

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTELLIGENT WELLHEAD SYSTEMS, INC.,
Petitioner,

v.

DOWNING WELLHEAD EQUIPMENT, LLC,
Patent Owner.

IPR2024-00300
Patent 11,560,770

Record of Oral Hearing
Held: February 21, 2025

Before BENJAMIN D. M. WOOD, CARL M. DEFRANCO, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

TAMMY J. TERRY, ESQ.
LISA E. MARGONIS, ESQ.
Osha Bergman Watanabe & Burton LLP
1100 Louisiana Street
Suite 4900
Houston, Texas 77002
(713) 228-8600
OBWB_IWS_Downing@obwb.com

ON BEHALF OF THE PATENT OWNER:

SCOTT T. JARRATT, ESQ.
LAURA VU, ESQ.
Haynes and Boone, LLP
2801 North Harwood Street
Suite 2300
Dallas, Texas 75201
(972) 739-8663
Scott.jarratt@haynesboone.com
Laura.Vu@haynesboone.com

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

(11:59 a.m.)

JUDGE LANEY: Okay. We are here for the trial of IPR2024 00300. If I may, could I have the representatives -- well, IPR 300, which is Intelligent Wellhead Systems, Inc. versus Downing Wellhead Equipment, LLC. If I could at this time, could I have the attorneys for the parties state their name for the record, starting with the petitioner.

MS. TERRY: Good afternoon, your honor. This is Tammy Terry, lead counsel for petitioner and.

MS. MARGONIS: I'm Lisa Margonis.

MR. JARRATT: Your Honor, for patent owner Downing Wellhead, I'm Scott Jarratt, Haynes and Boone.

MS. VU: And I'm Laura Vu with Haynes and Boone.

JUDGE LANEY: Okay. And on the bench today, we have Judge Laney, Judge DeFranco and Judge Wood. As a preliminary matter, Ms. Vu, you are here as a LEAP practitioner, correct?

MS. VU: Yes, Your Honor.

JUDGE LANEY: And will you be playing a substantive role during the hearings?

MS. VU: Yes.

JUDGE LANEY: Okay. Therefore, you get 15 extra minutes. As a preliminary matter, is there any confidentiality issues that we need to be aware, were we may have to clear the -- or take any precautions for? Either party aware of any?

MS. MARGONIS: No, your honor.

MR. JARRATT: No, Your Honor.

1 JUDGE LANEY: Okay. So as per the hearing order, we have 60
2 minutes for petitioner and in light of the LEAP practitioner for patent owner,
3 you'll have 75 minutes to break up into your principal argument, response,
4 rebuttal, and sur-rebuttal. If I could, let me get a piece of paper. Do you
5 know, petitioner, how you'd like to break up your time.

6 MS. MARGONIS: Yes. We plan to break up our time 40 minutes
7 initially and reserve 20 minutes for rebuttal, if needed.

8 JUDGE LANEY: Okay. And patent owner?

9 MR. JARRATT: Initially, we'd like 60 minutes, reserving 15.

10 JUDGE LANEY: Okay. And petitioner, when would you like heads
11 up when your 40 minutes is about to run out? Or how much time before
12 your end would you like the yellow light to come on?

13 MS. MARGONIS: Five minutes is fine, I guess.

14 JUDGE LANEY: All right. And patent owner?

15 MR. JARRATT: Five minutes is okay with us.

16 JUDGE LANEY: All right. Madam Court Reporter, ready? All
17 right. Petitioner can proceed. And you both, both parties can presume that
18 we have -- because we have studied the record and are very familiar with the
19 briefs and the exhibits.

20 MS. MARGONIS: Good afternoon, Your Honors. I'm Lisa Margonis
21 representing petitioner, Intelligent Wellhead Systems. We're here today to
22 demonstrate that Claims 1 through 38 of U.S. Patent No. 11,560,770, owned
23 by Downey Wellhead Equipment, LLC are unpatentable. I will refer to the
24 patent today as the 770 patent or the 770 and to Downing as patent owner or
25 Downing.

26 First, I'm going to give a quick road map of what we're going to
27 discuss today. Today, we're going to go through four main topics. We will

1 talk about what the claims of the 770 patent actually claim. We will talk
2 about the prior art grounds and primarily focus on the Carr-based and the
3 Tolman-based grounds. We will address patent owner's main arguments and
4 look at how the board got it right from the start. And we will address patent
5 owner's secondary considerations of nonobviousness arguments.

6 As we've shown in the petition and reiterated in the reply, all of the
7 challenge claims are unpatentable because they broadly claim concepts that
8 were long ago disclosed in the prior art. Today, we will highlight important
9 issues for the board to consider. This case is about misdirected notice
10 because the claims are so broadly written, that they fail to inform the public
11 as to the scope of the alleged invention.

12 Although the 770 patent specification contains a variety of
13 information relating to fracturing operations, that the patent owner uses in its
14 attempt to distance the claims from the prior art, the claims themselves do
15 not include that information. Like the 770 patent, the patent owner's
16 response and sur-reply is full of a lot of red herrings and hand waving, an
17 attempt to fill -- sorry, excuse me. In an attempt to distract from the fact,
18 that their arguments have nothing to do with the claims.

19 When you really look at the prior art and the evidence, there isn't a
20 meaningful dispute about what the prior art teaches or even what the claims
21 say. The vast majority of the dispute is about what the patent owner wishes
22 the claim said.

23 Now, to talk about the first topic, the patent. Looking at Slide 3, the
24 parties agree that the 770 earliest possible effective filing date is May 17,
25 2021, based on a convoluted prosecution history of provisionals,
26 continuations in parts and continuations.

1 On Slide 4 is shown in Figure 2A of the 770 patent. The 770 patent
2 specification describes a variety of ways to carry out hydraulic fracturing
3 operations using conventional equipment. The patent describes wireline and
4 equalization assembly, a greasing system, a lubricator, a controller, a frack
5 leg, a variety of valves, including equalization valves, pump down valves,
6 master valves, zipper valves and methods of fracturing wells using this
7 equipment. This specification also describes certain embodiments that
8 execute a regular swap or a CP swap, where CP stands for continue
9 pumping.

10 We can jump to Slide 7. The claims, however, tell a different story.
11 As we will discuss today, the 770 patent broadly claims a method, apparatus
12 and system with admitted standard conventional components that operate in
13 standard conventional ways. None of the claims purport to change the
14 standard conventional component or operations. None of the claims address
15 swapping or continuous pumping at all. Though you will hear patent owner
16 tout these unclaimed features.

17 As can be seen in the independent claims, only standard equipment, a
18 couple of valves in a manifold are recited, performing standard operations,
19 opening and closing a valve in response to a fluid satisfying a condition.
20 There's nothing about hydraulic fracturing, swapping or pumping fluid, let
21 alone continuously pumping fluid.

22 JUDGE LANEY: And -- and petitioner's relying on plain and
23 ordinary meaning in this case, correct?

24 MS. MARGONIS: That is correct. And patent owner has not
25 advance any other claim constructions, as well. And in their response they
26 indicated that they were relying on the plain and ordinary meaning, as well.

1 JUDGE LANEY: So it's your understanding there's no dispute that
2 the plain and ordinary meaning should control?

3 MS. MARGONIS: That is correct. We can skip to Slide 9.
4 Independent claim 14 is shown, indicating an apparatus claim that includes a
5 nontransitory computer readable medium and instructions stored on the
6 medium is highlighted on Slide 10. The instructions

7 JUDGE LANEY: Can I ask a quick question on that?

8 MS. MARGONIS: Yes.

9 JUDGE LANEY: The parties seem to address the independent claims
10 together.

11 MS. MARGONIS: Uh huh.

12 JUDGE LANEY: And I understand there are some differences
13 between one being a method system and claim 27 is probably the most
14 different, one as far the way it's worded and done. But it seems as though, at
15 least on the petitioner's side, you relied on overlapping evidence from claims
16 27, 1, and 14. Am I missing something or is that -- would you agree with
17 that?

18 MS. MARGONIS: I would agree with that because overall, the -- the
19 independent claims essentially claim the same structural components. Claim
20 1 is the method of performing that. Claim 14 has the apparatus, which is
21 really just saying a computer executes those steps, and there's no real
22 meaningful dispute that the prior art discloses a computer doing, executing
23 steps.

24 JUDGE LANEY: And -- and from the petitioner's perspective, do you
25 see any meaningful difference about the sequence that's recited. Obviously,
26 in this case, a big issue is opening this second valve while the first valve's

1 open and then closing the first valve after the second valve's has been
2 opened. I'm not using the verbatim language but

3 MS. MARGONIS: Understood.

4 JUDGE LANEY: -- but my question is, does petitioner contend there's
5 any difference between the claims, as it goes towards the sequence?
6

7 MS. MARGONIS: No. The independent claims all address that same
8 sequence of opening a second valve, communicating fluid to the second
9 valve, and then closing the first valve after opening the first -- the second
10 valve.

11 JUDGE LANEY: Then, if you could, since we're -- if you don't mind.

12 MS. MARGONIS: Sure.

13 JUDGE LANEY: If we -- you wanted to start at claim construction, is
14 that correct? Is that going to be the first thing you're hitting?

15 MS. MARGONIS: I was not going into claim construction, because I
16 didn't feel here was any, because we

17 JUDGE LANEY: Well

18 MS. MARGONIS: -- meaning. So I guess yeah.

19 JUDGE LANEY: It is a plain meaning.

20 MS. MARGONIS: Yes.

21 JUDGE LANEY: I just want to make sure we're on the same page,
22 what plain -- what we're -- what we understand the plain and ordinary
23 meaning is.

24 MS. MARGONIS: Sure. Okay.

25 JUDGE LANEY: And -- and I say this, because in your petition -- or
26 not the petition, I believe. Let me pull it up. It was in the petitioner's reply.
27 And -- and on Page 3 of the reply. Do you have that?

1 MS. MARGONIS: Yes.

2 JUDGE LANEY: Are you there.

3 MS. MARGONIS: Yes.

4 JUDGE LANEY: So I'm -- I'm going to begin where, the beginning
5 of the sentence starts with, "notably common."

6 MS. MARGONIS: In the first paragraph? Sorry.

7 JUDGE LANEY: On -- on the second paragraph, on Page 3?

8 MS. MARGONIS: Yes. Notably.

9 JUDGE LANEY: And -- and just for the record, I'll read it into the
10 record. It says, "notably the independent claims do not require the second
11 valve to be associated with the manifold or the first well nor do the claims
12 require the same fluid to be pressurized or communicated to both wells. The
13 claims recite communicating fluid to a first well via manifold in a first valve
14 and opening a second valve in response to determining that the fluid
15 communicated via the manifold has satisfied one or more conditions without
16 requiring the fluid used for determining to have been communicated to the
17 first well or the first valve."

18 MS. MARGONIS: Correct.

19 JUDGE LANEY: Now -- now, if you could -- let's

20 MS. MARGONIS: Sure.

21 JUDGE LANEY: You can go back. You can leave that slide up
22 there, which is

23 MS. MARGONIS: Slide 8.

24
25 JUDGE LANEY: -- slide 8 of the demonstrative. And if you go to 1.2,
26 what is the fluid? What's the antecedent basis for the fluid?

1 MS. MARGONIS: So yes, I understand. In 1.1, you're
2 communicating fluid to a first well via a manifold and a first valve. So to be
3 clear, as the claims described here and as shown in the specification, you
4 have fluid being communicated to a -- a manifold and a first valve, the
5 order's not really known, to a well, right? Your ultimate spot is the well.

6 JUDGE LANEY: But isn't -- just real quick on that.

7 MS. MARGONIS: Yes.

8 JUDGE LANEY: Just isn't the plain meaning of the fluid
9 communicated. So we have in 1.1 it says, "communicating fluid" and then
10 1.2 it says, "the fluid communicated." So aren't we talking about the fluid
11 communicated to the first well?

12 MS. MARGONIS: Well, it's saying it's the fluid communicated via
13 the manifold. So I guess the point

14 JUDGE LANEY: Well, you

15 MS. MARGONIS: Yes.

16 JUDGE LANEY: That -- that -- that's

17 MS. MARGONIS: Sure.

18 JUDGE LANEY: You jumped over -- I mean, yes. It says "fluid
19 communicated to a first well via a manifold." It doesn't say communicated
20 via manifold. It says, "to a first well via the manifold." And it says, "the
21 fluid communicated via the manifold."

22 And so, I -- I just want to understand petitioner's position, and I -- and
23 -- and first of all, I want to make sure I'm correct. Your position is that
24 when it says, "the fluid communicated via the manifold," that's not in fact
25 referring to the fluid communicated to the first well; is that correct?

26 MS. MARGONIS: I think -- I think the distinction is that the fluid --
27 I'm not saying it's a different fluid. So you have fluid that's being

1 communicated to the first well via the manifold and via a first valve. And
2 then when you're saying in response to determining that the fluid
3 communicated via the manifold, that's identifying where that fluid is
4 communicated. I guess the -- the distinction is, if we're doing a determining
5 step, there has to be where are we determining that. And nowhere in the
6 patent and nowhere has patent owner said that the determining is occurring
7 at the -- the well, I guess is the point.

8 JUDGE LANEY: No, but it's saying

9 MS. MARGONIS: So it's -- but it is to -- it may be going to the first
10 well. I agree with that.

11 JUDGE LANEY: So

12 MS. MARGONIS: But it may not have reached the first well, because
13 it's the communicated

14 JUDGE LANEY: Well, what makes it -- what makes it the first well,
15 if it hasn't reached the -- I mean, obviously, it's the fluid for the first well?

16 MS. MARGONIS: Correct.

17
18 JUDGE LANEY: Okay.

19 MS. MARGONIS: Yeah. And I don't dispute that.

20 JUDGE LANEY: -- lot of difference. I mean. I don't -- I don't quite
21 understand that. I -- I don't -- I don't know that I understand the -- appreciate
22 the difference in that and it seems

23 MS. MARGONIS: Ultimately, I don't think the distinction makes a
24 difference when we're looking at the prior arts.

25 JUDGE LANEY: Okay.

26 MS. MARGONIS: Because the prior art is looking at communicating
27 fluid via a manifold and a first valve, to the first well and it's looking at

1 communicating a fluid via the manifold and a second valve, to the second
2 well.

3 JUDGE LANEY: But -- but you agree that when it says "in response
4 to determining that the fluid communicated via the -- the manifold," we are
5 looking to the fluid that's for

6 MS. MARGONIS: Yes.

7 JUDGE LANEY: -- communication to the first well?

8 MS. MARGONIS: Yes.

9 JUDGE LANEY: Okay.

10 MS. MARGONIS: I agree. And then just to continue. So then when
11 we look at the 1.3 limitation, that is not "the" fluid. Our point there was
12 simply, that it's communicating fluid to a second well. So it doesn't have to
13 be that same fluid.

14 JUDGE LANEY: Okay.

15 MS. MARGONIS: It could be a whole different flow line, on a
16 different well, at this point, because that second valve's is not even attached
17 to the manifold or associated with the first well or the manifold. So in this

18 JUDGE LANEY: And just so I'm clear. I -- I haven't -- I don't
19 understand there to be a dispute between the parties with regarding to the
20 second valve and whether or not the -- the communicated fluid to the second
21 valve is the same fluid that's communicated or for the first well. I don't -- I
22 don't understand anybody to be suggesting otherwise. Am I missing
23 something?

24 MS. MARGONIS: No. Ultimately, the dispute -- ultimately, this
25 dispute, with respect to what the language really says, doesn't affect how
26 we've applied the prior art. Because the prior art, as we've analyzed it, still
27 meets the limitations based on that interpretation. That it is the fluid that is

1 for the first well, and it's still going to be the same fluid that then, is going to
2 the second well.

3 It's -- it's splitting the fluid from the flow and it's deciding whether it's
4 going to go to the first well or the second well or to both the first and second
5 well, and that's what the prior art shows.

6 JUDGE LANEY: And -- and am I also correct in understanding,
7 really the disputes between the party in this case focuses on either 1.2 or 1.4.
8 I understand it's a

9
10 MS. MARGONIS: Correct.

11 JUDGE LANEY: -- claim and there's some interplay. But generally
12 speaking, I -- my understanding is the dispute -- what -- what we should be
13 focusing on -- I don't know this -- I think the dispute centers around 1.2 and
14 1.4.

15 MS. MARGONIS: Yes.

16 JUDGE LANEY: And -- and correspondingly those similar
17 limitations that exist in the other independent claims; is that your
18 understanding, as well?

19 MS. MARGONIS: Yes, that is. And I think what we wanted to point
20 out is just, in -- in discussing the fluid and the antecedent basis issues and
21 the fact that the second valve's not attached to anything, is just the breadth of
22 these independent claims. And -- and that was really our focus. It wasn't to
23 say that's going to make a distinction in the prior art we're applying, but it's
24 to emphasize that these claims are extremely broad.

25 JUDGE LANEY: Well, they are, but they're -- they're not without
26 limitations.

1 MS. MARGONIS: That is correct. But if, for example, I can jump
2 ahead to Slide 13 and briefly discuss the prosecution history, a little bit. As
3 you can see in this slide on the right hand side

4 JUDGE LANEY: Before you -- before we do that

5 MS. MARGONIS: Sure.

6 JUDGE LANEY: Give me an overview of what why is the
7 prosecution history -- what's the significance of it? I mean, give me a bullet
8 point of

9 MS. MARGONIS: Sure.

10 JUDGE LANEY: -- why do I need to know more about the
11 prosecution history versus going -- let's go straight into the argument.

12 MS. MARGONIS: Sure. So just -- just to be clear, the -- the
13 prosecution history of the 770 patent itself, like, just the office actions in that
14 case, there were none. I think there was one office action and all there was
15 was a double patenting rejection based on the parent cases.

16 And so when we look at the parent cases, the 779 patent for example,
17 there were a host of other limitations that were in those claims. And when
18 they drafted -- when the patent owner drafted the 770 patent, they broaden
19 those claims out. A lot of limitations that, even in those parent cases, the
20 examiner specifically said were the reasons they were allowing those claims,
21 those limitations were removed in the 770 patent.

22
23 So the patent owner knew they were broadening the claims to try to
24 capture, potentially, additional infringers, right, to -- to broaden the scope of
25 their patent. But then they should be held to the words that they chose and
26 how they broadened it, and that opens the door to a significant amount of
27 prior art. And if you're going to delete certain limitations that were there,

1 then you are giving up that claim scope, and you can't come here today and
2 say those broad claims still have those limitations, especially when you're
3 addressing the prior art.

4 JUDGE LANEY: So you have the 770 from the 493 application and
5 then the 779

6 MS. MARGONIS: That's just the application numbers. Yeah. It's on
7 the left hand side of the table is the 770. That's the patent at issue here and
8 on the right is the parent, one of the parent patents, the 779 patent. And as
9 you will see, the 779 parent patent includes language such as -- such as the
10 first hydraulic fracturing operation and includes language like pumping
11 fluid, measuring flow rate, using thresholds, doing -- like Step C is during
12 pumping of the fluid into the first well via the first valve.

