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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

- - -

FOX FACTORY, INC.,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	No. 1:23-cv-00313-RM-KAS
	)	
SRAM, LLC,	)	
	)	
Defendant.	)	
	)	

DEPOSITION OF
DR. ERIC WANG
Friday, May 3, 2024

Reported By:
MICHELLE K. BAILEY
RPR, CSR No. 10713
Job No. 6664802
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1 APPEARANCES:

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18 ALSO PRESENT:

19 Dustin Brown, videographer

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I N D E X

WITNESS: DR. ERIC WANG

PAGE

EXAMINATION BY MS. BHATTACHARYYA

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E X H I B I T S

EXHIBIT NO.

DESCRIPTION

PAGE

Exhibit 1 U.S. Patent No. 9739331 11

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Invalidity Contentions For
U.S. Patent Number 8550223,
Exhibit 10, Nakaya" 12

Exhibit 126 Document entitled "SRAM's
Invalidity Contentions For
U.S. Patent Number 9739331,
Exhibit 4, Ceriani" 13

Exhibit 127 Wang Opening Report on
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Exhibit 128 U.S. Patent No. 7374028 17

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Exhibit 130 Exhibit 9 to Dr. Wang's
Invalidity Report 30

Exhibit 131 Chen UK Patent Filing 38

Exhibit 132 Exhibit 10 to Wang Invalidity
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Exhibit 133 U.S. Patent No. 6604751 B2 46

Exhibit 135 U.S. Patnent No. 7703586 B2 52

Exhibit 136 U.S. Patent No. 6558430 B1 55

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FRIDAY, MAY 3, 2024

9:10 A.M.

THE VIDEOGRAPHER: Good morning. We're on the 09:10:11
record at 9:10 a.m., May 3rd, 2024. This is the video 09:10:14
recorded deposition of Dr. Eric Wang. My name is Dustin 09:10:21
Brown, here with our court reporter Michelle Bailey. 09:10:25
This deposition is being held remotely.

The caption of the case is Fox, Incorporated 09:10:29
versus SRAM, LLC. 09:10:34

Please note that audio and video recording will 09:10:36
continue take place unless all parties agree to go off 09:10:40
the record. 09:10:42

If there are any objections to proceeding, 09:10:43
please state them at the time of your appearance, 09:10:44
beginning with the noticing attorney. 09:10:46

Appearances, please. 09:10:48

MS. BHATTACHARYYA: Arpita Bhattacharyya, on 09:10:52
behalf of Fox Factory, Inc. 09:10:57

MR. HICKEY: Michael hickey, on behalf of SRAM, 09:10:59
LLC and the witness. 09:11:02

DR. ERIC WANG,
having first been duly sworn
by the reporter, was examined

1	and testified as follows:	09:11:22
2		09:11:22
3	EXAMINATION	09:11:23
4	BY MS. BHATTACHARYYA:	
5	Q. Good morning, Dr. Wang.	09:11:24
6	A. Morning.	09:11:26
7	Q. Have you been deposed before?	09:11:26
8	A. Yes. Once or twice, I believe.	09:11:28
9	Q. When was the last time?	09:11:33
10	A. Maybe 2016. 2017 maybe.	09:11:34
11	Q. Okay.	09:11:44
12	And was it a patent related case?	09:11:44
13	A. Yeah. It was a case between Fox and SRAM.	09:11:46
14	Q. Okay.	09:11:54
15	Since you have not been deposed for a long	09:11:54
16	time, I'm just going to give you a brief introduction on	09:12:01
17	how things are going to proceed today. So as you know,	09:12:04
18	I'll ask you a series of questions, and you are supposed	09:12:08
19	to answer them to the best of your ability. Okay?	09:12:12
20	A. Okay.	09:12:15
21	Q. And do you understand you are under oath today	09:12:16
22	to answer truthfully and completely?	09:12:18
23	A. Yes.	09:12:21
24	Q. And your counsel, Mr. Hickey, may object to	09:12:22
25	some of my questions. And unless he instructs you not	09:12:28
		Page 7

1	to answer, you should still answer my question	09:12:35
2	truthfully and completely.	09:12:38
3	A. Okay.	09:12:40
4	Q. Throughout the day today we will take periodic	09:12:40
5	breaks. But if you need to take a break at any point,	09:12:48
6	just please let me know. I'm very happy to accommodate	09:12:52
7	that. I would only ask that if there's a question	09:12:56
8	pending, that you answer the question before we take a	09:12:59
9	break.	09:13:01
10	A. Okay.	09:13:10
11	Q. And I just have to ask, are you under the	09:13:10
12	influence of alcohol or any other medication or any	09:13:12
13	medication today that would impair your ability to	09:13:14
14	answer my questions truthfully and completely?	09:13:16
15	A. No.	09:13:19
16	Q. Okay. So thank you.	09:13:19
17	What have you done to prepare for the	09:13:30
18	deposition today?	09:13:32
19	A. I reviewed my report, my expert report. I	09:13:33
20	reviewed Dr. Slocum's rebuttal report of the 223 and 331	09:13:39
21	patents. I reviewed the claim construction. I met with	09:13:45
22	counsel three times over the past couple of days over	09:13:52
23	Zoom. I reviewed various websites that were in the	09:13:59
24	various reports.	09:14:03
25	Q. Who did you meet with when you say you met with	09:14:03

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1	counsel?	09:14:10
2	A. I met with Lewis Rice, Michael Hickey, Michael	09:14:11
3	Durbin, and Rick Walsh.	09:14:18
4	Q. And you said you met with them three times over	09:14:20
5	the last two days; is that right?	09:14:23
6	A. Yes.	09:14:24
7	Q. Approximately, how many hours did you meet with	09:14:25
8	them?	09:14:30
9	A. Two and a half maybe, roughly.	09:14:35
10	Q. Total?	09:14:39
11	A. Total. Yes.	09:14:40
12	Q. And when did you get involved with this present	09:14:41
13	case between Fox and SRAM?	09:14:52
14	A. I believe it was late 2022 or early 2023.	09:14:56
15	Q. So as part of it being related to your report,	09:15:00
16	you have asserted several prior art references; right?	09:15:14
17	A. Yes.	09:15:18
18	Q. Who found those prior art references?	09:15:18
19	A. I'm not sure if I found them or the counsel	09:15:21
20	found them. I did find some, and then they found many	09:15:30
21	more. I don't remember exactly if all the ones that I	09:15:35
22	found were not used or -- but there were a few I found	09:15:38
23	and many they found.	09:15:41
24	Q. Okay.	09:15:42
25	Do you recall which are the references that you	09:15:42

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1	found?	09:15:46
2	A. I don't recall. This is a long time ago. I do	09:15:46
3	remember recalling, for example, the EXT shock in my	09:15:51
4	research.	09:15:58
5	Q. Okay.	09:15:58
6	And were you involved in the preparation of the	09:15:58
7	infringement contentions that SRAM served in this case?	09:16:10
8	MR. HICKEY: Objection; form, misstates the	09:16:14
9	evidence. I think he meant interrogatory contentions.	09:16:25
10	So...	09:16:29
11	MS. BHATTACHARYYA: Yes. I'll strike my	09:16:33
12	question that's already there.	09:16:35
13	BY MS. BHATTACHARYYA:	09:16:36
14	Q. Were you very involved in the preparation of	09:16:37
15	the invalidity contentions that SRAM served in this	09:16:39
16	case?	09:16:43
17	A. Yes.	09:16:43
18	Q. And when did you get involved in the	09:16:43
19	preparation of the invalidity contentions?	09:16:48
20	A. Invalidity, I don't remember the exact date.	09:16:52
21	This has been going on for a long time. We've been	09:16:55
22	going back and forth. So I don't remember exactly when	09:16:57
23	it started. I think I put a lot of effort into my	09:16:59
24	invalidity report back during my spring break. So early	09:17:03
25	March I want to say when I put a significant amount of	09:17:11

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1 time into it. But it started way before that. 09:17:14

2 Q. My question to you is actually not about the 09:17:17

3 invalidity report but the invalidity contentions which 09:17:20

4 are the charts and mapping the claims to the power out 09:17:27

5 references that SRAM had submitted in the case first in 09:17:37

6 early 2023, and then there was an amended set served 09:17:41

7 earlier this year. 09:17:46

8 Do you recall those contentions? 09:17:47

9 A. Can we bring them up so I can look at them? 09:17:49

10 Q. Yes. 09:17:52

11 (Exhibits 1 through 248 marked)

12 BY MS. BHATTACHARYYA:

13 Q. By the way, if you go to the marked exhibit 09:17:58

14 folder, you will see I have already put it up. 09:18:00

15 A. I see two exhibits, Exhibit 1 and Exhibit 248. 09:18:07

16 Q. So those are the two patents that we'll be 09:18:11

17 talking about, the 331 and 223 patents that I previously 09:18:14

18 marked as exhibits. And I am going to -- 09:18:22

19 A. Is it -- question. Is it permissible for me to 09:18:22

20 use a printed copy of these same ones? 09:18:25

21 Q. Do you have -- so you have printed copies of 09:18:29

22 the two patents? 09:18:31

23 A. Yes. Is it okay to use those instead of -- 09:18:31

24 Q. Are they clean copies or do they have your 09:18:34

25 annotations or notes or anything in there? 09:18:38

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1 A. Oh, no. They are clean copies. I just printed 09:18:40
2 them off Google Patent. 09:18:43
3 Q. Okay. It's fine for you to refer to your clean 09:18:45
4 copies. 09:18:49
5 A. Okay. 09:18:50
6 Q. And whatever works for you. Whenever I put an 09:18:50
7 exhibit into the marked exhibits folder, it may be 09:18:58
8 easier if you download it and kind of save it on your 09:19:01
9 desktop. However, whatever works for you. 09:19:05
10 A. Okay. Thank you. 09:19:08
11 Is there a file to open? I don't see anything. 09:19:48
12 Q. Yes. 09:19:52
13 THE VIDEOGRAPHER: Pardon. This is the 09:19:58
14 videographer. 09:19:59
15 Dr. Wang, when she introduces a new exhibit, 09:20:00
16 you have to refresh the page. It won't autopopulate. 09:20:05
17 BY MS. BHATTACHARYYA: 09:20:20
18 Q. So I just introduced as Exhibit 125 a chart 09:20:21
19 that is marked "SRAM's Invalidity Contentions For U.S. 09:20:24
20 Patent Number 8550223, Exhibit 10, Nakaya." 09:20:28
21 Do you see that? 09:20:36
22 A. Yes. 09:20:39
23 (Exhibit 125 marked) 09:20:42
24 BY MS. BHATTACHARYYA: 09:20:42
25 Q. Have you seen this chart before? 09:20:43

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1 A. Yes. I was consulted early on. I don't 09:20:44
2 remember when that was, but I was shown versions of this 09:20:48
3 early on, and I gave feedback on it. 09:20:52
4 Q. Who prepared this chart? 09:20:56
5 A. I don't know who. It was one of the Lewis Rice 09:21:03
6 attorneys, I imagine. I don't know who the original 09:21:07
7 originator was. But I was shown drafts of it early on 09:21:11
8 and asked for my feedback. 09:21:15
9 Q. Did you make any edits or comments to the draft 09:21:17
10 that was shown to you? 09:21:24
11 A. I don't recall. Minor edits maybe. But I 09:21:26
12 don't recall exactly. I gave feedback on lots of 09:21:29
13 documents. 09:21:31
14 (Exhibit 126 marked)
15 BY MS. BHATTACHARYYA: 09:21:32
16 Q. And I now introduced another exhibit marked 09:21:32
17 126, which is titled "SRAM's Invalidity Contentions For 09:22:13
18 U.S. Patent Number 9739331, Exhibit 4, Ceriani." 09:22:17
19 Have you seen this before? 09:22:26
20 A. Yes. 09:22:27
21 Q. And who prepared this chart? 09:22:27
22 A. Similar to the last case or last exhibit, 09:22:35
23 somebody -- I imagine, counsel at Lewis Rice drafted it, 09:22:42
24 and I gave some feedback. 09:22:46
25 Q. Okay. 09:22:47

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1 So is it fair to say that for SRAM's invalidity 09:22:48
2 contentions that were served in this case, some 09:22:55
3 attorneys at Lewis Rice prepared the chart, and they 09:22:58
4 sent to you for review and comments? 09:23:02
5 A. That would be accurate, I think. Yeah. 09:23:04
6 Q. And when did you start preparing your 09:23:09
7 invalidity report in the case? 09:23:13
8 A. In earnest, I started in early March. I got 09:23:19
9 notified -- I don't remember the exact date, but I got 09:23:24
10 notified when it was due. And I just remember spending 09:23:26
11 a lot of time during my spring break. My whole spring 09:23:33
12 break was spent working on that report. 09:23:36
13 Q. Okay. 09:23:39
14 And, approximately, how many hours would you 09:23:39
15 estimate you spent? 09:23:42
16 A. Oh. 60 hours. I'm just thinking about how 09:23:43
17 much I billed it. I think 60 hours, roughly. 09:23:52
18 Q. Okay. 09:23:56
19 And so your -- let me go ahead and put your 09:23:56
20 invalidity report in as an exhibit. 09:24:04
21 So I just marked your opening report on the 09:24:30
22 invalidity 331 and 223 patents as Exhibit 127. 09:24:34
23 (Exhibit 127 marked) 09:24:40
24 THE WITNESS: I don't see it yet. I've 09:24:41
25 refreshed, but I don't see it yet. There it comes. 09:24:43

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1	Okay. All right.	09:24:49
2	BY MS. BHATTACHARYYA:	09:24:49
3	Q. Okay. It's a bigger file. So it took a	09:24:49
4	minute, I guess.	09:24:51
5	A. Yep.	09:24:51
6	Q. And is it fair to just refer to the two patents	09:24:52
7	at issue here as 331 and 223 patent?	09:24:55
8	A. Yes.	09:25:00
9	Q. And when you said that you spent a lot of time	09:25:00
10	over spring break preparing your report, do you mean	09:25:03
11	this invalidity report that has been marked as	09:25:07
12	Exhibit 127?	09:25:13
13	A. Yes.	09:25:13
14	Q. And along with this report, you submitted	09:25:13
15	several exhibits that are charts that map the prior art	09:25:20
16	references to the claims. Do you recall those?	09:25:30
17	A. Yes.	09:25:32
18	Q. Those charts are very similar to the charts	09:25:32
19	that I've shown you that are part of SRAM's invalidity	09:25:39
20	contentions; right?	09:25:44
21	A. Yes. I edited those for my report.	09:25:45
22	Q. Is it fair to say that you took the charts that	09:25:49
23	were submitted as part of the invalidity contentions and	09:25:54
24	then you made some edits to them to submit along with	09:25:59
25	your 3invalidity report in the case?	09:26:06

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1 A. What I would say is I took those. I actually 09:26:10
2 edited them and included them in my report. And then 09:26:15
3 the Fox counsel wanted to make them as exhibits because 09:26:19
4 it made the report hard to read. So we made them into 09:26:24
5 exhibits. So that's the way they ended up as exhibits 09:26:28
6 in the report. So I started with the documents that you 09:26:32
7 were shown earlier as those previous exits. I edited 09:26:34
8 those, included them in my report, the main body of the 09:26:40
9 report, and then they got moved to exhibits later. 09:26:43
10 Q. Okay. 09:26:45
11 And just in your answer, you said that Fox 09:26:46
12 counsel wanted to make them exhibits. Did you mean to 09:26:49
13 say SRAM's counsel wanted to make them exhibits? 09:26:53
14 A. SRAM's counsel. I'm sorry. SRAM's counsel. 09:26:54
15 Q. Okay. 09:26:57
16 Okay. Let's go to the 223 patent, which is 09:27:11
17 marked as Exhibit 48. 09:27:17
18 A. Okay. I've got that open. 09:27:19
19 Q. I assume you're familiar with this patent; 09:27:29
20 right? 09:27:32
21 A. More than I'd like to be, yes. 09:27:32
22 Q. And when was the last time you reviewed it? 09:27:35
23 A. Last night. 09:27:39
24 Q. Okay. 09:27:40
25 Let's go to column 3, about line 36 of the 223 09:27:41

