for a large, or small, or
- anybody you would want that same engagement across. There's

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- 1 no reason that one wearer gets a higher, better engagement
- 2 than the other wearer.
- 3 And, you know, Damaghi shows that because it talks
- 4 about -- you know, it's a single unitary nonwoven, but it talks
- 5 about that you can have the dangers of too much adjustability
- 6 so it creates a non -- it creates a stay-away zone so that you
- 7 can engage there. So the point being referring to size
- 8 adjustability is not a teaching of different basis weights, and
- 9 it's not a teaching of using different retaining forces. And
- 10 it cited no reference that teaches size adjustability with
- different retaining forces or different basis weights.
- 12 JUDGE JUNG: Okay, Ms. Daley. You're one minute
- 13 away from using your rebuttal time.
- MS. DALEY: I know. That's why -- I was just
- trying to see if I had any last comment to make, and I
- think -- well, and I guess the one last comment I will make is
- on -- for this one, I understood Petitioner to say that
- they're not relying on inherency for the Karami '626 and Benning
- and would agree because neither of those references
- 20 teaches the different retaining forces or that they secure the
- 21 diaper on the wearer. But in fact on page 60 on the slides
- 22 the petitioner themselves characterize the cogent factual
- 23 issue as to whether the claimed retaining forces would have
- 24 naturally resulted from the Benning-Karami '626 diaper, and they
- 25 cite PAR Pharmaceutical v. TWi and that is one of the cases on

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- 1 obviousness -- inherency in an obviousness case. And the
- 2 notion of the naturally resulting, what Par and the other
- 3 cases say is that's the notion that it has to necessarily
- 4 result from, not just be possible or probable. So I would
- 5 submit that the Karami -- the Benning-Karami '626 also requires
- 6 inherency to show those retaining forces and the securing the
- 7 diaper on the wearer and that they haven't shown that it would
- 8 be necessarily so.
- 9 JUDGE JUNG: Thank you, Ms. Daley. You have 14
- 10 minutes left for your surrebuttal.
- 11 MS. DALEY: Thank you. Thank you.
- 12 JUDGE JUNG: All right. Mr. Albright, your final
- 13 12 minutes for any rebuttal. Mr. Albright, we can't hear you.
- 14 Are you talking now?
- MR. ALBRIGHT: Thank you. I was muted. Sorry,
- 16 Your Honor.
- 17 JUDGE JUNG: Okay.
- MR. ALBRIGHT: And so I guess I would like to start
- 19 by seeing if anyone had any questions or any topics they would
- 20 like to hear about specifically or I can just dive right in.
- JUDGE JUNG: I have no questions at this point.
- MR. ALBRIGHT: Okay. So one of the first things
- 23 I'd like to address is Karami '772's Figure 8. And there was
- some discussion from Patent Owner that that figure does not
- 25 teach portions of the backsheet over the containment assembly

- 1 that are treated. But if you look at Figure 8, that's exactly
- 2 what it shows, and there are a litany of cases explaining that
- 3 even when figures are not to scale you cannot ignore that
- 4 which they clearly show, and it clearly shows treated portions
- 5 around the stay-away zone in the main part. Now, the figures
- 6 aren't to scale so we couldn't take a position like, oh, those
- 7 portions are two inches wide or -- you know, we couldn't give
- 8 them a specific dimension, but their existence, the treated
- 9 portions of that backsheet, are clearly shown in the figure
- and therefore that teaching of their presence simply can't be
- 11 ignored.
- 12 And then I'd like to address the conventional
- 13 nonwoven issue in a little more detail. So we've talked today
- about Karami '772, Karami '626, and Damaghi, and these are all
- references that are using that binder fastener to engage what
- they characterize as conventional nonwovens to secure a diaper
- on a wearer's body. And specifically, let's go -- I'd like to
- look at slide 11. And we asked Mr. Butterworth about Karami
- 19 '626, and what he said is Karami '626, when he says conventional,
- 20 he's talking about spunbonded nonwovens. That's like every
- 21 nonwoven in every combination that we put forward is a
- spunbonded nonwoven. And that was Mr. Butterworth's
- 23 understanding.
- 24 And I know today Patent Owner includes a slide 9,
- so Patent Owner's slide 9, where Mr. Butterworth took a