13 All of these things, the patent owner still argues in this case that the
14 prior art doesn't disclose these limitations, but unfortunately for them, those
15 limitations aren't in the claims in the 770 patent.

16 JUDGE LANEY: I understand, what you're saying. So now -- but
17 your argument is they -- they're making -- you're -- you're suggesting that
18 they're making arguments about claims -- about claim limitations that they
19 have in other claims

20 MS. MARGONIS: Yes.

21 JUDGE LANEY: -- that have been removed in these claims, but yet
22 they're still trying to make the same. That -- that's your contention?

23 MS. MARGONIS: Right. Yes.

24 JUDGE LANEY: Okay.

25 MS. MARGONIS: So they're trying to have their cake and needed
26 too, right? They have their narrow scope and they're going to try and get
27 these broader claims to enforce against anybody in the industry, because

1 these claims simply cover conventional equipment doing conventional
2 operations.

3 Even conventional sequences, as we've shown in the prior art. I mean,
4 really all these independent claims are doing, are opening and closing valves
5 in response to any condition. In the independent claims, it's a condition, one
6 or more conditions. I mean, we all do that when we go open and close sinks,
7 when -- when there's two valves.

8 JUDGE LANEY: Well, yes and no. Again, when we go back to what
9 we just talked about, that's where I -- I -- that's where I needed help from
10 you, because I -- I don't know that I see it as any condition. I see it as in
11 response to determining the fluid condition related to the -- the flow -- or the
12 -- I -- if you put the language back up there.

13 MS. MARGONIS: Sure.

14 JUDGE LANEY: Actually -- so in response to determining the fluid
15 communicated via the manifold has satisfied one more condition. Okay. I
16 see what you're saying.

17 MS. MARGONIS: It's not a fluid
18

19 JUDGE LANEY: It is any condition. But is any condition specific to
20 the fluid that's for the first well and how that's going to affect your operation
21 with regarding to a second valve, for a second well.

22 MS. MARGONIS: Correct. And that's what the prior art shows.

23 JUDGE LANEY: And that's what we need to discuss.

24 MS. MARGONIS: Yeah. And -- and just to be clear, going back to
25 that condition. You're correct. It's not a fluid condition. It's a fluid has to
26 satisfy "a condition." So when you read it like that, it could be a time, it

1 could be of volume, it could be a color. It's just a condition of the fluid. As
2 you know, the fluid has to satisfy some condition, and in response to that

3 JUDGE LANEY: Well, how does

4 MS. MARGONIS: You open a second valve.

5 JUDGE LANEY: How would time -- when you say time, you -- you -
6 - how -- how would that be related to the fluid?

7 MS. MARGONIS: You have to pump the fluid for ten minutes.

8 JUDGE LANEY: Yeah. But that's the pump, that's not the fluid,
9 right?

10 MS. MARGONIS: Well, it's -- okay. Fluid flowing out. I mean,
11 that's how -- but when you look at the prior art, time, volume, all of those are
12 interrelated. So they are looking at different things. So sometimes they may
13 say, "we want a certain volume" and in order to accomplish that, we set a
14 timer. That's the condition, so I can grab the volume. So they haven't
15 limited that in these claims.

16 JUDGE LANEY: But time itself doesn't tell you flow. All right.
17 You would need more than -- you would need to know -- volume and time
18 would tell you flow, so you wouldn't just -- time itself doesn't tell me
19 anything about the fluid, does it?

20 MS. MARGONIS: But the claim doesn't ask me to tell anything
21 about the fluid. It's just saying that the fluid communicated via the manifold
22 has satisfied one or more conditions.

23 JUDGE LANEY: So. Okay.

24 MS. MARGONIS: It does tell me it's been flowing for ten minutes.

25 JUDGE LANEY: But again, let's go -- okay. When it says "the fluid
26 has satisfied one or more conditions," aren't we -- aren't the conditions
27 related to "the fluid?"

1 MS. MARGONIS: They have to be tied to the fluid. I'm not saying
2 it's in the abstract, correct.

3 JUDGE LANEY: Okay.

4 MS. MARGONIS: I'm not saying any amount of time. It's amount of
5 time fluid is flowing, right? Or

6 JUDGE LANEY: Which would be flow, right. I mean, yeah, I agree
7 with that.

8 MS. MARGONIS: But that's what I'm saying. They're interrelated,
9 correct.

10
11 JUDGE LANEY: But the example you gave where you said, a pump
12 is running -- and that's what I'm trying to understand.

13 MS. MARGONIS: -- correct.

14 JUDGE LANEY: You -- you say a pump is running for two minutes,
15 but that isn't -- is that really fluid condition? Isn't that just how long the
16 pump -- now I -- I understand flow, you know, a pump running at creating X
17 volume for two minutes, yeah, then I get flow. But just something like a
18 pump running for two minutes, does that -- is that -- you think that would be
19 within the scope of the claims?

20 MS. MARGONIS: I think if you can show that the fluid had been
21 pumped for ten minutes, yes. I think that would be within the scope of the
22 claims, but

23 JUDGE LANEY: But that's presuming you know the rate in which
24 the -- the fluid is flowing from the pump, right? Because

25 MS. MARGONIS: Well, the claim doesn't ask me to know what the
26 total flow rate or the total volume. It just says, in response to determining
27 that the fluid communicated -- skipping over it, has satisfied one or more

1 conditions. And so I'm looking at -- okay. Has my fluid communicated via
2 the manifold satisfied this condition? Ultimately, however, I will say the
3 prior art does disclose flow rate and flow; over and over again. So I guess,
4 ultimately, I don't want to get hung up just on this one point

5 JUDGE LANEY: Okay.

6 MS. MARGONIS: -- because I think the prior art that we've shown,
7 actually contemplates all of those things. It looks at time with respect to
8 volume and it looks at flow rate and it looks at flow.

9 JUDGE LANEY: So -- so just so I'm clear. Even if I don't agree
10 exactly with how broad your understanding is, for -- for our purposes here,
11 you don't think that should make a difference?

12 MS. MARGONIS: Correct.

13 JUDGE LANEY: Okay.

14 MS. MARGONIS: All right. So I'm going to jump to Slide 14 now.
15 And now I will walk through and kind of go through the next -- the next
16 topic I was going to discuss, which is the prior grounds. Slide 14 just
17 summarizes the grounds of unpatentability. And as I mentioned earlier, we'll
18 focus today on the Carr and Tolman-based grounds. So if we're looking at
19 515, starting with Carr first.

20 "Carr discloses methods and systems for hydraulically fracturing
21 multiple wells from a centralized location, where the wells are connected to
22 a manifold and valves and are associated with manifolds and wells. Carr
23 also discloses the same opening, closing valve operation in response to a
24 fluid communicated via the manifold satisfying a condition as claimed. Carr
25 teaches monitoring fluid conditions, like flow rate for example, to optimize
26 fracturing operations."
27

1 So if we look at Slide 17 now, which is an annotated image of Figure
2 5 from Carr, which is Exhibit 1004. It is undisputed that Carr has all the
3 structural elements of Claim 1, namely a manifold, 120; a first valve, 470;
4 associated with the manifold and the first well, 140; and a second valve 472.

5 Carr also discloses that the valves may be within or outside the
6 manifold, 120. It's also disputed that the fluid is communicated to the first
7 well via the first valve, 470, and the second valve, 472, to the second well.

8 The only real dispute is whether Carr discloses one, opening a second
9 valve in response to determining that the fluid communicated via the
10 manifold to the first well, has satisfied one or more condition. And two,
11 closing the first valve after opening the second valve.

12 As to Point 1, regarding the in response to limitation, Carr clearly
13 discloses this. Patent owners interdependency argument is confusing, but
14 regardless, Carr lists -- Carr discloses flow meters on each flow line going to
15 a well, as shown in Figure 5, on slide 17. Carr also specifically says that
16 flow data from both meters is looked at and total flow is looked at when
17 adjusting the valves 472 and 470.

18 So it is taking flow data from both wells and it is determining which
19 valve to open and close and how much to adjust it.

20 JUDGE LANEY: So to me, this is an important area.

21 MS. MARGONIS: Okay.

22 JUDGE LANEY: As I understand the deposition of your expert, 130
23 are pumps that are used -- I forget. They -- they talked about missiles or -- it
24 -- to pressurize the fluid before it goes into their respective wells. So you
25 have 130 -- although you have 130 on the bottom and 130 on the top of
26 Figure 5. And my understanding from your expert, he -- he agrees that the
27 path for stimulating well 140 and I -- and the path for stimulating well 142,

1 those paths are separate, distinct and independent; as I understand. And in
2 fact, Carr says, I forget the exact verbiage Carr uses. Is it isolated or

3 MS. MARGONIS: Isolated flow paths.

4 JUDGE LANEY: Uh?

5 MS. MARGONIS: Isolated flow paths.

6 JUDGE LANEY: It said isolated flow paths. So and not only are
7 they isolated, but they're isolated and have completely separate pumps, that
8 once it gets -- I don't know if the pumping occurs before the manifold or
9 after, wherever in that separate path. But you have a separate pump that is
10 actually the pump that's the driving force for the stimulation for each
11 respective well.

12 And the -- the pressure or the pumping that's occurring to the left of
13 the valves is basically just pressure to keep the flow going into the well, to
14 ensure that those -- those respective paths are having sufficient flow within
15 them. So each well can independently do what each well is intended to do.
16

17 Now, let me stop there. Have you heard me say anything that that
18 demonstrates a misunderstanding, on my part, and if so, that's what I'd like
19 you to further clarify for me?

20 MS. MARGONIS: Sure. There's a couple of points there. Dr.
21 Durham did discuss the isolated flow paths, and Carr does disclose isolated
22 flow paths that it describes as -- I can't remember the numbers right now.

23 JUDGE LANEY: 120.

24 MS. MARGONIS: 120 is the manifold I think, but the paths going
25 through there. And during Dr. Duran's second deposition, so that would be
26 Exhibit 2033, he discussed that the isolation of the flow path occurs below

1 the valves 470 and 472. That's where you're going to isolate and -- that's
2 where it's isolated after it's past those valves.

3 Carr specifically discloses that those valves 470 although illustrated in
4 Figure 5, where they are, they may be inside or outside that manifold.
5 Ultimately, you have fluid flowing, being pumped from your mixing -- and
6 this is where all on the -- centralized location 105 is where you're preparing
7 all of your fluid. So you're adjusting proppant and you're pumping it down
8 those wells into the manifold to then -- yes, it does then further pressurize
9 the fluid, further pressurize it, it's already a pressurized fluid, and pumps it
10 into the wells.

11 That being said, nothing in the claim says anything about pumping.
12 None of it has pumping requirements. None of it has pressurized fluid
13 requirements. Those are all limitations that are being imported from the
14 parent patent that are nowhere in these claims.

15 JUDGE LANEY: Well I -- I -- I -- give me a chance on that. I -- but
16 real quick, on the point you made that -- well, isn't it correct. That -- so on
17 Figure 5 is you have you have a 470, 472. 470 is on the top and 472's on the
18 bottom, and then between them, it has another 470. But I think all the
19 parties agree that that should be 474, correct?

20 MS. MARGONIS: Correct.

21 JUDGE LANEY: Isn't it -- 474 is really where you start splitting. I
22 mean, that's because isn't the purpose of 474 is to direct it to either one side
23 or the other or allow it to go to both?

24 MS. MARGONIS: So 474, what we're calling the proportion valve.

25 JUDGE LANEY: Yeah.

26 MS. MARGONIS: Carr explicitly says is an optional feature. So that
27 valve is not present in all embodiments. It's shown here, but it's optional. It

1 says, you can have the proportioning valve if you want. You could just have
2 the two valves. You can eliminate 474, 472 or just -- and just use the 470

3
4 JUDGE LANEY: And what would happen if you eliminate it?
5 Would you have still -- you'd have still have one -- you'd still have one pipe.
6 You just wouldn't have a proportional valve, one pipe -- pipe that then got
7 split?

8 MS. MARGONIS: It would be proportionate, it would proportion the
9 flow between the wells, for instance.

10 JUDGE LANEY: Well, if you didn't have a proportion. I'm saying
11 you removed the proportion valve, then and you're saying you just have one
12 pipe that basically flows to both?

13 MS. MARGONIS: Right. Right. You would have the one flow
14 going to 470 and 472, which would look very similar to what's going in -- on
15 in the 770 patent. It's just a flow line and there's two valves associated with
16 two different wells. And depending on which valve you open and which
17 valve you close, is how your fluid gets directed to the well that you would
18 like it directed to.

19 JUDGE LANEY: Okay. And -- and I understand the -- the argument
20 about them, not -- that they're relying on things that aren't claimed. And
21 here's where I come from on this. Do they really have to be -- so isn't -- isn't
22 what they're really arguing is -- is to -- is a better understanding of what
23 Carr's disclosing. Because, I guess, with me reading it and knowing that
24 they're independent past, I -- I consider it something that I had a greater
25 appreciation for from the institution to now.

26 And -- and I guess my question is: What is your best evidence.

27 MS. MARGONIS: Sure.

1 JUDGE LANEY: In light of the fact that they're two separate
2 independent paths, what is your best evidence that information about path
3 that's going to 122, is used in order to make a determination about operation
4 of the valve 472.

5 MS. MARGONIS: Right. Well -- and I know we've briefed this in
6 our petition and in our reply, and we do point to it specifically in Carr.
7 Where Carr discloses looking at both flow meters, the first one and the
8 second, to make determinations on the first and/or the second well.

9 JUDGE LANEY: So

10 MS. MARGONIS: And I think also, if I may continue. The -- the
11 proportioning valve, the fact that there's a proportion proportioning valve,
12 tells us that we want different flows to different wells. And when we read
13 Carr as a whole, Carr teaches simultaneous flow and individual flow. Right?

14 So it's saying I may go from simultaneous flow and I may decide I want to
15 go to individual flow. How do I do that? I close a valve and I open a valve.

16 And so, it is contemplating flow rates to both sides. Just because
17 they're independent flow lines, that just means the fluid's not mixing, past
18 valve 470 and 472. They're going to the wells they want. But they're still
19 looking at the flow to each one, because as we've discussed, and even as
20 patent owner's expert admitted. When you split flow, you're going to affect
21 the flow rate.

22
23 So you're not just going to blindly start sending a bunch of flow to one
24 well and ignore what's happening on the other well. An operator's going to
25 look at both and Carr specifically teaches that. It says, we're going to look at
26 the flow meters, we're going to collect the flow meter data from each and

1 we're going to collect the total flow and we're going to adjust -- adjust the
2 valves based on that.

3 JUDGE LANEY: Okay. Let's

4 MS. MARGONIS: Sure.

5 JUDGE LANEY: Let's say everything -- I'm on board with you with
6 everything you've just said. But how would I be wrong if I said, what I find
7 is missing, is any connection between that and making a determination based
8 off of the flow for the independent path leading to well 140 and in order to
9 make a determination about the flow for the independent -- other
10 independent path going to 142.

11 So what -- what I'm saying is, I recognize that it teaches
12 proportionality, that it can control going from one to the other. I mean, it
13 definitely, from what I can read, has that capability. But I think what the
14 claims require, even in their breadth, requires something a little bit more,
15 which is a determination for that second valve based off of the first fluid
16 communication information. And -- and that's -- that's the connection I'd like
17 you to close. Not just -- not just the fact that it has this capability, but the
18 fact that it's using one for the other. And -- and that's where I -- I -- I -- I
19 know Paragraph 33 in Carr.

20 MS. MARGONIS: Yes.

21 JUDGE LANEY: And -- and maybe you can spend some time maybe
22 helping me better understand how -- how you're saying that establishes that
23 determination point, one on the other. And -- and I'm just -- I'm asking you,
24 if I'm skeptical about the fact that just because it says you can control one to
25 the other and flow goes to both and yeah, I mean, sure. You can do
26 simultaneous, yes. You can proportionately send flow to one or the other,

1 but that in and of itself doesn't suggest I'm making a determination about
2 what I'm going to do for the second valve, based off of the first valve.

3 MS. MARGONIS: Sure.

4 JUDGE LANEY: Okay.

5 MS. MARGONIS: I was just going to point to Paragraph 35 of Carr,
6 where it specifically talks about using flow data from the first meter and the
7 second flow meter in light of flow targets, fluid flow targets, for the first
8 well and/or the second well.

9 JUDGE LANEY: But
10

11 MS. MARGONIS: And just saying, if -- if I'm looking at both flow
12 meters, I'm necessarily making sure the first flow meter is done. It doesn't
13 preclude looking at other options. It's one or more conditions also, right?
14 And I get that it's the first flow meter or the first flows we're talking about.
15 But if I've determined that the first one, using the first flow meter and I'm
16 deciding on flow targets for that, I can adjust those valves based on that
17 information.

18 JUDGE LANEY: So -- okay. Let's say that's -- that is one way you
19 can read Paragraph 35. Here's what I'd like you to, if you can help me with.
20 Show me either through your expert declaration or anything, where you
21 provide evidence explaining why that would be the way, that one skilled in
22 the art would read the Paragraph 35.

23 In other words, what I didn't see in -- in -- in -- in your -- in your
24 expert's declaration, -- I may have missed it, there's -- I mean, there's 3,000
25 pages in here. But what I don't see in his declaration and I don't see in the
26 petition or the reply is a real crisp clean area where you explain to me, hey,
27 this is exactly why one skilled in the art would, in this configuration, control

1 -- make a determination about the fluid communicated to the first one, in
2 order to make a decision about how you're going to control the valve in the
3 second independent branch. What -- what benefit is that going to do?

4 MS. MARGONIS: Right. Well, I mean, I think in Carr, it talks about
5 the flow rates. It talks about both. But I also think the fact that they discuss
6 this proportioning valve, this optional proportioning valve, tells you -- you --
7 the operator knows they're splitting flow. You're going to have to balance
8 how much flow is in one area and how much is in the other. And so, you're
9 using, for example, your first flow meter, it says you could have a flow
10 meter on the first one and the second to balance that flow, in order to know
11 when to open or adjust your valves, to allow more fluid or less fluid to one
12 and both -- both of the valves.

13 JUDGE LANEY: Well, when you're talking about the proportioning
14 valve, though, that doesn't -- I don't see the link between the proportioning
15 valve and what you're calling the second valve and 472. In other words, I
16 understand that when -- when you're when you're going to now, you're
17 talking about the proportioning valve. I understand the proportioning valve
18 is okay. I have my valve 470 open whatever it's open to. I have 472 open to
19 wherever it's open to.

20 Okay. Now, if I'm reading my 472 flow meter and maybe my 472
21 flow meter is below what I want it to be, in order to feed that side of my
22 pump. Well, then, I may change my proportionality so that more is going
23 through, so that it can compensate and there's more able to go through.

24 But that in and of itself, doesn't explain to me why it is I would use
25 my 470 flow information in order to make a determination about what to do
26 with my 472 information. Because 474 is a proportional valve, and I don't
27 see where you identify that as being one of your first or second valves.

1 MS. MARGONIS: Correct. I was just saying that was another point.
2 And so, I do really think that Paragraph 35 and I know Dr. Durham does
3 explain this in Exhibit 1002 in Paragraph 324, where he cites to Paragraph
4 35

5
6 JUDGE LANEY: I'm sorry. One more time.