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1	patent.	09:27:57
2	A. Column 3, line 36. Can I zoom in here?	09:28:01
3	Line 36. Okay.	09:28:10
4	Q. Do you see the sentence there: "A	09:28:12
5	configuration of a side reservoir, including a floating	09:28:14
6	piston, is described in U.S. patent number 7374028,	09:28:20
7	which patent is entirely incorporated herein by	09:28:26
8	reference"?	09:28:32
9	A. I see that, yes.	09:28:33
10	Q. Have you reviewed this 028 patent?	09:28:34
11	A. Yes, I reviewed it. Not in any detail. But	09:28:39
12	I've read every single referenced patent.	09:28:43
13	Q. Mark this 028 patent as Exhibit 128.	09:28:56
14	(Exhibit 128 marked)	09:29:00
15	BY MS. BHATTACHARYYA:	09:29:05
16	Q. So it should be available to you in the exhibit	09:29:05
17	folder.	09:29:07
18	A. Yes. I've got that open now.	09:29:15
19	Q. If you go to figure 9, figure 10, figure 12 of	09:29:21
20	the 028 patent, you will see it shows a configuration of	09:29:31
21	a side reservoir for a floating piston; correct?	09:29:38
22	A. It shows several configurations I see, yes.	09:29:41
23	Q. And in each of those configuration, there is a	09:29:44
24	fluid pathway that connects the compression portion of	09:29:52
25	the damper chamber to a side reservoir that has a	09:29:57

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1 floating piston; right? 09:30:02

2 A. Let me review these pictures here. Figure 9 -- 09:30:03

3 I'm not reading the text, but figure 9 appears to show a 09:30:09

4 reservoir connected to it looks like the compression 09:30:12

5 portion. Although, I'm not -- if you'd like me to 09:30:16

6 review it in more detail, I'd have to read the patent. 09:30:18

7 But just observing from this picture her in figure 9, 09:30:23

8 that's what it appears to show. 09:30:29

9 Figure 10, again, without reading the text, it 09:30:31

10 appears to show what looks like a compression portion 09:30:34

11 and a reservoir to the right side of it. 09:30:38

12 Figure 11 appears to show what. It looks like 09:30:39

13 part of the reservoir, some part of the reservoir, some 09:30:41

14 type of mechanism there. 09:30:44

15 And 12 also shows what appears to be a 09:30:46

16 reservoir to the right of the main compression portion 09:30:51

17 of the damper. 09:30:53

18 Q. And in each of these configurations that are 09:30:57

19 shown in figures 9, 10 and 12, there appears to be a 09:31:01

20 fluid passage that connects the compression portion of 09:31:05

21 the damper chamber to the side reservoir; right? 09:31:11

22 A. Yes, but maybe not directly. Figure 9 looks 09:31:18

23 like the path is -- I would say -- well, actually, 09:31:24

24 figure 9 even. There's some intervening structure 09:31:29

25 between the compression -- the beginning -- before the 09:31:32

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1	path that goes to the compression chamber to the	09:31:36
2	reservoir, there's some mechanism, which I haven't	09:31:39
3	reviewed in detail. And then in figure 10 and 12,	09:31:44
4	there's some mechanism at the end of that fluid path	09:31:46
5	before it enters the reservoir. So there's some	09:31:48
6	intervening structures, but in general, there is a path	09:31:50
7	from the compression chamber to the reservoir.	09:31:52
8	Q. And would it be fair to say that, just based on	09:31:58
9	your understanding of how these kind of devices work,	09:32:01
10	that during a compression stroke, fluid will flow from	09:32:05
11	the compression portion of the damper chamber to the	09:32:09
12	side reservoir, and during a rebound stroke, some fluid	09:32:14
13	will flow back from the side reservoir back into the	09:32:21
14	compression chamber?	09:32:26
15	A. That's generally the purpose of the reservoir,	09:32:26
16	to make up for the volume of the compression shaft. So	09:32:28
17	as the compression shaft enters the compression chamber,	09:32:33
18	that additional volume -- equivalent volume of oil, or	09:32:38
19	whatever the fluid happens to be, would have to move	09:32:40
20	into the reservoir. And the reverse would be true in	09:32:43
21	rebound.	09:32:47
22	Q. Let's go back to the 223 patent, which was	09:32:53
23	marked as Exhibit 48.	09:32:56
24	A. Okay.	09:33:01
25	Q. Go to claim 11.	09:33:05

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1 A. Okay. 09:33:07

2 Q. Have you gone to claim 11? 09:33:20

3 A. Yes. I've got it in front of me. 09:33:24

4 Q. Okay. 09:33:27

5 Around line 14 of column 8, as part of claim 11 09:33:27

6 it reads: "A bottom out piston formed on the movable 09:33:44

7 rod for sealingly engaging an interior of the bottom out 09:34:32

8 cup." 09:34:33

9 Do you see that? 09:33:56

10 A. Yes. 09:33:57

11 Q. What is your understanding of this limitation 09:33:57

12 that reads "a bottom out piston formed on the removable 09:34:06

13 rod"? 09:34:11

14 A. I would interpret that as a piston that is 09:34:13

15 on -- let me read it one more time here. "A bottom out 09:34:25

16 piston formed on the movable rod for sealingly engaging 09:34:30

17 an interior of the bottom out cup." 09:34:32

18 Was your question about the bottom out piston? 09:34:34

19 I'm sorry. 09:34:38

20 Q. Yeah. My question is about -- so let me 09:34:38

21 rephrase this. The termed "bottom out piston formed on 09:34:44

22 the moveable rod" would mean the piston in an element 09:34:49

23 that is separate from the rod and it is mounted on the 09:34:55

24 rod; right? 09:34:59

25 MR. HICKEY: Objection; form. 09:35:01

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1	THE WITNESS: Sorry. Is it okay to answer? I	09:35:08
2	have to wait for him to object? Okay.	09:35:11
3	BY MS. BHATTACHARYYA:	09:35:13
4	Q. Yes. Go ahead.	09:35:13
5	A. So a piston formed. I wouldn't necessarily say	09:35:14
6	it has to be a separate structure. The rod itself could	09:35:18
7	have been manipulated in some way. So -- but it is --	09:35:20
8	would be identified, you know, as a separate element of	09:35:25
9	the rod. But it could be one continuous piece, could	09:35:28
10	have manufactured one continuous piece. But a bottom	09:35:32
11	out piston is a piston, which the general terms is for	09:35:36
12	moving the fluid. And that would be somehow either	09:35:39
13	attached or an integral part, maybe, of the removable	09:35:44
14	rod. And I have to figure what the rod is. The	09:35:51
15	moveable rod. So I have to look at what the moveable	09:35:54
16	rod is. So it's the -- so earlier it says: "A damper	09:36:00
17	chamber divided by a piston mounted on a moveable rod."	09:36:04
18	So had moveable rod is the shaft for the	09:36:08
19	damper.	09:36:17
20	Q. So the piston and the moveable rod cannot be	09:36:17
21	one and the same thing; correct?	09:36:21
22	MR. HICKEY: Objection; form.	09:36:23
23	THE WITNESS: I think, like I said earlier, I	09:36:29
24	would say that they actually could be made out of a	09:36:31
25	single integral piece. You could have a rod that is	09:36:35
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1 machined such that there is a piston at the end of it. 09:36:39
2 It might be identified as a separate element, but they 09:36:42
3 could be integral parts or they could be a separate part 09:36:45
4 that is somehow affixed to the rod. So it could be 09:36:48
5 either a separate piece or an element of the rod that's 09:36:53
6 been identified as a separate structure. 09:36:55
7 BY MS. BHATTACHARYYA:
8 Q. So the bottom out piston and the moveable rod 09:37:01
9 could be integral, but they are separate elements; 09:37:06
10 correct?
11 A. They could be. That would be one embodiment, 09:37:16
12 yes. 09:37:20
13 Q. But the rod itself, without any separate 09:37:26
14 structure to it, cannot be the bottom out piston; right? 09:37:32
15 MR. HICKEY: Objection; form, mischaracterizes 09:37:39
16 prior testimony. 09:37:43
17 THE WITNESS: Yeah. I would say, like I just 09:37:44
18 stated before, that the piston could be manufactured as 09:37:47
19 part of the rod. It would just be identified as a 09:37:52
20 separate element. 09:37:58
21 BY MS. BHATTACHARYYA: 09:38:03
22 Q. Well, when you say could be identified as a 09:38:04
23 separate element, what do you mean by that? 09:38:05
24 A. For example, if the rod extended through 09:38:10
25 another structure, you could identify the rod on 09:38:12

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1 one-half of the structure as the rod, and the other half 09:38:17
2 of the structure could be the piston at that point. It 09:38:21
3 could change diameter slightly, either getting bigger or 09:38:23
4 smaller. But there would be some type of demarkation, I 09:38:27
5 would think, that would say, you know, this is -- this 09:38:32
6 part of this structure is the rod and this part of the 09:38:35
7 structure is the piston. 09:38:40

8 Q. I understand. There has to be some separation 09:38:45
9 or demarkation of structure between the moveable rod and 09:38:48
10 the piston; right? 09:38:56

11 MR. HICKEY: Objection -- objection; form. 09:38:58

12 THE WITNESS: When you say demarkation, I mean, 09:39:06
13 that could be lots of things. It could be a structure, 09:39:09
14 like I said, intervening structure. It could be a 09:39:12
15 change in diameter. It could be simply just it's 09:39:14
16 labeled. 09:39:18

17 BY MS. BHATTACHARYYA: 09:39:22

18 Q. If I take a rod that is of constant diameter, 09:39:23
19 would it be fair to say one part of it is the rod and 09:39:29
20 another part of it is piston? 09:39:34

21 A. I think there are dampers that that's the case, 09:39:38
22 that the rod and the piston are essentially the same 09:39:41
23 element. They're a constant diameter. The end of the 09:39:44
24 rod acts as the piston. There are several dampers -- 09:39:48
25 many, many dampers that act in that fashion. 09:39:52

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1 Q. But in this case, in claim 11, it reads: "A 09:39:55
2 bottom out piston formed on the moveable rod." 09:40:02
3 Do you see that? 09:40:06
4 A. Yes. 09:40:07
5 Q. So claim 11 requires some form of demarkation 09:40:07
6 or change in structure between the moveable rod and the 09:40:12
7 piston; right? 09:40:15
8 MR. HICKEY: Objection; form, calls for a legal 09:40:16
9 conclusion. 09:40:18
10 THE WITNESS: Yeah. I'm not sure what the 09:40:22
11 legal definition of "formed" is. But the bottom out 09:40:24
12 piston formed on the moveable rod, again, I would say it 09:40:27
13 could be an integral structure. It could be a simple 09:40:31
14 demarkation, identification of an element. The end of 09:40:35
15 the rod could certainly serve as a piston. 09:40:39
16 BY MS. BHATTACHARYYA: 09:40:42
17 Q. I understand that. But if -- could you say 09:40:42
18 that the end of a piston is formed on the rod if the rod 09:40:45
19 itself, without any structural change or demarkation, is 09:40:55
20 serving as a piston? 09:41:00
21 MR. HICKEY: Objection; form, compound, vague. 09:41:01
22 THE WITNESS: I think lots of things could 09:41:06
23 happen. I mean, if you simply put a chamfer on the end 09:41:08
24 of the piston -- end of the rod to make a piston, that 09:41:12
25 would be form. I could put a chamfer or I could put a 09:41:16

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1 fillet. I could put a groove for an O ring. There are 09:41:20
2 lots of ways to do some very minor modifications. And 09:41:26
3 in some cases I think it wouldn't be necessary. Like I 09:41:31
4 said earlier, there are plenty of dampers where the rod 09:41:35
5 and the piston are one and the same. 09:41:38
6 BY MS. BHATTACHARYYA: 09:41:40
7 Q. Yes. But I'm asking about claim 11 though. 09:41:41
8 And claim 11 specifically requires a bottom out piston 09:41:43
9 to be formed on the moveable rod. So for the bottom out 09:41:47
10 piston to be formed on the moveable rod, there has to be 09:41:53
11 some kind of structural change on the rod for that end 09:41:58
12 of the rod with that structural change to serve as a 09:42:08
13 piston; right? 09:42:13
14 MR. HICKEY: Objection; form, calls for a legal 09:42:14
15 conclusion, compound, vague. 09:42:16
16 THE WITNESS: Again -- I'll keep, you know, 09:42:20
17 saying the same thing, I think, is that the term 09:42:28
18 "formed" could be -- could be very minor or negligible. 09:42:31
19 We say formed, I'm not sure that has, you know, meaning 09:42:43
20 in the art as I read this. I would read it as a piston 09:42:49
21 at the end of the moveable rod somehow attached or 09:42:54
22 created or integral. I think it's a way of saying -- of 09:43:00
23 enveloping lots of different ways. So it doesn't have 09:43:18
24 to be attached. It could be integral. It could be the 09:43:21
25 cost of diameter. I think that's the way of catching -- 09:43:26

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1 enveloping all those different embodiments. 09:43:29

2 BY MS. BHATTACHARYYA: 09:43:48

3 Q. In your invalidity report, have you referred to 09:43:48

4 the bottom out piston and the moveable rod as separate 09:43:59

5 elements or the same element? 09:44:02

6 A. I have to review my report to answer that 09:44:04

7 question. I'm going to open Exhibit 127, which is my 09:44:09

8 report. 09:44:19

9 Q. Okay. 09:44:19

10 A. Can you ask the question one more time while 09:44:20

11 I've got the report open? 09:44:23

12 Q. In your invalidity report, have you referred to 09:44:25

13 the bottom out piston and the moveable rod as separate 09:44:27

14 elements or the same element? 09:44:30

15 A. I could search the entire report to answer that 09:44:32

16 question. But to the best of my recollection, without 09:44:41

17 searching the entire report, I don't think I make a 09:44:43

18 distinction of whether their separate elements or 09:44:46

19 integral single elements. I think there are examples of 09:44:49

20 both. 09:44:53

21 Q. Let's go to paragraph 184 of your invalidity 09:45:39

22 report that has been marked as Exhibit 127. 09:45:43

23 A. All right. 184. I'm there. 09:45:55

24 Q. Have you physically inspected the EXT shock 09:45:57

25 that you referred to in your invalidity report? 09:46:02

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1 A. No. I've only looked at their website. 09:46:08

2 Q. In your report, you say that: "Extreme Racing 09:46:11

3 Shocks states in their marketing material to have 09:46:35

4 developed what they call hydraulic bottom out control 09:46:39

5 (HBC) technology for the 1994 world rally car 09:46:45

6 championship." 09:46:58

7 Do you see that? 09:46:58

8 A. Yes. 09:46:59

9 Q. Have you verified that the bottom out 09:47:00

10 technology that was allegedly used in the 1994 world 09:47:04

11 rally cup championship is the same HBC technology that 09:47:10

12 is shown in EXT's current website? 09:47:17

13 A. I have not personally verified that. I was 09:47:23

14 going off their marketing materials. 09:47:25

15 Q. Okay. 09:47:27

16 And have you seen any evidence of whether the 09:47:28

17 EXT shock was available in you U.S. prior to the 09:47:40

18 priority date of the 223 patent? 09:47:50

19 A. I would say second- or thirdhand evidence. I 09:47:52

20 was told that somebody, either Lewis Rice or SRAM, had 09:47:56

21 talked to Mr. Franco Frenton (phonetic). There was some 09:48:01

22 conversations about when it had been introduced. But I 09:48:05

23 have not confirmed, you know, the authenticity, I guess, 09:48:09

24 of those statements. 09:48:15

25 Q. So fair to say you have yourself not spoken 09:48:15

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1 with Mr. Franco Frenton; right? 09:48:19