- 1 different position on what conventional is. But here what he
- 2 says is there are conventional nonwovens that will not engage
- 3 with a hook-type fastener. And so he's attributed a breadth
- 4 to conventional here that pushes it totally outside the bounds
- 5 of the references that we're talking about. Karami '626,
- 6 Karami '772, Damaghi, those are all fastener engaging
- 7 conventional nonwovens. And so if you interpret conventional
- 8 to include nonwovens that specifically won't engage fasteners,
- 9 that's just not a relevant opinion.
- We heard a new example -- I guess not new, it was
- in the Sur-Reply, but Patent Owner reiterated the example of a
- 12 nonwoven that had a higher-basis-weight but lower retaining
- forces than a nonwoven having a higher-basis-weight, and I
- believe the example is -- let me pull it up -- from Karami
- 15 '772's table 1, and I think it's discussed here on Petitioner's
- slide 25. You can have a 20 gsm nonwoven that's treated, and
- it will have higher retaining forces than a 33.9 gsm nonwoven
- that's untreated per Karami '772's table 1.
- But as we discussed earlier today, that comparison
- 20 is completely irrelevant to any combination that we have put
- 21 forward. The Benning-Karami '626 diaper doesn't have treated
- 22 nonwovens, and in the Karami '772 diaper our first position for
- 23 the backsheet is the stay-away zone which is untreated versus
- 24 the treated wings, and of course the treatment there is going
- 25 to increase the wing retaining forces so it supports our

1 position.

2 And our second position is the areas around the 3 untreated portion that are treated in the backsheet, and when 4 you have a lower-basis-weight nonwoven in the backsheet for 5 comfort and a higher-basis-weight nonwoven in the wings for 6 strength, the higher-basis-weight nonwoven is going to have higher retaining forces as the '788 patent tells us is 7 8 essentially ensured. 9 So still there's not a single even allegation of a 10 parameter that could be varied within any of these 11 combinations that would defeat the positive correlation 12 between basis weight and retaining forces that Mr. Jezzi 13 testified to supported with objective documentary evidence, 14 Gehring and Gorman, that the '788 patent tells us is 15 essentially ensured. And then when you look at the laundry 16 list of parameters that they set forth, and you look at the 17 patent, the patent attributes no significance to those 18 parameters. I mean the breadth that we saw earlier with the 19 nonwovens, any nonwoven that contains at least one initial 20 component of a thermoplastic polymer. 21 And so at the end of the day the only evidence is that in the Benning-Karami '626 diaper, in the Karami '772-22 23 Benning diaper, when you go to those higher-basis-weight wings 24 for strength and a lower-basis-weight backsheet for comfort 25 and of course all of them are fastener engaging nonwovens

- 1 because the references themselves tell us, you're going to
- 2 have higher retaining forces in the wings than you do in the
- 3 backsheet. And Patent Owner hasn't presented any evidence to
- 4 defeat that.
- 5 Another thing that Patent Owner brought up was
- 6 allegedly we have not presented any evidence that higher-
- 7 basis-weight wings were desirable and a lower-basis-weight
- 8 backsheet other than Karami '626 I think the argument was, but
- 9 Karami '626 of course is only about a T-shaped diaper
- which -- I mean we saw earlier it's got the Figures 9 and 10
- diaper. It's got the broader description. It's about pull-
- 12 ups. It's about conventional diapers. It's not just about T-
- 13 shaped diapers.
- But setting those issues aside, the Petition
- absolutely advanced evidence supporting the notion that
- higher-basis-weight wings were desirable for strength and a
- 17 lower-basis-weight nonwoven was desirable in the backsheet for
- comfort, and that's on the petition at page 42 and I'm looking
- 19 at the -1477 proceeding. And here we cite Exhibit 1006 which
- 20 is Kleinschmidt who explains that side panels deliver the
- 21 material strength needed for securing a fastening device to
- 22 the diaper and lower-basis-weight regions deliver softness
- that are comfortable to the wearer's skin. And I think there
- 24 what Kleinschmidt is talking about, you want higher-basis-
- 25 weight side parts and lower-basis-weight cuffs. But still