7 MS. MARGONIS: Exhibit 1002 at Paragraph 324.

8 JUDGE LANEY: Okay.

9 MS. MARGONIS: Where he explains that Carr discloses the use of
10 flow data, for example the flow rate and the total flow information to control
11 that position of the first valve, the second valve -- and the second valve by
12 utilizing flow data from the flow meters, in light of fluid flow targets for the
13 first well and/or the second well.

14 JUDGE LANEY: Okay.

15 MS. MARGONIS: So Carr on its face is saying, we're using flow
16 targets to each well and we're adjusting one and/or both wells, based on the
17 flow target.

18 JUDGE LANEY: But that seems to be exactly what you say in your
19 petition. I don't

20 MS. MARGONIS: I mean -- I -- I think that's the support, and that's
21 sufficient for what the claims say. The claims don't require more than that.
22 They are opening and closing valves based on these fluid flow targets based
23 on information from at least the first well, and that's exactly what Carr is
24 saying. It's operating its valves. It's -- it's utilizing its flow data, to adjust its
25 valves and that flow data is in the first well. So it's in response to the -- that
26 fluid condition.

1 JUDGE LANEY: Okay. Other than -- other than 33 and 35 of Carr
2 and Paragraph 324 on this point, is there any other evidence that you want to
3 make sure that I've or we've considered on this particular issue, that you
4 want to highlight?

5 MS. MARGONIS: I know -- I think Paragraph 23 also goes through
6 some of the flow meters and, yeah, I think 21, 23, 33, and 35 would
7 probably be the main paragraphs. And also in the reply declaration.

8 JUDGE LANEY: Thank you for that.

9 MS. MARGONIS: Briefly, I'll just touch on Beuterbaugh.
10 Beuterbaugh, again, we believe that the board got this right in the institution
11 decision, the motivation to combine Beuterbaugh. Beuterbaugh discloses the
12 alternating sequence between the valves and explicitly explains that one
13 valve is open while the other one is open, and then you close the second
14 valve while the first one is open. And so, Beuterbaugh clearly shows that.

15 And also just briefly like touching on Tolman. I know that's a second
16 reference, because I'm running out of time.

17 JUDGE LANEY: And, you know what, I've used up a lot of it.

18 MS. MARGONIS: Yeah.

19 JUDGE LANEY: So I'd like to give you

20 MS. MARGONIS: Okay.

21 JUDGE LANEY: Give you about five more minutes.

22 MS. MARGONIS: Okay. Perfect. Let me just let me touch on
23 Tolman, then. So we've at least reviewed the other primary reference, unless
24 you have any questions on Beuterbaugh.

25 JUDGE LANEY: Well, my one question with Beuterbaugh is.

26
27 MS. MARGONIS: Sure.

1 JUDGE LANEY: Is I notice in the patent owner's response, and I just
2 want to make sure you agree with this statement. You're not relying on
3 Beuterbaugh to establish the 1.2. That's -- that -- you're relying solely on
4 Carr in that combination for 1.2 and Beuterbaugh is being to -- to being
5 relied upon and incorporated be -- to -- for the other elements, 1.3, 1.4. I just
6 want to make sure I'm correct, and that's -- that's

7 MS. MARGONIS: Right. In this instance, we were relying on
8 Beuterbaugh for disclosing a computerized controller and the -- closing the
9 first valve after opening the second valve.

10 JUDGE LANEY: Right. Computer

11 MS. MARGONIS: The sequencing

12 JUDGE LANEY: The controller for -- for different -- for the -- for
13 the -- the Claim 14, but -- but I'm saying for -- for Claim 1, it was 3 and 4.
14 And -- and the other question, I want to make sure it's clear that -- well,
15 that's it for that.

16 MS. MARGONIS: Okay. And just the other secondary reference in
17 that group was Jackson, which briefly, you know, Jackson describes using
18 flow rate thresholds specifically for moving -- determining when to move to
19 a next stage. And I just want to point out that, Jackson, we don't dispute that
20 that's a one well system, but it's talking about moving stages.

21 And just to be clear, when we use multi well systems, you perform
22 one stage on a first well, and then you actually perform the first well -- the
23 first stage on the next well, and then you come back to the first well to
24 perform the second stage. So when you determine that that first stage on the
25 first well is done, you are moving to the next well. And so, our point was, if
26 Jackson's teaching a person of ordinary skill in the art, hey, you look at --
27 you look at flow progression to determine when to move to the next stage, a

1 person applying that in a multi well system would say, Okay. I'm moving to
2 the next stage. That means moving to the next well. And just because
3 Jackson talks about one well, doesn't preclude a POSITA from
4 understanding its use in other applications, such as the multi well system.

5 JUDGE LANEY: And -- and just to address their side, I -- I guess
6 what I understood from them is: When you're dealing with -- and -- and -- I
7 don't want to say it. I'll let you say it. I think their point is well, in fracking,
8 you've got this high pressure pump. And when you're switching between
9 wells, it's very different than when you're going down a single well, because
10 you can keep that pump going. You -- it's not as dangerous.

11 Whereas, if you're doing multiple wells, you have to figure out how to
12 have this high pressure going from one well to the other. And they say,
13 that's why it's not. Am I under -- you, is that kind of what you understand
14 their argument to be or is that?

15 MS. MARGONIS: I mean, I don't really understand. Because one,
16 the claim say nothing about pumping or continuous pumping, so it's
17 irrelevant.

18
19 JUDGE LANEY: Okay.

20 MS. MARGONIS: Two, there's nothing in this claim or claim
21 sequence or the valves themselves or the structure of the valves, that tells me
22 they've invented some new way to change how they're switching. They're
23 just opening and closing standard valves on standard equipment, in the same
24 way all of these references have disclosed doing it.

25 So it's not like there's some new invention that has allowed them to do
26 anything special. I mean, the hardest part on a lot of these fracking jobs is

1 being able to provide the proppant timely in order to keep the flow going.
2 It's not the equipment. The equipment's all the same.

3 JUDGE LANEY: And -- and I guess more to your point, too. If you
4 can do it for two -- and so, for example, if -- if we were to find the
5 independent claims unpatentable, scaling from two to three or four, et cetera,
6 if you can -- if you can make that swap between two

7 MS. MARGONIS: Yes.

8 JUDGE LANEY: Then you can make it three, four.

9 MS. MARGONIS: Yes.

10 JUDGE LANEY: Okay.

11 MS. MARGONIS: Exactly. I'm going to jump to Slide 28 for the
12 benefit of the other judges. This is the Tolman ground. I guess I will just
13 pause here and ask if you have any questions on Tolman, based on the time
14 to see if there's anything I can address for you. I know, I feel like we've, you
15 know, sufficiently briefed this in our papers. I know -- I -- I will say I guess
16 the big issue here, I think, is they're addressing the -- the lack of particularity
17 on the tree valves. And I just want to point out, in the petition we repeatedly
18 and specifically identified the tree valve, and it's the valve on the well. And
19 their own expert

20 JUDGE LANEY: So -- so can you bring up? Do you have the figure
21 that you all relied on for Tolman? I think it's Figure 2.

22 MS. MARGONIS: Yeah. That was what it is.

23 JUDGE LANEY: So what is the first valve, is it 214 or 106?

24 MS. MARGONIS: Well, yeah. 106A is the valve, the tree valve.

25 JUDGE LANEY: I understand.

26 MS. MARGONIS: There is a tree there. So we're looking at it, kind
27 of, on an overview, right? Like, a bird's eye view and so the wells below

1 that. And you would have a stack of tree valves. As we went through with
2 patent owner's expert Mr. Hughett, that's all standard equipment.

3 JUDGE LANEY: No, I understand. It's just a simple question. Is
4 214 the first valve, or is one of the valves in the tree valve of 106A, the first
5 valve.

6 MS. MARGONIS: One of the valves in the tree valve, 106A.

7 JUDGE LANEY: Okay. And it's a valve that's associated with a
8 piping 228A.

9
10 MS. MARGONIS: I -- I don't know what you mean by associated, I
11 guess.

12 JUDGE LANEY: Well, I mean, that's -- that's I think that's their --
13 their argument, their thing. You can't -- you're pointing to just -- you just
14 refer to valves in a tree valve. And by definition a tree of valves has a lot of
15 different valves, right?

16 MS. MARGONIS: Right.

17 JUDGE LANEY: So those valves go to a lot of different things.

18 MS. MARGONIS: Correct. That's correct.

19 JUDGE LANEY: I'm -- so I'm just asking.

20 MS. MARGONIS: Sure.

21 JUDGE LANEY: Is the valve you're relying upon in the tree valve,
22 the valve that's associated with 228.

23 MS. MARGONIS: I don't think it's associated in the way that the
24 patent owner has implied, if I can explain. We do explain that the tree valve
25 in the tree is there and that there's a host of other valves. And we are
26 pumping fluid in through the well for -- for -- for hydraulic fracturing. So if

1 we're just looking at Well 1, right? Tolman clearly describes pumping
2 hydraulic fracturing in through the well.

3 It's going to go through the tree valves. It's going to go through a
4 number of valves and it's going to go into the well, then it's going to flow
5 back. We're going to flow back the well. And that flow comes back through
6 the master valve, which is a tree valve, which we go through with Mr.
7 Hughett. And Mr. Hughett explicitly walks through all of these standard
8 equipment, and that a POSITA, a skilled person, would know that this is
9 exactly how it functions.

10 There's a master valve, which is basically the control valve for all
11 fluid to the well and out of the well. So anytime you are flowing fluid into
12 the well and out of the well, the master valve has to be opened.

13 JUDGE LANEY: But I understood your expert to be saying that
14 228A, which is what the

15 MS. MARGONIS: Correct.

16 JUDGE LANEY: The -- the parts that you cite from Tolman.

17 MS. MARGONIS: Correct.

18 JUDGE LANEY: The discussing this and we're talking about the
19 valves that you cite for Tolman, are discussing about the valves associated
20 with 228A. And I -- and I'm just, I want to better understand this.

21 MS. MARGONIS: Sure.

22 JUDGE LANEY: Because what I understand your expert agree with
23 him, at least in the deposition, is that yes, that is a flow back pipe.

24 MS. MARGONIS: Correct.

25 JUDGE LANEY: That is for flow that's flowing away from the well.

26 MS. MARGONIS: Correct.

1 JUDGE LANEY: And therefore, the valves that are used for
2 controlling that flowback pipe are valves that are associated with control --
3 blocking or openings to allow that flowback.

4 MS. MARGONIS: Correct. The master valve is associated with both
5 flowback and hydraulic fracturing.

6 JUDGE LANEY: Okay. But the discussions that -- this is where I'm
7 -- the discussions that you cite to and point to, because it is -- I mean, I don't
8 find their argument completely frivolous about the lack of particularity.
9 Whether or not I -- I think it's -- doesn't satisfy what -- what's required is a
10 whole other question. But I'm talking, you have the burden.

11 And so what I'm looking for is far as particularity is -- is the
12 persuasion. So my understanding is -- is when you open 214, there's a pipe
13 that's for -- for go -- fluid going to the well. That's not shown in Figure 5,
14 but that's -- that's because -- right?

15 MS. MARGONIS: In Figure 2. Sorry. The -- the pipe, the valve 214.
16 There's a pipe going to the well 106A, yes. That's a flow into the well. Q.
17 106A. I thought 106A is the tree valve? A. It's -- it's a tree. So it's like a
18 stack. So, like, if we're looking at bird's eye view, the well's below it. I
19 mean, this is just a schematic, right? And so 106A is your well tree, having
20 all these valves.

21 JUDGE LANEY: Right.

22 MS. MARGONIS: So you have fluid flow from valve 214 coming
23 into that well 106A, going through this host, this stack of valves, that we
24 went through with Mr. Jovich, which I'm trying to find a reference for you,
25 for a site of what that looks like in real -- in the real world.

26 JUDGE LANEY: Okay.

1 MS. MARGONIS: So you have fluid flowing through those valves.
2 So that is Exhibit 1038, shows just like -- what is -- what this frac tree looks
3 like?

4 JUDGE LANEY: Let me pull it up. One second. Okay. Yeah.

5 MS. MARGONIS: Okay. So

6 JUDGE LANEY: And so, that frack tree.

7 MS. MARGONIS: So

8 JUDGE LANEY: Where would be -- where's -- so you're saying on
9 this frac tree, there's some of those pipes that are coming off that frac tree
10 that are -- that are for stimulating and then, there's some that are for
11 backflow.

12 MS. MARGONIS: Correct. And so, these the -- the master valves
13 which Mr. Hughett labeled, those are the lowest valves on that tree, because
14 those are the master valves. They control all flow in and out. So those are at
15 the base. And above that, is a series of valves that you open and close,
16 depending on the operation you want to perform. So the master valve is
17 open. While you're pumping hydraulic fracturing fluid in through those
18 valves down through the master valve.

19 JUDGE LANEY: Okay.

20
21 MS. MARGONIS: That master valve stays open when you -- so that,
22 just going back to that. Show the picture. So that would be, for example,
23 where you have your manifold labeled on the top of Figure 2.

24 JUDGE LANEY: So you're talk -- you're talking about 206 or

25 MS. MARGONIS: Yes. I'm trying to find 206 for me.

26 JUDGE LANEY: Oh, you're looking at

1 MS. MARGONIS: Yeah. So at the top, the 202, like the whole
2 system on the left, top left corner of Figure 2.

3 JUDGE LANEY: Okay.

4 MS. MARGONIS: In Tolman, right? So there's that whole label that
5 we have marked there as the manifold on Slide 29.

6 JUDGE LANEY: Yeah.

7 MS. MARGONIS: Fluid flows through valve 214.

8 JUDGE LANEY: Yeah.

9 MS. MARGONIS: And into the well tree and into the well; which is
10 106A. Fluid, when you flow back, you turn off the valves for pumping fluid
11 in through that well tree. You then, open your other valves that are going to
12 allow the flowback to come out through that line 228. So yes, 228 is the
13 flowback line. Both the line going into the well and the line coming out are
14 associated with the tree valve, that is the master valve.

15 They're associated with -- if we're using associated as meaning like
16 fluid flows through them, the fluids going to go through any valve that's
17 open right. So the master valve is the master valve that's controlling it and
18 which we have mapped to the first valve.

19 JUDGE LANEY: Isn't the master valve 214, though?

20 MS. MARGONIS: 214 is a manifold well valve.

21 JUDGE LANEY: Okay.

22 MS. MARGONIS: So that's on the manifold.

23 JUDGE LANEY: So you're saying there's a manifold -- basically, the
24 -- the manifold valve is the master master; is -- is that -- is that fair? Because
25 it's -- it's even

26 MS. MARGONIS: No.

1 JUDGE LANEY: -- before the master? You've got a master for the
2 tree, and then you've got the -- the man -- is that what you're saying? You're
3 saying the tree has a master valve and the manifold has its own valve that
4 controls fluid from going into it?

5 MS. MARGONIS: Yeah. All of -- yeah. All of this equipment --
6 yes. On a well site you're going to have many, many valves.

7 JUDGE LANEY: Many valves. Yeah, I know.
8

9 MS. MARGONIS: So the -- the image that's above those well trees
10 106A, 106B, 106C, that's the fluid that's going into those wells and, like into
11 the page of 106A, down into the well. And then they will come back up
12 through that tree and come out the open valve, to the flowback line. So the
13 master valve itself, which is at the bottom of that tree, that one is open
14 during both of those operations. So when you pump in it stays open, then
15 you stop -- you close some other valve to stop your hydraulic fracturing
16 flow.

17 JUDGE LANEY: Which is 214?

18 MS. MARGONIS: Correct. Close that. My master valve stays open.
19 I flowback or I open it, it flows back through there and comes out to the
20 flowback line.

21 JUDGE LANEY: And are you -- is the flowback valve going to be
22 open while you're stimulating?

23 MS. MARGONIS: No. That would be closed.

24 JUDGE LANEY: Okay. And so, it's not until you close 214 then
25 you'll open the -- the master valve, the

26 MS. MARGONIS: The master valve.

27 JUDGE LANEY: The flowback valve?

1 MS. MARGONIS: Correct.

2 JUDGE LANEY: But -- but during that whole time, the -- regardless
3 of your -- before -- before you've opened or closed the flowback, the
4 master's already opened. You're saying the master valve's open during
5 stimulation and that master valves going to be open once you open the
6 flowback valve?

7 MS. MARGONIS: Right. And so in Tolman, they tell us when they
8 finish completing. So when they're done with that valve 214, they're going
9 to move into -- they're going to open valve 216 while the master valve on the
10 first well is still open. And we know that because, Tolman explicitly says
11 we're going to do flowback concurrently. So we're still allowing flow
12 through that valve, while we're allowing fluid flow into the second well,
13 through 216, right? So now we're going to hydraulically fracture the second
14 well, while the -- the master valve's still open.

15 And then it says after that has been -- when that is done, then we will
16 shut in the well. Shut in the well means, you close the valve to the well so
17 that no fluid flow in or out. You close the master valve. And that's exactly
18 what Mr. Hughett testified to and walked through during his deposition.

19 JUDGE LANEY: So -- so the master valve -- okay. So -- I -- I thank
20 you for that. I think I have a better understanding. Thank you.

21 MS. MARGONIS: Sorry. And I think -- and we shared that evidence
22 in the petition and in Dr. Durham's initial declaration and then our point in
23 addressing it with Mr. Hughett and raising that again, was he corroborated
24 essentially everything Dr. Hughett said about what the standard operation is
25 of one of these systems.

26 Because the point in the matter is, when you have somebody skilled in
27 the art and you tell them this is a frack tree, as Mr. Hughett said, I know

1 what's on it. I know all the equipment that's on it and I know what has to be
2 on it. And he said, a master valve has to be on it. And he knows that the
3 master valve and admits that it has to be open during both of those
4 operations and that it's closed during shut in, which is what Tolman
5 explicitly says, so.

6
7 JUDGE LANEY: And is Tolman for use in oil fields and oil and gas
8 fields?

9 MS. MARGONIS: Yeah. It's a hydraulic fracturing site.

10 JUDGE LANEY: And -- and -- and I'm correct, as far as your expert.
11 Your expert's expertise are mainly in -- not that he's not -- I'm not
12 suggesting not qualified. I just want to make sure I understand. His
13 principal expertise are with water drilling?

14 MS. MARGONIS: He has done extensive hydraulic fracturing. I
15 know he has designed hydraulic fracturing plans.

16 JUDGE LANEY: Okay.

17 MS. MARGONIS: So he does have extensive experience in hydraulic
18 fracturing.

19 JUDGE LANEY: But he doesn't have extensive experience specific
20 to oil and gas. I know he testified that he's done it, but most of his
21 experience is in -- in fracking for -- or hydraulic fracking for water; isn't that
22 right?

23 MS. MARGONIS: I -- I -- I don't believe that's correct. I know he
24 works in the oil and gas industry and this is his primary focus, is hydraulic
25 fracturing on these types of wells, so. That is my understanding.