2 A. That's correct. 09:48:23

3 Q. Have you seen any other documentary evidence of 09:48:24

4 when and where the EXT shock was available? 09:48:40

5 A. I haven't seen anything about when it was made 09:48:43

6 available. I know it currently is available. One of 09:48:49

7 the websites that Dr. Slocum included is the rebuttal 09:48:54

8 report. One of the reviewers mentioned he was using EXT 09:48:58

9 shock on his work. I don't remember which website that 09:49:03

10 was. I looked at lots of them. One of them mentioned 09:49:07

11 that. 09:49:10

12 Q. Okay. 09:49:11

13 So you are aware that they are currently 09:49:11

14 available, but you are not aware of when the EXT shocks 09:49:14

15 became available to the public; right? 09:49:22

16 MR. HICKEY: Objection; form, mischaracterizes 09:49:25

17 prior testimony, asked and answered. 09:49:30

18 THE WITNESS: I am not aware of when -- beyond 09:49:36

19 the marketing materials that state that they created 09:49:41

20 since 1994. I don't know when it became available in 09:49:47

21 the United States. 09:49:50

22 BY MS. BHATTACHARYYA: 09:49:52

23 Q. Let's go to paragraph 197 of your invalidity 09:50:05

24 report. 09:50:12

25 A. Okay. I'm there. 09:50:20

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1 Q. And just to back up a bit, I'm going to ask you 09:50:21
2 some questions about the Hewitt prior art reference. 09:50:24
3 And let me mark that as an exhibit so you have that 09:50:29
4 available to you. 09:50:32
5 A. Would you like me to go to the Hewitt reference 09:51:01
6 or stay on my report? 09:51:03
7 Q. Maybe you can have both open. I just 09:51:13
8 introduced the Hewitt reference in case you need to 09:51:16
9 refer to it to answer some of my questions. You can 09:51:18
10 possibly answer them off of your report too, but I will 09:51:21
11 leave that up to you. 09:51:26
12 A. Can I open them both at the same time? 09:51:26
13 Q. I think so. Yeah. You can have them both 09:51:31
14 opened. You might have to toggle between the two, but 09:51:33
15 you can have them both opened. 09:51:36
16 MR. HICKEY: And, Dr. Wang, I would, you know, 09:51:45
17 further advise you that if you need to have your 09:51:47
18 exhibits to your report open as well, I'm sure that 09:51:49
19 Ms. Bhattacharyya can provide those to you. 09:51:54
20 MS. BHATTACHARYYA: Yes. Absolutely. 09:51:57
21 (Exhibit 129 marked) 09:51:59
22 BY MS. BHATTACHARYYA: 09:51:59
23 Q. If you need them, I can mark them as exhibits. 09:52:00
24 It's whatever you need. Just let me know. That's the 09:52:04
25 beauty of Zoom depositions. I can put in anything as 09:52:06

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1	exhibit.	09:52:11
2	A. Yeah. Let's go ahead -- I'm sure it will	09:52:11
3	become necessary at some point. So why don't we go	09:52:15
4	ahead and add those.	09:52:18
5	I'm not seeing how I can view both at the same	09:52:30
6	time. But I can toggle between the two. So I guess I'm	09:52:32
7	ready to answer whatever question you have.	09:52:37
8	Q. And I just marked Exhibit 9 to your invalidity	09:52:44
9	report as Exhibit 130. And that's the chart that maps	09:52:48
10	Hewitt to the claims of the 223 patent.	09:52:57
11	A. Okay. I see that.	09:53:02
12	(Exhibit 130 marked)	09:53:04
13	BY MS. BHATTACHARYYA:	09:53:04
14	Q. Okay.	09:53:04
15	A. It's not very convenient to have to flip back	09:53:20
16	and forth between these. I have to keep scrolling down	09:53:23
17	to the appropriate paragraph.	09:53:27
18	Q. Well, maybe let's just stick with your report	09:53:29
19	for now. Maybe you can answer my questions based on	09:53:32
20	those. If needed, then you have the other materials	09:53:34
21	available.	09:53:36
22	MR. HICKEY: Dr. Wang, one other thing I might	09:53:37
23	advise is you can download those to your desktop and	09:53:40
24	open them up as PDF files. So you might be able to have	09:53:44
25	multiple PDF files open at once as opposed to being in a	09:53:49

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1	browser.	09:53:54
2	THE WITNESS: Ah. Yes. Okay. I see it.	09:53:54
3	Thank you. Thank you, Michael. That helps a lot.	09:53:57
4	Now I've got two browser windows open. Okay.	09:54:01
5	I've got my report open in one browser window here, and	09:54:05
6	I'll open Hewitt in the other browser window. Exhibit 9	09:54:10
7	in my other browser window. Okay.	09:54:25
8	What paragraph again? 19 --	09:54:29
9	BY MS. BHATTACHARYYA:	09:54:38
10	Q. 197.	09:54:39
11	A. 197. Scrolling down. Sorry. My browser	09:54:39
12	window is obscuring the video now button. I'm sure I'll	09:54:42
13	be able to answer without seeing your face.	09:54:46
14	Q. You don't need to see my face at all. We see	09:54:49
15	you though.	09:54:51
16	A. Okay. 197. Okay. I'm there.	09:54:53
17	Q. So with respect to Hewitt and claim 11 of the	09:54:56
18	223 patent which recites a bottom out piston, you were	09:55:02
19	referring to plug 29 of Hewitt as the bottom out piston;	09:55:11
20	correct?	09:55:18
21	A. I've identified, yes, plug 29, the light orange	09:55:18
22	structure, figure 1 as the bottom out piston.	09:55:22
23	Q. What is the difference between a plug and a	09:55:26
24	piston?	09:55:29
25	A. That's a good question. I think there -- in	09:55:30

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1 this case, he's just identifying the element as a plug, 09:55:49
2 what he calls a plug. I would call it a piston in this 09:55:51
3 case. 09:55:58
4 Q. What is your reasoning behind calling plug 29 a 09:55:58
5 piston? 09:56:03
6 A. Because it acts as a piston. It forces fluid 09:56:03
7 as it moves. 09:56:10
8 Q. And it also functions as a plug by closing off 09:56:13
9 the opening of cavity 18; right? 09:56:20
10 A. As much as the piston closes off the main 09:56:23
11 compression chamber, yes. 09:56:29
12 Q. And when you say as much as the piston closed 09:56:31
13 the main compression chamber, do you mean the main 09:56:36
14 piston of Hewitt? 09:56:40
15 A. The main piston of Hewitt, or pistons in many 09:56:41
16 cases, that is closing off the main compression chamber, 09:56:45
17 I guess I would call that. So the plug -- what he 09:56:57
18 recites as the plug does a similar function with the 09:57:02
19 bottom out cup, the pink. 09:57:09
20 Q. So the plug 29 enters the opening of cavity 18 09:57:14
21 and closes it off; right? 09:57:19
22 A. Yes. In this case, I would say -- because 09:57:20
23 there were seals, it sealingly engages the cup. Or in 09:57:28
24 this case, the seals are on the cup rather than the 09:57:33
25 piston. And then it forces fluid to exit the cup. 09:57:35

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1 Q. It forces fluid to exit the cup through port 23 09:57:39
2 to the exterior; correct? 09:57:49
3 A. 23 or 24. I'm not quite -- I don't recall 09:57:50
4 exactly which ones. It could be either -- there's two 09:57:57
5 labels there, 24 and 23. Without reviewing the patent 09:57:59
6 in detail, it's one of those two. 09:58:04
7 Q. Okay. 09:58:06
8 Claim 11 recites: "An adjustable fluid flow 09:58:07
9 path formed in the cup, the flow path providing fluid 09:58:16
10 communication between the cup and the primary 09:58:19
11 compression chamber in a compression stroke of the 09:58:22
12 damper." 09:58:27
13 Do you see that? 09:58:28
14 A. I don't have the patent open in front of me, 09:58:29
15 but I do recall that that text does sound correct. 09:58:31
16 Q. With respect to Hewitt, which flow path, if 09:58:36
17 any, have you identified as the adjustable fluid flow 09:58:43
18 path formed in the cup, the flow path providing 09:58:48
19 communication between the cup and the primary 09:58:52
20 compression chamber? 09:58:57
21 A. I think if you go down to paragraph 198, I 09:58:58
22 say -- I'm quoting here -- "finally, Hewitt discloses 09:59:05
23 the use of a channel 25, 26 (dark blue) between the 09:59:10
24 bottom out cup 84 and the compression portion (light 09:59:16
25 red). This channel 25, 26 (dark blue) is adjustable via 09:59:21

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1	needle valve 27, 28 (dark purple) that is externally	09:59:23
2	actuated by an adjuster (light purple)."	09:59:28
3	So that blue channel identified below paragraph	09:59:32
4	198.	09:59:36
5	Q. So fluid flows from the compression chamber to	09:59:39
6	cavity 18 through the channel 25, 26; correct?	09:59:48
7	A. Sorry. Can you state that one more time?	10:00:02
8	Q. Fluid flows from the compression chamber of the	10:00:05
9	Hewitt device to cavity 18 through channels 25, 26;	10:00:09
10	correct?	10:00:20
11	A. They are -- fluid flows between the compression	10:00:20
12	chamber and the bottom out cup via channel 25, 26.	10:00:28
13	Q. I'm asking about the direction of flow.	10:00:35
14	A. Oh, okay. Sorry.	10:00:37
15	Q. So fluid flows from the compression chamber to	10:00:38
16	cavity 18 through channels 25, 26; right?	10:00:47
17	A. Let me refresh myself. This is -- it depends	10:00:50
18	on the fluid. But let me just refresh myself here.	10:00:55
19	For Hewitt, since he's using hydraulic fluid,	10:01:42
20	the fluid would flow from the compression chamber to the	10:01:46
21	bottom out cup.	10:01:51
22	Q. And that flow is through channels 25, 26;	10:01:52
23	right?	10:01:57
24	A. Correct. Well, once the -- we have to be	10:01:57
25	careful about what position we're talking about, what	10:02:03

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1	the bottom out cup is -- the bottom out piston is fully	10:02:10
2	engaged with the bottom out cup, that would be true.	10:02:15
3	Q. Does Hewitt disclose an adjustable fluid flow	10:02:34
4	path from the cavity 18 to the compression chamber 22?	10:02:39
5	A. Well, that channel 25, 26 is adjustable and it	10:02:46
6	connects 18 to the compression chamber.	10:02:58
7	Q. My question to you is, again, about the	10:03:07
8	direction of flow. I'm asking is there an adjustable	10:03:10
9	flow path from cavity 18 to the compression chamber.	10:03:13
10	A. If you're saying does the flow go from -- I	10:03:19
11	think I've already answered this question.	10:03:35
12	So the flow has shown that the flow is going	10:03:37
13	from the compression chamber to the bottom out cup. But	10:03:41
14	claim 11 doesn't have anything about directionality.	10:03:47
15	Q. Understood. I just wanted to clarify that.	10:03:50
16	I want to go to claim 13 now.	10:03:55
17	A. Claim 13 of the 223?	10:04:01
18	Q. Yes.	10:04:04
19	A. Let me open that document. Claim 13. Okay.	10:04:05
20	Q. Claim 13 of the 223 patent recites: "The	10:04:19
21	damper of claim 12, further including a fluid flow path	10:04:24
22	formed between the cup and the primary compression	10:04:30
23	chamber; wherein the capacity of the fluid flow path is	10:04:34
24	adjustable."	10:04:39
25	Do you see that?	10:04:40

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1	A. Yes.	10:04:41
2	Q. Which flow path in Hewitt are you referring to	10:04:41
3	as the fluid flow path formed between the cup and the	10:04:52
4	primary compression chamber that is recited in claim 13?	10:04:55
5	A. I'm just pausing here because I think -- I had	10:04:59
6	to remind myself about multiple flow paths.	10:05:16
7	So claim 13 says: The damper of claim 12,	10:05:35
8	including a fluid flow path formed between the cup and	10:05:41
9	the primary compression chamber." So that is now the	10:05:44
10	second flow path that's talked about. Because I think	10:05:49
11	claim -- let's see. Claim 12 doesn't say flow. But	10:05:55
12	claim 11 does have adjustable fluid flow path. So when	10:05:58
13	you say which adjustable fluid flow path, I think I	10:06:03
14	point out in my report that that -- because that's an	10:06:09
15	indefinite term. Because it's not clear which fluid	10:06:16
16	flow path -- where -- the capacity of the fluid flow	10:06:19
17	path is adjustable. I don't know which fluid flow path	10:06:23
18	it's referring to.	10:06:27
19	Q. My question to you is not about the portion --	10:06:28
20	the capacity of the fluid flow path is adjustable.	10:06:32
21	Leaving that aside.	10:06:35
22	A. Oh, sorry.	10:06:36
23	Q. I want to know about the first portion of	10:06:37
24	claim 13 where it recites: "Further including a fluid	10:06:41
25	flow path formed between the cup and the primary	10:06:47

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1	compression chamber."	10:06:49
2	Which flow path in the Hewitt reference are you	10:06:52
3	referring to as a fluid flow path formed between the cup	10:06:55
4	and the primary compression chamber?	10:07:01
5	A. Let me scroll back down to that part of the	10:07:03
6	report. Better to go to the -- let me open my exhibit	10:07:05
7	here. I'm jumping between documents here. A lot of	10:07:27
8	windows open now.	10:07:43
9	Q. Okay.	10:07:44
10	A. I'm going to my exhibits just to refresh myself	10:07:45
11	here. We're talking about claim 11. Sorry. We're	10:07:47
12	talking about claim 13. I'm sorry. I'm looking at the	10:08:29
13	wrong claim. Claim 13.	10:08:32
14	So claim 13, talking about that fluid flow path	10:08:42
15	25, 26. I'm looking at my claim -- my Exhibit 9.	10:08:46
16	Q. So you're referring to the channels 25, 26 of	10:08:54
17	Hewitt as the adjustable fluid flow path formed in the	10:09:04
18	cup that's recited in claim 11, as well as the fluid	10:09:11
19	flow path formed between the cup and the primary	10:09:20
20	compression chamber that's recited in claim 13; correct?	10:09:23
21	A. Claim 11, I also claim that path 25, 26, yes.	10:09:29
22	Q. Go to your channel reference. And that is --	10:09:57
23	the discussion of the Chen reference at about -- at	10:10:47
24	paragraph 203 of your invalidity report. And, again,	10:10:50
25	I'm going to mark the Chen reference as well as your	10:10:55

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1	claim chart related to the Chen reference as exhibits.	10:11:00
2	(Exhibits 131 through 132 marked)	10:11:04
3	THE WITNESS: I'm at paragraph 203.	10:11:10
4	BY MS. BHATTACHARYYA:	10:11:12
5	Q. Okay.	10:11:12
6	A. I don't see those exhibits yet appearing.	10:11:25
7	Q. They're coming up. Give me one second.	10:11:27
8	A. Sure.	10:11:29
9	Q. In the meantime, if you want to look at your	10:11:30
10	invalidity report, paragraph 208 and after, please feel	10:11:33
11	free to do so.	10:11:40
12	A. 208 or 203?	10:11:40
13	Q. 203. The Chen portion.	10:11:44
14	A. Okay.	10:11:46
15	Q. Dr. Wang, I just marked the Chen reference as	10:12:46
16	Exhibit 131, and the claim chart, which is part of your	10:12:50
17	invalidity report and maps Chen to the 223 patent claims	10:12:57
18	has been marked as Exhibit 132.	10:13:04
19	A. These aren't quite the claim charts, but	10:13:06
20	they're close enough. Yes.	10:13:09
21	Q. So for the Chen reference, you're referring to	10:13:23
22	post 821 as the bottom out cup; right?	10:13:26
23	A. Post 821 as the bottom out -- say that one more	10:13:34
24	time.	10:13:41
25	Q. Let me rephrase.	10:13:41