- 1 there's the relationship between basis weight, strength, and
- 2 comfort.
- We have Exhibit 1022 which I believe is Young who
- 4 explains that when you increase basis weight softness tends to
- 5 decrease. Exhibit 1020, I'm not sure exactly what that one is
- 6 offhand, but lower-basis-weight nonwoven webs are more
- 7 susceptible to having fibers pulled out so where you're going
- 8 to be fastening your -- or attaching your fasteners where
- 9 there's the high forces you're going to want a higher-basis-
- weight. And then on the other end we have all of this
- evidence that explains that really 10 to 30 gsm with 20 gsm
- being an exemplary sweet spot, that's where you're going to
- get the cloth-like feel. That's where you're going to get the
- 14 user comfort for your backsheet. And so we have quite a bit
- of evidence that supports our position that you would -- a
- 16 POSITA would be motivated to use higher-basis-weight wings and
- 17 a lower-basis-weight backsheet.
- And the last point I'd like to make is that the
- 19 petition established that the materials in the '788 patent's
- 20 example, the commercially available nonwovens that they used
- 21 and the commercially available fastener, which again is the
- same one in all the Karami's, the binder 445 fastener, we
- establish that those were obvious choices, and we didn't do
- 24 that working backwards from the patent. Every parameter of
- 25 those materials -- and I'm going to point us to a slide.

- 1 Let's look at slide 71, and let's just start with material Z.
- 2 So material Z in the '788 and other challenged patents example
- 3 is the fastener, and there's that binder fastener again, and
- 4 it's preferably 20 by 25 millimeters in dimension. Well,
- 5 that's Karami '626's preferred fastener in its preferred size
- 6 which is there for at least an obvious choice for a fastener
- 7 because Karami '626 provides it.
- 8 And then we have material Y -- and let me make sure
- 9 I don't confuse this. So material Y is the backsheet
- 10 nonwoven. It's laminated to the film. And it's a 20 gsm
- spunbond nonwoven. Well, that's what Karami '626 prefers with
- polypropylene fibers. Karami '626 doesn't tell us what the
- 13 fiber material is but Karami '772 which is also a spunbond with
- 14 the same basis weight for engaging a fastener tells us that
- polypropylene was a suitable choice, and therefore at least
- obvious choice. And also, the exemplary material Y in the '788
- patent has Karami '626's preferred fiber size and embossing
- area. So literally every parameter for their exemplary
- backsheet nonwoven is met by Karami '626. So that covers the
- 20 fastener and the backsheet.
- We get down to -- and we've already covered that.
- 22 Go to slide 74 please. And material X, that's the wing
- 23 nonwoven. Well, as we explained in the Petition, one
- 24 implementation of Karami is with the wings comprising the same
- 25 type of nonwoven as just with a higher-basis-weight than the

- 1 backsheet. That's an implementation of Karami '626 that was
- 2 advanced in the Petition and, as we've just described, the
- 3 commercially available nonwoven backsheet that the '788 patent
- 4 lists in its examples is Karami '626's preferred nonwoven for
- 5 engaging the same fastener that the '788 patent uses. And if
- 6 you use the same material just with a different basis weight,
- 7 well you're going to end up with the '788 patent's preferred
- 8 wing material as well, 30 gsm polypropylene spunbond nonwoven
- 9 with a fiber thickness of (indiscernible) which falls within
- 10 Karami's parameters and with the embossing area as well.
- 11 And I guess I said that was the final point. I'd
- 12 also like to point out that we have -- and I mentioned this
- earlier, but I just wanted to be clear. We have a Benning-
- 14 Karami '626 Stupperich combination which does not involve
- inherency in any way, and that combination, very briefly,
- starts from the Benning-Karami '626 combination where you want
- 17 a higher-basis-weight wing and a lower-basis-weight nonwoven.
- Well, Stupperich provides two nonwovens, one having a higher-
- basis-weight and one having a lower-basis-weight. And what's
- 20 nice about Stupperich is he discloses that his embossing area
- 21 or his bonding pattern strikes a balance between re-
- 22 fastenability and reliability. So it's taught as a nice
- 23 nonwoven if you need a nonwoven for engaging fasteners.
- Well, and that's exactly what the Benning-Karami
- 25 '626 diaper is in search of, and we contend it would have been

