

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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WABCO HOLDINGS INC. AND LAYDON COMPOSITES LTD.,  
Petitioner,

v.

TRANSTEX COMPOSITES INC.,  
Patent Owner.

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IPR2018-01319  
Patent 8,449,017 B2

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RECORD OF ORAL HEARING  
Held on October 29, 2019

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Before BART A. GERSTENBLITH, TIMOTHY J. GOODSON, and  
BRENT M. DOUGAL, *Administrative Patent Judges*.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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The above-titled matter came on for hearing on Tuesday, October 29, 2019, commencing at 1:00 p.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

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

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3 JUDGE GERSTENBLITH: Good morning everyone. We are here  
4 for oral argument in IPR2018-01319, Wabco Holdings and Laydon  
5 Composites Limited versus Transtex Composites Inc.

6 I am Judge Gerstenblith, and let's see, surrounding me on multiple  
7 screens are Judge Goodson on the left side of the screen, and Judge Dougal  
8 on the right side of the screen.

9 Judge Goodson is appearing remotely from California, and Judge  
10 Dougal is appearing remotely from Denver. And, I understand according to  
11 a report from him this morning that it's a good thing that we're here now in  
12 Alexandria because they are in the midst of a big snowstorm in Denver.

13 Starting with Petitioner, if you would please step up to the podium  
14 and enter your appearance for the record.

15 MR. MUELLER: Good afternoon, Your Honors. Wesley Mueller  
16 from Leydig, Voit & Mayer in Chicago representing the Petitioners, Wabco  
17 and Laydon Industries. With me here today is Mr. Michael Minnae, Chief  
18 IP Counsel for Wabco America; Mr. Michael Hartmann, Attorney in  
19 Charge; and my partner, Paul Filbin. Thank you.

20 JUDGE GERSTENBLITH: You're Welcome. And, for Patent  
21 Owner please.

22 MR. RICHEY: Good afternoon, Your Honors. For Patent Owner,  
23 Scott Richey.

24 JUDGE GERSTENBLITH: Thank you.

25 MR. RICHEY: Thank you.

1 JUDGE GERSTENBLITH: I wanted to note for the record that on  
2 Monday, October 21, 2019, a prehearing conference call was held with  
3 counsel for the parties and the panel, and the panel authorized Patent Owner  
4 to be represented at this hearing by Mr. Richey, who is backup counsel,  
5 without requiring the presence of lead counsel, Mr. Caracappa, who I  
6 understand is currently at trial in another location.

7 MR. RICHEY: Thank you, Your Honor.

8 JUDGE GERSTENBLITH: Absolutely. And if either party brought  
9 paper copies of its demonstratives for the Court Reporter, if you have not  
10 already handed them up to him, please do so.

11 I do not need a paper copy unless you really want me to have one  
12 because they are filed, and I have it in front of me here as well.

13 MR. RICHEY: For the Court Reporter.

14 JUDGE GERSTENBLITH: Sure. Thank you. Also, before we  
15 begin, let me just confirm -- I'll start with Mr. Mueller, you'll be presenting  
16 the argument?

17 MR. MUELLER: Yes, Your Honor.

18 JUDGE GERSTENBLITH: Okay. So, I'll start with you just to be  
19 clear. There are no pending motions at this time, is that right?

20 MR. MUELLER: No pending motions.

21 JUDGE GERSTENBLITH: Okay. And do you concur?

22 MR. RICHEY: Yes, Your Honor.

23 JUDGE GERSTENBLITH: Okay, thank you. We set forth the  
24 procedure for today's hearing in our order granting the parties' requests for  
25 an oral hearing, which is Paper Number 20. Each party will have 60 minutes  
26 of total argument time.

1           We will begin with Petitioner who will start with its case in chief.  
2           Petitioner may reserve time for rebuttal. After Petitioner presents its  
3           opening arguments, it will be Patent Owner's turn to respond to those  
4           arguments, and Patent Owner may also reserve time for rebuttal.

5           After Patent Owner's argument, Petitioner will have whatever time it  
6           reserved to respond to Patent Owner's arguments, and thereafter, Patent  
7           Owner will have whatever time it reserved to respond to Petitioner's rebuttal  
8           arguments.

9           I have a timer here that I can set for whatever amount of time you  
10          would like. So, when it's your turn at the podium, if you want to reserve a  
11          certain amount of time, you can tell me, and I can put whatever time you  
12          want. It'll count down and go to yellow when that time is up.

13          I won't forcibly stop you or anything like that. So, you're welcome to  
14          go into your rebuttal time, but that is the reminder that you have crossed that  
15          threshold, so to speak.

16          If you are planning to use demonstratives, which I think both sides  
17          are, please remember -- and I know this is often tricky to remember -- to call  
18          out the slide number, and if there is a figure that we're looking at in the  
19          demonstrative, to please call out that number, so that not only is the  
20          transcript clear, but also the Judges appearing remotely can follow along  
21          with ease. Starting with Mr. Mueller, do you have any questions about the  
22          procedure for today?

23          MR. MUELLER: No, Your Honor.

24          JUDGE GERSTENBLITH: Okay. Mr. Richey?

25          MR. RICHEY: No, Your Honor.

1 JUDGE GERSTENBLITH: Okay. With that, Mr. Mueller, I give you  
2 the floor.

3 MR. MUELLER: Good afternoon, Your Honors. May it please the  
4 Board. We've put up Slide 3 of the presentation, which simply identifies the  
5 institution grounds in this IPR.

6 At the prehearing conference on October 21, the Board asked the  
7 parties to address what it considered to be any differences between this case,  
8 IPR2018-01319, involving the 017 Patent, and the earlier IPR, in which a  
9 final decision was rendered, concerning the 471 Patent.

10 Petitioners believe that there are no significant differences between  
11 the claims in the two patents. They are material in all respects, and the  
12 claims that were determined to be unpatentable in the first trial should also  
13 demonstrate that the claims here are unpatentable.

14 This patent issued from essentially the same specification, which was  
15 in the same chain of applications that led to the 471 Patent. The same prior  
16 art references that were applied in the first trial are also at issue here.

17 There's largely the same arguments and the same evidence that are  
18 before the Board, with some slight differences, but those differences would  
19 not lead to any different conclusion from the conclusion reached in  
20 connection with the final decision regarding the 471 Patent. And  
21 importantly, the Patent Owner here provides no reason to depart from the  
22 decision and the underlying fact findings that were made in the first trial.

23 So, Petitioner believes that the principles of claim preclusion should  
24 actually apply here to avoid the possibility of inconsistent decisions in this  
25 second trial on very closely related patents involving claims that are  
26 materially indistinct.

1 I'd like to go to the 017 Patent and take a look at the claims at issue  
2 and take a look at the claim language. If we can turn to Slide 6 --

3 JUDGE GOODSON: Mr. Mueller, are you aware of any Board  
4 decision applying claim preclusion in one IPR based on a final decision in a  
5 related IPR between the same two parties?

6 MR. MUELLER: Your Honor, there is the *Max Linear* Federal  
7 Circuit decision, which indicates that claim preclusion is appropriate when it  
8 is applicable.

9 We are aware -- although we haven't briefed this issue to this Board,  
10 certainly -- we are aware of an IPR decision -- I don't recall if it was a final  
11 decision -- in which the Board indicated that claim preclusion would not  
12 apply until there was an exhaustion of appeal rights. So, either the Patent  
13 Owner had appealed the case and there was a decision from the Federal  
14 Circuit, or it decided not to appeal its decision.

15 Now, that case is actually in conflict with law in, I believe, the Third  
16 Circuit, and perhaps the Fourth Circuit, which allows for claim preclusion  
17 after a final decision is rendered.

18 So, right now if we apply the decision that was made in the prior IPR  
19 decision, we are in a time period in which the Board would consider that  
20 there is not a final decision with a loss of any rights to appeal.