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1	In the Chen reference and with respect to	10:13:41
2	claim 11 of the 223 patent, you have identified post 821	10:13:44
3	as the bottom out piston; right?	10:13:50
4	A. Correct.	10:13:52
5	Q. And you have identified cavity 84 as the bottom	10:13:52
6	out cup; right?	10:14:04
7	A. Correct.	10:14:05
8	Q. The Chen refers to cavity 84 as an opening or a	10:14:06
9	space through which oil can flow from the hydraulic	10:14:11
10	chamber 8 to the exterior as the piston moves towards	10:14:18
11	the front end of the cylinder; right?	10:14:26
12	A. Can you be specific? What paragraph, column,	10:14:32
13	and line?	10:14:35
14	Q. Go to the Chen reference, which has been marked	10:14:45
15	as Exhibit 131.	10:14:47
16	A. Yes.	10:15:03
17	Q. Go to page 1 of Chen, lines 9, 10. You'll see	10:15:03
18	it reads: "The accommodating cavity 84 communicates	10:15:07
19	with an oil outlet 85."	10:15:11
20	Do you see that?	10:15:13
21	A. What line? Page -- this is column 1 you said?	10:15:14
22	Q. Page 1. Page 1, second paragraph, lines 9, 10.	10:15:18
23	A. Sorry. I'm looking -- I've got Hewitt open.	10:15:23
24	I'm sorry. This is very confusing. Sorry. That's why	10:15:27
25	I was confused. Sorry. I had Hewitt open. Chen.	10:15:30
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1	Q. Okay. It's been marked as Exhibit 131.	10:15:34
2	A. Yes. I just had the wrong one open.	10:15:36
3	Okay. So Chen. Page 1. I'm sorry. What	10:15:45
4	paragraph or what line?	10:15:51
5	Q. Lines 9, 10.	10:16:00
6	A. Sorry. What was the question again?	10:16:06
7	Q. The Hewitt -- strike that.	10:16:08
8	Chen refers to accommodating cavity 84 as an	10:16:11
9	opening or a space through which oil can flow from	10:16:15
10	hydraulic chamber 8 to the exterior through outlet 85 as	10:16:19
11	the main piston moves towards the front end of the	10:16:27
12	cylinder; right?	10:16:31
13	MR. HICKEY: Objection; form, compound.	10:16:35
14	THE WITNESS: I'm looking for that exact -- are	10:16:47
15	you saying that phrase appears? I don't --	10:16:49
16	BY MS. BHATTACHARYYA:	10:16:51
17	Q. I can refer you to lines 18 to 20 of Chen on	10:16:52
18	page 1 where it reads: " Referring to figure 5, when the	10:17:00
19	piston 81 moves towards the cap 83 at the front end, the	10:17:05
20	oil in the hydraulic cylinder 8 flows out through the	10:17:10
21	accommodating cavity 84 from the oil outlet 85."	10:17:17
22	Do you see that?	10:17:23
23	A. Yes.	10:17:24
24	Q. So according to Chen, accommodating cavity 84	10:17:24
25	is an opening or a space through which oil can flow from	10:17:32

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1	the hydraulic chamber 8 to the exterior through outlet	10:17:36
2	85; right?	10:17:45
3	A. Well, it's a bottom out cup, like I think the	10:17:46
4	previous example and what's talked about in the 223.	10:17:56
5	It's, essentially, a bottom out cup.	10:18:03
6	Q. Okay.	10:18:06
7	A. It flows from the main compression chamber to	10:18:08
8	the bottom out cup. As the -- before the piston --	10:18:11
9	before the bottom out piston engages the bottom out cup,	10:18:17
10	the fluid flows directly from the compression chamber	10:18:20
11	into the bottom out cup.	10:18:25
12	Q. And then what happens when post 821, which you	10:18:27
13	have referred to as the bottom out piston, engages the	10:18:34
14	opening of the accommodating cavity 84?	10:18:40
15	A. What do you mean what happens, I guess? Lots	10:18:43
16	of things happen.	10:18:50
17	Q. Okay. Let me rephrase.	10:18:54
18	Before the piston -- let me start over.	10:18:57
19	Before post 821 engages cavity 84, fluid flows	10:19:04
20	from hydraulic chamber 8 to cavity 84 through its main	10:19:16
21	opening at the top of the cavity; right?	10:19:23
22	A. That's one flow path, yes.	10:19:25
23	Q. And when post 821 engages the main opening of	10:19:27
24	cavity 84, fluid will flow from hydraulic chamber 8 to	10:19:37
25	cavity 84 through a flow rate 86; right?	10:19:50

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1	A. Once the -- that was a long question.	10:19:59
2	Once the bottom out piston, 821, enters the	10:20:02
3	bottom out cup, 84, there will be fluid flowing through	10:20:08
4	that passage 86. Yes. Is that the question? I'm	10:20:11
5	sorry. Yes.	10:20:16
6	Q. Yes.	10:20:18
7	And now going back to claim 11 of the 223	10:20:19
8	patent, you recall claim 11 has a limitation in	10:20:27
9	adjustable fluid flow path formed in the cup, the flow	10:20:35
10	path providing communication between the cup and the	10:20:38
11	primary compression chamber in a compression stroke of	10:20:41
12	the damper? You recall that; right?	10:20:46
13	A. Yes.	10:20:47
14	Q. Are you referring to the flow path 86 between	10:20:48
15	hydraulic chamber 8 and accommodating cavity 84 as the	10:20:57
16	adjustable fluid flow path formed in the cup as recited	10:21:04
17	in claim 11 of the 223 patent?	10:21:10
18	A. There are two flow paths, 87 and 86. But the	10:21:18
19	one I'm referring to in my modification of the claim	10:21:25
20	chart, in Exhibit 10, is channel 86.	10:21:29
21	Q. And going to claim 13, claim 13 further	10:21:37
22	recites: "A fluid flow path formed between the cup and	10:21:41
23	the primary compression chamber."	10:21:47
24	Do you recall that?	10:21:54
25	A. Yes.	10:21:54

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1	Q. And you are referring to the flow path 86 as	10:21:55
2	the fluid flow path formed between the cup and the	10:22:00
3	primary compression chamber as recited in claim 13;	10:22:06
4	correct?	10:22:10
5	A. Again, there are two flow paths. But I'm	10:22:10
6	referring to flow path 86 in this case.	10:22:16
7	Q. In flow path 87, that is not an adjustable flow	10:22:21
8	path; correct?	10:22:35
9	A. That's not a correct statement. I don't agree.	10:22:35
10	Q. Is it a user adjustable flow path?	10:22:41
11	A. Certainly, I can adjust it by changing the	10:22:46
12	spring.	10:22:51
13	Q. But that change would have to be conducted	10:22:51
14	during maintenance or assembly. It's not a change the	10:22:58
15	user would do on the fly during a course of her ride;	10:23:02
16	correct?	10:23:10
17	A. Are you defining "user adjustable" as	10:23:10
18	adjustable during a ride?	10:23:13
19	Q. As adjustable -- yes. As adjustable by a user	10:23:15
20	during the course of her ride. Not while riding the	10:23:19
21	bicycle, but, let's say, during the course of her ride,	10:23:22
22	you stop and you adjust your -- the damping	10:23:26
23	characteristics.	10:23:34
24	A. Let me --	10:23:35
25	MR. HICKEY: Objection; form, compound, vague,	10:23:37

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1	calls for a legal conclusion.	10:23:41
2	THE WITNESS: I was going to say before I	10:23:45
3	answer this, by just looking at these figures, figure 4,	10:23:47
4	which is shown in my modified claim chart, that	10:23:50
5	that spring -- I think we're both referring to a little	10:23:57
6	check ball valve, the spring. But above that structure,	10:24:00
7	you can see there is a threaded structure with what	10:24:03
8	appears to be a recessed hex bolt. So you could	10:24:07
9	change -- if that's indeed the case, without reviewing	10:24:13
10	the patent in detail, in this figure, it would appear to	10:24:17
11	me that you could change the preload on that spring with	10:24:21
12	an Allen wrench or similar tool. And that would be user	10:24:25
13	adjustable during a ride.	10:24:30
14	BY MS. BHATTACHARYYA:	10:24:32
15	Q. What is the direction of flow through the	10:24:33
16	passage 87?	10:24:35
17	A. The check valve would prevent flow from the	10:24:36
18	compression chamber to the bottom out cup. It would	10:24:42
19	largely restrict that flow. It would -- it's designed	10:24:50
20	to permit flow from the bottom out cup to the	10:24:55
21	compression chamber.	10:24:58
22	Q. In your invalidity report, however, you are	10:25:09
23	referring to the flow path 86 as the fluid flow path	10:25:13
24	formed between the cup and the primary compression	10:25:19
25	chamber as recited in claim 13; correct?	10:25:21

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1	A. In my report, that's what I identify in claim	10:25:24
2	13, yes.	10:25:27
3	Q. And just so the record is clear, you have	10:25:28
4	referred to flow path 86 as the adjustable fluid flow	10:25:35
5	path formed in the cup that is recited in claim 11;	10:25:39
6	correct?	10:25:46
7	A. Correct.	10:25:46
8	Q. Dr. Wang, we have been going for over an hour	10:25:48
9	now. Would you like to take a break?	10:26:00
10	A. Sure. That would be nice.	10:26:02
11	Q. Okay.	10:26:05
12	THE VIDEOGRAPHER: All right. Going off	10:26:06
13	record. 10:26 a.m.	10:26:08
14	(Recess)	10:26:09
15	THE VIDEOGRAPHER: We're back on record at	10:37:50
16	10:37 a.m.	10:37:53
17	BY MS. BHATTACHARYYA:	10:37:54
18	Q. Welcome back, Dr. Wang.	10:37:54
19	A. Thanks.	10:37:57
20	Q. By the way, Dr. Wang, where are you testifying	10:37:58
21	from today?	10:38:01
22	A. My office.	10:38:02
23	Q. Okay.	10:38:02
24	And that's in?	10:38:03
25	A. Reno. University of Nevada, Reno.	10:38:07

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1	Q. Okay.	10:38:10
2	During the break, I marked a Fox 751 reference	10:38:10
3	as an exhibit. It's marked as Exhibit 133.	10:38:30
4	(Exhibit 133 marked)	10:38:33
5	THE WITNESS: Yep. I got it.	10:38:35
6	BY MS. BHATTACHARYYA:	10:38:36
7	Q. And Exhibit 12 to your invalidity report, which	10:38:36
8	is the Fox 751 and Chen combination has been marked as	10:38:42
9	Exhibit 134.	10:38:50
10	A. Okay. I've got that.	10:38:52
11	(Exhibit 134 marked)	10:38:54
12	BY MS. BHATTACHARYYA:	10:38:54
13	Q. You're familiar with the Fox 751 reference;	10:39:01
14	right?	10:39:04
15	A. Correct.	10:39:04
16	Q. Fox 751 does not include hydraulic	10:39:06
17	(unintelligible) technology; correct?	10:39:12
18	A. No. It does not.	10:39:13
19	Q. So with respect to the adjustable fluid flow	10:39:15
20	path referred to in claim 11 of the 223 patent, you are	10:39:30
21	relying on the flow path 86 of Chen in your obviousness	10:39:38
22	combination; correct?	10:39:49
23	A. As I stated in my report, the combination of	10:39:50
24	Chen and the Fox 751, they contain all the elements of	10:39:59
25	claim 11. Yes.	10:40:04

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1 Q. But with respect to the specification of an 10:40:10
2 adjustable fluid flow path formed in the cup that is 10:40:14
3 recited in claim 11, that is not present in the Fox 751 10:40:18
4 reference; correct? 10:40:24

5 A. As I stated in my report, I'm looking at a 10:40:26
6 combination of those two. So by itself, the Fox 751 10:40:33
7 does not. 10:40:37

8 Q. And, again, in the combination of Fox 751 and 10:40:38
9 Chen, with respect to claim 13, again, you are referring 10:40:46
10 to the flow path 86 discussed in the Chen reference as 10:40:49
11 the fluid flow path formed between the cup and the 10:41:04
12 primary compression chamber recited in claim 13; 10:41:08
13 correct? 10:41:12

14 A. As I said before in my report, there are two 10:41:12
15 adjustable flow paths in my modified claim chart, I 10:41:15
16 refer to claim -- I refer to channel 86 as one of the 10:41:19
17 flow paths that was adjustable. 10:41:23

18 Q. Is there any reason why you have not referred 10:41:30
19 to the flow path 87 as an adjustable flow path between 10:41:32
20 the cavity 84 and hydraulic chamber 8 in Chen? 10:41:43

21 A. I don't know if there was a good reason, other 10:41:49
22 than it was -- I picked the first one. 10:41:56

23 Q. And with the flow path 87, the flow is -- 10:41:59
24 strike that.

25 Which way does fluid flow through the flow path 10:42:25

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1	87 in Chen?	10:42:28
2	A. Because of the check ball valve, the majority	10:42:29
3	of the flow will go from the bottom out cup to the	10:42:36
4	compression portion of the damper.	10:42:42
5	Q. And would that be during a compression stroke	10:42:50
6	or a rebound stroke?	10:42:52
7	A. That would depend on the compressibility of the	10:42:54
8	fluid and the exact geometries, if you go either	10:43:00
9	direction depending on the combination. If the fluid is	10:43:05
10	incompressible, then that would primarily happen in a	10:43:09
11	rebound stroke. But, again, it kind of depends on the	10:43:13
12	compressibility of the fluid and the ratio of the	10:43:16
13	geometries of the bottom out piston to the main piston.	10:43:19
14	Q. So during a compression stroke, is there going	10:43:24
15	to be any fluid flow from the hydraulic chamber 8 to	10:43:30
16	cavity 84 through the flow path 87?	10:43:38
17	A. In certain circumstances I can imagine there	10:43:44
18	would be. Again, it depends on the compressibility of	10:43:47
19	the fluid and the specific geometries. Really, the	10:43:51
20	fluid is going to go from region of higher pressure to	10:43:53
21	lower pressure. That's the driving force that drives	10:43:58
22	the direction of fluid. So depending on the relative	10:44:00
23	sizes, for example, of the orifice 85 and the size of	10:44:06
24	the flow path 87 and the state of the screw valve on	10:44:10
25	path 86 and the compressibility of the fluid, those	10:44:15

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1 things could all influence. There could be some 10:44:20
2 circumstances where fluid is flowing from high region in 10:44:23
3 the bottom out cup to the bottom -- to the compression 10:44:26
4 chamber. It just depends on the specific combinations 10:44:30
5 of all these things, including the compressibility of 10:44:34
6 the fluid. 10:44:37

7 Q. Does the Chen reference discuss flow of fluid 10:44:37
8 through the flow path 87 during either a compression or 10:44:43
9 a rebound stroke? 10:44:48

10 A. I think it does. Again, can we open Chen here? 10:44:58
11 Again, this is my recollection. It's been a while -- 10:45:02
12 well, I looked at it recently, but I didn't read it that 10:45:04
13 carefully. Let me open Chen here. I guess I have to 10:45:10
14 search. 10:45:19

15 I'm just looking at line I guess it's 11, 12. 10:46:06
16 It starts at 11. "A check ball valve 88 is disposed in 10:46:12
17 one flow way 871" -- I think it's a typo. I think it's 10:46:17
18 supposed to be 870 -- or 87 -- "whereby the oil can only 10:46:22
19 flow one way therethrough during the forward stroke of 10:46:28
20 the piston 81." 10:46:31

21 Q. And by the forward stroke of piston 81, it 10:46:35
22 means the compression stroke; right? 10:46:41

23 A. I imagine that's the case. But I'm looking for 10:46:44
24 forward stroke -- again, it's hard to search this. I 10:46:50
25 don't know his definition of forward was. But I would 10:47:03

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1 imagine that the forward stroke is the compression 10:47:05
2 stroke. 10:47:08

3 Q. So according to Chen, during the forward stroke 10:47:08
4 of piston 81, oil can flow -- strike that. 10:47:12

5 When Chen says oil can only flow one way 10:47:25
6 through the flow path 87 during the forward stroke of 10:47:33
7 the piston, that one way is from the cavity 84 to the 10:47:37
8 hydraulic cylinder 8; is that right? 10:47:49

9 A. That was a long question. So when I read this 10:47:53
10 statement, it sounds to me like -- I interpret this as 10:47:58
11 it flows from the bottom out cup to the compression 10:48:08
12 chamber during compression stroke. 10:48:14