26 JUDGE LANEY: Okay. Thank you. I'm glad I asked.

27 MS. MARGONIS: Okay.

1 JUDGE LANEY: Thank you. I apologize. I asked a ton of
2 questions.

3 MS. MARGONIS: So I'll just sum up. Let's see.

4 JUDGE LANEY: I'll give you one minute to sum up.

5 MS. MARGONIS: Okay. And also just for the record, I wanted to
6 point out. Earlier you were asking me about further Carr -- discussion about
7 Carr and I just wanted to put on the record, that also Exhibit 1044 is
8 Durham's reply declaration and Paragraph's 9 through 12. That when you're
9 asking me for paragraphs that specifically address your questions, all
10 pointing to that.

11 JUDGE LANEY: 9 through 12? Now, and these -- for some reason
12 I'm thinking that was cited in your reply or petition. I -- I -- I can't
13 remember. I'm just wondering if there's something -- I'm glad you pointed
14 that out to me. I'm just -- but there was nothing that's not cited already.

15 MS. MARGONIS: It's in the reply.

16 JUDGE LANEY: Okay. Cool. Thank you.

17 MS. MARGONIS: Quickly. With respect to secondary
18 considerations. And I just want to point out that secondary for -- for
19 secondary considerations of nonobviousness. The first step in considering
20 secondary considerations is determining that there's nexus between the
21 claimed invention and the commercial embodiment.

22
23 We've not seen any evidence of what their actual commercial
24 embodiment does, other than a single graph of a result that is achieved,
25 presumably, from their commercial embodiment. We haven't seen any
26 process instrumentation. We haven't seen any diagrams. I have no idea how
27 their commercial embodiment works, how their valves operate, whether

1 they're in response to any condition, we don't know. They point to the patent
2 and say the patent says in this -- in our commercial embodiment practices is
3 the patent. They have to do more than that. They have to show us that
4 they're commercial embodiment does practice the invention and they failed
5 to do that.

6 And I will point that we do agree that nexus requires showing that the
7 evidence of secondary consideration is the direct result of the unique
8 characteristics of the claimed invention. I know patent owner cites the
9 Volvo Penta case for that law, but notably in the Volvo Penta case, the
10 petitioner did not dispute that the patent owner had a commercial
11 embodiment that practiced the claims of the challenged patent.

12 Here, patent owner has never shown that they have a commercial
13 embodiment that practices the claims of the 770 patent -- 770 patent, let
14 alone show, that the nexus between the product and any secondary
15 considerations of nonobviousness apply. And just as a quick point, one of --
16 one of the patent owner's own -- one of the patent owners evidence for the --
17 for the secondary considerations

18 JUDGE LANEY: Isn't this the slide they objected to?

19 MS. MARGONIS: Yes, but it's one that's in the evidence and we
20 responded to.

21 JUDGE LANEY: Okay. I understand. Let's -- let's just not -- we'll --
22 we'll consider, we'll figure out what's right to consider and not to consider.

23 MS. MARGONIS: So and just to

24 JUDGE LANEY: I don't think it's necessary for -- for today, and
25 we've gone well over the time.

1 MS. MARGONIS: Correct. Yes. I just want to point out that, they
2 do argue and all of their evidence points to hot swapping, continuous
3 pumping and all of these features that are not in the claims.

4 And finally, I just want to put on the record that, while we understand
5 Krupa -- the reference Krupa was not considered during institutions -- during
6 the institution stage, because the provisional application was not on record.
7 That application is now of record as Exhibit 1037 1, and the patent owner
8 has not objected to it or moved to exclude it. And so, we just wanted to
9 make you aware that that reference is available for the board to consider as a
10 complete record.

11
12 JUDGE LANEY: Did you provide specific citations? Because I
13 looked at your reply and I don't see where you still -- I still don't see where
14 you provided specific citations to where there is actual support in the
15 provisional to the -- to the claims. And I'm just saying, I -- I don't see where
16 you've done that work, and -- and am I missing something? Because I know
17 -- I -- I saw that it was in there. I was going to ask you, did you file a motion
18 to -- to add that evidence, but as you point out, I also don't see an objection
19 from the patent owner.

20 But I guess more critical to me is even -- even a cursory review, I can
21 see some differences. I'm not saying they're significant. I'm just saying --
22 but what -- what's -- what's troubling to me is I don't see where -- where
23 you've done any analysis to show me where in the provisional in fact each
24 element is supported that you're relying upon for -- in the -- in the Krupa --
25 Krupa reference.

26 MS. MARGONIS: The -- the text is identical. The text in the -- I
27 understand, but the text is identical. So the support in the Krupa reference

1 that we provided the institution during -- for institution, would also be the
2 same to what is shown in the provisional.

3 JUDGE LANEY: Okay.

4 MS. MARGONIS: The text is the same. So in summary, we believe
5 that patent owner's entire argument is based on a multitude of unclaimed
6 features and should therefore be rejected and I'll just switch to our last

7 JUDGE LANEY: You're really going to have to wrap it up.

8 MS. MARGONIS: Sure. I'm -- no, I'm finished. I was just going to
9 say, Slide 45 lists all of those features for your reference. And thank you for
10 the additional time. I appreciate it.

11 MR. JARRATT: Good afternoon, Your Honors. Again, I'm Scott
12 Jarratt for patent owner, Downing Wellhead. Before we get into the weeds,
13 I would like to provide you with context. I think it would help.

14 So this is a dispute between competitors. You know, Downing and
15 IWS they're both in the fracking business and the mere fact that we're in this
16 room arguing, means there's something valuable at stake. All right. And
17 that's the continuous pumping swap. All right. Downing invented the CP
18 swap in 2020, commercialized it and then patented it.

19 So what the CP swap allows an operator to do is switch from fracking
20 from one well to the other well, without stopping pumps. And that's
21 something that just was not done before in the industry. All right. It was
22 actually considered dangerous, I think as you -- as you had mentioned Judge
23 Laney. And early on when Downing would actually propose this idea to
24 operators, they were actually -- were incredulous, because they always
25 stopped the pumps when switching between the wells. All right. This is a
26 new idea.

1 And when Downing proved that the CP swap worked, saved time and
2 reduced nonpumping time, other companies like IWS started practicing it,
3 too. All right. And that's why we're here. All right. We're not here because
4 the 770 patent covers the traditional way of fracking. All right. And I'll
5 admit the claims are broad. All right. But that's often the case when
6 someone events something truly, as is here. All right.

7
8 This is not an incremental improvement, right? The evidence in the
9 record shows that frac operators using the CP swap have shaved days and
10 days off of frac jobs and that's -- that's real money. All right. And that's --
11 there's a reason Downing has one awards based on the technology, as Ms.
12 Vu will touch on.

13 So with that understanding, let's get into the weeds. Quickly, I'll -- I'll
14 begin with something you guys ended on, was Krupa. And so Krupa, even if
15 petitioner had done a colimitation by limitation analysis to show that every
16 element they relied up on in the application was in the not -- was in the
17 provisional at the reply stage, that's still not sufficient. Because that
18 showing had to have been in the petition itself to meet the -- to meet the law
19 and we showed that case law in our briefing.

20 All right. Let's start quickly -- oh, and I guess, also quick note on the
21 prosecution history. I think -- I think the -- it was decided at the end that the
22 prosecution history did not affect petitioner's actual prior art grounds and I
23 will agree with that. And it also does not affect patent owner's rebuttals to
24 those arguments. All right. All of our arguments depend on what's actually
25 claimed in the 770 patent itself, not in any other related patent. All right. So
26 with that, let's start on

27 JUDGE DEFRANCO: Mr. Jarratt, this is Judge DeFranco.

1 MR. JARRATT: Yes, Your Honor.

2 JUDGE DEFRANCO: Just going back to Krupa again. Why do you
3 say that it's not enough just to submit the priority -- the provisional into
4 evidence, especially if -- when Ms. Terry or Ms. Margonis said that it's
5 identical or essentially the same?

6 MR. JARRATT: All right. Because the way the -- the burden
7 shifting works in the dynamic report case is, that if the piece of -- if the --
8 the reference submitted with the petition has a prior art -- priority date later
9 than the patent, then the burden is on the petitioner, in the petition, to make
10 the showing, the affirmative showing, that that piece of prior art actually is
11 prior art, by showing where the support is in the provision.

12 JUDGE DEFRANCO: That's not my understanding of Dynamic
13 Drinkware. My understanding of Dynamic Drinkware is once the petitioner
14 brings -- shows that the claims are obvious or anticipated by a particular
15 reference. In other words, they put in evidence of anticipating prior art or
16 obviousness, then the burden shifts to patent owner to show that they're
17 entitled to the -- the benefit of a priority.

18 MR. JARRATT: And I think that's the second step in the analysis,
19 Your Honor. The first step is determining whether something's prior art in
20 the first -- in the first instance. And if the -- like I said, if the date on the
21 reference submitted with the petition is after the date of the patent, then the
22 petitioner has the burden, in the petition itself, to show that it's actually prior
23 art.

24
25 And they do that by either citing to a provisional and showing where
26 the support is in the provisional itself. And they didn't do that here, and they

1 could not have done that here, because they did not submit the provisional
2 with the -- with the petition itself.

3 JUDGE LANEY: Why didn't you object

4 JUDGE DEFRANCO: Okay. So you rely on the -- on the face of
5 Krupa as being after the filing date of the actual -- challenged filing?

6 MR. JARRATT: Right. That's correct, Your Honor.

7 JUDGE LANEY: Why didn't you object to their submission of
8 Exhibit -- was it 137 provisions?

9 MR. JARRATT: We didn't object because it's too late, at that point.

10 JUDGE LANEY: Okay. But that -- isn't that why you object. I
11 mean, isn't that the whole point of objecting? Somebody's done something
12 wrong and you

13 MR. JARRATT: Well, I would say, we didn't need to object because
14 you cannot cure that error. All right. The error -- once they did not put that
15 in the petition, that's not something you can cure later on in the proceeding.
16 So -- so it didn't

17 JUDGE LANEY: So am I understanding what you're saying is, even
18 if it's admitted, it's too late and so your position is, objecting would have
19 been an exercise of futility from your perspective?

20 MR. JARRATT: That's exactly correct, because as the SAS Supreme
21 Court decision says, it's the petition that drives the proceeding.

22 JUDGE LANEY: Well, how do we square that with the Fed circuit
23 also saying you can build a record after institution? You can introduce
24 additional efforts? I mean, there's a -- there's kind of a tug of war there and
25 where's that -- where do we draw that line? I mean, clearly, we drew it one
26 place in the institution based on what we had. But if they submitted this
27 evidence, and you didn't object to it, what do we do with that?

1 MR. JARRATT: But I -- I agree. There is a fine balance. But in this
2 case, in some instances, for instance, if patent owner -- excuse me. Petitioner
3 made a prima facie case of obviousness in your petition, based on an art that
4 was prior art, they could add additional evidence to further supplement that
5 prima facie case evidence. Here, they did not make that initial burden that
6 was required in the petition itself. And so they can't augment something that
7 was not in the petition itself.

8 JUDGE LANEY: So what you're saying is that -- what you're saying
9 is the way -- you're saying when somebody hasn't established something as
10 prior art in the first instance, that is not something that can be -- the record
11 can be further developed during trial? I mean, is -- is -- am I understanding
12 the issue of what your position is?

13
14 MR. JARRATT: For this specific issue, yes, Your Honor. That is
15 correct.

16 JUDGE LANEY: And why -- you keep qualifying for this specific
17 issue. What makes this specific issue so unique?

18 MR. JARRATT: Because they didn't -- petitioner did not meet their
19 initial burden, right. If petitioner had met their initial burden and included
20 provisional with a petition and done some analysis, they could maybe
21 augmented it later, as

22 JUDGE LANEY: I see what you're saying.

23 MR. JARRATT: But they did not do -- they did not meet their initial
24 burden, which means they cannot augment later.

25 JUDGE LANEY: So you would analogize it, I guess. So take, for
26 example -- let's say we missed the boat. You have Claim Elements 1

1 through 10 and for whatever reason, we move forward on it, but in the
2 petition -- or no, no.

3 Better yet. Say they had two grounds. Ground 1, you had Elements 1
4 through 10. We said, they didn't satisfy the burden because they didn't put in
5 nearly enough evidence or not the right evidence -- or let's say there's
6 nothing there, because here, they didn't put the provisional in at all, right? So
7 there's a complete void of evidence for Elements 1 and 2, but they had
8 enough for Ground 2.

9 So we go forward. Your position is that one -- that -- that because
10 they didn't put in anything for one ground for -- for Elements 1 and 2 in
11 Ground 1, that is not something that can be cured with additional evidence
12 later?

13 MR. JARRATT: Correct. Yes, because it's the petition that drives the
14 whole proceeding.

15 JUDGE LANEY: Well, I -- I understand that, but I mean, this isn't
16 like -- this isn't a scenario where they didn't at least in the petition, make an
17 argument about something. I mean, that's -- that's where the -- the line gets a
18 little bit tricky.

19 So, for example, in my hypothetical, you couldn't really -- I mean,
20 yes, they made an argument that -- that the claim is invalid for obviousness
21 based on prior art A and B, but they just didn't identify a single thing for
22 Elements 1 and 2. And then as you go forward, they want to then identify
23 specific evidence. You're -- your -- your position is, well, that's too late.
24 That's new argument. That's -- that's not -- because it -- well, is -- am I -- am
25 I correctly characterizing what you're saying?

26 MR. JARRATT: Yes. And that is correct. You actually have that
27 situation with the Tolman grounds, as well. All right. With the late

1 identification of the master valve. And we can just discuss that later, but
2 yes, generally, that -- that is our position.

3
4 JUDGE LANEY: Okay. And just so we're clear on this. You -- you
5 -- I mean, in fairness, you kind of gambled on that, because if we happen to
6 disagree, you don't -- in your -- in your patent owner response and I'm
7 asking because I want to make sure I didn't miss something. But in your
8 patent owner response, I don't see where you preserved the argument you
9 made in the preliminary response regarding that it was already disclosed,
10 even if we were to find that. And I don't see you making any arguments
11 addressing the unpatentability, what Krupa discloses and -- and

12 MR. JARRATT: Right. We -- and we did not make those arguments,
13 because we don't -- we don't think it's a gamble, Your Honor.

14 JUDGE LANEY: Okay.

15 MR. JARRATT: We think the law's very clear, that they have to
16 show Krupa is prior art based on the provisional

17 JUDGE LANEY: You're confident in your decision. I -- I appreciate
18 that.

19 MR. JARRATT: We're confident, yes.

20 JUDGE LANEY: I'm just making sure from my perspective because
21 I've got to look at everything. I just want to make sure, if I happen to get to
22 that stage, not saying I am, just saying if I did, then.

23 MR. JARRATT: Yes.

24 JUDGE LANEY: Then you haven't made any of those other
25 arguments?

26 MR. JARRATT: That is correct.

27 JUDGE LANEY: Okay. Thank you.

1 MR. JARRATT: All right. So let's -- let's move to Slide 6. And so,
2 I'll be presenting on the Carr grounds and the Tolman grounds, and Ms. Vu
3 will be presenting on secondary considerations. All right. So let's -- let's
4 start with the Carr.

5 If we turn to Slide 8 -- so this is Claim 1, the 770 patent. And I think
6 we agreed -- the petitioner agreed that the fluid communicated via the
7 manifold based on an antecedent basis refers to the communicating fluid to
8 the first well.

9 JUDGE LANEY: So can I ask you a quick question, before we go
10 there. Just -- just for my kind of housekeeping, I want to make sure I
11 understand. Would you agree, the independent claims limitations are
12 substantially similar, such that, they kind of rise and fall together?

13 MR. JARRATT: Correct. Yeah. That's correct, Your Honor. Yes.

14 JUDGE LANEY: Okay.

15 MR. JARRATT: And so -- so based on this antecedent basis to meet
16 the claims, the prior art must disclose opening a valve to a second well based
17 on the condition of the fluid communicated to a -- a first well. All right.
18 And petitioner said that doesn't really matter when making the prior art, but
19 this requirement is the specific reason why Carr doesn't disclose the claims.
20 And if you turn to Slide 9

21 JUDGE LANEY: Say that one more time.

22
23 MR. JARRATT: So I believe petitioner in their argument said, at
24 some point during when they were discussing the antecedent basis issue.
25 That it doesn't matter whether this requirement exists, the art still works and
26 our position is that

1 JUDGE LANEY: Well, I -- I don't know that -- well, I mean what's
2 just said -- I -- I don't think she -- I don't think petitioner said we -- we can
3 just ignore the claim elements. I think -- I think when I had discussions with
4 petitioner, we were just trying to figure out what -- what is that scope, right?
5 I mean, you have to agree, these are -- are -- they're broad claims.

6 I mean, like I said before, they're not without limitation, but they're
7 broad claims. And I think we were talking more about just the breadth and
8 she was saying they're broad. So I'm not sure I fully understand what you're
9 -- you're saying there. And I just want to clarify, so I know where you're
10 going with it.

11 MR. JARRATT: So maybe I misheard, but our point is that, this
12 requirement that petitioner apparently agrees exists in the claim, is the
13 reason the Carr doesn't meet the -- meet the claims.

14 JUDGE LANEY: And by this, you're referring to?

15 MR. JARRATT: The requirement that the opening second valve in
16 response to the fluid communicated to the manifold has to be -- the fluid
17 communicated must be the fluid communicated to the first well.

18 JUDGE LANEY: Okay.

19 MR. JARRATT: All right. So if we turn to Slide 9, this is petitioner's
20 mapping of the claim elements to Carr's Figure 5. And based on their
21 mapping, they would have to do -- to specifically show in their petition, that
22 the second valve, 472 at the bottom, is open in response to the fluid
23 conditions in the first isolated manifold 122, right? And they don't make this
24 showing and Carr simply doesn't work that way.

25 If you turn to Slide 11, this is Dr. Durham's annotations of Carr's
26 Figure 5 from his deposition. And he color coded the fluid to show what

1 happens as the fluid passes through Carr's systems. And -- and Your Honor,
2 you kind of accurately described how Carr's system worked.

3 There's only a couple of little things that I would further address. In
4 that, the proportioning valve 474, that's the point at which the fluid is
5 separated.

6 JUDGE LANEY: If it has a 474. I think petitioner's point is, not all
7 embodiments have a proportioning valve.

8 MR. JARRATT: And I would say two -- two things to say to that.
9 And the first is, that petitioner relied upon this embodiment of Figure 5 for
10 their mapping. And so, to the extent they're relying on a different
11 embodiment that does not have the proportioning valve, that's not what they
12 put forth in the petition. And

13 JUDGE LANEY: Do you understand them to say that the
14 proportioning valve is either Valve 1 or Valve 2?

15 MR. JARRATT: No, Your Honor. It's either -- it's 474.

16
17 JUDGE LANEY: Okay.