21 So, it would be unclear that -- or, at least under the legal analysis  
22 applied in the prior decision coming from the Board -- claim preclusion  
23 would not actually attach until there was either an appeal, and/or exhaustion  
24 of appeal right.

25 JUDGE GOODSON: Do you have the name or case number of the  
26 IPR decision you are referring to?

1 MR. MUELLER: We can get it, Your Honor, perhaps when I step  
2 back up in my rebuttal, we can give you the name of the case.

3 JUDGE GERSTENBLITH: Great, thanks.

4 MR. MUELLER: We acknowledge that the *Max Linear* decision, and  
5 the issues of claim preclusion perhaps haven't been as developed in the case  
6 law, either by the IPR or the Federal Circuit. So, it's not entirely clear what  
7 the Board needs to apply, and when it needs to apply it.

8 Petitioners, however, certainly do not waive their right to apply  
9 collateral estoppel to the second case. But, even on the record in this second  
10 case, the Board should conclude, again, that the claims at issue in the  
11 017 Patent are unpatentable.

12 And, if we look at the claim limitations at issue highlighted in yellow,  
13 we've got a resilience strut, that's the same that was in the --

14 MR. FILBIN: This is Slide 6, Your Honors.

15 MR. MUELLER: Yes, Slide 6 of our presentation. We have a  
16 resilient strut again. Again, we have a skirt panel that moves away from -- it  
17 reduces the drag of the trailer, and it contacts a foreign object, and can  
18 recover to its original configuration. The strut is adapted to sustain elastic  
19 deformation; that's the element that's in green.

20 Here we have slightly different wording in which the strut includes a  
21 longitudinal shape variation which is adapted to change a mechanical  
22 strength of the resilient strut; and we'll get to that. That's also shown in the  
23 Layfield prior art. And so, these are essentially the elements of the  
24 independent claims in the 017 Patent that we are looking at today.

25 Let me go on and talk briefly about the Layfield reference. Again,  
26 we've talked about this at length. If I can turn to Slide 13.



1           The starting point for Layfield is that there is disclosure of a skirt  
2 panel that is flexible. And that's set forth at various portions of Layfield,  
3 including at Exhibit 1004, which is the Layfield reference, Column 5,  
4 Lines 51 through 55; a relatively flexible side panel is disclosed there.

5           If we go to Slide 14 in the deck, which is another passage from the  
6 Layfield disclosure, which is found at Exhibit 1004, Column 12, Line 67  
7 through Column 13, Line 4; which, again, is talking about the sufficient  
8 flexibility of the skirt panel so it can avoid objects such as curbs and railway  
9 tracks, etc., loading docks.

10          If we go next to Slide 15, which talks about the material used in the  
11 flexible side panel in Layfield. We've got thermoplastic materials which  
12 include ABS, HMW, polyethylene, PP, or TPO.

13          If we move forward to Slide 16, we are also talking about -- let me  
14 just make sure that's the right slide -- yes, Slide 16, we're talking about an  
15 advantage of using injection molding which provides a greater flexibility of  
16 the skirt panel as it passes over road objects, etc. So, this is the correct  
17 starting point to consider the Layfield Patent.

18          The Layfield prior art reference discloses a skirt panel which is  
19 resilient in that it moves either inwardly or outwardly when contacted by a  
20 foreign object, such as a curb, railroad track, or loading dock.

21          Now, what we wanted to point out particularly in connection with this  
22 IPR, and we acknowledge that we may not have been as clear as we could  
23 have been in the prior IPR, is that Petitioners are arguing that when you look  
24 at what is expressly disclosed in Layfield -- and, again, the test for  
25 anticipation is, what a person skilled in the art would understand or infer

1 from the reference -- we would submit that there is express disclosure of a  
2 resilient strut in Layfield as well.

3 And that is because in Layfield, when a person skilled in the art  
4 considers that we're using the same material for this strut as we're using for  
5 the resilient skirt panel -- and Mr. Tres talks about that at paragraph 75 of his  
6 initial declaration, which is Exhibit 1010 -- he indicates that we're using the  
7 same material, and when we look at the structure of the strut, the structure  
8 would have been understood by a person skilled in the art, based on the  
9 material being used, to provide flexibility along with the skirt panel.

10 So, we would submit that this case -- and while each case is decided  
11 on it's own merits, and we can't look at cases for what they hold, but we  
12 have to look at the reasoning behind the holding -- we would submit that this  
13 case is similar to the REG Synthetic Fuels case versus Nestle; that's 841  
14 F.3d 954, a Federal Circuit case from 2016.

15 And we cited that, I believe, in our Reply Brief. Let me just make  
16 sure. We cited that at Page 18 in our Reply Brief.

17 But, in the *Synthetic Fuels* case, the Federal Circuit said, "you're  
18 dealing with an issue of expressed disclosure when the information  
19 contained in the reference is simply used by the expert in a way in which he  
20 interprets what is being said in order to satisfy the limitation of the claim."

21 In other words, this is not a case of inherency. This is not a case  
22 where we're looking at an intermediate component that's being created by a  
23 complicated chemical reaction where nobody would understand that the  
24 component is actually present, or the intermediary is actually present.

25 But instead, what we are considering is a case in which a person  
26 skilled in the art would understand that a resilient strut is expressly disclosed

1 by virtue of the disclosure of the characteristics of the material as well as the  
2 particular design that's set forth in the Layfield Patent.

3 So, we would submit that this case is an anticipation case based on  
4 express disclosure of a resilient strut in the Layfield Reference.

5 JUDGE GOODSON: So, Mr. Mueller, you're asking us to depart  
6 from the analysis that we had in the previous IPR, but you started by telling  
7 us the previous IPR's final decision was preclusive.

8 MR. MUELLER: Your Honor, we would submit that certainly to the  
9 extent that the Board is willing to consider further argument and evidence,  
10 and decide that the prior decision is not preclusive; that we would preserve,  
11 at least, our argument of anticipation because, with all due respect, we  
12 believe that the Board looked at the evidence and the law in the original  
13 decision incorrectly as to the particular issue of whether a resilient strut is  
14 expressly disclosed in the Layfield Reference.

15 So, to the extent that collateral estoppel does not apply, we would ask  
16 that the Board consider the evidence and argument that is made in this case,  
17 under the rubric that we are arguing about express disclosure of a resilient  
18 strut in the Layfield Reference, and determine that that element is satisfied  
19 by the Layfield Reference.

20 JUDGE GOODSON: Okay, I think I understand your position.  
21 Correct me if I'm wrong, your initial position is that the previous final  
22 decision is preclusive under collateral estoppel doctrines, but that if we  
23 determine that collateral estoppel doesn't apply, then we should modify the  
24 anticipation analysis.

25 MR. MUELLER: Correct, Your Honor.

1 JUDGE GOODSON: Okay. But, is it correct that there's no briefing  
2 on the application of collateral estoppel in the record here?

3 MR. MUELLER: That's correct. There is no briefing on the issue  
4 and, again, we are in this nebulous time period where the Patent Owner still  
5 has time left in which to decide whether to appeal the final decision in the  
6 417 case, and so it is unclear whether they will avail themselves of their  
7 appeal right, and whether we would then have to, perhaps, wait until  
8 collateral estoppel actually applied when the final decision, or disposition,  
9 by the Federal Circuit occurred, assuming that there was affirmance of the  
10 Board's decision.

11 In the prior decision -- let me move on to the second grounds for  
12 rendering the claims unpatentable. And this is the combination of Layfield  
13 and Rinard. And I'll move to Slide 29.

14 So, the record in this case -- which is virtually identical or very close  
15 to the record in connection with the 471 case -- indicates that Rinard  
16 contains disclosure of a resilient strut.

17 And for the same reasons -- very similar reasons, if we move to the  
18 next slide, Slide 30 -- a person skilled in the art would have been motivated  
19 to combine Rinard with Layfield to provide a strut that is, we would suggest,  
20 even more resilient than the Layfield strut, but certainly a resilient strut that  
21 meets all of the limitations of the claims at issue in connection with the  
22 017 IPR.