13 Q. When the piston -- strike that. 10:48:14

14 When post 821 fits into the accommodating 10:48:21
15 cavity 84 and blocks it, at that time, would there be 10:48:32
16 any fluid flow from cavity 84 to the hydraulic cylinder 10:48:36
17 8 through the flow path 87? 10:48:42

18 A. I think that's what this is saying; right? "A 10:48:50
19 check ball valve 88" -- that's the check ball valve -- 10:48:53
20 "one way flow through" -- again, it says 871, but I 10:48:59
21 think that's a typo -- "through 87, whereby the oil can 10:49:03
22 only flow one way" -- which is one way being from the 10:49:07
23 bottom out cup to the compression chamber -- "during the 10:49:10
24 forward stroke" -- meaning the compression stroke -- "of 10:49:13
25 piston 81." 10:49:16

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1	Does that answer your question? I'm sorry.	10:49:24
2	Q. My question was more specific as to when the	10:49:32
3	post 821 fits into the accommodating cavity 84 and	10:49:36
4	blocks it, at that point in the piston movement, is	10:49:41
5	there going to be fluid flow from cavity 84 to hydraulic	10:49:48
6	cylinder 8 through the flow path 87?	10:49:54
7	MR. HICKEY: Objection; asked and answered.	10:49:59
8	THE WITNESS: Again, I'll go by my previous	10:50:04
9	statement. It depends on a lot of factors, including	10:50:06
10	the geometries and compressibility of the fluid. But it	10:50:09
11	appears to me that Chen, himself, is stating that that	10:50:12
12	flow occurs while the bottom out piston is engaged with	10:50:18
13	the bottom out cup.	10:50:22
14	BY MS. BHATTACHARYYA:	10:50:31
15	Q. When the bottom out piston is engaged with the	10:50:31
16	bottom out cup, fluid will be -- also be flowing out	10:50:34
17	from the cavity -- strike the question.	10:50:39
18	There is an outlet 85 that connects to cavity	10:50:44
19	84; correct?	10:50:48
20	A. Correct.	10:50:49
21	Q. And when post 821 fits into the cavity 84,	10:50:50
22	fluid continues to flow out from cavity 84 to the	10:51:07
23	exterior through outlet 85; correct?	10:51:12
24	A. That's one of the flow paths out of the bottom	10:51:14
25	out cup.	10:51:19

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1 Q. I have also marked as the Deferme reference -- 10:51:35
2 is that how you say it, D-e-f-e-r-m-e? 10:51:46
3 A. I call it Deferme. I don't know how to 10:51:49
4 pronounce it. But that's how I pronounce it. 10:51:51
5 Q. Okay. Let's just call it Deferme. That 10:51:54
6 reference has been marked as Exhibit 135. 10:51:58
7 (Exhibit 135 marked) 10:52:02
8 THE WITNESS: Okay. I've got that open. 10:52:13
9 BY MS. BHATTACHARYYA: 10:52:14
10 Q. So throughout your invalidity report that your 10:52:33
11 firm may be combined with Hewitt or with Chen as part of 10:52:36
12 your obviousness combination. 10:52:41
13 Do you recall that? 10:52:43
14 A. Both Hewitt and Chen. Yes. 10:52:44
15 Q. So with respect to Chen, are you -- is it your 10:52:48
16 position that the piston 81 of Chen may be replaced by 10:52:58
17 the piston that is taught by the firm? 10:53:07
18 A. Let me refresh myself here again. 10:53:12
19 Yes. So Chen is one of the cases where I 10:53:33
20 suggest that it would have been obvious to replace the 10:53:37
21 fixed piston of Chen with this more complex piston from 10:53:40
22 Deferme. 10:53:46
23 Q. And what is the reason behind your position 10:53:50
24 that the piston 81 of Chen may be replaced by the firm's 10:53:54
25 piston? 10:54:00

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1	A. You would increase the performance of the	10:54:01
2	resulting shock absorber.	10:54:03
3	Q. With respect to the Chen and Deferme	10:55:09
4	combination that you have discussed in your invalidity	10:55:14
5	report, you are not referring to the alleged flow path	10:55:19
6	through the firm's piston as the adjustable fluid flow	10:55:31
7	path formed in the cup that's recited in claim 11;	10:55:38
8	correct?	10:55:42
9	A. I'm sorry. I'm just trying to remind myself --	10:55:42
10	MR. HICKEY: Objection; form.	10:55:51
11	THE WITNESS: The combination of Deferme --	10:55:57
12	sorry. Repeat that question one more time.	10:55:59
13	BY MS. BHATTACHARYYA:	10:56:02
14	Q. With respect to the Chen and the Deferme	10:56:02
15	combination that you have discussed in your invalidity	10:56:05
16	report, you are not referring to any alleged flow path	10:56:07
17	to Deferme's piston as the adjustable fluid flow path	10:56:12
18	from the cup as recited in claim 11; correct?	10:56:17
19	A. That's correct. The fluid flow path are from	10:56:23
20	the bottom out cup to the -- between the bottom out cup	10:56:26
21	and the compression chamber, and those are not due to	10:56:29
22	the flow paths that go through Deferme 's piston.	10:56:32
23	Q. And same with respect to claim 13; right?	10:56:39
24	There is -- you are not referring to a flow path through	10:56:43
25	Deferme as the right flow path formed between the cup	10:56:54

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1	and the primary compression chamber as recited in	10:56:59
2	claim 13; correct?	10:57:03
3	A. That's correct.	10:57:03
4	Q. And same question with respect to Hewitt. You	10:57:07
5	have -- is it correct to say that in your invalidity	10:57:15
6	report, you have said that a person skilled in the art	10:57:21
7	may be motivated to replace Hewitt's piston 6 with	10:57:27
8	Deferme's piston to improve the performance of the	10:57:35
9	Hewitt device?	10:57:39
10	A. I mean, that was a long question. But I think	10:57:46
11	the answer -- somebody -- the POSIT would have been --	10:57:48
12	POSITA? POSIT? I'm not sure how you pronounce that --	10:57:57
13	would have been motivated to replace the Hewitt's simple	10:58:01
14	piston with the deferred adjustable system because it	10:58:05
15	would increase the performance of the overall shock	10:58:07
16	absorber.	10:58:08
17	Q. And, again, with respect to the adjustable	10:58:08
18	fluid flow path formed in the cup, as recited in	10:58:11
19	claim 11 of the 223 patent, you are referring to the	10:58:15
20	flow path 25, 26 of Hewitt as that adjustable fluid flow	10:58:26
21	path and not any flow path through the firm's piston;	10:58:33
22	correct?	10:58:38
23	MR. HICKEY: Objection; form, compound.	10:58:38
24	THE WITNESS: The fluid -- the adjustable fluid	10:58:43
25	flow path between the bottom out cup and the compression	10:58:45

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1	chamber is -- the one I'm referring to is the one from	10:58:49
2	Hewitt, which is -- I believe it's path 25 and not to	10:58:52
3	through the piston of Deferme.	10:58:57
4	BY MS. BHATTACHARYYA:	
5	Q. And with respect to claim 13 and the limitation	10:59:06
6	of fluid flow path formed between the cup and the	10:59:09
7	primary compression chamber that's recited in claim 13,	10:59:09
8	you are referring to path 25 of Hewitt and not a path	10:59:13
9	through Deferme's piston; correct?	10:59:18
10	MR. HICKEY: Objection; form.	10:59:21
11	THE WITNESS: Again, path 25 between the bottom	10:59:27
12	out cup and the compression chamber is the path I'm	10:59:29
13	referring to, not a path through Deferme's piston.	10:59:33
14	BY MS. BHATTACHARYYA:	10:59:37
15	Q. Let's switch gears to the Nakaya reference.	10:59:41
16	Let me go ahead and introduce that. I'm going to mark	10:59:47
17	the Nakaya reference as 136 that should be available to	11:00:32
18	you.	11:00:37
19	(Exhibit 136 marked)	11:00:37
20	THE WITNESS: I'm still waiting for it to	11:00:38
21	appear.	11:00:40
22	BY MS. BHATTACHARYYA:	11:00:49
23	Q. Okay.	11:00:50
24	A. All right. I've got it. This is a fun patent.	11:00:58
25	Q. And I have marked Exhibit 137 -- strike that.	11:01:17

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1	I have marked Exhibit 11 to the Wang invalidity	11:01:25
2	report, which is the Nakaya chart as Exhibit 137. And	11:01:31
3	that should be available to you too.	11:01:38
4	(Exhibit 137 marked)	11:01:54
5	THE WITNESS: Okay. I've got both Nakaya and	11:01:54
6	Exhibit 11 open.	11:01:58
7	BY MS. BHATTACHARYYA:	11:02:09
8	Q. I'm going to ask you the same questions about	11:02:09
9	the flow paths in claims 11 and 13, just to give you	11:02:13
10	some context.	11:02:17
11	With respect to -- strike that.	11:02:19
12	Which flow path in Nakaya are you referring to	11:02:27
13	as the adjustable fluid flow path formed in the cup?	11:02:31
14	The flow path provided fluid communication between the	11:02:40
15	cup and primary compression chamber in a compression	11:02:43
16	stroke of a depth bar that's recited in claim 11 of the	11:02:46
17	223 patent?	11:02:48
18	A. There are a couple in this one because there	11:02:52
19	are a couple different embodiments. And one embodiment,	11:02:54
20	it's flow path 823 that's shown on page 21 of	11:03:09
21	Exhibit 11. And then also in a different embodiment,	11:03:33
22	there are two flow paths. Either of them could be the	11:03:45
23	one. It looks like they're labeled 824. This is hard	11:03:48
24	to read the -- pull the patent up for a little better	11:03:59
25	pictures. He doesn't label them -- I'm looking at	11:04:16

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1 figure 19 in the patent. He doesn't label the flow 11:04:19
2 paths, but he labels the needle valves, adjusts them. 11:04:24
3 4824B and 4824A. So those are two adjustable flow 11:04:28
4 paths, either one of which could be the flow path in 11:04:37
5 claim 11. 11:04:40
6 Q. So going back to the embodiment as shown on 11:04:43
7 page 21 of Exhibit 137. 11:04:48
8 A. Okay. 11:04:58
9 Q. In which direction does the fluid flow through 11:05:00
10 the flow path 823 during a downward stroke of the 11:05:03
11 piston? 11:05:21
12 A. Again, it depends on -- because Nakaya is using 11:05:21
13 gas as a fluid here, it depends on the relative 11:05:25
14 geometries of the bottom out piston to the main piston. 11:05:28
15 So in some circumstances you can get flow -- it will 11:05:35
16 depend on -- again, the flow will go from the pressure 11:05:37
17 of higher -- it will go from the region of higher 11:05:44
18 pressure to pressure of lower pressure. Whichever one 11:05:47
19 is at the higher pressure, it will go from there to the 11:05:50
20 region of lower pressure. So depending on the 11:05:53
21 geometries of the bottom out cup and piston relative to 11:05:54
22 the main compression piston and piston chamber, you 11:05:57
23 could have the bottom out cup pressure higher than the 11:06:02
24 main compression chamber, in which case the flow would 11:06:08
25 be towards -- from the bottom out cup to the main 11:06:15

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1 compression chamber. Or there could be circumstances, 11:06:17
2 depending upon the geometries, where the pressure is 11:06:18
3 higher in the main compression chamber than the bottom 11:06:20
4 out cup. So the flow would go in the opposite 11:06:21
5 direction, meaning it would go from the compression 11:06:23
6 chamber to the bottom out cup. So it just depends on 11:06:26
7 the geometries because we're dealing with, in this case, 11:06:29
8 a very compressible fluid. 11:06:32

9 Q. And so going up -- going to claim 13 where it 11:06:40
10 recites a fluid flow path formed between the cup and the 11:06:47
11 primary compression chamber, you are again referring to 11:06:54
12 the flow path 823 as that fluid flow path between the 11:07:01
13 cup and the primary compression chamber recited in 11:07:09
14 claim 58; correct? 11:07:12

15 A. Again, like I said in the previous claim 11, 11:07:14
16 there are at least two embodiments I've identified. One 11:07:18
17 embodiment, the path is 823, as you mentioned. The 11:07:21
18 second embodiment is this, again, unidentified paths, 11:07:24
19 but the valves are labeled 4824A and 4824B. 11:07:27

20 Q. Nakaya's air cylinder paired as 110 is designed 11:08:22
21 so aid in the forward motion of the prosthetic limb; 11:08:29
22 correct? 11:08:35

23 A. I wouldn't limit it to the forward motion. 11:08:35
24 It's meant to -- I'm not sure "aid" is the right word 11:08:39
25 either. It's part of a prosthetic limb. You could be 11:08:45

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1	walking forward or backwards, or sideways, or jumping.	11:08:49
2	Q. Nakaya's device is designed for adjusting	11:08:57
3	pressure characteristics and generating appropriate	11:09:08
4	resistant forces in accordance with the bending and	11:09:12
5	stretching motion of the amputee's knee; correct?	11:09:18
6	A. Can you say it one more time? I'm trying to	11:09:22
7	listen to the beginning of the thing. Definitely for an	11:09:29
8	amputee's knee. What did the first part of the	11:09:33
9	statement say?	11:09:36
10	Q. The device is designed for adjusting the	11:09:36
11	pressure characteristics and resistive forces in	11:09:40
12	accordance with the bending and stretching motion of the	11:09:43
13	amputee's knee; correct?	11:09:49
14	A. You said pressure characteristics and bending	11:09:52
15	motion? Is that what you said?	11:09:55
16	Q. Adjusting pressure characteristics and the	11:09:57
17	resistive forces in accordance with --	11:10:01
18	A. Okay. I mean, those are two of the	11:10:04
19	characteristics, certainly. There are many	11:10:06
20	characteristics that go into making a prosthetic limb.	11:10:08
21	Adjusting the pressure and adjusting the resistive	11:10:12
22	forces, those would be two of the characteristics.	11:10:15
23	Q. Okay.	11:10:18
24	But Nakaya exclusively talks about just those	11:10:19
25	characteristics; right?	11:10:24

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1 MR. HICKEY: Objection; form, mischaracterizes 11:10:25
2 the evidence. 11:10:28
3 THE WITNESS: I'm not sure Nakaya talks about 11:10:32
4 just those things. He presents torques versus angle 11:10:35
5 curves, lots of embodiments. But it discloses things 11:10:41
6 about damping, adjusting various rates. So -- 11:10:45
7 BY MS. BHATTACHARYYA: 11:10:52
8 Q. Where in Nakaya does it talk about adjusting 11:10:52
9 any damping characteristics? 11:10:56
10 A. Oh, if -- so in Nakaya, if you try and search 11:10:59
11 for the word "damping" -- I think I did that. My 11:11:03
12 recollection, it doesn't appear. But terms like -- I 11:11:06
13 can search here. I can do that. I think I can search 11:11:12
14 here. For example, if you search for the term 11:11:15
15 "resistance," that appears many times, several times. 11:11:20
16 Twelve times. The resistance to flow. If I search for 11:11:24
17 "restriction," that appears four times. There are terms 11:11:29
18 that are synonymous -- not synonymous with damping, but 11:11:37
19 associated about damping that appear many times 11:11:42
20 throughout the patent. 11:11:45
21 Q. The purpose of the Nakaya device is to store 11:11:48
22 energy to help with propelling walking; correct? 11:11:55
23 MR. HICKEY: Objection; form. 11:12:05
24 THE WITNESS: Say it one more time. I'm sorry. 11:12:06
25 ///