18 MR. JARRATT: Where the two are separated.

19 JUDGE LANEY: Okay.

20 MR. JARRATT: And my same point is that, Carr in embodiments
21 that it does not have the proportioning valve still -- Carr still says that the
22 fluid is separated into these two isolated manifold paths. And that's actually
23 in -- you can see that in Paragraph 32. If you bring up

24 JUDGE LANEY: You said paragraph 32?

25 MR. JARRATT: Paragraph 32. And so Figure 4 of Carr doesn't
26 actually have the proportioning valve. If we go up to Figure 4 very quickly.
27 So this is Figure 4 of Carr, and it does not have the proportioning valve.

1 JUDGE LANEY: Okay.

2 MR. JARRATT: But If you go down to Paragraph 32, it still states --
3 it still states that, before the flow is separated and directed into the first
4 manifold -- isolated manifold path in the second isolated -- so Carr still
5 separates the fluid even without the proportioning valve into these isolated
6 manifold paths.

7 JUDGE LANEY: Okay. I -- I think with this, what you really want
8 to address is, obviously, paragraphs 33 and 35.

9 MR. JARRATT: Yes.

10 JUDGE LANEY: In particular.

11 MR. JARRATT: So let's -- let's go to that, actually. Well, first, let's -
12 - I think it's important to go -- to show what Carr also says, on Slide 12.
13 And Carr, it consistently says that according to this first quote, "that the first
14 valve 470 can be utilized to control the flow to the first well on 40 and the
15 second valve 472, can be used to control the flow to the second well on 42."
16 So first to first, second to second.

17 Carr also teaches adjusting the first valve in response to the first flow
18 rate and the second valve in response to the second flow rate. All right. And
19 that makes sense based upon how Carr has isolated manifold paths. All
20 right. It never -- it does not say, adjusting the second valve in response to
21 the first flow rate. It doesn't have that opposite disclosure.

22 And to the extent -- let's look at Paragraph 35 that the petitioner
23 pointing to. So this is a line from their reply, and they state, "Carr as a
24 whole discloses or teaches that the valves are operated in light of fluid flow
25 targets for the first well 140 and/or the second well 142, to simulate the
26 wells individually or simultaneously."

1 So what it seems petitioner's apparently reading this to me is, that you
2 would operate the second valve in light of the first wells fluid flow target.
3 And -- but if you go back to Slide 11, if you look at the second valve, 472, if
4 you operate the second valve 472, it would have no effect on the flow going
5 to the well 140. Because at that point the flow has already been separated
6 and isolated into the paths.

7
8 So that -- Paragraph 35 does not actually support what they're saying.
9 What -- what Carr is really getting at here is it uses this

10 JUDGE LANEY: Just so that I -- I just want to make sure I
11 understand. Could you bring that back up?

12 MR. JARRATT: Sure. Absolutely.

13 JUDGE LANEY: So what you're saying is -- so -- so the statement
14 reads Paragraph 35, "the control system can be utilized to control the
15 positions of the first valve 470, second valve 472 and/or the proportional
16 valve 474 by utilizing flow data from the first flow meter 150 and the second
17 flow meter 152, in light of the fluid flow targets for the first well 140 and/or
18 the second well 142."

19 That's what Paragraph 35 says, right? And what you're saying, I
20 think, is once you get past the proportional valve 474, the adjustments to 470
21 has no bearing on 472 and vice versa. Is that -- is that what your point was
22 just then?

23 MR. JARRATT: Yes, because at that point the fluid has already been
24 separated. And the fact that these -- each manifold path is independently
25 pressurized, right? There's a reason Carr refers them to as isolated, right?
26 Because they're isolated, changing one valve on one side is not going to have
27 an effect on the -- the isolated manifold path on the other side.

1 JUDGE LANEY: Yeah. I mean, that raises the question of -- and I
2 think this is what I understood petitioner's response to this was, they're
3 isolated after the valve. They're isolated after 470 and after 472. Prior to
4 470 and 472, they are not isolated.

5 MR. JARRATT: Well, I think the -- when Carr describes what
6 happens after the 470 -- 474 proportioning valve, it describes it separating
7 the flow at that point into the isolated manifold paths.

8 JUDGE LANEY: Okay. And your point of also bringing it up -- just
9 that side step, the one you brought up. I think it was 472 -- I mean
10 Paragraph 32, is to point out, and if you don't have 474, then it gets isolated
11 even further up. Basically you're saying there's two separate paths -- what
12 you're characterizing 30 -- Paragraph 32 is to be suggesting, you coming out
13 of mix blend -- or out of -- what is that number? 18 -- 105 for the whole
14 thing. I can't see. I'm sorry.

15 MR. JARRATT: I'm sorry. 105 is the mixing unit.

16 JUDGE LANEY: 105?

17 MR. JARRATT: Yes.

18 JUDGE LANEY: So you're saying, coming out of that, they're
19 separated from the get go if -- if there's not a 474? That's what you're saying
20 Paragraph 32 indicates?

21
22 MR. JARRATT: At some point before the two valves, you know,
23 most likely where the -- the lines actually split into two. And -- and I think
24 there's good evidence that the -- the fluid is actually separated into the
25 isolated valves after the proportioning valve. You can actually look at
26 Paragraph 34 in Carr. Carr says that, starting with the proportioning valve,
27 so.

1 JUDGE LANEY: Read it into the record, I think, if you want

2 MR. JARRATT: And says -- it says, "The proportioning valve 474
3 can separate or direct completely to the first isolated manifold path 122, to
4 the second isolated manifold path 124 or combination of the two."

5 All right. So the separation happens into the path -- isolated paths, at
6 the proportioning valve

7 JUDGE LANEY: Well, keep reading. I mean, you've got to -- you
8 can't just stop there. You've got to read the whole thing.

9 MR. JARRATT: Sure. "Or a combination of the first isolated
10 manifold path 122 and the second isolated manifold path 124, at the desired
11 portion."

12 JUDGE LANEY: So that's -- so I think -- so what does that mean?
13 The combination part of that's not either/or that kind of seems to be both,
14 right?

15 MR. JARRATT: Right. You -- you -- combination is when you,
16 maybe, you send 60 percent of the flow to the one well, it's 40 percent of the
17 flow to the other well.

18 JUDGE LANEY: But they're still separate. It's just 60 percent that's
19 going to this one, 40 to that one. That's what you're saying?

20 MR. JARRATT: Yes, correct?

21 JUDGE LANEY: Okay.

22 MR. JARRATT: And -- and -- and I think just going back to
23 Paragraph 35 or excuse me, the -- the statement in 35 again. What Carr is
24 really getting at with the and/or language is that it's trying to bundle together
25 the different operations of individual stimulation and simultaneous
26 stimulation. And what I mean by that, it's that is because if one of the wells

1 is being stimulated, you would look at the flow target of the first well or the
2 second well, right?

3 Because only one of them is getting flow, but if you're doing --
4 stimulating simultaneously, you would be looking at the flow target of both
5 the first well and the second well, because you have flow going in both,
6 right? That still doesn't mean you're looking at the opposite isolated
7 manifold path to make adjustments for the other valve.

8 JUDGE LANEY: And you're -- when we're talking the 60/40, that's
9 when you're saying it would be and, because you want to see which one are
10 you're going to give 60, which one you're going to give 40?

11 MR. JARRATT: Correct. And then once -- and once it's diverted,
12 then the first valve controls the flow and the first flow path, and the second
13 valve controls the flow in the second flow path.

14 JUDGE LANEY: Okay.

15
16 MR. JARRATT: Let's see. So I think I would also like to address --
17 you had brought up the capable of language, and that's on slide 18. So even
18 if Carr's system is capable of what to do is -- of doing what it's claim, right,
19 that's not enough. All right. The Park division case is -- is on point on this.
20 You know, we have here, Qualcomm who is the petitioner, failed to put
21 forth any evidence or argument in its petitions as to whether the -- the prior
22 art device, even if capable of doing so, would actually perform the claim.
23 And the petitioner also didn't explain why a person of ordinary skill in the
24 art would have been motivated to do that, right? And that's the situation we
25 got here, right?

26 The petitioner did not specifically show that Carr actually would open
27 the second valve 472, in response to the fluid conditions of the first manifold

1 path, right? Which is what they would require. And they haven't shown that
2 that would be obvious, either. Their -- their entire obviousness case is going
3 to a single sentence. All right. You can see that on the Slide 19.

4 They state, "If a POSITA would find it necessary and at least obvious
5 to close a first valve to first well after opening a second valve to a second
6 well, based on the fluid flow targets to simulate the first and second wells
7 individually and simultaneously."

8 And what's striking here is that they never stated that POSITA would
9 be motivated to operate the second valve 474 in light of the fluid conditions
10 on the opposite isolated manifold.

11 JUDGE LANEY: So you're saying that they never rely on Beuter --
12 Beuterbur?

13 MR. JARRATT: Beuterbaugh, Your Honor.

14 JUDGE LANEY: Beuterbaugh or Jackson?

15 MR. JARRATT: That is correct. They only rely upon the secondary
16 references for the valve sequencing. All right. Not this claimed
17 independency. And so, and even if they had, you know, said something
18 about motivation in a sentence. Like, a single sentence is not enough to
19 support, obviousness.

20 All right. I would like to address the zipper valve in the dependent
21 claims. So these are dependent Claims 11, 24 and 36, and they recite
22 whether the first or second zipper valve or excuse me. First or second valve
23 is a zipper valve.

24 JUDGE LANEY: Before you get there, real quick, on the
25 independent claims. And -- and we'll see if you can -- just wondering if
26 there's -- to focus our efforts and then, as I said -- as -- as we said in the -- in
27 the institution decision. As far as the structural components, you don't

1 disagree that the prior art discloses -- that they've identified, discloses the
2 structural elements, meaning manifold, two valves, controls for opening and
3 closing the two valves?

4 MR. JARRATT: That is correct. That is correct.

5
6 JUDGE LANEY: Okay. Really, the fight -- and -- and do you agree
7 with how I characterized the dispute earlier, which is really over 1.2 and 1.4
8 and the -- those corresponding limitations that are in the other independent
9 claims. And if you -- if you -- if you're not comfortable with that, I -- I just
10 want to know, how is that not an accurate understanding of what the -- the
11 dispute is?

12 MR. JARRATT: Okay. The dispute is -- I'm not sure of the exact
13 element numbers, but the dispute is whether Carr actually discloses opening
14 a second valve in response to a fluid conditions of a first -- fluid
15 communicated to a first valve.

16 JUDGE LANEY: And -- and that is 1.2, which says, "in response to
17 determining that a fluid communicated via the manifold has satisfied one or
18 more conditions."

19 MR. JARRATT: Correct.

20 JUDGE LANEY: And -- and that -- that happened, that causes the
21 opening of the second -- and then the close -- and then after the opening of
22 the second one, the closing of the first.

23 MR. JARRATT: That is correct.

24 JUDGE LANEY: Okay. But that that is where the -- the dispute is --
25 is in this case?

26 MR. JARRATT: Yes.

27 JUDGE LANEY: Regardless of which ground?

1 MR. JARRATT: Correct.

2 JUDGE LANEY: Okay.

3 MR. JARRATT: Correct. All right. Yeah. Let's skip to the zipper
4 valves really fast. So on Slide 21, this is the beginning of the petition's
5 mapping of Claims 11, 24 and 36. And it states that claims 11, 24 and 36
6 really label the second -- first second valve differently, without imparting
7 any distinguishable functionality. Additionally, zipper valves are not
8 distinguished from any other valve capable of allowing fluid flow into a
9 well."

10 And this is just not correct, based on the 770 patent and both expert's
11 testimony. All right. The zipper valve has a conventional meaning to a
12 POSITA, and that's the way it's used in the 770 patent. If you go to Slide 22,
13 in purple, you can see the zipper valve 170A and 170B. And they're called
14 zipper valves because they determine which well attach to the zipper
15 manifold receives the common fluid floor.

16 All right. They redirect the flow to a specific well, attached to the
17 zipper manifold. All right. And these zipper valves, they have different
18 functionality than the other valves on frac tree. All right. For instance, the
19 valves 160A and 160B on the opposite side of the cross, those are flow back
20 -- or excuse me, those are pump down valves. And the pump down valves
21 are called that, because they receive the fluid from the pump down truck and
22 pump them down into the well.

23
24 So the wells have specific names based on the functionality and the
25 zipper valves is no different. If you turn to Slide 23, say this -- this is Figure
26 1A of the 770 patent, and this is where the figure has been annotated to show
27 where one of these zipper valves would be located. And this zipper valve

1 has the function of redirecting the common fluid flow to the well 105A. All
2 right. And both experts have testified, that this is the plain and ordinary
3 meaning of the term.

4 If you turn to Slide 24. So this is Dr. Durham's, petitioner's expert's
5 original declaration submitted with the petition. All right. And he states
6 that, "A POSITA would have understood a zipper valve to simply be a valve
7 used in zipper fracturing operations typically between a discharge manifold,
8 a Geo zipper manifold and the well head. These valves would be used to
9 swap fracturing operations from one well to another."

10 All right. And then at the bottom, he says: "The figures of the 770
11 patent show a zipper valve consistent with the general knowledge of a
12 POSITA."

13 So even though this declaration was submitted with the petition, right,
14 it says the opposite of a petition. All right. It says the zipper valve do have
15 a function. All right. Swap fracturing operations from one well head to
16 another. If we turn to Slide 25, we asked Dr. Durham about this in his
17 deposition, and he actually confirmed his -- his testimony in his first
18 declaration. He said at the bottom, "The zipper valve function is used to
19 direct fluid flow between the wells. So it would have to have that function
20 to be a zipper valve."

21 All right. So it's not the case, as stated in the petition, that a zipper
22 valve has no functionality. All right. It at least has the function of
23 redirecting flow between the wells.

24 If we go to Slide 27. So under this conventional understanding, Carr's
25 valves 470 and 472 are not zipper valves. One, they're not associated with
26 the zipper manifold, that the -- the manifold 120 is really admissible. All
27 right. They don't have the function of redirecting fluid between wells, right?

1 That's the job of the proportioning valve. And so once the valve -- once the
2 fluid reaches the valves 470 and 472, it's already been separate as we
3 discussed. So under the plain and ordinary meaning of zipper valve, Carr
4 does not anticipate or render obvious these dependent claims.

5 If there is no questions, I'll move on to the Beuterbaugh reference,
6 briefly. And so as petitioner acknowledged, they're only taking the specific
7 valve sequence from Beuterbaugh. All right. Having Carr's system working
8 on it.

9 JUDGE LANEY: And -- and on that point, I don't understand the
10 petitioner. I mean, I don't understand the patent owner to be disputing that
11 Beuterbaugh discloses the sequence? I mean, I -- my understanding, and
12 this is where I'd like your help and tell me where I'm wrong. But my
13 understanding is you -- your -- patent owner's contention is fine. It discloses
14 closing a first after you've opened the second, but it does not disclose doing
15 that after determinations -- based on a determination about the
16 communication of the first.

17
18 MR. JARRATT: Yeah. Both of those things are correct, yes. So we
19 don't dispute that -- that it actually, in its system, performs the -- the
20 sequence, right? But the important part is, that there'd be no reason to
21 perform that sequence in Carr's system.

22 JUDGE LANEY: And -- and one of your principal reasons for that is
23 because, in Beuterbaugh, it's a single well; is that right or

24 MR. JARRATT: That's the Jackson reference.

25 JUDGE LANEY: That's the -- okay.

26 MR. JARRATT: Yeah. So in Beuterbaugh there is two wells, but the
27 difference is, there is a single source of high pressure fracturing fluid going

1 to both wells. You can see on Slide 29, the purpose of this sequence -- you
2 can see that on the right. Beuterbaugh says

3 JUDGE LANEY: Oh, okay. That's -- that's right. Okay.

4 MR. JARRATT: Yeah. So the purpose of this overlapping sequence
5 is so that two or more wells will be pulsed simultaneously by a single source
6 of high pressure fracturing fluid. So the sequence will be performed back
7 and forth very quickly, instantaneously, to create these pulses of this high --
8 high -- high pressure fracturing fluid and you can see that on the image on
9 the left.

10 JUDGE LANEY: So what your point is and -- and thank you. I -- I
11 misspoke before. I don't remember. Your point was that it's actually -- it's
12 actually the -- the reason it performs a sequence that it does, is because it's
13 using that single in order to create a wave?

14 MR. JARRATT: That's correct.

15 JUDGE LANEY: And if you did that in Carr, you're not going to
16 create any wave, because each one has its own pump.

17 MR. JARRATT: That -- I was exactly about to say that same thing.

18 JUDGE LANEY: Okay.

19 MR. JARRATT: So you see Carr on the right side, it has its own
20 individual pumps and there's not a single source of high pressure fracturing
21 fluid. All right. So there'd be no point in performing the overlapping
22 sequence of Carr, because you can't create these high pressure pulses. All
23 right. If you take away that purpose, there's no reason to perform the
24 sequence in Carr.

25 JUDGE LANEY: I guess to the extent in Carr, and -- and how would
26 this affect things? But clearly what's -- I can't -- I'm too blind. Let me pull
27 up Carr.

1 MR. JARRATT: I can bring up a bigger version.

2 JUDGE LANEY: It's -- it's probably easier, if I just do this. And
3 that's Figure 5, right?

4 MR. JARRATT: Yes.

5 JUDGE LANEY: So in Carr, I mean, you would agree that 105 is that
6 whole part coming out -- out of the mixing blender, right?

7 MR. JARRATT: Yes.

8 JUDGE LANEY: That's -- that's coming out at a pressure, right?

9 MR. JARRATT: Some pressure. Low pressure.

10
11 JUDGE LANEY: Okay. And what if the -- what if their argument is
12 474 or -- or you -- you want to -- you're using -- you -- you're -- you're
13 adjusting those to create the wave coming out of the mixing blinder. Does
14 that -- what would be the error in that argument?

15 MR. JARRATT: Because you couldn't create high pressure waves,
16 and that's the point in Beuterbaugh. That's the purpose of the valve sequence.
17 It only works if you have high pressure force go, you know, against these
18 two valves that are opening and closing in a specific sequence. And think

19 JUDGE LANEY: And I -- what would be the reason why you would
20 -- I guess, going into the manifold, would there be any reason for creating
21 pressure waves? Would that having any benefit? I -- I'm just thinking out
22 loud.

23 MR. JARRATT: Yeah, I don't believe so. The -- the purpose is to
24 send the waves into the wells themselves. All right. And -- and maybe, if
25 you indulge me with a simple analogy. I think petitioner's combination is
26 kind of like proposing adding gear shifters to a bike without gears. All right.

1 The purpose of the gear shifter is to shift gears. So there'd be no reason to
2 add them to a bike without gears.

3 JUDGE LANEY: Okay. All right.

4 MR. JARRATT: So -- so their combination just simply isn't logical
5 and is not supported by rational underpinning.

6 JUDGE LANEY: Real quick, just so -- you're patent owner's
7 understanding and I have to go back and look at Beuterbaugh a little bit
8 closer on this point. Is it your understanding that if you were to do that
9 sequencing in Beuterbaugh, that it only works as described, if you have a
10 single source high pressure pump?