23 So, for those same reasons as decided in the 417 case, we would  
24 submit that the independent claims in the 017 case are also unpatentable by  
25 virtue of anticipation, or at least, by virtue of obviousness based on Layfield  
26 and Rinard.

1 I would like to talk about, first of all, the limitation that we saw in  
2 blue. If we can go back to slide --

3 MR. FILBIN: Slide 6.

4 MR. MUELLER: Slide 6. We have 1.e, and this is a limitation that  
5 perhaps we haven't seen before but is certainly present in the Layfield  
6 disclosure. And this is a resilient strut including a longitudinal shape  
7 variation adapted to change a mechanical strength of the resilient strut and  
8 influence a stiffness of the resilient strut.

9 And if we look at the structure of the Layfield strut, it clearly has a  
10 shape variation.

11 If we can go to Slide 26. I'm now jumping to Slide 26 which is a  
12 reproduction of material that's provided both in our briefing and in  
13 Mr. Tres's declaration.

14 So, if we look at the structure of the resilient strut of Layfield -- or at  
15 least the strut when combined with Rinard to yield a resilient strut -- we see  
16 that there is a longitudinal shape variation. The strut is actually tapering  
17 from the top to the bottom, which is providing greater flexibility toward or  
18 near the bottom of the strut. So, there is a shape variation certainly, which is  
19 affecting the stiffness of the strut.

20 And if that's not good enough, the strut also includes a U-shaped  
21 cross section, or cross members, it's got hollow openings; so, any shape  
22 variation -- if we take the words as they're presented to us in the claims -- is  
23 going to affect the stiffness of the strut.

24 Well, we would submit that the shape is, in fact, made in connection  
25 with the Layfield strut to provide greater flexibility at the bottom than at the  
26 top where it's going to be fixed to the I-beam.

1           And so, we would submit that Limitations 1.e, 11.g, and 17.f, which  
2 go to the shape variation, are satisfied with the Layfield strut.

3           In that regard, I'd like to point out quickly Element 11.g on Slide 7. If  
4 we look at that language you kind of scratch your head because it says in  
5 blue, 11.g, "the resilient support including a shape defined therein adapted to  
6 influence the stiffness of the resilient support."

7           Well, any shape of the support is going to influence the stiffness, but  
8 leaving that aside, the strut configuration in Layfield certainly provides a  
9 shape that is influencing the stiffness with its cross members and tapering  
10 along from top to bottom of the strut, that adds increased flexibility.

11           I'd like to talk briefly about the dependent claims of the 017 Patent,  
12 where those claims are also not patentable as either anticipated or as obvious  
13 based on Layfield in combination with Rinard.

14           So, if we can look then at Slide 32 of our deck. So, Claims 2 and 12  
15 have very similar language and they call for the strut to define a U-shaped  
16 section.

17           So, the issue here is whether a Block-U is the same as a U with a  
18 curved base between its two legs, because if you look at Layfield's strut --  
19 which is the next slide, Slide 34 -- I'm sorry, is that 34, or 35 -- yes, Slide 34  
20 -- you can see by the indication in red that if you consider a Block-U to also  
21 be a U, then Layfield meets the limitation in Claims 2 and 12.

22           There is a U-shaped section. There's nothing in the patent  
23 specification, which is requiring a U to have a curvature in it. And, oh by  
24 the way, Figure 9B of the 017 Patent, which is the patent at issue, is the first  
25 time in which the applicants disclosed what they meant by a U-shaped  
26 configuration.

1           While it is true that prior to that time the chain of applications had the  
2 words “U-shaped configuration,” there was no indication in patent drawings,  
3 or in any other text, what was meant.

4           So, nonetheless, the Layfield structure discloses a U-shape, if you  
5 consider a Block-U to be a U.

6           JUDGE GERSTENBLITH: Counsel, let me just clarify.

7           MR. MUELLER: Sure.

8           JUDGE GERSTENBLITH: The figure that you have on the slide, and  
9 that was in the papers, is showing a red annotation that it seems to be  
10 directly on top of, or commensurate with, 162, the horizontal piece?

11          MR. MUELLER: It does not include the horizontal piece. If it’s  
12 above or below the cross member, which is a piece of plastic that’s a cross  
13 beam, you have a U between the two sides and the end of the strut.

14          JUDGE GERSTENBLITH: Thank you.

15          JUDGE GOODSON: Why did the Petitioner make that annotation  
16 right where that divider is? That seems confusing and misleading if the  
17 portion you’re relying on is the areas of the cross section in between those  
18 dividers; to me, it makes the challenge a little bit unclear when you have this  
19 annotation that points specifically at the divider plate.

20          MR. MUELLER: Yes, and that’s a good question. And I hadn’t even  
21 noticed that. But the papers plainly talk about a three-sided shape. And the  
22 issue here -- and the only point that was disputed by the Patent Owner -- is  
23 that the base of the U has to be curved. And that’s similar to the argument  
24 that they make with the concave section.

1           So, the only item which is at issue is whether a U can be block  
2 shaped, or whether it can also -- the issue is whether the U can also include a  
3 block shape, including two sides and an end.

4           JUDGE GERSTENBLITH: Counsel, I never like to disagree with a  
5 characterization of another parties' argument, but I did not personally get  
6 from Patent Owner's position a disagreement from them based on whether  
7 it's curved, the U is curved or not.

8           What I understood, and particularly from Pages 48 to 49 of Patent  
9 Owner's response, I don't know if you have that there.

10          MR. MUELLER: Yes.

11          JUDGE GERSTENBLITH: But, what I understood is that they're  
12 looking at the same spot, same location on Figure 10 of Layfield, where  
13 Petitioner has it's annotation, and at the bottom of Page 48 of Patent  
14 Owner's response, there is an annotation added by Patent Owner to show  
15 that, hey, this spot that Petitioner is pointing to, this has a rectangular cross  
16 section, not a U-shaped cross section.

17          MR. MUELLER: Yes. So, certainly the argument that was presented  
18 in the Petition is that the U-shaped section was two sides and an end. The  
19 counter-argument, and why we're contending that the Patent Owner is  
20 saying the U-shape requires a curvature, is in its claim construction where  
21 it's talking about the U as being a U-shape with curves.

22          In our Reply Brief, we specifically argue that the Layfield strut has a  
23 three-sided open box construction that constitutes a U-shape section. So, to  
24 the extent that it was unclear by the iteration, or by the drawing of a red line  
25 which appears to be coplanar with the cross member, that was not what we



1 were intending to demonstrate; but that we were demonstrating a three-sided  
2 open box construction which defined a U-shape section.

3 So, if we move to Slide 35, Claims 3 and 4, and Claims 13 and 14 are  
4 talking about a concave portion adapted to increase the stiffness of the strut.  
5 That's Claim 3, and similarly Claim 13, contains language which talks about  
6 the concave portion being adapted to increase stiffness. And then Claim 4 is  
7 discussing the concave portion as being uneven along the resilient strut.  
8 Similarly Claim 14 has language that is similar.

9 Again, this is a limitation that's found nowhere in the patent  
10 specification, but if we turn to Page 37 of our demonstratives, the concave  
11 portions are the hollowed out portions which in this case the arrows plainly  
12 show that we're not talking about the cross member, but the area in between  
13 the cross member.

14 So, the dispute here is not in the context of claim construction because  
15 as with the other items or claim limitations in this patent, the Patent Owner  
16 has contended that no claim construction is necessary; that the issues don't  
17 revolve around a claim construction.

18 But again, the argument is that the portion is not a concave portion  
19 because it needs to have some sort of curvature in it. And, we would submit  
20 that the portions in between the cross members of the Layfield strut qualify  
21 or satisfy the concave elements of Claims 3, 4, and 13 and 14.