- 1 obvious to use the higher-basis-weight nonwoven disclosed in
- 2 Stupperich on the wings and the lower-basis-weight nonwoven
- 3 disclosed in Stupperich on the backsheet, and Stupperich
- 4 specifically -- and by the way, this is Patent Owner's own
- 5 prior art patent. Stupperich specifically provides the
- 6 retaining forces recited in the claims for that higher-basis-
- 7 weight nonwoven and lower-basis-weight nonwoven measured in
- 8 the same way and with the same unit. So there is absolutely
- 9 no inherency involved in that combination.
- And Patent Owner's answer to Stupperich, if we go
- 11 quickly to slide 76, is much like their attack on Karami '626.
- 12 It's another belt-diaper argument. Stupperich teaches that
- fasteners engage the belt. They don't engage the front of the
- 14 diaper. But just even looking at Stupperich, the first
- sentence of Stupperich is abstract shows us, just like Karami
- 16 '626's broader teachings, that Stupperich isn't limited to T-
- shaped diapers. The invention relates to a loop forming
- 18 nonwoven material in particular for disposable hygiene
- 19 articles such as diapers, of course belt diapers, that's the
- T-shaped, incontinence articles and pads. So Stupperich's
- 21 teachings are broader than Patent Owner is willing to give
- 22 Stupperich credit for.
- And then their final challenge to Stupperich on
- slide 77 is that we don't acknowledge that Stupperich
- describes the two different nonwovens as different embodiments

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IPR2020-01477 (Patent 8,152,788 B2)
IPR2020-01478 (Patent 8,784,398 B2)
IPR2020-01479 (Patent 8,771,249 B2)
IPR2020-01480 (Patent 8,708,990 B2)
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- or discuss whether, how, or why they would have been combined.
- 2 But as I mentioned earlier, this is all in the Petition at 88
- 3 to 89. Stupperich's nonwovens are what Karami calls for.
- 4 They're fastener engaging nonwovens that secure a diaper on a
- 5 wearer. Motivation is a POSITA would have sought the
- 6 advantageous balance between closing reliability and
- 7 durability that Stupperich is non-willing to provide. And
- 8 that's specifically stated in Stupperich.
- 9 And then it would have been obvious -- so now we've
- 10 got Stupperich in our diaper. Well, how do we justify the
- higher-basis-weight in the wings and the lower-basis-weight in
- the backsheet? Well, it's the same as we've been discussing
- all day. The higher-basis-weight nonwoven is going to provide
- 14 enhanced strength and diaper retention. The lower-basis-
- 15 weight nonwoven is going to provide wearer comfort and cost.
- 16 And finally, as another motivation, this
- modification would have maintained Karami '626's simplicity of
- using otherwise similar nonwovens that have different basis
- 19 weights with the wings and backsheet. And with that I am
- 20 ready for any questions, and I am otherwise done.
- JUDGE JUNG: I have no questions.
- JUDGE POWELL: Nor do I.
- JUDGE SCANLON: No, no questions.
- MR. ALBRIGHT: Thank you.
- JUDGE JUNG: Okay, Ms. Daley. I let Mr. Albright

IPR2020-01477 (Patent 8,152,788 B2) IPR2020-01478 (Patent 8,784,398 B2) IPR2020-01479 (Patent 8,771,249 B2) IPR2020-01480 (Patent 8,708,990 B2) go over by a couple of minutes. You have 16 minutes for your sur-rebuttal. MS. DALEY: All right. Well, thank you. I'll start with I think it was slide 71 of Petitioner, and for that I'll note when we're talking about the claimed retaining force ranges what Petitioner didn't try to do is show that the claimed retaining force ranges would have been obvious when they're going through their material section. And so what they didn't try to do is show that the claims of retaining force ranges would have been obvious. What they did is they went to the Beckert patent, took one of the examples, and said, well, I can find all the aspects of it in the prior art. That's not a proper obviousness analysis. And even when you get to that I would say that they're showing the supposed comparisons. They aren't exactly the same. Beckert has a different embossing pattern. It differs from Karami '626. They haven't actually shown why one of skill in the art would have picked the particular example they're relying on from Beckert in saying which would have made the retaining forces obviousness. So I would say that's not the proper analysis when they're looking

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would say that's not the proper analysis when they're looking at retaining forces, and the fact that they had selected an example from the Beckert patents to try to go find in the prior art shows that they're doing the wrong analysis.