11 MR. JARRATT: Correct.

12 JUDGE LANEY: Okay.

13 MR. JARRATT: And -- and in -- in page -- Slide 31, these are the
14 two motivations petitioner provided, as to why you'd use the sequence in
15 Carr. And neither of them provide the benefits in Carr, because they're only
16 benefits associated with Beuterbaugh. And the first in the yellow, it talks
17 about optimizing downhole pressure waves, right? But in Carr, you would
18 not have those pressure waves, so there's nothing to optimize.

19 And then, in -- in blue, it says you could prevent an absolute shutoff
20 of fracturing fluid by the plug valves, but the petitioner is not suggesting
21 moving the plug valve from Beuterbaugh to Carr. All right. And -- but the
22 benefit, the absolute shut off, that is caused by the plug valves and those are
23 not being moved to Carr.

24 JUDGE LANEY: Well, why would they have to move? Why -- why
25 would they have had to do that?

26

1 MR. JARRATT: The -- the point of me showing this is because
2 petitioner is using this absolute shutoff as a benefit of a reason you would
3 add the sequence to Carr. And if you're not bringing the plug valves, you
4 wouldn't get this benefit in Carr, because there wouldn't be any shutoff
5 because there wouldn't be any plug valves in Carr. So it's not -- this is not a
6 motivation to perform the sequence in Carr.

7 JUDGE LANEY: Okay.

8 MR. JARRATT: These motivations are -- both of these are specific to
9 Beuterbaugh itself, and these are the only motivations they provided in this,
10 in the petition itself.

11 JUDGE LANEY: And -- and just so I'm clear, what you're saying is -
12 - well, let me ask it a different way. Are you making the contention or the
13 argument just that they haven't said you'd bring the plugs, or are you saying
14 that you wouldn't or couldn't use the plugs in Carr?

15 MR. JARRATT: My point is that they have said they are only
16 bringing the sequence of Beuterbaugh. They're not bringing any of the
17 structure of Beuterbaugh into Carr. And so, this benefit is not a benefit in
18 Carr, if you don't also bring the plug valves.

19 JUDGE LANEY: Okay. Well, that may be a way to implement it,
20 right? But would they have to bring in the plug valve? I mean, I -- I'm just
21 trying to figure out, would it be necessary for them to bring in? I -- I -- I'm
22 just trying to -- is a plug valve a person of skill in the art would in the
23 ordinary course use with Carr's system? Just and set aside the -- creating the
24 waves by doing the sequence. Is a plug valve something that an ordinary
25 skill in the art would normally use with Carr's system?

26 MR. JARRATT: I don't think there's any record -- anything in the
27 record to support that. All right. The plug valves are only used in the

1 Beuterbaugh system, where the wells share the same high pressure fracking
2 fluid.

3 JUDGE LANEY: And you're saying, plug valves are necessary in
4 order, for even Beuterbaugh, to -- they say it's a necessary part of their --
5 their sequence?

6 MR. JARRATT: Well, it's certainly -- it's a necessary part to create
7 absolute shutoff of the fracturing fluid. All right.

8 JUDGE LANEY: Okay. I see what you're saying.

9 MR. JARRATT: So without the plugs, you don't have that benefit.
10 Without the benefit, you don't have motivation to bring the sequence over.

11 JUDGE LANEY: Okay.

12 MR. JARRATT: All right. So let's go to Tolman. Let's go to 35. So
13 real quick, before we get into the details of Tolman. I'd just emphasize, that
14 the federal circuit has said, "That it's the utmost importance that petitioners
15 in the IPR proceedings adhere to the requirement that the initial petition
16 identify with particularity the evidence that supports the grounds for their
17 challenge to each claim."

18
19 And -- and this particularity requirement, it's extremely important in
20 this case. Because -- because of the -- the back and forth between the parties
21 and the record that developed. And let me explain that. So if we go to Slide
22 36, this is the first mapping in the petition of the first valve. And the
23 petitioner points to both the manifold valve 214 and the tree valve that's not
24 shown in Tolman. And as you can see in Tolman, Tolman just provides

25 JUDGE LANEY: Yeah. Actually, one thing I want to address before
26 you

27 MR. JARRATT: Sure.

1 JUDGE LANEY: I want to help guide where you're about to go with
2 this, just because I know a big part of your particularity argument.

3 MR. JARRATT: Yes.

4 JUDGE LANEY: And let's just presume, hypothetically, we don't
5 follow that argument. Let's say -- let's work under the world where -- where
6 their argument is that it's the master valve on the -- on the valve tree and
7 that's the first valve and the second valve is valve 216. Can you focus your
8 argument and -- and help us understand, where you believe the weaknesses
9 are if -- if what -- and they can correct when they -- they have rebuttal. But
10 let's -- let's say it's the master valve of the tree and is number -- the first
11 valve and the second valve is 216.

12 MR. JARRATT: So it's a difficult question to answer, Your Honor,
13 because the master valve was not identified until the petitioner reply, right?
14 And at that point, patent owner did not have a chance to introduce any expert
15 evidence as to why the master valve could not be the claim first valve. So

16 JUDGE LANEY: Well, let me -- okay. So that's -- just so I
17 understand. Are you saying, you -- you agree they identified the valve tree
18 is at least a -- I mean, I think in our -- in our -- you had the benefit of our
19 institution decision, correct?

20 MR. JARRATT: Correct.

21 JUDGE LANEY: And I think in our institution decision, we -- we
22 clearly stated that we understood them to be saying the valve tree, right?

23 MR. JARRATT: I -- I read the institution decision last night and it --
24 it was occasionally it said a valve tree 106A and it occasionally says the
25 valve -- the tree valve. But I think the record is developed in so far that, we
26 now agree that there's multiple valves on the well valve tree.

27 JUDGE LANEY: Okay. I agree with that.

1 MR. JARRATT: And

2 JUDGE LANEY: But -- but we -- we made it clear in the -- in the
3 institution decision, that 214 can't be the first valve?

4 MR. JARRATT: Correct.

5 JUDGE LANEY: Or at least that's how we understand it in the
6 institution decision. And I -- I -- I -- I haven't heard petitioner to be trying to
7 suggest that 214 could be the first valve, today.

8 MR. JARRATT: And so

9
10 JUDGE LANEY: What I -- so -- but -- but we -- so I -- I guess, in the
11 institution decision, I -- let's -- let's presume we -- we thought we -- we said
12 the tree valve, right or the valve tree? I don't think we made any distinction
13 between tree valve or valve tree. Your point is there lots of different valves
14 and a valve tree and it's not sufficient just to say valve tree. You've got to
15 identify which specific -- and because that's petitioner pointed out, a valve
16 tree has valves that do very different things.

17 MR. JARRATT: And I'll -- I'll -- I'll tell you why it's important is
18 because we -- we -- we saw what was decided to -- in the institution
19 decision. It said, petitioner is going forward with the -- the well tree valve
20 theory. Okay. So we looked in the mapping, and we saw that the tree valve
21 that they were pointing to was one associated with flowback. "The well tree
22 valve would need to be opened while flood is being flowed back to allow a
23 fluid into and out of the well."

24 And so in petition -- or excuse me, patent owner's response, we focus
25 on -- this is on Slide 42. We focused on the tree valve that was associated
26 with flow back. All right. And we introduced evidence, and we deposed Dr.

1 Durham asking questions about how the flowback works. What does the
2 flowback valve do? And we distinguish the flowback valve in our response.

3 JUDGE LANEY: Okay. So let's -- let's start there.

4 MR. JARRATT: Okay.

5 JUDGE LANEY: Let's say we agree with you, that we understood the
6 petition to be saying the flowback valve, not this master valve they're talking
7 about now. Because I just want to make sure I'm understanding what the
8 argument is. I almost hear you saying that they argued -- even if they --
9 even if they satisfied particularity. At most of their particularity is the
10 flowback valve. Anything regarding the master valve is a new argument that
11 shouldn't -- that we should not consider, because it's a new argument not
12 introduced until the reply or at this hearing?

13 MR. JARRATT: That is correct. So

14 JUDGE LANEY: Okay.

15 MR. JARRATT: -- we did our best to respond to what we could see
16 in the petition itself, because the petition had no evidence other than the
17 blank box and Tolman as to what a tree valve looks like. There's no
18 disclosure whatsoever, there's no expert testimony about the valve -- which
19 valves are in a well tree. There is no secondary reference showing what a
20 well tree looked like. All of that evidence came in later, actually from patent
21 owner's expert.

22 All right. And so after the -- we made this argument in our response,
23 patent owner -- excuse me, petitioner came back as a reply, now identified
24 the master valve as the claim first valve. All right. And let me make this
25 very clear. The petition never mentions a master valve. The original expert
26 declaration never mentions a master valve.

1 JUDGE LANEY: So let me ask you a quick question on that point,
2 because this is what you cite. They cite -- this is from their petition, this is
3 the reply?

4 MR. JARRATT: Yes.

5 JUDGE LANEY: They cite to the petition 7576. They cite 102
6 Paragraphs 544, 556 through 557, and then it cuts off the other exhibits. Are
7 you representing to -- now that it's your understanding, that not a single one
8 of those citations that they reference there, supports that specific contention
9 that the master valve is, as the claim, the first valve?

10 MR. JARRATT: That is correct.

11 JUDGE LANEY: Okay.

12 MR. JARRATT: They never say the words master valve in any of the
13

14 JUDGE LANEY: Well -- okay.

15 MR. JARRATT: Or excuse me. They don't say the words master
16 valve and they don't point to any valve that could be the master valve.

17 JUDGE LANEY: In other words, like today, she's describing, very
18 clearly, that the master valve is that one at the very base, that's open when
19 you stimulate, as well as, when you do backflow, and that there's a separate
20 and then it. In other words, even if they don't use the magic words "master
21 valve", they've never described with any kind of clarity something that could
22 be understood as a master valve?

23 MR. JARRATT: Right. There's nothing to give us, as patent owner,
24 an idea of what they're pointing to for the first valve. All right. The only
25 hint that we had was a valve associated with flowback, right? And that's
26 what we responded to in our patent owner response, right? And then in the
27 reply they said, oh, no, no, no. It's not the valve. It's not the flowback valve.

1 It's the master valve. All right. At that point, we didn't have a chance to put
2 in additional evidence showing why the master valve could not be the first
3 valve.

4 JUDGE LANEY: We had a sur-reply, right?

5 MR. JARRATT: Well, we had a sur-reply but we cannot add
6 additional expert evidence, et cetera. All right. And I will note on the master
7 valve point, is that they -- they -- in their reply, they consistently said the
8 master valve. All right. But there's actually two master valves on a frac
9 tree, and this is Dr. Durham -- excuse me, doctor -- Mr. Hughett's
10 annotations. He says, there's an upper master valve and a lower master
11 value.

12 JUDGE LANEY: Just for the -- could you state for the record,
13 exactly what you're -- you -- you're pointing?

14 MR. JARRATT: Sorry.

15 JUDGE LANEY: I just want to make sure the record is clear, what
16 you're pointing to.

17 MR. JARRATT: This is slide -- this is slide 46. And, Mr. Hughett
18 had annotated a typical frac valve.

19 JUDGE LANEY: So is it an exhibit in the record?
20

21 MR. JARRATT: Yes. This is, I believe, Exhibit 1044 from his
22 deposition. And he identified that there's was both an upper master and a
23 lower master. All right. So -- and we asked Dr. Durham about this in his
24 deposition, and he said you could open the upper and the lower
25 independently.

26 JUDGE LANEY: Okay.

1 MR. JARRATT: And so -- and so, just identifying quote "the master
2 valve" is still not enough to meet the claim -- to meet the particularity
3 requirement. And one last thing on Tolman, I'll go to

4 JUDGE LANEY: I'm sorry. Real quick. If you -- before you go to
5 the next thing.

6 MR. JARRATT: Yeah.

7 JUDGE LANEY: Do you have a -- let's say -- hypothetically, let's say
8 we accept the master valve. What -- I thought you -- you did it -- and did
9 address it in the sur, by saying something to do with, at the shutoff is
10 actually when that master valve is closed. It's actually after the second. I -- I
11 -- I -- I think that's an argument. I just was -- do you -- can you explain that
12 more or -- or am I misunderstanding that you did, in fact, at least address the
13 master valve argument to some degree?

14 MR. JARRATT: For -- for purposes of time, I will rely on the papers
15 review for that.

16 JUDGE LANEY: Okay.

17 MR. JARRATT: But I will -- want to make one quick point, is that in
18 1.4 petitioner said -- to understand that shutting down the first well,
19 necessarily includes closing the first well's valves. At this point, they don't
20 say anything about whether a tree valve or manifold valve. We asked ask
21 Dr. Durham about this, and he said you can actually have valves open during
22 shut down. All right. So because you could have some valve open and
23 some valves closed, it was incumbent upon petitioner to identify, that the
24 same valve that was open previously is now being closed in Element 1.14.

25 JUDGE LANEY: Okay.

26 MR. JARRATT: All right. And the rest of the time, I'll give it to Ms.
27 Vu for secondary considerations.

1 JUDGE LANEY: Okay.

2 JUDGE LANEY: And I apologize. Just so you know, I'm standing,
3 because I actually have to have a back surgery in a month. So I -- it starts to
4 hurt, so I hope you indulge me. Welcome, Mrs. Vu.

5 MS. VU: Thank you, Your Honor. I'm a stander, as well. So
6 completely understand.

7 JUDGE LANEY: And Ms. Vu.

8 MS. VU: Yes.

9 JUDGE LANEY: Just before you -- I just want to let you know
10 something of particular interest, I think is addressing the nexus issue.

11 MS. VU: Yes, Your Honor, that is the topic here.

12
13 JUDGE LANEY: Okay. And also, Ms. Vu, in light of the extra time
14 we gave to the petitioner, I don't want you to feel like we're rushing your --
15 your part. And also, in light of the fact that you're part of the lead
16 practitioner part. So you have -- you have at least a couple of extra minutes
17 over the -- the six and a half that shows.

18 MS. VU: Thank you very much, Your Honor.

19 JUDGE LANEY: Okay.

20 MS. VU: So I'm going to start with Slide 48. And I just first want to
21 say that the only dispute between the parties is whether a patent owner has
22 established a nexus between the evidence of secondary considerations
23 related to the industry praise that we submitted and the claims of the 770
24 patent. The only secondary considerations evidence that patent owner is
25 relying on is industry praise. And other than nexus, my understanding from
26 reading the reply is that all of the patent owner's secondary consideration
27 showing is un rebutted.

1 So if you turn to Slide 49, I just quickly want to establish what nexus
2 requires. And it only requires showing that the evidence of secondary
3 considerations is a direct result of the unique characteristics of the claimed
4 invention.

5 If we turn to Slide 50, so petitioner's reply, and today they've argued
6 that there's no nexus because the praise is related to features that are not in
7 the claims. But nexus can exist even if the claimed feature is what enables
8 the phrase, right. And that's what happened in the Rambus case here. The
9 industry praise was directed to this high speed data transfer feature. It was
10 not in the claims, but the federal circuit found a nexus because the claimed
11 feature is what enabled the praise for the high speed data transfer.

12 JUDGE LANEY: Well, what if their argument's a little bit different?
13 What if their argument is that you haven't made the connection, the link
14 between what is being praised and something that is practicing the
15 invention?

16 MS. VU: Yes, Your Honor. And I'm going to get to that in this very
17 next slide.

18 JUDGE LANEY: Okay.

19 MS. VU: So unfortunately, this nexus showing is like a multistep
20 approach. So I'm going to first start by saying that, you know, the unique
21 characteristic of the 770 patent is this CP swap feature. It's described in the
22 specification as transitioning the zipper valve from one well to the other,
23 opening the second well and subsequently shutting in the well, all while
24 pumping. And the claim mirrors how the specification talks about the CP
25 swap feature. It claims all the essential steps of the CP swap feature. That
26 feature is also depicted in the figures shown below.
27

1 I know petitioner has argued today that the claims don't recite
2 pumping, they don't explicitly recite pumping. But the claims recite
3 communicating fluid to a first well and then communicating fluid to the
4 second well, and then closing the first valve after opening the second valve.
5 And so because fluid is being communicated to both wells at the same time,
6 pumping is occurring.

7 JUDGE LANEY: Well, I -- I kind of understand their argument to be
8 a little -- I agree with you on that. But I think part of it is a little bit
9 different, in the fact they're saying, look, if you're going to rely on this
10 determining that fluid communicated via the manifold to satisfy one or more
11 conditions, you're giving it this -- this emphasis on that element, requiring
12 you to make a determination about that first well to control the valve on the
13 second well.

14 That's -- that's the critical -- that's one of the key distinctions that the
15 patent owners relied upon to make a distinction between the prior art.

16 Where is it in your record, in the evidence that you've presented, that
17 what's your -- this praise that you have. It does the swapping. It -- it does
18 the -- it closes the -- it opens the second well before it closes the first, and
19 then closes the first after it opens the second. But it does that in response to
20 determining the fluid communication.

21 Where's your evidence that what that's getting that praise that allows
22 that sequence to give you the continuous, the CP, the whatever nomenclature
23 used. Where's your evidence that that thing that got that praise did that --
24 did the determining?

25 MS. VU: Yes, Your Honor. So if you look at the specification where
26 it is describing the CP swap, it says, you know, as shown in Figure 16D, the
27 CP swap transitioned the zipper valves from one well to the other. And

1 when we look at Figure 16D, it shows -- you know, these are actual fluid
2 conditions from actual CP well -- CP swaps performed by patent owners'
3 commercial product.

4 So if you look, you know, you have the first well that is -- there's
5 communicating fluid. And then, in response to a fluid condition, right, you
6 have the second well then being -- communicating fluid. And that's kind of
7 going through that through each well transition. So, you know, there has to
8 be a fluid condition before you open the second well and communication

9 JUDGE LANEY: Okay. That's all fine and good that it has to be
10 there. But where's your evidence that the thing that's being praised, in fact,
11 made that determination that the fluid communicated via the manifold has
12 satisfied one or more conditions?

13 I mean, this is from the specification. I'm looking for the evidence
14 that correlates that, makes that tie, that nexus between that praise and
15 something that actually made this determination.

16 MS. VU: So I guess when you're looking at nexus, we're looking at
17 the claimed invention as a whole. We're not focusing on one single element.
18 And so

19 JUDGE LANEY: Yeah, but this is a critical element, right?

20 MS. VU: Yes.

21
22 JUDGE LANEY: I mean, this is what I understand the patent owner
23 to be putting a whole lot of weight on.

24 MS. VU: Yes, Your Honor. So I think, you know, the well transition,
25 the -- in response to the fluid condition, right? That's a necessary component
26 of transitioning the opening of second well and then closing the first well,
27 right? Like, you want to do it safely.

1 And, you know, based on this figure, you know, that is there -- it's
2 showing that the second well is being opened in response to a fluid condition
3 of the first well. And so that's kind of wrapped into how you do the CP
4 swap feature. And so when we go to look at the evidence of industry praise,
5 you know, the industry praise is directed to the CP swap feature.

6 I -- I recognize that it doesn't explicitly mention, you know, the exact
7 words of determining a fluid condition. But I think when you look at how
8 this feature is described in the specification and how the praise kind of
9 matches that same phrasing, which incorporates this, you know, safely
10 implementing the CP swap feature by looking at the fluid conditions, there is
11 a nexus.