22 JUDGE GOODSON: Mr. Mueller, could you help me understand  
23 what it being claimed in Claim 3? When I look at the 017 Patent, is there a  
24 part of it, or figure or some description in here that could help me understand  
25 what is meant by, "a substantially rectangular section including a concave

1 portion,” because it’s hard for me to understand how something could be  
2 both substantially rectangular and also include a concave portion.

3 MR. MUELLER: We agree, Your Honor; that’s less than clear. But I  
4 believe that if you look at Figures 9A and 9B of the 017 Patent, which I can't  
5 put up on the screen, but it you have them in front of you.

6 JUDGE GOODSON: I have them, mm-hmm.

7 MR. MUELLER: And understand the prosecution history of this  
8 patent, and again, this was a very long chain of patent applications; there  
9 were reexaminations and some of the applications there was an attempt to  
10 cover what was going on in the industry many years after the original  
11 application was filed.

12 As originally filed, the patent application, which preceded -- so the  
13 parent or grandparent of the 017 -- only had Figure 9A, which is showing a  
14 rectangular cross section for the strut. However, we do concede that the  
15 specification said, “oh, in addition to the strut having a cross section, it can  
16 also be U-shaped to add stiffness.”

17 So then when the 017 application was filed, the applicants added  
18 Figure 9B showing what appears to be a U to the figures as a new figure in  
19 the patent, and presumably claiming as support the description, which said  
20 that there could be a U-shaped section.

21 And just for fullness of what was going on in the prosecution, the  
22 original specification -- and when I’m talking about the specification, it’s  
23 Column 10, Lines 28 through 37, or 38 -- that Column, or that disclosure,  
24 was contained in the original application at large extent; however, there was  
25 no picture showing what a U-shaped section was. So, if you look at the  
26 disclosure at Column 10, it talks about a U-shaped section.

1 But alternatively, you could have an embossed section. And so, to fill  
2 the gap for the embossed sections, the applicants added their fanciful  
3 artwork on new Figure 4.

4 If you look at Figure 4 of the 017 Patent, that figure is different than  
5 the prior figures in that it's got an hour glass, and a tear drop; it's got little  
6 elements that are shown in connection with the strut.

7 JUDGE GOODSON: Okay, so you're saying that the designs that are  
8 marked with Reference Number 42 in Figure 4, those are illustrating  
9 embossed portions?

10 MR. MUELLER: I believe so, Your Honor. I believe that is what it  
11 was intended to show embossed portions.

12 JUDGE GOODSON: Okay, but getting back to Figures 9A and 9B --

13 MR. MUELLER: Yeah.

14 JUDGE GOODSON: The strut, which is 42 in these figures, right.

15 MR. MUELLER: Yes.

16 JUDGE GOODSON: It's just Reference Number 42, it looks  
17 rectangular in Figure 9A, but I don't see how that is rectangular in  
18 Figure 9B.

19 MR. MUELLER: Well, again, we can't challenge indefiniteness of  
20 these claims or we may be arguing something else here. But I think what  
21 it's saying is that it was substantially rectangular, and we added this U-  
22 shape.

23 So, if you consider everything else for the strut 42, apart from the U-  
24 shape, that's rectangular. So, I submit -- and maybe the Patent Owner wants  
25 to elucidate what was being shown and what they're getting at -- but I would  
26 submit that it's substantially rectangular if you consider those aspects or

1 those parts of this rectangular piece of plastic sheet, which now has a U  
2 formed in it.

3 JUDGE GOODSON: Okay, thanks.

4 MR. MUELLER: If we look at Claims 5 and 15 on Slide 39, these  
5 claims go to the embossed portion.

6 And so, again, the specification indicates that there can be an  
7 embossed portion. It doesn't talk about any methodology for creating  
8 embossed portions. The additions to Figure 4 showed up in this application  
9 for the first time. But under, certainly its broadest reasonable construction,  
10 embossed simply means a portion that is standing out in relation to another  
11 portion.

12 So, we cited as Exhibit 1022 the definition of embossed, which was,  
13 "to carve or mold a design on a surface so that it stands out in relief." So,  
14 the embossed portions of Layfield, if we look at Slide --

15 JUDGE DOUGAL: (Inaudible).

16 MR. MUELLER: Yes.

17 JUDGE DOUGAL: Can we go back to concave for just a second?

18 MR. MUELLER: Sure.

19 JUDGE DOUGAL: Before we get to embossed.

20 MR. MUELLER: Sure.

21 JUDGE DOUGAL: I'm having a little difficulty understanding what  
22 is concave here. You raised argument about the U-shaped cross section.  
23 You mentioned how it's block-shaped, so basically flat surfaces. So, you're  
24 saying just the fact that the flat surfaces and the side walls is that it's  
25 concave?

1           MR. MUELLER: Yes, if you look at Slide 37. So, because it is  
2 hollowed out -- if we consider the broadest reasonable construction of  
3 concave, it includes to hollow out -- the sections defined by the U are  
4 certainly hollowed out as compared to a block of material. So, those are  
5 concave sections of the strut, in the same way that the U-shape is a concave  
6 section on the strut shown in Figure 9B.

7           JUDGE DOUGAL: So, would any hollowing or hole in a member be  
8 concave then?

9           MR. MUELLER: Well, certainly we would submit that the hole  
10 shown in Figure 10 is a hollowing out. I would have to consider whether  
11 any hollowing out would qualify as a concave member.

12          JUDGE DOUGAL: But your claim construction does require a  
13 hollowing out, right?

14          MR. MUELLER: Yes.

15          JUDGE DOUGAL: Okay.

16          JUDGE GERSTENBLITH: Do you have Exhibit 1056 there?

17          MR. MUELLER: Which is?

18          JUDGE GERSTENBLITH: Which is the definition of concave.

19          MR. MUELLER: Yes.

20          JUDGE GERSTENBLITH: So, it says, "hollowed or rounded inward  
21 like the inside of a bowl." Should we not be taking the "like the inside of a  
22 bowl" to also apply to hollowed?

23          MR. MUELLER: Right, I would read the definition as it's written is  
24 "hollowed," or "rounded inward like the inside of a ball," in which case the  
25 rounded inward like the inside of a bowl would connote some sort of  
26 curvature.

1 And, to be sure, there's going to be some amount of curvature in the  
2 hollowed out portions of the Layfield strut because you're not going to get --  
3 you know, there's going to be a radius where the sides meet the end.

4 So, there's going to be some curvature, but the way in which this  
5 definition is set forth is "hollowed" is one part, or "rounded inward like the  
6 inside of a bowl." That's how the definition reads in its plain language.

7 JUDGE DOUGAL: Do we have any evidence of what the inside  
8 looks like? Or that it necessarily would be curved?

9 MR. MUELLER: Of that there would be a radius? Is that the  
10 question?

11 JUDGE DOUGAL: Yes.

12 MR. MUELLER: There's no evidence of record. That's how it would  
13 be manufactured for sure. You couldn't get two perpendicular sides butting  
14 up against each other, if you're using a molding process, without a curvature.  
15 It would be impossible to mold.

16 If we can go on to Slide 39, which is now indicating that the resilient  
17 strut includes an embossed portion thereon. So again, the specification as it  
18 was originally presented just said there could be an embossed portion. It  
19 didn't indicate what it was.