They reference page 42 of their Petition regarding

- 1 whether there is teaching in the prior art of using different
- 2 basis weights in the same diaper for engaging fasteners, and
- 3 you could go through, and I would say that the references that
- 4 they have pointed there don't say that. There was one
- 5 reference to one of the pieces of prior art that has the
- 6 softer cuffs. They want the softer cuffs -- and essentially
- 7 one nonwoven. They want softer cuffs around the legs for
- 8 comfort for the wearer. That's not using it as a
- 9 retaining -- different retaining forces or using it as a
- 10 fastener engaging surface. And I think there's a reference to
- 11 Young which said that the lower-basis-weight is softer, and it
- does say that, and again it's not suggesting actually using
- different basis weights on the same diaper for engaging
- 14 fasteners. So that really isn't taught in any of those
- 15 references that are discussed there.
- 16 Counsel also talked about Karami '772 and the region
- outside of -- in the containment assembly outside of the stay-
- away zone, and they said they couldn't say the size of it
- because that's not disclosed. You know, that's the issue is
- 20 it doesn't actually teach very much about that, and in fact
- 21 it's Petitioner's burden if they're going to rely on it to
- show that the combination would meet the claims, and the fact
- 23 that they can't say what that region would be or what it is I
- 24 actually would submit shows they can't meet the inherency
- 25 requirement because they don't have the information necessary

- 1 even from the reference to make the obviousness or the
- 2 inherency case.
- 3 And Petitioner's counsel again said for the Benning
- 4 and Karami '626 reference combination that the reference to the
- 5 fact that there could be treated nonwovens with higher-basis-
- 6 weights is irrelevant to the combination because they're not
- 7 alleging it's treated. Well, that's part of the problem is
- 8 they haven't actually alleged what that nonwoven is other than
- 9 the basis weight, and it's their burden to show that it -- the
- 10 combination wouldn't necessarily, and I would say inherently,
- meet the claimed combination -- the claimed secure engagement
- retaining forces because the references don't teach that. And
- the fact that they're saying they wouldn't be treated only
- raises a bigger question that it really wouldn't necessarily
- 15 need those retaining forces.
- 16 As I noted, they alleged using the 20 gsm nonwoven
- backsheet from Karami '626 T-shaped diaper, and we just went
- through how that isn't something that is designed to engage
- 19 fasteners. You can't say based on the fact that Karami
- 20 disclosed it in a diaper that it necessarily engages fasteners
- 21 because it is not designed to and was never intended to in
- 22 Karami '626 to engage fasteners. So the fact that Petitioner's
- counsel is acknowledging that that wouldn't be treated or
- 24 nothing would have been done to enhance its ability to engage
- 25 fasteners further shows that they're not going to be able to

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IPR2020-01477 (Patent 8,152,788 B2)
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     IPR2020-01480 (Patent 8,708,990 B2)
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     meet -- they haven't and can't meet the burden of inherency in
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     saying that it's necessarily so.
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           And finally, on Stupperich, I would just note that
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     the specific embodiment, the examples that they have taken
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     from Stupperich are two different embodiments, and they're two
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     embodiments of a T-shaped -- or a belt diaper, a T-shaped
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     diaper. And what they've done is they're going to take one
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     aspect of the belt and put it on a belt and another aspect of
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     the belt and put it on the body of the diaper, and they haven't
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     really said why and haven't sufficiently explained why one of
     ordinary skill in the art would have combined two different
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     embodiments from Stupperich on the nonwoven use on the belt in
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     a conventional diaper such as Benning. And with that, unless
     there's other questions.
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           JUDGE JUNG: I have no questions.
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           JUDGE POWELL: I don't either.
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           JUDGE SCANLON: None from me.
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           JUDGE JUNG: Well, Mr. Albright and Ms. Daley,
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     thank you for your presentation. It's been very helpful to
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the panel to decide these cases. Your cases are submitted and

we are adjourned. Thank you.

(Off the record at 3:59 p.m.)

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