12 And just to take a step back about why, you know, you need to safely
13 be able to do this: The traditional method, right, you opened -- you had one
14 well -- one valve open and you were communicating fluid to a first well.
15 And then, you close that valve. And then, you open the second valve and
16 you communicate fluid to the second well. And so, when you have both
17 valves closed in that transition time, right, you have to shut off the pumps
18 because it creates a dangerous condition.

19 And so in order to continuously pump and, you know, do the well
20 transitions, you still want to do it safely. And -- and so that condition is,
21 like, wrapped into doing the CP swap feature.

22 Okay. If we could, go to Slide 52.

23 JUDGE LANEY: 52, did you say?

24 MS. VU: Yes, 52.

25 JUDGE LANEY: Okay.

26 MS. VU: So the industry praise all relates to patent owners
27 completion system called The Freedom Series. And for a little background,

1 The Freedom Series is used on site during fracturing operations. And it
2 automates and controls latches and valves and pumps of the completion
3 system.

4 So patent owner invented and added the CP swap feature to The
5 Freedom Series in 2020. And it then began promoting the CP swap feature
6 on a web page in October of 2020. And that's shown on this slide here. And
7 this feature was so important to the patent owner that they have a separate
8 page on their website all about this feature. And -- and, you know, based on
9 the timing, right, it was published in October 2020. That is even before the
10 770 parent patent was filed.

11
12 So if we could, turn to Slide 55. So here we have the testimony of
13 Mr. Marvel. He's the vice president of business development and
14 technology at patent owner's parent company.

15 JUDGE LANEY: Can I ask you a quick question, if you know?

16 MS. VU: Yes.

17 JUDGE LANEY: Is the Freedom series control -- is there anything in
18 the evidence that indicates whether or not it's marked with like, "patent
19 pending" or "patent", "patent number" or anything like that?

20 MS. VU: I'm sorry, Your Honor. I don't know the answer to that.

21 JUDGE LANEY: Okay.

22 MS. VU: But Mr. Marvel testified that the CP swap feature that's
23 claimed in the 770 patent is the same CP swap feature in the Freedom series.
24 And he also testified the 770 patent was filed specifically to protect the CP
25 swap feature of the Freedom series.

26 If we could, go to slide 54. So when you compare patent owner's
27 webpage discussing continuous pumping to the patent, this shows that the

1 Freedom series implements the CP swap. On the bottom of the slide, we
2 have patent owner's webpage that's describing the CP swap feature in the
3 Freedom series. And it says that you transitioned the zipper valves from one
4 well to the other, opening the second well, and subsequently shutting in the
5 first well, all while pumping.

6 And again, this webpage came first. It was published before the 770
7 patent and its parent application was filed. And so that's why the
8 specification describes the CP swap feature in almost identical language in
9 the specification, and it's why the claims recite similar limitations.

10 If you turn to Slide 53

11 JUDGE LANEY: Real quick -- oh, yeah, 53. Yeah.

12 MS. VU: Yes. It's also why we have these identical figures, right.
13 The web page came first. And so the patent owner was using the -- the
14 disclosures already published on its web page to provide information about
15 this feature.

16 JUDGE LANEY: Did -- is there anything in the record that you're
17 aware of, that I may have missed, where you have an expert or anybody
18 saying that looking at Exhibit 201, that you have on Slide 53, that that would
19 communicate to a person of skill that you are making the determinations
20 that's recited?

21 MS. VU: We have Mr. Hughett's testimony. If you would like me to
22 find the specific testimony

23 JUDGE LANEY: Well, counsel can bring it up on rebuttal. I'm just

24 MS. VU: Okay.

25 JUDGE LANEY: That's just a question I ask.

26 MS. VU: Okay. Yes. Okay. I will find that

1 JUDGE LANEY: And just for planning purposes, how much longer
2 do you think you have?

3 MS. VU: I hope five to ten minutes.

4 JUDGE LANEY: Let's try to keep it at five.

5
6 MS. VU: Okay. Yes, Your Honor. Okay.

7 So I will jump to Slide 57. Okay. So the CP swap feature enables
8 continuous company here we have the testimony of Mr. Hughett, and he
9 testifies that the CP swap feature is what enables continuous pumping in the
10 Freedom series. And he also testifies that continuous pumping can't --
11 cannot occur without performing the claimed CP swap. So again, we have
12 this claimed CP swap feature that enables continuous pumping.

13 If you could, turn to Slide 59. So when you look at the evidence of
14 industry praise that's in the record, the praise all relates to the CP swap
15 feature and all the benefits that are enabled by the CP swap feature. So the
16 patent owner has discussed that in much more detail in the briefs. I'm just
17 going to touch on a couple examples here.

18 But if you're looking for the most explicit example of nexus, I think
19 this slide is what shows it.

20 JUDGE LANEY: And this is slide -- when you say "this", you're
21 referring to Slide 59 of patent owner's demonstration?

22 MS. VU: Yes, Your Honor.

23 JUDGE LANEY: And that's exhibit

24 MS. VU: Exhibit 2020.

25 JUDGE LANEY: Okay.

26 MS. VU: And so this slide shows the press release from Liberty Oil
27 Field Services. And Liberty used the Freedom series to reach its milestone

1 achievement of 24 hours of continuous pumping. And this press release
2 attributes this to the freedom series, and in the highlighted section it says
3 instantaneously transitioning from one well to the other, opening the second
4 well and subsequently shutting in the first well, all while pumping. Right?
5 This is the same language that we see in the specification of the 770 patent.

6 And so, this press release shows a direct nexus between the industry
7 praise and the CP swap feature, almost exactly as it's described in the 770
8 patent.

9 If we could, turn to Slide 62. The Freedom series has also received an
10 industry award because of the CP swap feature. In 2023, the Freedom series
11 won the best completions technology award at the Gulf Energy Information
12 Excellence award.

13 And here, we have the Downing team after receiving the award, right?
14 The person holding the award, with the biggest smile on his face, is one of
15 the inventors, Austin Johnson. And you know, we have in the record Mr.
16 Marble's testimony that when he nominated the Freedom series for this
17 award, he highlighted key aspects related to the CP swap feature.

18 And that's also shown at Slide 63, which shows, you know, Exhibit
19 2019. We've highlighted all of the aspects in this nomination submission by
20 Mr. Marvel for this award that relate to continuous pumping and the CP
21 swap feature. And so, that also establishes a nexus between the CP swap
22 feature and the industry award.

23
24 I know patent -- or petitioner mentioned the hot swap feature today.
25 Our position, we've objected to it as a new argument. But if you'd like me to
26 address it, and why the -- there's no nexus

27 JUDGE LANEY: Well, I'm going to -- look. I asked the petitioner

1 MS. VU: Yeah. Okay.

2 JUDGE LANEY: -- to move on from it. We'll -- we'll look at it and
3 make our own evaluation of whether or not it should. Let's -- let's let that

4 MS. VU: Great. And so, just my final slide, Your Honor, Slide 64:
5 Patent owner has established a nexus between the industry praise and the
6 invention claim in the 770 patent. And that industry praise is the most
7 probative evidence in the record regarding obviousness. And so because
8 patent owner has established a nexus and because the industry praise is
9 otherwise unrebutted, the evidence of industry praise strongly weighs
10 against obviousness.

11 And this is especially true in light of the weak obviousness grounds
12 that Mr. Jarratt discussed.

13 JUDGE LANEY: Thank you.

14 Judge Wood, Judge DeFranco, do you have any questions for her?

15 JUDGE WOOD: No, thank you.

16 JUDGE DEFRANCO: Ms. Vu, this is Judge DeFranco. Do you have
17 any other evidence aside from industry praise, such as commercial success
18 or copying or failure of others?

19 MS. VU: No, Your Honor. We're only relying on industry praise.

20 JUDGE DEFRANCO: Okay. Thank you.

21 JUDGE LANEY: All right. Petitioner?

22 MS. MARGONIS: Can I have a few minutes?

23 JUDGE LANEY: You can come back up. I will say we've gone a lot
24 of over it.

25 MS. MARGONIS: Yes.

26 JUDGE LANEY: So I would just ask -- I'm not going to take away
27 the time that we agreed to already. I just would ask that you really fine tune,

1 to addressing the arguments that were made by the other side. And I'll give
2 you some leeway, if there's something specific that maybe I -- because of my
3 questions, you didn't get to that you really, really wanted to get to. You can
4 do that within your time. But if you can, try to really hone the arguments.

5 MS. MARGONIS: Thank you, Your Honor.

6 JUDGE LANEY: And then, so Petitioner, I understand you had
7 reserved 20 minutes; is that correct?

8 MS. MARGONIS: I believe so, yes.

9 JUDGE LANEY: And you don't have to use it all.

10 MS. MARGONIS: No, I understand.

11 JUDGE LANEY: All right.

12
13 MS. MARGONIS: And I plan to just make a couple of few points
14 and help, maybe, point you to some places in the record when you're
15 considering these issues.

16 JUDGE LANEY: Perfect.

17 MS. MARGONIS: So with respect to Carr and the isolated flow
18 paths, I did just want to point you to Dr. Durham's testimony because I know
19 patent owner discussed what he said. And I don't believe that was exactly
20 accurate. And it also failed to address a lot of the additional information he
21 provided.

22 So I would point you to Exhibit 2033 at Page 27, Line 25 through
23 Page 37, Line 5. Did I say that -- Page 27, Line 25 through Page 37, Line 5.
24 That's his deposition transcript

25 JUDGE LANEY: Okay.

26 MS. MARGONIS: That discusses isolated flow paths of Carr and the
27 different valve sequencing.

1 JUDGE LANEY: Perfect. Very helpful.

2 MS. MARGONIS: Second, with respect to the zipper valves, I just
3 wanted to clarify one point because I know patent owner believes that Dr.
4 Durham disagreed with petitioner and our analysis of zipper valves, but that
5 is not what the record reflects.

6 What Dr. Durham explained is that you have a zipper valve that has --
7 the zipper valve, there's a name for it based on, essentially, it's its location.
8 But the valve itself is a standard valve. And in fact, in the 770 patent it tells
9 you it can be just a gate valve. So it's a gate valve and it has the function of
10 operating as a valve. So the function is the same. There's no new special
11 functionality that's been provided to this valve. It's just a gate valve. And so
12 that's what petitioner was explaining. Same function, same structure.
13 There's nothing new.

14 However, I understand that. And as Dr. Durham testified, the zipper
15 valve does direct fluid from the pump to a well -- to two wells, right? It
16 chooses whether it's going to go into a well or not. You don't have to have a
17 zipper manifold. You can have other structures coming from the pump. But
18 essentially, a zipper manifold -- or a zipper valve, rather, excuse me -- is just
19 a valve that is used to direct fluid from a pump into a well.

20 JUDGE LANEY: So go to the next steps. Say I agree with you 100
21 percent. How does that undermine what patent owner's argument was?

22 MS. MARGONIS: So they're required -- this goes back to what the
23 claims actually say. They are trying to import all these limitations that there
24 has to be a zipper manifold, whatever that definition is. There has to be
25 some specific structure that's given there. And our point is, that's not what's
26 in the claims. It's called -- it's just saying there's a zipper valve.

1 And so the valves that we have identified in the prior reference,
2 although they may not be labeled a zipper valve, they are being used as a
3 zipper valve.

4
5 JUDGE LANEY: And that's referring to the dependent claim that

6 MS. MARGONIS: Correct. It's a dependent claim.

7 JUDGE LANEY: Okay.

8 MS. MARGONIS: And then, on -- regarding Beuterbaugh and the
9 motivation to combine, I know patent owner highlighted portions of what
10 the rationale was. And they highlighted the portion that talks about
11 Beuterbaugh teaching optimizing pressure waves. It is not true that pressure
12 waves would only be created on Beuterbaugh's high pressure system.

13 Anytime you open and close the valve, there's going to be pressure
14 waves. And so Beuterbaugh's teaching optimization of that, of those
15 pressure waves. And so you could still take that teaching and apply it to
16 Carr.

17 JUDGE LANEY: And what benefit -- I mean, I guess I don't know
18 that -- I don't know that I completely understand their argument being just
19 that. I kind of understand their argument to be, yeah, but pressure valve --
20 doing this doesn't make any sense in the context of Carr because Carr, each
21 one of them, they have their own pumps. And so doing the -- taking your
22 first and second valves located where they are ahead of the pumps and not
23 after the pumps, it's not creating the kind of wave or efficiencies that
24 Beuterbaugh's teaching because Beuterbaugh's teaching this benefit, this --
25 what's derived from the fact that the orientation of having the high pressure
26 before the sequence being performed.

27 And so, could you address that a little bit.

1 MS. MARGONIS: Sure. So points there. First, with respect to Carr:
2 Carr discloses that those valves, 474, 472 specifically, could be outside the
3 manifold or inside the manifold. And I know the patent owner wants to
4 force us into the one figure shown in Figure 5. But as the petition and our
5 supporting declaration show, we did not rely solely on exactly how that
6 image -- it was a visualization that was provided by Carr for what's actually
7 disclosed in the patent's specification.

8 And so, the valve location could vary from what's in the -- the
9 drawing. And secondly, even if the efficiencies

10 JUDGE LANEY: On that -- on that point. On that point real quick,
11 just because it's

12 MS. MARGONIS: Yes, sorry.

13 JUDGE LANEY: But I -- I didn't see anything from your expert's
14 testimony. It may not -- it may be there. I just didn't see it. But I didn't see
15 anything that would suggest in the alternate configuration you would still
16 have the valve in front of the pumps versus behind the pumps, like they're
17 illustrated. In other words, I understand there could be all kinds of different
18 configurations. But it would still, you would think, still be consistent with
19 the way Carr's teaching it and disclosing it.
20

21 To hear what we're really looking for, in order to get the benefits that
22 Beuterbaugh teaches -- and if I'm wrong, that's the way I say it. But you --
23 you would have to have the valve ahead so that it's, you know, the -- the
24 pump's before the valve.

25 And I don't -- and could you just explain how that would occur in Carr
26 because it doesn't seem like that is

1 MS. MARGONIS: I would just say that the efficiencies gained may
2 be different between the systems, but that doesn't detract from Beuterbaugh's
3 discussion of here are efficiencies and ways to optimize your system, that
4 could be applied. So there's no requirement that I get maximum efficiencies
5 or maximum optimization, because I'm not going from a pressurized -- a
6 high pressurized flow to just pressurized.

7 JUDGE LANEY: Where -- and I appreciate that. And I can -- I can
8 follow that. But where I get a little bit lost on that argument is, but all I have
9 -- I think, unless you can show me otherwise, all I have is the efficiencies
10 that Beuterbaugh tells me that you gained by doing the sequencing in the
11 arrangement it has. And all I'm looking for you is: Where is your evidence
12 that in the configuration that it would be in, such as the one disclosed in
13 Carr, what are those efficiencies?

14 Because I have -- I don't see the connection between the efficiencies
15 that are taught to me by Beuterbaugh and the deficiencies that may, as you
16 said, they can be completely different ones. But what are they and where is
17 the evidence that those efficiencies would exist?

18 MS. MARGONIS: Right. Well, on Slide 25, we do talk about the
19 motivations to combine. And we do point to the various evidence as to why
20 Beuterbaugh discloses -- or why it would be -- why a person skilled in the
21 art would be motivated to combine Carr and Beuterbaugh. And it's not just
22 efficiencies. We've kind of gone that language, but it's optimizing those
23 pressure waves. And we do discuss that you would want to do that because
24 any system, as in Carr, is going to be affected by pressure waves.

25 And the point I was also going to make in that sentence, they failed to
26 highlight the rest of that sentence that where Beuterbaugh also says you --
27 it's also to help prevent surface damage, which is always a concern in any of

1 these operations and systems where you're operating valves and you're
2 wanting to make sure you're minimizing any kind of surface damage.

3 And so we do point to that in the record. We point to the petition at
4 Pages 63 and 66, Exhibit 1005, which is Beuterbaugh's at Paragraph 24.
5 And we also cite to Dr. Durham's declaration 1002 at Paragraphs 488
6 through 512, and Carr, which is Exhibit 4 at Paragraph 33. So I do think we
7 do a good job of explaining why there's those motivations to combine.

8
9 And I understand that the sequencing in the system may be different,
10 but as Dr. Durham goes through, like, ultimately these systems are very
11 similar. And so when you're looking at how can you operate valves and how
12 can you optimize your system, you know, you would look to these other
13 references. You would look to Beuterbaugh to understand how you could do
14 that using these this particular valve sequencing.

15 JUDGE LANEY: Okay. And I want to clarify. When you said Slide
16 25, you're talking about from

17 MS. MARGONIS: Sorry. From petitioner's demonstratives, yes.

18 JUDGE LANEY: And then when you say, yes, that they are the -- the
19 systems are very similar, but -- but I don't see, really, any dispute that at
20 least from one difference is that in Beuterbaugh, the pump is before the
21 valve and in Carr, the pumps are after the valve. Regarding the
22 configurations of the manifold, however it is. But as far as that basic level
23 of configuration, that is a difference.

24 MS. MARGONIS: That might be a difference in some embodiments,
25 but it's not one that would detract from the benefits gained from
26 Beuterbaugh.

27 JUDGE LANEY: Okay.

1 MS. MARGONIS: And then I would just like to reiterate that the
2 patent owners started their presentation and ended their presentation on a
3 variety of limitations that are just simply not in the claims. And so, you
4 know, when Your Honors go back to review the case, I -- you know, I hope
5 that we look at that, what the claims actually say and what they require,
6 because they don't require a whole lot. And they definitely don't require
7 continuous pumping. And they don't require any of the other features that
8 petitioner -- or that patent owner has relied on for distinguishing the prior art
9 or for attempting to establish secondary considerations of nonobviousness.

10 And I don't believe we didn't dispute that -- that petitioner did not
11 dispute other issues of their secondary considerations arguments because
12 there's a lot of problems. There's no commercial success seen that's tied to
13 anything. There's no nexus that's shown. They only show industry praise,
14 and that is not even relevant to what they're arguing and what's in the claims.

15 And with that

16 JUDGE LANEY: Before you sit down, I would like you to address
17 what the patent owner's counsel talked about Krupa and the case law and
18 stuff like that. How do you think -- because there is -- there is this tug of
19 war that we have. And we have a unique case here because you did put in
20 the evidence of the -- or you did put in the provisional application. You
21 didn't make a motion to do it, but they didn't object to it.

22 MS. MARGONIS: Right.

23 JUDGE LANEY: And so now we're stuck with what we have. And
24 the patent owner's understanding is they didn't object because it's fruitless.
25 There's nothing you can do. It's already been decided.
26

1 And I -- I see, somewhat, where they come from that, from -- from the
2 institution decision. And -- and there is this tug of war. You can add in
3 some evidence and arguments, but you can't make new arguments. Right?

4 MS. MARGONIS: Right.

5 JUDGE LANEY: So where did -- where do you find, and what is
6 your best argument saying this doesn't fall in that line of things where in my
7 hypothetical, you have two grounds, ten elements, one ground hit all the ten.
8 The other ground, you did three through ten, but you didn't do one and two.