20 So, if we look at Layfield, and under its broadest reasonable  
21 construction, if an embossed portion is simply required to stand out in relief  
22 as compared to another portion, then the screw points would qualify as  
23 embossed portions, including the one on the bottom, the two at the top, the  
24 reinforcing lattice at the top of the Layfield strut, number 170, and the cross  
25 members --

26 MR. FILBIN: This is Slide 41, Your Honors.

1 MR. MUELLER: Would all qualify as embossed portions.

2 JUDGE GERSTENBLITH: How is the lattice embossed?

3 MR. MUELLER: Because it stands out in relief as compared to the  
4 base of the strut, the one at the end wall.

5 JUDGE GERSTENBLITH: Okay.

6 JUDGE GOODSON: Could a skilled artisan form a structure like the  
7 Screw Point 166 using an embossing technique?

8 MR. MUELLER: In what sense “using an embossing technique?”

9 JUDGE GOODSON: It seems to me when I look at Figure 10, it  
10 looks like this is kind of an irregular surface, the screw point 166. It’s not  
11 just a flat raised surface. It looks like there's a thin portion that’s attaching a  
12 rounded portion.

13 And when I think of -- just from a layman’s perspective -- when I  
14 think of something that’s been embossed, usually it’s just a raised surface, a  
15 simple raised surface, without an inset or an irregular cross section like that.

16 So, this looks to me like something you would form through a  
17 different manufacturing technique like injection molding or attaching this  
18 screw point 166 in some other fashion.

19 MR. MUELLER: So, it probably could be manufactured with an  
20 embossing technique, but we cited the case in the invalidity analysis, and in  
21 the obviousness, and anticipation analysis, the *Purdue Pharma* case, which  
22 is 811 F.3d 1345, where we look at the resulting product, and not the process  
23 by which the product was made in order to determine invalidity.

24 So, while it is possible to envision a technique that would create that  
25 section, or that screw point, through embossing, we submit that it wouldn’t  
26 be proper to require embossing as part of this claim if the overall structure,

1 at the end of the day notwithstanding the process being used, resulted in a  
2 relief, a raised portion, with respect to a different portion.

3 JUDGE GOODSON: So, on this *Purdue Pharma* case, I understand  
4 your point that you don't have to show that this structure was actually made  
5 by embossing in order to make your case on this claim, but would you agree  
6 that you do have to show that the structure could be made through  
7 embossing? That's it capable of being made through embossing.

8 MR. MUELLER: Well, again, if we look at the definition of emboss,  
9 it means to carve or mold a design on a surface that stands out in relief. So,  
10 under that definition of emboss, I would submit that, yes, it could be made  
11 with an embossing technique.

12 JUDGE GOODSON: That just seems like maybe an overly broad  
13 definition of embossing. I mean, if you take that literally, that means  
14 Michelangelo's David is embossed because it stands out in relief from its  
15 pedestal. Any form whatsoever that stands out against a lower surface is  
16 embossed, under that understanding.

17 MR. MUELLER: But there's a slight narrowing which would perhaps  
18 distinguish from a painting in which the design is molded, so you were  
19 molding a design in order to meet the definition of embossed, it includes  
20 molding a design on a surface.

21 And so, this, we submit, could be created with an embossing  
22 technique, albeit not, you know, the embossing technique one might think of  
23 when stamping a piece of leather to make a design on it for a belt.

24 JUDGE GERSTENBLITH: Counsel, I'll just note that you're at 45  
25 minutes in right now.



1 MR. MUELLER: Okay, thank you, Your Honor. Let me just quickly  
2 go to angularly extending, which is Claim 7 of the 017 Patent. And let's go  
3 to Slide 44.

4 And so, the issue here is whether -- I believe that the Patent Owner  
5 would accept that the top portion of the Layfield strut angularly extends  
6 from whatever the intermediate portion might be that's set forth in their  
7 claim. But they disagree that the bottom screw point is angularly extending  
8 from the intermediate portion.

9 And what Page 44 is actually showing, it's not only showing a  
10 deflection along the face of the strut, but it's also an outward deflection. So,  
11 the screw point is angularly offset outwardly from the face of the strut as  
12 well. Finally --

13 JUDGE GERSTENBLITH: Counsel, let me just make sure I  
14 understand that. So, we should be understanding that green arrow -- this is  
15 Slide 44 -- the green arrow is meant to be coming out of the page?

16 MR. MUELLER: As well as off set, so it's in three dimensions.

17 JUDGE GERSTENBLITH: Okay.

18 MR. MUELLER: Yes. And then finally, Claims 19 and 20 on fiber  
19 reinforced polypropylene, and Claim 20, a skirt panel with a polypropylene  
20 component and a woven component.

21 Our expert sets forth -- and this is on Slide 46 -- that the Layfield  
22 disclosure discloses both the requirements of Claim 19, which is a fiber  
23 reinforced polypropylene, as well as the polypropylene component and  
24 woven component of Claim 20, as that was a well-known way to  
25 manufacture polypropylene.

1 JUDGE GERSTENBLITH: Where does Mr. Tres explain why -- for  
2 example Claim 19 -- why does one understand that glass reinforced  
3 polypropylene constitutes fiber reinforced polypropylene?

4 MR. MUELLER: He says the glass is a type of fiber that would be  
5 used.

6 JUDGE GERSTENBLITH: Does he say that? Is that -- we're at  
7 Paragraph 185? I'm happy to take your response when you come up next.

8 MR. MUELLER: Yes, I'll address that in my reply. Thank you,  
9 Your Honor.

10 JUDGE GERSTENBLITH: So, I have you as using 47 minutes.

11 MR. MUELLER: Okay, thank you.

12 JUDGE GERSTENBLITH: You have 13 left. Mr. Richey, if you  
13 would like me to use the timer, just let me know how much time to set.

14 MR. RICHEY: Yes, Your Honor. I would like to reserve 10 minutes.

15 JUDGE GERSTENBLITH: 10 minutes, okay.

16 MR. RICHEY: Thank you.

17 JUDGE GERSTENBLITH: You can start whenever you're ready.

18 MR. RICHEY: Thank you. I'd first like to address the claim  
19 preclusion issue raised for the first time here. Claim preclusion is  
20 inappropriate. It was not briefed. It was not even raised at the prehearing  
21 conference on October 21st.

22 Further, all appeals have not been exhausted. And, are there  
23 similarities between the claims? Yes, but there are differences too.

24 Each claim has to be analyzed on its own. In fact, all issued claims  
25 being considered in District Court are given a presumption that they are  
26 different inventions. So, claim preclusion simply doesn't apply here.

1 Now, the claims of the 017 Patent include a shape variation, the  
2 Independent Claims 1, 11, and 18 include a shape variation. And, if we can  
3 look at Claim 1 for a moment. Claim 1 at the end of the claim requires a  
4 longitudinal shape variation adapted to change a mechanical strength of the  
5 resilient strut and influence a stiffness of the resilient strut.

6 Now, Petitioner points to two things. One, they say embossing. The  
7 vertical slats are a shape variation, but that is not a variation of the elongated  
8 box shaped strut that they describe throughout their Petition.

9 The shape of the box shaped strut is box shape. The internal lattice,  
10 whether embossed or not, are not shape variations. In addition to that, the  
11 Layfield strut does not taper.

12 Petitioner's entire reliance for their taper argument is Figure 10 of the  
13 Layfield Patent. But, Figure 10 is not described anywhere in the  
14 specification as tapering. Neither is any other description of Strut 58.

15 And there's no indicia -- which would be required, indicating in the  
16 figures themselves -- any measurements. There's nothing showing  
17 specifically that the Strut 58 is tapered.

18 And Figure 10 is an isometric view, which you would expect to have  
19 aspect and ratio, so we cannot draw any inferences as to whether or not the  
20 Layfield strut is tapered. It's not. That's something that Petitioner has made  
21 up out of whole-cloth.

22 JUDGE GOODSON: I mean, you say made out of whole cloth. The  
23 figure teaches what it teaches just from looking at it. Is there any discussion  
24 in Layfield that runs counter to the understanding that the strut is tapered?

25 MR. RICHEY: There's no discussion of a taper at all in Layfield.

26 JUDGE GOODSON: Is there any discussion that is straight sided?

1 MR. RICHEY: I don't recall any discussion in Layfield about the  
2 specific measurements of the strut. I don't believe there is any discussion.