1	BY MS. BHATTACHARYYA:	11:12:08
2	Q. The purpose of the Nakaya device is to help	11:12:08
3	with energy storage to propel walking; correct?	11:12:11
4	MR. HICKEY: Objection --	11:12:15
5	THE WITNESS: That's one -- sorry.	11:12:17
6	MR. HICKEY: Objection; form.	11:12:18
7	THE WITNESS: Sorry.	11:12:19
8	So that's one of the purposes. When you're	11:12:21
9	doing -- when you're trying to get the proper gait for	11:12:24
10	an amputee, you need to have energy storage, that's one	11:12:28
11	mechanism, but you also need energy dissipation. You	11:12:33
12	don't want the leg to extend -- during the swing phase,	11:12:36
13	you don't want the leg to extend at an extremely fast	11:12:40
14	rate. That would cause the knee to lock out very	11:12:44
15	quickly. So you want to restrain that extension motion	11:12:47
16	to damping. So you have to have both energy storage and	11:12:50
17	damping, which is what a shock absorber is designed to	11:12:56
18	do in order to have proper gait.	11:13:01
19	BY MS. BHATTACHARYYA:	11:13:04
20	Q. But Nakaya does not exclusively talk about	11:13:04
21	damping --	11:13:09
22	MR. HICKEY: Objection.	11:13:18
23	BY MS. BHATTACHARYYA:	11:13:19
24	Q. Sorry. I'll repeat my question again.	11:13:19
25	Nakaya does not exclusively talk about any	11:13:21

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1	damping or damping characteristics to adjust the proper	11:13:25
2	gait; correct?	11:13:28
3	MR. HICKEY: Objection; form, asked and	11:13:31
4	answered, mischaracterizes testimony.	11:13:34
5	THE WITNESS: Again, I don't think the word	11:13:38
6	"damping" appears. But there are terms that are	11:13:41
7	associated with damping that appear several times.	11:13:45
8	BY MS. BHATTACHARYYA:	11:13:49
9	Q. Can you refer me to one of the terms that you	11:13:57
10	deem as associated with damping in the Nakaya reference?	11:14:00
11	A. Yeah. Let me just word search here. I'm	11:14:03
12	opening here in a separate window so I can word search.	11:14:15
13	So, for example, if I word search for	11:14:29
14	"restrict," that's found on five different pages. For	11:14:35
15	example, on -- let's see here. On column 1, line 50,	11:14:41
16	51: "The throttle valve for restricting the flow of air	11:14:53
17	in accordance with walking speed using computer."	11:15:00
18	That's a different patent. Sorry. That's not this	11:15:04
19	patent. He's talking prior art. Let's see another one	11:15:07
20	here. So under column 2, line 55 -- 54: "The constant	11:15:12
21	throttle valve has the role for normally restricting the	11:15:24
22	flow of air from a second chamber towards the first	11:15:27
23	chamber."	11:15:30
24	That's a damping term.	11:15:32
25	Q. Even if the throttle valves provide some	11:15:37

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1	restriction or damping, would you characterize the	11:15:43
2	Nakaya device as a damper or shock absorber?	11:15:45
3	A. Definitely.	11:15:50
4	Q. So it is your opinion is that a Nakaya device	11:15:51
5	which is meant for assisting walking for an amputee is a	11:15:54
6	damper?	11:16:02
7	A. It is a shock absorber. It contains an energy	11:16:04
8	storage mechanisms and contains energy dissipation	11:16:08
9	mechanisms, both of which are necessary for proper gait.	11:16:12
10	Q. But a shock absorber doesn't usually have	11:16:16
11	energy storage mechanisms; correct?	11:16:20
12	A. That's not true. A shock absorber can be	11:16:22
13	defined many ways. Some people will define just a	11:16:28
14	damper as a shock absorber. I think I mentioned this in	11:16:31
15	one of my reports. I'm not sure if it's invalidity or	11:16:36
16	IPR. But a shock absorber can be defined in many ways.	11:16:40
17	Some people say a shock absorber is the spring and the	11:16:46
18	damper combined. Some people refer to a shock absorber	
19	as just the damper. There's no consistency throughout	11:16:52
20	the industry. When I say shock absorber, I'm talking	11:16:53
21	about energy storage and energy dissipation. Could be a	11:16:55
22	single unit, like we have here, or it could be different	11:16:57
23	elements, where you have a spring and a damper	11:17:01
24	separately.	11:17:06
25	Q. So if you are just talking about a damper, does	11:17:06

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1 the damper usually do any energy storage? 11:17:09

2 A. There are -- you're asking if a damper does 11:17:14

3 energy storage? 11:17:25

4 Q. Yes. So I'm not asking you to a shock absorber 11:17:26

5 that has both a damper and a spring element. I'm just 11:17:32

6 talking to you -- asking you about a damper. A damper 11:17:37

7 is an energy dissipation device; correct? 11:17:39

8 A. Correct. So a damper is meant to dissipate 11:17:43

9 energy. 11:17:47

10 Q. And so a damper does not do energy storage; 11:17:47

11 correct? 11:17:52

12 A. There are many cases, such as Nakaya included, 11:17:52

13 where the device, a single element -- why did I say 11:18:01

14 single element -- the device does energy storage and 11:18:06

15 energy dissipation at the same time. That's super 11:18:10

16 common throughout all of pneumatics. 11:18:13

17 Q. I'm asking you just about a damper in general 11:18:17

18 and not about the Nakaya device. A damper's purpose is 11:18:19

19 to dissipate energy; correct? 11:18:24

20 A. A damper's purpose is to dissipate energy. 11:18:26

21 Correct. 11:18:29

22 Q. And Nakaya does not refer to or call its device 11:18:30

23 as a damper; correct? 11:18:36

24 A. The word "damper," as I said before, does not 11:18:37

25 appear, but terms associated with damping appear. And 11:18:42

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1 his figures show dampers, what I would call and what any 11:18:52
2 POSITA would call a damper. 11:18:58

3 Q. The Nakaya device does both energy storage and 11:19:01
4 energy dissipation according to you; correct? 11:19:05

5 A. Correct. As many pneumatic devices do, you can 11:19:07
6 have energy storage and energy dissipation in one unit. 11:19:12

7 Q. I'm going to switch gears to the 331 patent 11:19:37
8 now. So maybe now is a time to take a quick break. I 11:19:53
9 know we took a break not too long ago, but maybe a short 11:19:56
10 break. 11:20:00

11 A. Sure. 11:20:01

12 THE VIDEOGRAPHER: Off record. 11:19 a.m. 11:20:02
13 (Recess) 11:20:05

14 THE VIDEOGRAPHER: Back on record. 11:31 a.m. 11:31:30
15 BY MS. BHATTACHARYYA: 11:31:36

16 Q. Dr. Wang, as I said before the break, we are 11:31:37
17 going to switch gears to the 331 patent. Okay? 11:31:44

18 A. Okay. 11:31:49

19 Q. And the 331 patent was previously marked as 11:31:49
20 Exhibit 1, and that should be available to you on the 11:31:57
21 Exhibit Share folder. 11:31:59

22 A. Yep. 11:32:02

23 Q. And I have marked the Hoose reference that you 11:32:02
24 have talked about in your invalidity report as 11:32:18
25 Exhibit 138 and Exhibit 5 to your invalidity report 11:32:21

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1 which relates to Hoose has been marked as Exhibit 139. 11:32:28

2 A. I see those. Yes. 11:32:35

3 (Exhibits 138 through 139 marked)

4 BY MS. BHATTACHARYYA: 11:32:36

5 Q. So -- and in your report, invalidity report, 11:32:36

6 you have discussed Hoose starting at paragraph 130, if 11:32:51

7 you want to go to that. So I have made three different 11:32:58

8 sources available for you. Feel free to refer to 11:33:01

9 anything to answer the questions. 11:33:05

10 A. I'm at paragraph 130. Yes. 11:33:07

11 Q. When was the last time you reviewed Hoose? 11:33:09

12 A. Sometime this week. I don't remember exactly 11:33:18

13 when. I briefly reviewed it, just looked over it, to 11:33:21

14 remind myself which patent it is. Many prior arts. 11:33:25

15 Q. Okay. 11:33:28

16 Fair to say you are largely familiar with the 11:33:29

17 Hoose reference? 11:33:35

18 A. Yes. 11:33:38

19 Q. So you have alleged that valve 129 of Hoose is 11:33:39

20 in air bleed valve; correct? 11:33:55

21 A. I've identified 129. And there's an unnumbered 11:34:00

22 valve that looks very similar on the bottom chamber 11:34:05

23 that's unlabeled. I've identified those two as possible 11:34:08

24 air bleed valves. 11:34:13

25 Q. Valve 129 communicates with chamber 126 or 11:34:17

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1	chamber 146 of Hoose; correct?	11:34:27
2	A. 129 communicates with 126. Correct. And then	11:34:32
3	the unlabeled one communicates with 146.	11:34:36
4	Q. Okay.	11:34:40
5	And chambers 126 and 146 are pressurized	11:34:41
6	chambers; correct?	11:34:59
7	A. That depends. Hoose mentions you can	11:35:00
8	pressurize with air, oil, or coil springs, he mentions,	11:35:02
9	or a combination thereof.	11:35:07
10	Q. But whatever the combination is, chambers 136	11:35:13
11	and 146 are pressurized; correct?	11:35:17
12	A. They could be pressurized to higher than	11:35:20
13	atmospheric, or they can be pressurized to atmospheric,	11:35:27
14	depending on if you're trying to use an air spring or	11:35:31
15	coil spring or hydraulic spring. You --	11:35:35
16	Q. According to Hoose though --	11:35:39
17	MR. HICKEY: Hold on, Arpita. Please let	11:35:40
18	Dr. Wang finish his answer.	11:35:44
19	BY MS. BHATTACHARYYA:	11:35:46
20	Q. Sorry. I thought you were finished. Are you	11:35:46
21	done, Dr. Wang?	11:35:48
22	A. I'm done. That's fine.	11:35:49
23	Q. According to Hoose, chamber 126 and chamber 146	11:35:50
24	have a positive pressure that is the pressure higher	11:36:02
25	than ambient air pressure; correct?	11:36:05

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1 A. Let me bring up the patent. I believe that you 11:36:08
2 can do positive pressure. It gives an example you can 11:36:12
3 pressurize it. But it also states that you can use a 11:36:15
4 coil spring, or a combination of air and a coil spring, 11:36:18
5 and/or oil. If you want me to find exact reference, I 11:36:22
6 can try and find it. But my recollection is that he 11:36:25
7 gives an example, one embodiment where you can 11:36:28
8 pressurize it, and then he also goes on to say that you 11:36:33
9 can also use a coil spring, and/or oil, or combination 11:36:39
10 thereof. So if you had a combination, then you wouldn't 11:36:43
11 need to pressurize it. You could pressurize, have a 11:36:47
12 pressurized air spring in parallel with the coil spring. 11:36:50
13 That's one possible embodiment. You could have a coil 11:36:56
14 spring with just ambient pressure inside, which would 11:36:57
15 still act as an air spring as you compress it. 11:37:00
16 Would you like me to find that section where he 11:37:08
17 talks about that? 11:37:10
18 Q. Sure. Why don't we do that. 11:37:13
19 A. Let me find it. 11:37:15
20 All right. Column 6, line 24. 11:37:44
21 Q. Uh-huh. 11:37:48
22 A. It says: "Preferably pressurized and 11:37:48
23 pneumatically provided, although, other readily 11:37:52
24 recognized mechanisms exist, e.g., oil, springs, et 11:37:55
25 cetera." 11:37:59

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1	Q. And right above that sentence that you read in	11:38:01
2	Hoose column 6, starting at line 21, it says: "Shock	11:38:06
3	chamber 126 can be advantageously pneumatically	11:38:13
4	pressurized, example, by valve 129, to absorb shock	11:38:18
5	encountered by suspension 110."	11:38:23
6	Do you see that?	11:38:26
7	A. I see that, yes.	11:38:26
8	Q. So Hoose discloses the purpose of valve 129 as	11:38:27
9	for adjusting the pressure or pressurizing the shock	11:38:35
10	chamber 126 or chamber 146; correct?	11:38:45
11	MR. HICKEY: Objection; form.	11:38:50
12	THE WITNESS: Again, I'll stand by my previous	11:38:52
13	answer is he's saying that you one embodiment is to use	11:38:54
14	an air spring by pressurizing to above ambient pressure,	11:38:58
15	but he also says other things -- other mechanisms exist,	11:39:04
16	such as oil and springs, et cetera. So, again, he's	11:39:08
17	saying that you can have a coil spring, and you might	11:39:12
18	put that in parallel with an air spring, you may not.	11:39:16
19	So you may pressurize it to atmospheric pressure. You	11:39:19
20	may pressurize it to above atmospheric pressure. It	11:39:23
21	just depends on the spring rate you want. This patent	11:39:27
22	is all about having multistage super adjustable springs	11:39:29
23	so you can have different spring rates. So you can --	11:39:35
24	you would want to have different combinations of soft	11:39:38
25	and stiff springs.	11:39:41

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1	BY MS. BHATTACHARYYA:	11:39:42
2	Q. But I'm asking about the function and purpose	11:39:42
3	of valve 129. Hoose discloses the function of valve 129	11:39:47
4	as pneumatically pressurizing shock chamber 126 or	11:39:57
5	chamber 146; correct?	11:40:03
6	A. Again, what he's disclosing is the way you	11:40:05
7	would put air into or out of those two chambers would be	11:40:10
8	through the valve 129 and the unmarked valve, the lower	11:40:15
9	one.	11:40:20
10	Q. Hoose column 6, line 21 to 23 states: "Shock	11:40:20
11	chamber 126 can be advantageously pneumatically	11:40:36
12	pressurized, example, by valve 129, to absorb shock	11:40:41
13	encountered by suspension 110."	11:40:46
14	Do you see that?	11:40:49
15	A. I see that, yes.	11:40:49
16	Q. In that sentence there, Hoose is saying one	11:40:50
17	would use valve 129 to pressurize the shock chamber 126;	11:40:56
18	correct?	11:41:04
19	A. In that one embodiment, you would be using	11:41:04
20	valve 129 to add air. But that's not the only	11:41:08
21	embodiment.	11:41:11
22	Q. Sure.	11:41:15
23	Is there any other embodiment in which Hoose	11:41:15
24	discusses using valve 129 to equalize pressure in shock	11:41:20
25	chamber 126 or 146 with the ambient air pressure?	11:41:29

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1 A. Hoose does not say those exact words. But he's 11:41:35
2 disclosing the ability to open those valves, either 11:41:42
3 valve 129 or the one that's unmarked, to equalize the 11:41:45
4 ambient pressure. 11:41:50
5 Again, if you had a coil spring in the lower 11:41:51
6 one, for example, and you rode -- took your vehicle to a 11:41:54
7 higher elevation, you could vent that pressure through 11:41:59
8 the unmarked valve. 11:42:03
9 Q. And I'm just trying to focus on what Hoose 11:42:06
10 discloses. So you would agree that Hoose does not 11:42:13
11 disclose using valve 129 to equalize pressure in shock 11:42:18
12 chamber 126 or 146 with ambient air pressure; correct? 11:42:24
13 MR. HICKEY: Objection; form, misstates 11:42:29
14 testimony, misstates the evidence. 11:42:31
15 THE WITNESS: Again -- I'm not a lawyer. So 11:42:35
16 when you say disclose, are you saying, actually, the 11:42:37
17 words themselves appear, or are you saying that I can 11:42:40
18 imply or infer from the patent this is the case? 11:42:44
19 BY MS. BHATTACHARYYA: 11:42:48
20 Q. I'm talking about an express disclosure in the 11:42:48
21 specification or drawings of Hoose. 11:42:58
22 MR. HICKEY: Objection, form. 11:43:02
23 THE WITNESS: Again, I'm wary of these words 11:43:07
24 like "disclose." You know, those words do not appear. 11:43:11
25 But when you read the patent, a POSITA would understand 11:43:26