9 And then we -- we institute. And now you're proceeding forward.
10 And first off, I'll start from the foundation. Do you agree with me if you had
11 done -- if, in the hypothetical, you have elements one through ten and you
12 didn't put in anything for elements one and two, but you -- but we institute it
13 because you did it on the second ground and we proceeded forward. Would
14 you then be able to cure that defect? Do you think the law allows you to do
15 that?

16 MS. MARGONIS: No. This case is different

17 JUDGE LANEY: Okay.

18 MS. MARGONIS: -- because all the arguments are the same. There
19 are no new arguments. There is no new evidence. It is the petition and the
20 petition plainly laid out that Krupa was prior art and that petitioner was
21 submitting it as prior art based on its priority claim. That is specific in the
22 petition. We recognize its 102 value based on the filing date of the
23 provisional. And we did cite to that.

24 JUDGE LANEY: But you recognized, coming into the petition --
25 your petition expressly recognizes that on its face, Krupa is not -- its filing
26 date is after the priority date of the challenged patent.

1 MS. MARGONIS: The published Krupa -- the filing date of the
2 application was after the 770

3 JUDGE LANEY: The prior art that you relied upon?

4 MS. MARGONIS: Yes, but it cites -- it -- it claims priority to the
5 provisional. And that provisional is identical. In the Drinkware case that
6 patent owner's case was talking about there was, like, mapping that had to be
7 done. Where was the support found from -- you know, the petition filed
8 reference to the later filed -- or the later documents, right? The -- the
9 underlying provisional document, for example. It was a mapping. Like,
10 where was support for that?

11 Where here, we have identical references. So our arguments are all
12 entirely the same. The claim limitations match. We're not presenting any
13 new arguments as the arguments as they're presented in the petition.
14

15 JUDGE LANEY: But where I struggle with that is -- but you're not
16 really. I mean, but you -- I guess I don't know that -- I -- I'm struggling with
17 that because you don't -- the provisional wasn't in there. So we had nothing.
18 We had no basis. And I'm -- I think our law in Drinkware, it's very clear
19 that when it's something of a provisional, in particular. No, we're not talking
20 about continuation in part. We're talking provisional in particular. We have
21 no idea, as far as the record's concerned. And it wasn't there.

22 And so how could you -- how is that -- how is that not more
23 analogous to what we agree, if you had just not put in any evidence for one
24 and two, even though it's in -- it's in all those references?

25 MS. MARGONIS: Because in this case, the evidence is the same. It's
26 identical. There's really no new evidence.

27 JUDGE LANEY: Okay. Thank you.

1 MS. MARGONIS: Do have any further questions?

2 JUDGE LANEY: Judge Wood? Judge DeFranco?

3 JUDGE WOOD: No, thank you.

4 JUDGE DEFRANCO: No, I don't believe so. I'm still struggling with
5 this Krupa issue. My problem here is that the -- the -- institution decision,
6 it's pretty clear that we say that it's not prior art, based on the lack of a
7 showing that it is. And what do we do about the fact that we've made that
8 statement in the decision to institute, and it appears the patent owner has
9 relied on it.

10 MS. MARGONIS: Yeah. At the institution phase, I understand that
11 was the term -- determination that was made, whether or not to institute.
12 You did look at Krupa for purposes of institution. But now that the record is
13 complete and patent owner has not objected to any of the evidence that's
14 been submitted, then I believe the board has the availability to look at that
15 reference and look at Krupa in its entirety and see that they're identical and
16 there are no new arguments. It's all relying on everything that's in the
17 petition.

18 JUDGE DEFRANCO: So your argument -- your position is it's a
19 whole new ball game once it's instituted and Krupa is definitely still in play
20 because we have to institute on all the grounds and you submitted your
21 evidence of the provisional, and therefore, we have to consider it.

22 MS. MARGONIS: I do not believe it's a whole new ball game. I
23 think it's tied to the petition and very specifically in the petition we referred
24 to and relied on the provisional document. And the provisional document is
25 identical to Krupa. And so, the arguments presented are identical to what's
26 in the petition. And, you know, the record is now complete and shows that
27 is true, that it is a proper claim to priority. And it is -- yeah.

1 JUDGE DEFRANCO: Fair enough. It's not a whole new ball game.
2 Yes, everything is tied to the petition. But it's a whole new ball game as far
3 as that Krupa reference goes. Everything before that, it seems like -- we said
4 it's not prior art, but we instituted it. Now we have to go forward and make
5 a determination as to whether it is prior art.

6
7 JUDGE LANEY: I have an interesting hypothetical. I know you're
8 going to love this. Let's say -- I mean, sometimes patents issue that are not
9 enabled. They lack written description. Okay?

10 MS. MARGONIS: Uh huh.

11 JUDGE LANEY: And how do we know, because that's outside the
12 purview of what we're doing here, and -- but except for written description
13 comes into play when we're talking about priority. And so what you've
14 basically done, even if you take the pinch position, even say you put in the
15 patent application, and all you did in the petition says it's identical; therefore,
16 it's supported.

17 But I don't know that we -- is even that enough? Because Drinkware,
18 we're getting into a different analysis. We actually have to make a
19 determination that there's written description support. Now, I understand the
20 shorthand, but that's required us to make a presumption that the claims that
21 are in the -- the application that you're citing is prior art. What you're asking
22 us to do is make a presumption that they have written description support in
23 the claim that's in the patent application.

24 We're not talking about an issued patent. We're not talking about a
25 patent that went through the patent process where you have an examiner
26 who evaluates. And one of his determinations is to evaluate whether or not
27 it has written description support. And so therefore, there is a level of

1 certain -- you know, there's some belief that an issued patent, it has written
2 description support.

3 But we're dealing with a patent application. So there's no belief, no
4 presumption at all that it, in fact, has written description support. So now we
5 get to our scenario here, where even in the petition, even if we were to
6 assume for this hypothetical, that you had in the -- the provisional
7 application, and you were to say, it's word for word, verbatim, identical.
8 And that's all you did.

9 While that may have been enough for institution stage, would that
10 really be enough even in the end because we still don't know if there's
11 written description support because you've presented no evidence, no
12 argument to establish to us that there is written description support other
13 than what, I presume, you're relying upon is a presumption that if you have a
14 patent application and it has claims, there's written -- written description
15 support for those claims.

16 And while that may have some weight in an issued patent, in a patent
17 application does it still have weight? How -- how would -- how do you
18 think it -- I mean, I certainly haven't seen any cases on this?

19 MS. MARGONIS: Yeah, well

20 JUDGE LANEY: This is a very

21 MS. MARGONIS: I guess

22 JUDGE LANEY: -- unique situation.

23
24 MS. MARGONIS: I guess I'm a little confused, maybe, by the written
25 description support because we're not talking about like what the claims say.
26 We're saying whether the specification itself discloses what's in the claims of
27 the 770, right? And so if we're saying that they are identical, whatever our

1 arguments are for Krupa, whether or not Krupa discloses that, would be the
2 exact same thing as the provisional. So they are exactly identical. They're
3 supported.

4 So I guess I'm not really following the written description
5 JUDGE LANEY: Well, doesn't Drinkwater say that in order for you
6 to get priority, the benefit

7 MS. MARGONIS: Yeah.

8 JUDGE LANEY: -- of the priority, you have to establish that a claim
9 has written description support in the -- the earlier application? It doesn't

10 MS. MARGONIS: And they're verbatim here. So I guess I feel like
11 that does establish -- that would establish that.

12 JUDGE LANEY: Why? I mean, you've done no analysis of either
13 one of whether or not there's written description support for the claim. I
14 mean, it's a weird situation. But you understand what I'm saying? I mean,
15 normally we're dealing with patents.

16 MS. MARGONIS: If we're looking at the claim, yeah. I understand
17 we're saying for looking at the claim, right.

18 JUDGE LANEY: Well, that's what
19 (Simultaneous speaking.)

20 MS. MARGONIS: -- doesn't always mean there's

21 JUDGE LANEY: Well, that's what -- that's Drinkwater says. It says
22 you have to look at the claim.

23 MS. MARGONIS: So I -- I mean, I still think that if they're identical.

24 JUDGE LANEY: Okay.

25 MS. MARGONIS: The written support has to be there because I
26 mean, what more written support could there be than identical language.

1 JUDGE LANEY: Other than the person -- other than the fact that it's
2 not in there even in the application.

3 Again, it hasn't been -- I understand. But if it's an issued patent,
4 there's a presumption that that has been considered. But in an application,
5 we have no reason to think written description support exists. In an issued
6 patent, we do have a reason to believe written description support exists
7 because it has gone through the process and been analyzed; and therefore,
8 we -- there's a presumption.

9 But when an application -- I mean, who knows what people put in
10 applications before it actually goes through and completes the whole
11 process. It can be riddled with all kinds of defects. It's just a conundrum. I
12 don't

13
14 JUDGE DEFRANCO: I think -- I think, Ms. Margonis -- I think what
15 Ms. Margonis is saying is that all they need to do is satisfy their burden of
16 production. And by producing that identical provisional, they have satisfied
17 that burden of production and shifted it to the patent owner. Now, patent
18 owner has to rebut it. They have to rebut that initial burden of production.
19 Petitioner doesn't have to come out and satisfy their burden of persuasion
20 right off the bat. They do, in the end, have to satisfy that.

21 JUDGE LANEY: Correct. And that's why I'm bringing this up,
22 because of the fact that even in the reply, they still do no analysis. All they
23 have done in the reply is they've added nothing additional. They just simply
24 added in the provisional without any further analysis, argument or any other
25 development to establish there's written description support. So, it's

26 JUDGE DEFRANCO: And therein lies the struggle.

1 JUDGE LANEY: Yeah. And that's what I wanted to present to
2 counsel, just so I -- it's a -- it's a complicated issue. I don't know. I mean,
3 it's something I have to think about, and so I wanted to get your input.

4 MS. MARGONIS: Right. No. I understand. And I appreciate you
5 giving us the opportunity. And I think where we stand is just -- it was
6 introduced in our petition. We relied on the priority document. The
7 documents are identical. They fully support the -- I mean, the documents or
8 the publication is identical to the applicant, the provisional application that
9 was filed. And so the written support is there. It's verbatim. So that's all.

10 JUDGE WOOD: This is Judge Wood, if I could toss a question in.

11 Ms. Margonis, are you saying that the petitioner in the petition alleged
12 that the provisional, the Krupa provisional, is identical to the specification of
13 Krupa?

14 MS. MARGONIS: We did not explicitly say that in the petition, no.
15 But we did point to -- we did cite Krupa. And we pointed to its priority, that
16 it should receive priority because of its provisional application.

17 JUDGE WOOD: But there was no assertion that the provisional had
18 an identical written description with the Krupa written description in the
19 petition?

20 MS. MARGONIS: Correct. And I -- I believe we had -- I was just
21 going to say I believe we had a hearing about that to potentially address it.
22 Yes.

23 JUDGE WOOD: All right. Thank you.

24 MS. MARGONIS: Yeah.

25 JUDGE LANEY: Thank you very much, Counsel.

26 MS. MARGONIS: Sure.

27 JUDGE LANEY: Very helpful.

1 MS. MARGONIS: And the petitioner rests.

2 JUDGE LANEY: All right. Ms. Vu, will you be doing the rebuttal?

3 MS. VU: I'm going to just make a couple of points. And then Mr.
4 Jarratt will assist me.

5 JUDGE LANEY: Okay. You have 15 minutes.

6
7 And once again, I would ask your comments or everything being
8 directly responsive to what petitioner raised just now in the reply. In other
9 words, let's not go to any new different territory.

10 MS. VU: Yes, Your Honor. All right. So Your Honor asked about
11 expert testimony, describing Figure 16D. And that is shown here.

12 JUDGE LANEY: When you say Figure 6, just for the record could
13 you be more specific about 16D from what, where?

14 MS. VU: Sorry, Your Honor. From the 770 patent, Figure 16D and
15 how it implements the -- you know, in response to determining the fluid
16 condition. We have Exhibit 2012, which is Mr. Hughett's expert
17 declaration. Starting at Paragraphs 236 to 237, he explains how these
18 figures show each of the claim steps being performed, including the claimed
19 sequence of, you know, being in response to a fluid condition. And he also
20 goes into additional detail in Paragraphs 115 to 119 of his declaration.

21 Petitioner has also argued that there's no commercial embodiment for
22 the CP swap feature. We respectfully disagree. We think that the evidence
23 shows that the Freedom series implements the CP swap feature that is
24 described and claimed in the 770 patent. And petitioner has argued that
25 there is no additional evidence of secondary considerations; there's only
26 industry praise, but there is no requirement that there must be multiple

1 secondary considerations present in order to give weight to that secondary
2 considerations evidence.

3 And with that, I will turn it over to Mr. Jarratt, unless Your Honor has
4 any further questions.

5 JUDGE LANEY: No. Thank you very much. Well done.

6 MR. JARRATT: I'll -- I'll be brief. So quickly regarding Krupa, not
7 to beat a dead horse, but -- so the case law, we believe, is very clear that the
8 prove up that it was actually prior had to have been done in the petition
9 itself, and you cannot go back later and -- and try to correct that error. And
10 if you look at Page 11 of the patent owner response, all the case law is laid
11 out to that point. And we had a -- there's some discussion of the burden
12 shifting. And I -- I believe the case law is also very clear that the petitioner
13 had the initial burden in the petition to show that the Krupa reference has
14 support in its provision. And because they did not make that showing, the
15 burden never shifted to patent owner.

16 And so in this case, if Cooper had been the only ground, it would've
17 been denied and we wouldn't be talking about it anymore.

18 All right. Second point on zipper valve

19 JUDGE DEFRANCO: Mr. Jarratt, I think the problem there is -- and
20 then during trial, they submitted supplemental evidence, meaning the
21 provisional itself. And so what are we to do with that? Because that is
22 evidence. I understand they didn't make the initial assertion. But by
23 submitting that provisional, aren't they implicitly making that assertion?

24 MR. JARRATT: But, again I would -- I would

25
26 JUDGE DEFRANCO: So Krupa wasn't -- probably is a ground in the
27 petition?

1 MR. JARRATT: It is a ground, but it's

2 JUDGE DEFRANCO: -- struggling with.

3 MR. JARRATT: It's a ground, but it's an invalid ground because
4 Krupa was not shown to be prior art. And just because they later put
5 evidence into the record cannot correct that initial burden in the petition
6 itself.

7 JUDGE LANEY: I mean, is that in -- are you suggesting that it's a
8 new argument? I mean, are you saying it's a new argument?

9 MR. JARRATT: It is a new argument because they never -- well, I
10 guess -- I think, as you pointed out, they have never done the element of
11 biome mapping from the subject matter of Krupa to the subject matter in the
12 Krupa provisional.

13 JUDGE LANEY: Well, they still don't do that in the reply.

14 MR. JARRATT: Exactly. So because they have not done that
15 anywhere, certainly Krupa has not been shown in the prior argument. So
16 even if they submitted the provision

17 JUDGE LANEY: Isn't there -- isn't there a presumption that goes
18 along with submitting the provisional, in saying that it's identical to the
19 specification of Krupa? That sets up a presumption that, in my opinion,
20 shifts the burden of production to you as patent owner.

21 MR. JARRATT: Well, I think I'll respond to that. The -- the burden
22 never shifted to patent owner because petitioner never made their initial
23 burden of production in the petition itself. And that's -- that's what we
24 believe the case law shows on Page 11 of the patent owner's response.

25 JUDGE LANEY: I understand.

26 MR. JARRATT: Okay. Another thing that petitioner mentioned was
27 that the patent owner is relying on unclaimed features. Every one of patent

1 owner's prior arguments are based on actual features in the claim. All right.
2 For instance, in Carr. Carr is not anticipatory or obvious because it is no
3 disclosure of opening the second valve in response to the fluid conditions of
4 a first isolated manifold path, right? And that's a requirement of the claim
5 itself, right?

6 And petitioner certainly has established -- it certainly has not
7 established that it's obvious because their obviousness analysis is limited to a
8 single sentence, right. And Tolman is not anticipatory because the petition
9 itself does not map the claimed first valve to the specific valve in Tolman as
10 required, right? The petitioner failed to include any evidence regarding the
11 master valve that it now points to.

12 All right. And if patent owner had included that evidence with the
13 petition, patent owner -- or excuse me, if petitioner had included that
14 evidence with the petition, the patent owner could have responded to that
15 and, as patent owner response, developed the record. And we could have
16 had a, you know, trial discussing the merits of that evidence.

17
18 But they didn't, and so we did not have a chance to fully respond to
19 the new master valve argument. And that's why the lack of particularity is
20 really essential here.

21 The last thing I will say is this. The most probative evidence in the
22 record here regarding obviousness is the industry praise that Downing's
23 received, right. And it's certainly more probative than petitioner's single
24 sentence obviously statement. All right. At the end of the day, the Carr --
25 the Carr and the Tolman references, they describe the old way of swapping
26 between wells. All right. And the 770 patent claimed the new way of
27 swapping between wells that's more efficient.

1 Thank you.

2 JUDGE LANEY: Thank you.

3 Well, I'd like to thank

4 JUDGE DEFRANCO: One last question, Mr. Jarratt. I'm sorry to
5 keep going.

6 MR. JARRATT: No problem, Your Honor.

7 JUDGE DEFRANCO: In Krupa, if we find that it is prior and that
8 petitioner adequately raised it, do you lose?

9 MR. JARRATT: We would -- because we did not put forth any
10 evidence, we would lose. Yes. But we would -- we would certainly appeal
11 that issue based on the case law. I hate to say that, but

12 JUDGE DEFRANCO: We've yet to have a decision.

13 MR. JARRATT: But by default, yes. You are correct. We did not
14 rebut the substance of Krupa, because it's not actually prior art.

15 JUDGE DEFRANCO: But you agree that it anticipates, even though
16 it's not prior art?

17 MR. JARRATT: I did not say that. I said we do not put forth a
18 defense against Krupa.

19 JUDGE DEFRANCO: All right. Thank you.

20 MR. JARRATT: All right. Thank you.

21 JUDGE LANEY: Judge Wood?

22 JUDGE WOOD: No, thanks.

23 JUDGE LANEY: All right. I'd like to thank both parties. Very well
24 done. You've made our jobs very difficult. A lot of -- a lot of issues for us
25 to struggle with. And I think the case is under advisement. Thank you very
26 much.

27 (Whereupon, the above-entitled matter went off the record at 2:58 p.m.)

PETITIONER:

Tammy Terry
Lisa Margonis
OAH BERGMAN WATANABE & BURTON LLP
tammy.terry@nelsonmullins.com
lisa.margonis@nelsonmullins.com

PATENT OWNER:

Scott Jarratt
Tiffany Cooke
Caroline W. Fox
Andrew B. Drott
Brooke Cohen
HAYNES AND BOONE, LLP
scott.jarratt.ipr@haynesboone.com
tiffany.cooke@haynesboone.com
caroline.fox.ipr@haynesboone.com
andrew.drott@haynesboone.com
brooke.cohen.ipr@haynesboone.com