3 JUDGE GOODSON: Okay.

4 JUDGE GERSTENBLITH: Counsel, where does Patent Owner argue  
5 that the strut is not tapered?

6 MR. RICHEY: Pardon me one second. So, at Page 23 of the Patent  
7 Owner response, Patent Owner adopts Petitioner's description that the struts  
8 are box shaped.

9 JUDGE GERSTENBLITH: I'm sorry, what page are we on?

10 MR. RICHEY: Page 23 of the Patent Owner response.

11 JUDGE GERSTENBLITH: Okay, thank you.

12 MR. RICHEY: And I apologize, Your Honor. I am not seeing.

13 JUDGE GERSTENBLITH: I'll tell you what, if you want to look in  
14 between.

15 MR. RICHEY: Thank you.

16 JUDGE GERSTENBLITH: You can let me know because I'll just  
17 note that -- as you look, if you look at Patent Owner response Page 44,  
18 Patent Owner says, "this is in responding," so, Page 44 of Patent Owner's  
19 response, responding to a different point, but Patent Owner says, "to the  
20 contrary, support strut 58 of Layfield are tapered to be thicker at the  
21 mounting point where they will experience a higher stress concentration.  
22 This taper actually strengthens, dot-dot-dot."

23 So, I don't see Patent Owner arguing that there's no taper, and in fact,  
24 it appears that Patent Owner agrees that they're tapered.

25 MR. RICHEY: Yes, Your Honor. So, I think that may have not been  
26 stated with as much clarity as I would have liked. The top of the Figure 10

1 strut shows a boot shape, which I think, perhaps, I made a slip of the tongue  
2 where I call it tapered.

3 But what I'm referring to there, or what Patent Owner is referring to  
4 there, is the boot shape which is the connecting clamp at the top of the strut.  
5 The strut itself is box shape, an elongated box. So, I understand the question  
6 and I will endeavor to find you an answer.

7 JUDGE GERSTENBLITH: Thank you.

8 JUDGE GOODSON: What about the bottom of the strut, the bottom-  
9 most portion of Figure 10 that looks like it's even more tapered. Do you  
10 disagree that that's showing a taper?

11 MR. RICHEY: So that's the panel connecting portion of the strut.  
12 And while that is narrower, that portion doesn't affect the stiffness of the  
13 strut itself.

14 Similarly, the boot portion -- which I call taper on Page 44 -- that does  
15 not affect -- neither end affects the stiffness or rigidity of the strut, except  
16 that the clamp, boot shaped portion would, or course, be stiffer than the strut  
17 itself. But the intermediate portion is entirely box shaped and elongated.

18 And, if you look again at Claim 1, you have a longitudinal shape  
19 variation adapted to change a mechanical strength of the resilience strut. So,  
20 the elongated box portion has to be able to flex, and that's the portion that  
21 requires a shape variation. So, I'd like to talk briefly about the dependent  
22 claims --

23 JUDGE GERSTENBLITH: I apologize for taking you backwards,  
24 but can I just ask you about what you mentioned about Claim Element 1E?

25 MR. RICHEY: Yes.

1 JUDGE GERSTENBLITH: I think you were saying that there's a  
2 specific part of the strut that this is supposed to be referring to. So, in other  
3 words, not the -- we'll just go with the boot shape part, you know, up by  
4 where the lattice is -- I think you were saying that it's not supposed to be  
5 that. Is that what you were saying?

6 MR. RICHEY: Yes, Your Honor, because in Layfield there's a clamp  
7 connecting portion and panel connecting portion. The strut itself is the  
8 portion in between those. And that's an elongated box; that's what I'm  
9 trying to say.

10 JUDGE GERSTENBLITH: So, just looking at Figure 10, we're  
11 talking about 58, right?

12 MR. RICHEY: Yes.

13 JUDGE GERSTENBLITH: Which runs all the way -- I don't like to  
14 say up -- but it runs toward the lattice portion where 68 and 170 and all that  
15 is located. And 58 appears to be a contiguous piece that then branches into,  
16 and goes at an angle, to where it was originally going.

17 So, if there's a question in what I'm saying, it's when Claim Element  
18 1E says, "the resilient strut, including the longitudinal shape variation  
19 adapted to change in mechanical strength of the resilient strut and influence  
20 a stiffness," that doesn't, to me, say, I'm only looking at the middle or  
21 intermediate portion of the strut; it just says the strut.

22 So, I can influence strength of the strut at the top, the middle, or the  
23 bottom, and I still have influenced to the strength of the strut. Where am I to  
24 draw a line to say where I'm cutting the strut off, or should we not be  
25 drawing a line?

1           MR. RICHEY: Whether we draw a line or not, I think that the answer  
2 is that nothing in Layfield discusses changing the shape to affect the strength  
3 or rigidity or flexibility of the strut.

4           So, whether we draw a line at the clamp I-beam connecting portion, or  
5 at the bottom portion, is irrelevant because nothing in Layfield teaches  
6 changing the shape to affect the strength or rigidity or -- specifically with  
7 respect to Claim 1 -- the mechanical strength of the strut.

8           JUDGE GERSTENBLITH: Okay.

9           MR. RICHEY: It's just not a discussion in Layfield or Rinard for that  
10 matter.

11          JUDGE GERSTENBLITH: Okay, so if it's not in the reference, but  
12 we have expert testimony from Mr. Tres saying that this design with having  
13 what they're pointing to as a shape variation, takes care of that function  
14 that's recited in the claim?

15          MR. RICHEY: I don't believe that Mr. Tres is suggesting that the  
16 bottom portion with the bolt hole, or the boot shape portion itself, changes  
17 the flexibility, with the ability to flex, of the strut.

18          I believe what he's pointing to are what they call the embossed  
19 portions, the horizontal slats and the overall taper of the strut -- which there  
20 is no overall taper. The taper, which I've used again, is only at the two  
21 connecting portions. That taper is not intended to affect the flexibility of the  
22 strut.

23          JUDGE GERSTENBLITH: Okay. Thank you.

24          MR. RICHEY: I'd like to turn to the dependent claims.

25          JUDGE GERSTENBLITH: Okay.

1 MR. RICHEY: For the reasons we discussed in the brief, Layfield  
2 does not anticipate the independent claims. It also does not anticipate the  
3 dependent claims, but I'd like to focus on obviousness.

4 Petitioners bear the burden of obviousness for each and every  
5 challenged claim. But for many of the dependent claims, Petitioner has put  
6 forth no reasons whatsoever why those claims are purportedly obvious  
7 beyond a conclusory incorporation of their anticipation argument.

8 That incorporation is legally deficient because obviousness, the  
9 obviousness analysis, is a different analysis from anticipation, and  
10 Petitioners invite the Board to fill in the gaps of this legal error.

11 Petitioners don't articulate any reason, for example, why Claim 2  
12 would have been obvious. Rather that, again, they just incorporate their  
13 anticipation argument with respect to Layfield.

14 This can be seen in the Petition at Page 63. Similarly, Mr. Tres in  
15 Exhibit 1010, his declaration at Paragraphs 215 to 225, and 262 to 263,  
16 incorporates the anticipation analysis in his obviousness argument without  
17 the additional obviousness analysis.

18 Petitioners apply none of the *Graham* factors to the dependent claims,  
19 or *KSR* analysis. The Petition is silent as to whether it would be have been  
20 obvious to try to modify a resilient strut to make it a U-shape or have a U-  
21 shape section.

22 Similarly, the Petition is silent whether modifying a U-shaped strut to  
23 be a resilient strut in combination with Rinard would have been predictable  
24 or otherwise obvious. There's no evidence of record that any of this analysis  
25 exists.



1           However, there is analysis of record that Claim 2 is not obvious, for  
2     example, Dr. Micklow's declaration, which is Exhibit 2001 at Paragraphs  
3     242 to 243, and the Patent Owner's response at Page 22.