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1	that you can use valve 129 or the unmarked valve to	11:43:29
2	equalize pressure.	11:43:35
3	BY MS. BHATTACHARYYA:	11:43:57
4	Q. I have marked the Becker prior art reference as	11:44:23
5	Exhibit 140.	11:44:38
6	(Exhibit 140 marked)	11:44:39
7	THE WITNESS: Still waiting for it to show up.	11:44:51
8	BY MS. BHATTACHARYYA:	11:44:56
9	Q. And I am marking Exhibit 3 your invalidity	11:44:57
10	report which relates to the Becker/Bruckbauer	11:45:02
11	combination as Exhibit 141. It should be available to	11:45:08
12	you shortly.	11:45:12
13	(Exhibit 141 marked)	
14	THE WITNESS: It's listed as Exhibit 140 again.	11:45:24
15	BY MS. BHATTACHARYYA:	11:45:27
16	Q. Yeah. I should try to change that. I don't	11:45:28
17	know why it went ahead and marked both as 140. Maybe I	11:45:31
18	added it too fast.	11:45:38
19	A. I don't know the situation. Is it okay to just	11:45:39
20	use it? I mean --	11:45:42
21	Q. I don't want to create confusion. So let me	11:45:44
22	rename -- let me remark it.	11:45:47
23	A. I've got Exhibit 141. Exhibit 140. Exhibit 3.	11:46:40
24	Okay. I've got it.	11:46:46
25	Q. And just so the record is clear, Exhibit 140 is	11:46:47

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1 the Becker prior art reference and Exhibit 141 is 11:46:51
2 Exhibit 3 to your invalidity report, which relates to 11:46:55
3 the Becker and the Bruckbauer combination. 11:46:59
4 The Becker itself does not disclose an air 11:47:19
5 bleed assembly for equalizing air pressure in the lower 11:47:24
6 fork with ambient air pressure; correct? 11:47:30
7 A. No. I was talking about the combination of 11:47:33
8 Becker and Bruckbauer. 11:47:35
9 Q. So just so the record is clear, you agree that 11:47:37
10 Becker itself does not disclose an air bleed assembly 11:47:42
11 for equalizing air pressure in the lower fork with 11:47:47
12 ambient air pressure; correct? 11:47:51
13 A. Becker by itself does not disclose it. I was 11:47:53
14 only talking about Becker in combination with 11:47:57
15 Bruckbauer. 11:48:01
16 Q. And Bruckbauer by itself also does not provide 11:48:02
17 disclosure of an air bleed assembly for equalizing air 11:48:05
18 pressure in the lower fork with ambient air pressure; 11:48:10
19 correct? 11:48:18
20 A. Bruckbauer -- we have to be careful because 11:48:18
21 Bruckbauer is a motorcycle patent. And motorcycles and 11:48:22
22 bicycles are often inverted from each other. So 11:48:25
23 Bruckbauer is on the outer fork, which would be the 11:48:29
24 lower fork for a bicycle. So he does not say lower 11:48:31
25 fork, but he is on the outer fork. 11:48:37

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1	Q. But Bruckbauer's valve is venting from the cap	11:48:42
2	of that outer fork; correct?	11:48:49
3	A. Okay. So we have to be careful here. Is the	11:48:52
4	cap considered part of the outer fork?	11:48:56
5	Q. Let's rephrase it.	11:49:05
6	Bruckbauer does not disclose any air bleed	11:49:16
7	assemblies on the lower fork legs, the outer forks;	11:49:22
8	correct?	11:49:33
9	MR. HICKEY: Objection; mischaracterizes	11:49:33
10	testimony, mischaracterizes the evidence, form.	11:49:35
11	THE WITNESS: We have to be careful about these	11:49:40
12	terms here because we have this dispute over the lower	11:49:41
13	fork, outer fork, lower fork leg, outer fork leg.	11:49:47
14	Bruckbauer discloses a valve on the outer fork.	11:49:52
15	BY MS. BHATTACHARYYA:	11:49:59
16	Q. Bruckbauer discloses a valve on the cap of the	11:49:59
17	outer fork; correct?	11:50:03
18	A. Again, you have to be careful about what you	11:50:05
19	consider the cap. Part of the -- the outer fork. If	11:50:12
20	cap is considered part of the outer fork, then that's	11:50:16
21	kind of a redundant statement to say that it's on the	11:50:19
22	cap of the outer fork. It is on the outer fork. If the	11:50:23
23	cap is part of the outer fork, the valve is on the outer	11:50:26
24	fork.	11:50:30
25	Q. Bruckbauer discloses a valve only on the cap	11:50:39

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1 portion of the outer fork; correct? 11:50:45

2 A. Cap portion of the outer fork. I would agree 11:50:53

3 with that statement. 11:50:57

4 Q. Bruckbauer does not disclose using its pressure 11:50:58

5 valve 10 for equalizing air pressure within a lower fork 11:51:51

6 tube to the ambient pressure; correct? 11:51:58

7 MR. HICKEY: Objection; form, mischaracterizes 11:52:02

8 the evidence, lack of foundation. 11:52:04

9 THE WITNESS: Can we bring up Bruckbauer? 11:52:07

10 BY MS. BHATTACHARYYA:

11 Q. Sure. 11:52:10

12 Bruckbauer has been introduced as Exhibit 142. 11:52:42

13 (Exhibit 142 marked) 11:52:45

14 THE WITNESS: Okay. I've got that. Let me 11:52:48

15 open it. 11:52:49

16 So sorry. What was your question again? 11:52:57

17 BY MS. BHATTACHARYYA:

18 Q. Bruckbauer does not disclose or suggest using 11:53:00

19 its pressure relief valve 10 configured for equalizing 11:53:03

20 air pressure within a lower fork tube to the ambient 11:53:10

21 pressure; correct? 11:53:15

22 MR. HICKEY: Same objections. 11:53:16

23 THE WITNESS: Again, we have to be careful here 11:53:18

24 because the motorcycle fork and a bicycle fork are, 11:53:21

25 typically, inverted from each other. So, again, he's 11:53:24

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1	venting for the outer fork, which would be the lower	11:53:27
2	fork for a mountain bike, typically.	11:53:31
3	BY MS. BHATTACHARYYA:	11:53:37
4	Q. But Bruckbauer does not disclose or suggest	11:53:37
5	that its pressure relief valve 10 is configured for	11:53:40
6	equalizing air pressure within an outer fork tube to the	11:53:44
7	ambient pressure; correct?	11:53:53
8	MR. HICKEY: Objection; form.	11:53:54
9	THE WITNESS: Say it one more time. You had a	11:54:01
10	couple phrases I was a little worried. Say it one more	11:54:03
11	time.	11:54:06
12	BY MS. BHATTACHARYYA:	11:54:06
13	Q. Bruckbauer does not disclose or suggest that	11:54:07
14	its pressure relief valve 10 is configured for	11:54:09
15	equalizing air pressure within an outer fork tube to the	11:54:14
16	ambient pressure; correct?	11:54:21
17	MR. HICKEY: Objection; form, mischaracterizes	11:54:23
18	the evidence, lack of foundation.	11:54:25
19	THE WITNESS: So there are a couple phrases I'm	11:54:30
20	a little worried about. You said within. I know that's	11:54:33
21	a contentious little thing we have here. So you said	11:54:37
22	equalizing the ambient pressure within. The pressure	11:54:42
23	inside the fork is not ambient. But he's disclosing a	11:54:45
24	valve which equalizes the pressure from within the outer	11:54:53
25	fork to ambient pressure, equalizing -- let me say that	11:54:58

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1	one more time.	11:55:03
2	A valve is equalizing the pressure from within	11:55:03
3	the outer fork to the ambient air pressure.	11:55:06
4	BY MS. BHATTACHARYYA:	11:55:09
5	Q. My question to you is about the outer fork	11:55:09
6	tubes. So we talked about the cap; right? And my	11:55:13
7	question is specific to the tubes. And I'm asking the	11:55:19
8	question -- and by the way, I didn't say ambient	11:55:22
9	pressure inside the tube. I'm talking about ambient	11:55:26
10	pressure outside. So let me ask the question again.	11:55:29
11	Bruckbauer does not disclose or suggest that	11:55:31
12	its pressure relief valve 10 is configured for	11:55:37
13	equalizing air pressure within an outer fork tube to the	11:55:40
14	ambient pressure; correct?	11:55:51
15	MR. HICKEY: Objection -- objection; form,	11:55:52
16	mischaracterizes the evidence, lack of foundation.	11:55:54
17	THE WITNESS: Again, I disagree. The air	11:55:57
18	pressure within the outer fork tube, or outer fork leg,	11:56:01
19	that pressure is relieved by the valve 10. The valve is	11:56:07
20	not located on the outer fork tube. It is located on	11:56:15
21	the outer fork, not the outer fork tube. But it's	11:56:19
22	definitely leaving the pressure inside the outer fork	11:56:23
23	tube.	11:56:26
24	BY MS. BHATTACHARYYA:	
25	Q. But claim 1 of the 321 patent refers to an air	11:56:29

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1	bleed valve that is located on the lower fork tube	11:56:39
2	between the seal -- the lower leg seal and the resting	11:56:44
3	level of the oil; correct?	11:56:53
4	A. Let me open 331. You're saying claim 1?	11:56:55
5	Q. Uh-huh.	11:57:01
6	A. Sorry. Air bleed assembly disposed? Is that	11:57:17
7	what you're talking about? Line 56, is that what you're	11:57:21
8	saying of column 4?	11:57:26
9	Q. Starting at 97 of column 4 in the 331 patent,	11:57:28
10	the claim 1 of the 331 patent recites: "Said manually	11:57:57
11	operable valve disposed between said lower leg seal and	11:58:02
12	said first end of said lower fork and bearing said fluid	11:58:05
13	passage and said manually operable valve are located at	11:58:15
14	a distance from an oil bath lubrication within said	11:58:17
15	lower fork."	11:58:23
16	Do you see that?	11:58:24
17	A. You said line 54?	11:58:25
18	Q. Line 67, column 4.	11:58:28
19	A. I'm sorry. Line 67. Okay. Say it one more	11:58:31
20	time. It starts with "said manually operable valve? Is	11:58:37
21	that what you said?	11:58:42
22	Q. "Said manually operable valve disposed between	11:58:43
23	said lower leg seal and said first end of said lower	11:58:48
24	fork and varying said fluid passage and said manually	11:58:51
25	operable valve are located at a distance from an oil	11:58:57

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1	bath lubrication within said lower fork."	11:59:01
2	Do you see that?	11:59:04
3	A. Yes.	11:59:05
4	Q. So claim 1 of the 331 patent requires the	11:59:05
5	manually operable valve on the foot passage to be	11:59:11
6	located on the lower fork between the lower leg seal and	11:59:14
7	the resting level of the oil bath lubrication; correct?	11:59:23
8	MR. HICKEY: Objection; form, calls for a legal	11:59:27
9	conclusion.	11:59:30
10	THE WITNESS: Under, you know, Fox's claim	11:59:37
11	construction, what you're saying I don't agree with.	11:59:39
12	SRAM's claim construction says -- and I think it's based	11:59:42
13	on the patent history -- that the valve has to be	11:59:46
14	located between the lower leg seal and the upper	11:59:49
15	bushing.	11:59:52
16	BY MS. BHATTACHARYYA:	11:59:53
17	Q. I'm not getting into claim construction right	11:59:53
18	now. I just want to refer to the language that's in the	11:59:55
19	claim.	11:59:59
20	So if we go with just the plain language of the	12:00:00
21	claim and the portion that I read to you, that portion	12:00:03
22	of claim 1 says: "The manually operable valve and the	12:00:08
23	fluid passage is located between the lower leg seal and	12:00:13
24	the resting level of the oil bath lubrication in the	12:00:19
25	lower fork."	12:00:23

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1	Correct?	12:00:24
2	MR. HICKEY: Objection; form, compound.	12:00:27
3	If you're asking if that's what it says, that's	12:00:30
4	one thing. If you're asking him to interpret that	12:00:32
5	language, it is claim construction, and I would say that	12:00:36
6	it calls for a legal conclusion.	12:00:38
7	MS. BHATTACHARYYA: That was improper	12:00:42
8	objection, Mr. Hickey.	12:00:44
9	BY MS. BHATTACHARYYA:	12:00:45
10	Q. But go ahead, Dr. Wang.	12:00:46
11	A. Okay. I'm not quite sure how to respond.	12:00:48
12	Again, what the words say and what the	12:00:53
13	interpretation according to -- my interpretation and	12:00:57
14	SRAM's interpretation of the claims are in dispute, I	12:01:02
15	guess, or not in agreement. Those words, as you've read	12:01:05
16	them, say what you read, but that's not how I interpret	12:01:09
17	the meaning of them.	12:01:15
18	Q. Okay.	12:01:16
19	So let me just ask you this. Does Bruckbauer	12:01:16
20	disclose a manually operable valve in a fluid passage	12:01:20
21	that is located between the lower leg seal and the	12:01:24
22	resting level of the oil bled lubrication in the outer	12:01:31
23	fork?	12:01:40
24	A. What I'm proposing is the combination of	12:01:44
25	Becker; right? I want to say it's right, Becker --	12:01:53

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1	Becker and Bruckbauer. So you would be relocating	12:01:56
2	Bruckbauer's valve onto Becker's fork. And you'd place	12:02:00
3	it between the upper leg -- what did we say -- the lower	12:02:05
4	leg seal and the oil bath.	12:02:12
5	Q. So Bruckbauer by itself does not disclose a	12:02:15
6	manually operable valve and fluid passage that is	12:02:20
7	located between the lower leg seal and the oil bath	12:02:24
8	lubrication; correct?	12:02:29
9	A. Bruckbauer by itself does not disclose that	12:02:30
10	exact location. But that's not what I'm talking about.	12:02:36
11	I'm talking about the combination of Bruckbauer and	12:02:40
12	Becker.	12:02:42
13	Q. And Becker also does not disclose an air bleed	12:02:43
14	assembly that is located between the lower leg seal and	12:02:49
15	the oil bath lubrication in the lower fork; correct?	12:02:52
16	A. As I said before, Becker does not -- by itself	12:02:56
17	does not disclose that. But I'm talking about the	12:03:01
18	combination of Becker and Bruckbauer.	12:03:04
19	Q. And just so that I'm clear, your position is	12:03:05
20	that you take Bruckbauer's valve and relocate it on	12:03:08
21	Becker's lower fork between the lower leg seal and the	12:03:23
22	oil bath lubrication; is that right?	12:03:28
23	A. I would take Becker's valve and place it	12:03:31
24	someplace on the outer fork leg between the oil bath and	12:03:36
25	the upper -- lower fork seal. Sorry. The lower fork	12:03:41

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1 seal. But, again, I'll keep reminding you that -- you 12:03:46
2 know, SRAM's proposed claim construction, that's not 12:03:52
3 where -- the 331 doesn't have to be just between the 12:03:56
4 lower leg seal and the oil bath. 12:04:00
5 Q. In your answer you said I would take Becker's 12:04:03
6 valve and put it someplace on the outer fork leg. Did 12:04:08
7 you mean to say you would take Bruckbauer's valve and 12:04:13
8 put it on Becker's lower fork? 12:04:18
9 A. Sorry. Did I misstate that? Yeah. It should 12:04:23
10 have been -- let me restate it one more time. 12:04:26
11 I would take Bruckbauer's pressure relief valve 12:04:29
12 that was on his outer fork and I would place it on the 12:04:33
13 outer fork leg, which is the lower fork, of Becker's 12:04:37
14 fork, and place that somewhere between the lower fork 12:04:40
15 seal and the oil bath. 12:04:45
16 Q. I'm going to mark another exhibit. 12:05:31
17 I just entered the Kojima reference as 12:06:02
18 Exhibit 143. 12:06:10
19 A. I got that. Are we going to enter my exhibit 12:06:31
20 also that goes along with that. 12:06:34
21 Q. Yes. It's coming up. 12:06:36
22 (Exhibits 143 through 144 marked) 12:06:38
23 BY MS. BHATTACHARYYA: 12:06:54
24 Q. Exhibit 4 to the invalidity report which 12:06:55
25 relates to the Kojima reference has been marked as 12:06:57