4           Petitioners did not respond in the reply, which can be seen where they  
5     discuss dependent claims in the reply at Pages 25 to 27. They don't respond  
6     to the obviousness arguments for dependent claims at all, really. Nor did  
7     Petitioners' declarant, Mr. Tres.

8           Similarly, Claims 3 through 5, 7, 12 through 15, 19 and 20, lack any  
9     obviousness analysis.

10          So, I'd like to look briefly at Claims 2 and 3 specifically because there  
11     were some questions about U-shape and embossing. On the slides, at Slide  
12     7, and you know, I only have a paper copy, if that's okay.

13          JUDGE GERSTENBLITH: Yes.

14          MR. RICHEY: At Slide 7 we have Figure 4 and Figure 7 from the  
15     017 Patent, and these have been modified to add color to highlight what I'm  
16     going to talk about, which are the struts and the embossed portions 42.

17          And you can see that in -- actually, if we'll go to Slide 8 -- sorry about  
18     that -- Slide 8 we have Figure 9B, which has a U-shaped portion, and there  
19     was a question about how can there be a U-shape and a rectangular shape.

20          Well, on the next slide, Slide 9, we have the rectangular shape, it's  
21     substantially rectangular and, yes, in Slide 8 Figure 9B, a U has been added  
22     but this is clearer, I believe, on Slide 7, which has Figures 7 and 4, that show  
23     the substantially rectangular struts having an embossed portion.

24          So, part of it is U-shaped, part of it is substantially rectangular. But  
25     the initial shape, as Petitioner was describing, I think, was substantially  
26     correct; it's the shape of the strut is substantially rectangular and it's

1   embossed to have a shape variation, and the various shape variations are  
2   shown in Figure 4.

3           JUDGE GOODSON: Which one is U-Shaped in Figure 4?

4           MR. RICHEY: I can't say specifically based on -- because again,  
5   there's no indicia of measurements or specific descriptions with respect to  
6   Figures 4-7, which is U-shaped, but any of them could be U-shaped. The  
7   point is there's embossed portions that change the shape of the strut. And  
8   specifically, they change the shape of the strut to increase or decrease the  
9   rigidity or resilience, the flexibility, of the struts.

10          JUDGE GOODSON: So, you don't know which of these struts that  
11   are shown in Figure 4 are U-shaped?

12          MR. RICHEY: Any of them can be. I apologize if that's what I said.  
13   What I meant was any of them can be U-shaped, or they could be concave.  
14   The strut itself is substantially rectangular and then there's an embossed  
15   portion, 42, which if you look at Figure 7, you can see I've highlighted in  
16   yellow the embossed portion.

17          So, the embossed portion can run most of the length of the  
18   intermediate portion of the strut. Or, for example, in the middle strut there's  
19   a portion at the top that's embossed, and a portion at the bottom that's  
20   embossed.

21          JUDGE GOODSON: Okay, when you say that it's substantially  
22   rectangular, how do you mean that it's substantially rectangular? Is it in the  
23   view where we're looking at it in Figure 4, it's rectangular because the outer  
24   perimeter is rectangular? Is that what you mean?

25          MR. RICHEY: Yes, the blue portion is rectangular.

1 JUDGE GOODSON: Okay, and then you said that any of these could  
2 be U-shaped, and I'm trying to figure out which portion you would be  
3 looking to determine whether it's U-shaped or not.

4 MR. RICHEY: Sure. If we look at the two struts on the right hand of  
5 Figure 4, the blue portion would be substantially rectangular, and then the  
6 yellow portion would be molded or impacted to have a U-shaped embossing,  
7 which would be the yellow portion. That would be the portion that is U-  
8 shaped.

9 JUDGE GOODSON: So, it's coming out? In that yellow portion in  
10 the instance where it's U-shaped, is that added on to the strut?

11 MR. RICHEY: No, I think during manufacturing. If you look then at  
12 Figure 9B, you can see what the final shape would be of the yellow portion.

13 So, looking at Figures 4 and 9, Slide 7 and 8, perhaps I should have  
14 used blue on the sides of Strut 42, and yellow in the U portion, which  
15 Reference 41 is pointing to.

16 JUDGE GOODSON: Yeah, I mean, my problem is it's hard for me to  
17 envision how it's both rectangular and U-shaped. I mean, I see your point  
18 that it's rectangular, the outside perimeter is rectangular. But then it seems  
19 like you're changing dimensions when you point to how it's U-shaped.

20 MR. RICHEY: Claim 2 only has U-shaped. It does not have a  
21 requirement that the strut be substantially rectangular. And then Claim 3 --  
22 which does not depend from Claim 2 -- Claim 3 has a substantially  
23 rectangular section including a concaved portion adapted to increase  
24 stiffness.

25 And so, Figure 3 certainly does not require a U-shaped portion, but it  
26 does have substantially rectangular **and** a concave portion. So, the strut

1 overall is substantially rectangular, like in Figure 4, the blue portion. But  
2 there is a section that is also concave; Yellow 42.

3 JUDGE GOODSON: Okay, but if the way that you arrive at what  
4 we're seeing in Figure 4 is by, I think you said "impacting" it, then you're  
5 taking the material that was flat before and you're pushing it out so that it's  
6 concave, as we see in Figure 9B. Is that right?

7 MR. RICHEY: You do not have to do that at all because embossing  
8 is a separate claim limitation. It could be manufactured substantially  
9 rectangular, and then through a press you create a concave portion of the  
10 strut, or U-shape portion of the strut. Or, it could be that the mold itself is  
11 that shape.

12 I'm sure there are other ways, but I don't want to get too far afield  
13 with speculation as to how you might create a concave portion. But  
14 certainly, it does not have to be a two-step process where you take a  
15 rectangular strut and then create a concave portion. It could be part of the  
16 molding process.

17 JUDGE GOODSON: Okay.

18 MR. RICHEY: So, I'd like to skip to Claim 20. Claim 20 requires a  
19 polypropylene component and a woven component.

20 JUDGE GOODSON: Could we go to Claim 5 before you go to  
21 Claim 20, and that's the resilient strut includes an embossed portion thereon.

22 MR. RICHEY: Yes, Your Honor.

23 JUDGE GOODSON: When we look at Layfield, could that screw  
24 point 166, be made through embossing?

1 MR. RICHEY: Not to my layman's thinking. To me, the definition  
2 of embossing is fairly clear. It's a portion that's carved or molded or  
3 stamped that stands out.

4 If we adopt Petitioner's position -- I believe Your Honor offered up  
5 Michelangelo's David as an embossment. That's not what we think of when  
6 we think of embossing. The Statue of Liberty stands out from the bay in  
7 New York, that's not -- she's not embossed. It's a sculpture.

8 Embossing is, for example, what you get from a notary. When paper  
9 is stamped, there is an embossment, it's a slight pushing up or pushing down  
10 from the substantially flat surface, which is exactly what is shown in  
11 Figures 4 and 7, and 9B.

12 JUDGE GOODSON: Okay, but I think the definition the Patent  
13 Owner has offered of embossing includes molding, and I think the one you  
14 just mentioned includes molding. Is that right?

15 MR. RICHEY: It does include molding, but embossing is -- I can't  
16 think of any way that embossing would include a complex three-dimensional  
17 object like the screw holes at the bottom of Strut 58. If those qualify, then  
18 Michelangelo's David does as well, but that's just far afield from the  
19 common understanding of embossing.

20 JUDGE GOODSON: Right I understand your point, but I guess my  
21 trouble with Patent Owner's position is that the construction they've offered  
22 for embossing includes molding, and I think Layfield describes its entire  
23 strut as being formed through injection molding.

24 MR. RICHEY: Well, in that sense the entire strut itself could be  
25 considered an embossed thing. But that just doesn't comport with the  
26 common understanding of what embossing means.

1 JUDGE GOODSON: Okay.

2 MR. RICHEY: Lastly, jumping to Claim 20 if that's okay, I'd just  
3 like to point out that it requires a polypropylene component and a woven  
4 component. There's no discussion in Layfield or Rinard of a woven  
5 component.

6 Mr. Tres guesses that recycling plastic would lead to some kind of  
7 weaving. It's unclear how that would be a woven component. Dr. Micklow  
8 responds that it would not, and we discussed that at Patent Owner's sur-  
9 reply, Pages 24 to 25. And if there are no other questions --

10 JUDGE GERSTENBLITH: I wanted to ask you about concave for  
11 Claim 3, and specifically the definition. Is there anything that you wanted to  
12 add about how we should understand the definition, which this particular  
13 definition does say hollowed or rounded inward like the inside of a bowl.

14 To whatever extent we or whoever may have in their mind that  
15 concave is synonymous with a curved surface, how do we handle hollowed  
16 being there?

17 MR. RICHEY: Well, there's no comma in that definition. It doesn't  
18 say hollowed, "comma", or curved like the inside of a bowl. Like the inside  
19 of a bowl describes hollowed in and curved.

20 I think the common understanding for concave would be curved, both  
21 definitions that Petitioner put forth discussed curved. Curve's mentioned  
22 several times in both entries for concave. And I think that's just the natural  
23 meaning.

24 JUDGE GERSTENBLITH: Okay. Thank you.

25 MR. RICHEY: Thank you, Your Honors.

1 MR. MUELLER: Thank you, Your Honors. Let me address the  
2 arguments and then I will address Your Honors' questions, or I can do that  
3 first.

4 I believe you asked in connection with Claim 19, where, in Tres, does  
5 he discuss that glass reinforced polypropylene constitutes fiber reinforced  
6 polypropylene, and he does that in Paragraph 185 of his opening declaration,  
7 which is Exhibit 1010. There was also a discussion by Patent Owner --

8 JUDGE GERSTENBLITH: Before you do, is this moving to a  
9 different topic?

10 MR. MUELLER: Yes.

11 JUDGE GERSTENBLITH: Okay, so before that, Paragraph 185 is  
12 effectively the exact same thing that's in the Petition. So, it does not  
13 explain. My specific question is, how do we go from glass reinforced to  
14 fiber reinforced? What is the connection between the two?

15 In other words, I would be looking for somebody to be saying, "glass  
16 is a fiber or has some synonymous, synonymity, for lack of a better word.

17 MR. MUELLER: (Laughter), you're really putting it to us, Your  
18 Honor. I appreciate the issue. So, I understand it and as I'm going through  
19 the rest of my argument, we will look for a portion in Mr. Tres' declaration  
20 where he's talking about glass being a fiber that's reinforced.

21 JUDGE GERSTENBLITH: And the same question would be for  
22 Claim 20.

23 MR. MUELLER: Yes. I understand.

24 JUDGE GERSTENBLITH: Thank you.

1 MR. MUELLER: And for Claim 20, to shorten, Mr. Tres was  
2 explaining that when polypropylene is recycled or reclaimed the manner in  
3 which it is produced is by first putting down a woven mat.

4 So that's -- a person skilled in the art would understand that the  
5 disclosure of polypropylene would include disclosure of polypropylene  
6 being placed on a woven mat in order to manufacture it from its recycled  
7 state; and so, he provides that explanation. I could get you the paragraph  
8 number, but that's his explanation of Claim 20.

9 Now, there was significant argument about shape variations and  
10 Figure 10, and if we could just show that again, Paul, that would be Slide --  
11 we can just show Slide --

12 MR. FILBIN: Slide 26.

13 MR. MUELLER: 26 is fine. So, this is Figure 10. Mr. Tres from the  
14 very beginning indicated that the strut has a taper construction such that it  
15 flexes from top to bottom. We can all see the figure.

16 I don't believe Dr. Micklow ever argued, or ever opined that what is  
17 shown in the figure is not a tapered beam construction, because that's not  
18 what is being shown.

19 Now, let me talk about the obviousness analysis, which Patent Owner  
20 stressed in his argument. In this case, Mr. Tres has gone into excruciating  
21 detail why it would have been obvious to use the teachings of Rinard in  
22 order to arrive at a resilient strut by modifying the Layfield strut as  
23 appropriate, either to modify its material choice and/or its construction. That  
24 was for the independent claims; he went through a detailed analysis.

25 So that same analysis also applies to the dependent claims here which  
26 add differences which are not material to patentability; differences such as



1 U-shaped cross sections, and embossed portions and concave portions,  
2 which don't add any significant -- are not patentably significant in and of  
3 themselves.

4 And certainly, the obviousness analysis-- and Mr. Tres sets us for it as  
5 set forth in the papers -- the obviousness analysis which applies to the  
6 independent claims also applies to the additional items shown in the Layfield  
7 strut.

8 The same combination of Rinard's resilient materials would have  
9 been understood by a person of ordinary skill in the art that those could have  
10 been or would have been combined with the teachings of Layfield to result  
11 in the independent claims, as well as the additional items in the dependent  
12 claims.

13 JUDGE GOODSON: Is there any evidence in the record that you can  
14 emboss something that's plastic? A plastic component?

15 MR. MUELLER: I don't know if there's any evidence in the record  
16 that you could emboss a plastic component as such.

17 The evidence is that embossing would include molding, which I think  
18 we now are in agreement that molding qualifies as a manner in which to  
19 emboss. So, from that standpoint, a plastic component can be embossed  
20 because it is a molded component.

21 JUDGE GERSTENBLITH: Did Petitioner argue in the papers that  
22 these additional limitations from the dependent claims don't add to  
23 patentability?

24 MR. MUELLER: We argued that with respect to Claim 20 for sure.  
25 I'm not sure that that specific argument was made with respect to, for  
26 example, Claim 2, the U-shape and the concave portions.

1           Lastly, Your Honors, I just point out with respect to the definition of  
2   concave that if it's hollowed out, a bowl could be rounded, or it could have  
3   substantially flat side surfaces. There are many different types of bowls. So  
4   even if we say that, "hollowed out in the shape of a bowl," we could still  
5   envision a structure such as the concave structure in the Layfield strut. Are  
6   there any more questions?

7           JUDGE GERSTENBLITH: Any from Judges Goodson or Dougal?

8           JUDGE GOODSON: No thank you.

9           MR. MUELLER: My colleague informs me that glass fibers and  
10   glass are used synonymously in this context, which is essentially what Mr.  
11   Tres is saying.

12           So, while he didn't use the word glass fiber is the same as glass, a  
13   person skilled in the art would understand that those are the same thing.

14           JUDGE GERSTENBLITH: Okay, thank you.

15           MR. MUELLER: Thank you, Your Honors.

16           MR. RICHEY: Your Honor, I said I would look for where we argued  
17   that the strut is not tapered, I haven't been able to find it.

18           JUDGE GERSTENBLITH: Okay.

19           MR. RICHEY: There's no evidence of record that glass and fiber are  
20   synonymous. And lastly, I'd like to point out, Petitioner argues that it's  
21   enough to analyze an independent claim for obviousness and then say that  
22   the same analysis applies for all dependent claims.

23           That is not the law. It was not okay when I was an Examiner, it's not  
24   okay in District Court, it's not okay here. Every claim must be analyzed  
25   according to the Graham factors, and motivation analysis must be done for

1 each and every claim, and there is no such analysis for the dependent claims  
2 in this case. I have nothing else, if there are no further questions.

3 JUDGE GERSTENBLITH: Anything else, gentlemen.

4 JUDGE GOODSON: No thanks.

5 JUDGE GERSTENBLITH: Thank you very much.

6 MR. RICHEY: Thank you.

7 JUDGE GERSTENBLITH: All right, thank you all very much for  
8 coming. I hope you have a safe trip back to wherever you came from. This  
9 case is submitted, and we are adjourned. Thank you.

10 (Whereupon, the proceedings at 2:32 p.m. were concluded.)

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