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1	Exhibit 144.	12:07:00
2	A. I'm still waiting for it to appear.	12:07:20
3	Okay. I've got it now.	12:07:36
4	Q. Okay.	12:07:39
5	With respect to the 331 patent and Kojima, you	12:07:39
6	have referred to valve 215 of Kojima as the manually	12:07:47
7	operable valve that is cited in claim 1 of the 221	12:07:58
8	patent; correct?	12:08:01
9	A. I don't agree that that's a valve. But under	12:08:02
10	Fox's overly broad claim construction, that that screw	12:08:05
11	type -- that screw plug -- you're were calling it a	12:08:10
12	valve, but I would not call it a valve.	12:08:15
13	Q. Doesn't Kojima refer to it as a valve?	12:08:25
14	A. I think he calls it an air breather. Is this	12:08:28
15	the one he calls air breather or maybe I'm thinking of	12:08:32
16	the other one.	12:08:36
17	Q. I'll refer you to your report.	12:08:37
18	In paragraph 117, you are referring to element	12:08:44
19	215 as an air valve. Do you see that?	12:08:48
20	A. Yes. I'm using Fox's claim construction, which	12:08:51
21	is still in agreement with SRAM's claim construction.	12:09:05
22	Kojima refers to it in paragraph 77, 077 as air	12:09:35
23	valve 215.	12:09:42
24	Q. So Kojima itself refers to element 215 as a	12:09:43
25	valve; correct?	12:09:48

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1 A. Air valve 215. 12:09:49

2 Q. Air valve 215. Exactly. 12:09:52

3 A. But, again, under SRAM's claim construction, I 12:09:58

4 would not consider that a valve. It's a plug. 12:10:02

5 Q. Is it your understanding that SRAM has asked 12:10:11

6 for claim construction of the term "valve"? 12:10:13

7 A. I have to refresh myself on the claim. Could 12:10:15

8 we bring up the claim constructions? 12:10:23

9 Q. I'm just asking. Just going from your memory, 12:10:25

10 is that your understanding? 12:10:29

11 A. I know this is one of the terms that we're 12:10:29

12 fighting about. I don't remember if it's in the 12:10:38

13 original claim construction. I don't recall if it's one 12:10:40

14 of the phrases that are in the claim construction. 12:10:49

15 Q. So because Kojima refers to 215 as an air 12:10:55

16 valve, I will refer to it as an air valve 215. Okay? 12:11:00

17 A. Okay. 12:11:04

18 Q. Air valve 215 communicates with the bottom case 12:11:07

19 210 of Kojima; correct? 12:11:11

20 A. Let me make sure here. Yes. That's correct. 12:11:14

21 Q. And Kojima discloses that bottom case 210 is at 12:11:23

22 a positive pressure; correct? 12:11:36

23 A. It's a negative air spring at a positive 12:11:38

24 pressure. Correct. 12:11:42

25 Q. If the air pressure within the chamber 210 is 12:11:47

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1 equalized to the ambient air pressure, it would not have 12:11:54
2 a positive air pressure inside chamber 210; correct? 12:11:59
3 A. Not correct. If you equalize the pressure in 12:12:04
4 the negative air spring -- 210 is a negative air 12:12:09
5 spring -- and then you close it as you ride, it will 12:12:13
6 change volume. And that volume can increase or decrease 12:12:17
7 a pressure above or below ambient. 12:12:21
8 Q. But before you start riding, at that point in 12:12:23
9 time, the pressure inside chamber 210 will be the same 12:12:25
10 as the ambient pressure; correct? 12:12:32
11 A. So if you open the screw and equalize the 12:12:35
12 pressure between 210A, the negative air spring, and 12:12:41
13 ambient, those two pressures will be the same as long as 12:12:47
14 you don't disturb the fork, compress or uncompress the 12:12:51
15 fork. And you close it back up. The pressure inside 12:12:52
16 210A will be the same as ambient pressure. 12:12:58
17 Q. And paragraph 78 for Kojima specifically says 12:13:02
18 that: "For initial operating smoothness and sensitivity 12:13:05
19 during extension, the bottom case 210 is pressurized at, 12:13:15
20 for example, an air pressure of 50 PSI." 12:13:22
21 Do you see that? 12:13:26
22 A. Yes, I see that. 12:13:27
23 Q. So Kojima teaches pressurizing the chamber 210 12:13:31
24 to a pressure up above 50 PSI; correct? 12:13:41
25 MR. HICKEY: Objection; form. 12:13:44

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1	THE WITNESS: Kojima is suggesting under one	12:13:45
2	embodiment that you pressurize to 50 PSI. But that --	12:13:51
3	you could do more or less. It's a negative air spring.	12:13:58
4	So you could do more or less without substantially	12:14:03
5	affecting the performance.	12:14:05
6	BY MS. BHATTACHARYYA:	12:14:06
7	Q. Okay.	12:14:06
8	But either way, Kojima teaches that the chamber	12:14:06
9	210 should be pressurized to above ambient air pressure;	12:14:12
10	correct?	12:14:18
11	MR. HICKEY: Objection; form, mischaracterizes	12:14:18
12	the evidence.	12:14:20
13	THE WITNESS: Again, in one embodiment, he's	12:14:23
14	saying to pressurize. I call it he. I don't know	12:14:27
15	whether it's -- Kojima. In one embodiment, Kojima says	12:14:30
16	that you pressurize to 50 PSI as an example. He even	12:14:35
17	says, "for example." That's one embodiment. There	12:14:40
18	could be others where you do more or less.	12:14:43
19	BY MS. BHATTACHARYYA:	12:14:44
20	Q. So in your report, in paragraph 121, you say:	12:14:44
21	"A user will eventually need to equalize the pressure	12:14:47
22	within the air spring 210A with that of ambient air in	12:14:51
23	order to safely disassemble the suspension fork for	12:14:57
24	maintenance."	12:15:01
25	Do you see that?	12:15:03

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1	A. Yes.	12:15:03
2	Q. You have not provided any reasoning why a	12:15:04
3	POSITA would need to equalize air pressure within air	12:15:15
4	spring 210A with the ambient air during the course of a	12:15:15
5	ride or during operation of the bicycle; correct?	12:15:19
6	MR. HICKEY: Objection; form.	12:15:24
7	THE WITNESS: I think the previous paragraph I	12:15:33
8	say, you know: "A POSITA would know that the user may	12:15:41
9	overinflate the air spring too tight or air" -- "during	
10	setup or the air pressure may increase as a result of an	12:15:46
11	altitude change or temperature increases. As a result,	12:15:49
12	you'd be preventing some of the air pressure in 210A."	12:15:52
13	So I don't agree that statement.	12:15:56
14	BY MS. BHATTACHARYYA:	12:16:00
15	Q. I asked about equalizing air pressure. And in	12:16:00
16	paragraph 120 you said -- you provide a reasoning for	12:16:05
17	depressurizing or venting it some, but you do not say	12:16:07
18	anything about equalizing the air pressure in chamber	12:16:09
19	210 to the ambient air pressure; isn't that right?	12:16:12
20	MR. HICKEY: Objection; form.	12:16:18
21	THE WITNESS: When I say you can vent some of	12:16:21
22	the air pressure, that would include the case where you	12:16:22
23	vent all of the air pressure to ambient.	12:16:29
24	BY MS. BHATTACHARYYA:	12:16:31
25	Q. If you have -- is there any reason why a POSITA	12:16:31

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1	would vent all of the air in the air spring 210A to the	12:16:37
2	ambient air pressure during the course of a ride or	12:16:43
3	during the operation of a bicycle?	12:16:46
4	MR. HICKEY: Objection; form, asked and	12:16:50
5	answered.	12:16:53
6	THE WITNESS: You know, I think I mentioned	12:16:53
7	there that why you'd want to do it. You could have	12:16:56
8	overinflated it. You could have altitude changes or	12:16:58
9	temperature increases.	12:17:01
10	BY MS. BHATTACHARYYA:	12:17:05
11	Q. Again, Dr. Wang, I'm not asking you about	12:17:05
12	venting some air or depressurizing a little bit. I'm	12:17:10
13	asking about equalizing air pressure within the air	12:17:14
14	spring 210A to the ambient air pressure.	12:17:17
15	A. Again --	12:17:21
16	MR. HICKEY: Objection; form, asked and	12:17:21
17	answered.	12:17:23
18	THE WITNESS: Again, I think part of the	12:17:23
19	problem here is that 210A is the negative air spring.	12:17:25
20	It's not necessarily the primary spring. So if you vent	12:17:29
21	the air, you may be thinking that the spring -- the	12:17:33
22	shock is nonfunctional. But it's the negative air	12:17:36
23	spring. So that's -- the negative air spring's function	12:17:39
24	is to influence the amount of preload that's necessary	12:17:43
25	to get the fork moving. So you can vent a little or a	12:17:48

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1 lot to change that amount of preload. So the fork will 12:17:55
2 still function even if you release all of the air. 12:18:00
3 BY MS. BHATTACHARYYA: 12:18:03
4 Q. I'm asking for a reason or a motivation to 12:18:04
5 release all the air and equalize the air pressure in air 12:18:06
6 chamber 210A to the ambient air pressure. Is there a 12:18:12
7 reason to do that during the course of a ride or during 12:18:16
8 operation of the bicycle? 12:18:22
9 MR. HICKEY: Objection; form, asked and 12:18:23
10 answered. 12:18:27
11 THE WITNESS: So if the negative air spring is 12:18:27
12 over-pressurized, what will happen is you'll reduce the 12:18:31
13 effective travel of your. Because the negative air 12:18:36
14 spring will actually cause it -- that's what negative 12:18:37
15 air springs do, they cause the fork to compress. That's 12:18:38
16 their purpose. They're trying to make -- they don't 12:18:41
17 necessarily make it compress. But they're trying to, 12:18:42
18 you know, exert a compressive force, which makes it 12:18:45
19 easier to start the motion. So if you overinflate your 12:18:49
20 negative spring, you could reduce the amount of travel 12:18:52
21 in your fork. So if it overheats for whatever reason or 12:18:57
22 you go to high altitude and the negative spring is 12:19:00
23 overinflated, you certainly might want to release that 12:19:04
24 so you regain the full travel of your fork. 12:19:07
25 ///

1	BY MS. BHATTACHARYYA:	12:19:10
2	Q. Again, Dr. Wang, I'm asking you about	12:19:10
3	equalizing the air pressure, not about venting some of	12:19:13
4	the air or depressurizing a little bit. I'm asking you	12:19:18
5	is there a reason to equalize the air pressure in	12:19:23
6	chamber 210A with the ambient air pressure during the	12:19:25
7	course of a ride or during the operation of a bicycle?	12:19:31
8	MR. HICKEY: Objection; form, asked and	12:19:33
9	answered for I think the third time.	12:19:37
10	THE WITNESS: Again, I don't think I can add	12:19:41
11	anything to my answer. It's a negative air spring. So	12:19:42
12	there are reasons why you want to release the pressure	12:19:47
13	in the negative air spring. Even release it to ambient	12:19:49
14	to recover the full travel of your fork.	12:19:54
15	BY MS. BHATTACHARYYA:	12:19:57
16	Q. But Kojima specifically says that you would	12:19:57
17	keep it pressurized at, for example, 50 PSI; correct?	12:20:00
18	MR. HICKEY: Objection; form, mischaracterizes	12:20:04
19	testimony, mischaracterizes evidence.	12:20:07
20	THE WITNESS: For a negative air spring, it's	12:20:12
21	going to depend on the geometry which you use for	12:20:13
22	pressures. So he's saying, example, 50 PSI. Maybe it's	12:20:18
23	less, maybe it's more. That's just one embodiment.	12:20:22
24	But, again, the purpose of the negative air spring --	12:20:24
25	you know, we've talked about this several times. The	12:20:27

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1	purpose of negative air spring is to reduce the amount	12:20:29
2	of force necessary it initiate motion. So you can	12:20:32
3	imagine somebody goes and rides and their negative air	12:20:34
4	spring has too much pressure. They go to the top of	12:20:37
5	whatever the highest mountain bike park there is.	12:20:41
6	Negative air spring's got a lot of pressure in there.	12:20:43
7	So the fork has actually got reduced travel because of	12:20:46
8	that. So what would you do? You might logically vent	12:20:50
9	all of the air to ambient to recover all of your	12:20:53
10	available travel. Agreed that you will have a higher	12:20:57
11	preload, but you will have recovered all of the travel	12:21:00
12	of your fork.	12:21:03
13	My light just turned off. I've got to wave my	12:21:05
14	light here. It turned off, which means we've been	12:21:09
15	sitting here a while.	12:21:12
16	But again, a reason might be you're trying to	12:21:14
17	recover the full travel of your fork. And so you value	12:21:17
18	that more than the increase in preload.	12:21:21
19	BY MS. BHATTACHARYYA:	12:21:29
20	Q. Kojima does not disclose equalizing air	12:21:29
21	pressure within chamber 210A to the ambient air pressure	12:21:33
22	outside the fork; correct?	12:21:41
23	MR. HICKEY: Objection; form, mischaracterizes	12:21:43
24	testimony, mischaracterizes evidence, asked and	12:21:45
25	answered.	12:21:50

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1	THE WITNESS: Again, I'm wary of the word	12:21:50
2	"disclosed." But, you know, he doesn't -- the words	12:21:52
3	"equalizing to ambient air pressure," that term does not	12:21:57
4	appear in the patent. But it's understood from reading	12:22:00
5	the patent that it's possible to do. It's one of the	12:22:03
6	things the valve could be used for -- the so-called	12:22:05
7	valve could be used for.	12:22:09
8	BY MS. BHATTACHARYYA:	12:22:10
9	Q. I have marked Exhibit 7 to your invalidity	12:23:13
10	report which relates to the Ceriani reference as	12:23:20
11	Exhibit 145. And I will mark Ceriani reference itself	12:23:24
12	always Exhibit 146.	12:23:31
13	(Exhibits 145 through 146 marked)	12:23:33
14	THE WITNESS: Okay. I've got both of those	12:23:58
15	open.	12:24:00
16	BY MS. BHATTACHARYYA:	12:24:01
17	Q. You're familiar with the Ceriani reference	12:24:13
18	which has been marked as Exhibit 146; correct?	12:24:15
19	A. Correct.	12:24:20
20	Q. And you agree that the unlabeled plug that you	12:24:20
21	referred to as an air bleed valve is used to fill oil	12:24:29
22	into the piston chamber 19 and expansion chamber 26 of	12:24:34
23	the Ceriani fork; correct?	12:24:39
24	A. It's used to fill oil and/or it could be used	12:24:40
25	to expel air.	12:24:45

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1 Q. Ceriani explicitly just discloses -- strike 12:24:47
2 that.
3 Ceriani doesn't talk about this unlabeled plug 12:24:55
4 at all; correct? 12:24:59
5 A. I'd have to search the patent. But since it's 12:25:03
6 not labeled, I don't know if he talks about that 12:25:06
7 specifically. 12:25:08
8 Q. And the valve 31, 35 in Ceriani, that 12:25:13
9 communicates with the air pocket 29; correct? 12:25:23
10 A. Air pocket 29. Correct. 12:25:27
11 Q. The valve 31 and 35, it's not communicating 12:25:30
12 with the oil in the expansion chamber 26 and the piston 12:25:34
13 chamber 19 of Ceriani; correct? 12:25:41
14 A. It does not communicate with the oil, but it 12:25:43
15 certainly communicates with the inside of the lower 12:25:48
16 fork. 12:25:51
17 Q. The valve 31, 35 is communicating with the air 12:25:53
18 pocket itself; correct, and not to the oil in the lower 12:26:00
19 fork? 12:26:07
20 MR. HICKEY: Objection; form. 12:26:09
21 THE WITNESS: I mean, again, it communicates 12:26:15
22 with the air pocket, which is inside the lower fork. 12:26:16
23 And that pocket is, obviously, pressing on or touching 12:26:21
24 the fluid. 12:26:25
25 ///

1	BY MS. BHATTACHARYYA:	12:26:27
2	Q. Okay.	12:26:27
3	A. That valve does not touch oil, if that's what	12:26:28
4	you're asking.	12:26:30
5	Q. So that valve 31, 35, that -- if you open that	12:26:32
6	valve, it should not be either relieving air from the	12:26:40
7	fork or entering air into the fork; correct?	12:26:49
8	A. No. I mean, if you -- you're supposed to --	12:26:53
9	when I read that pattern, you're supposed to initially	12:26:57
10	inflate that pressure to ambient air pressure. That's	12:27:02
11	how you -- you know, it's acting as -- that valve 29 is	12:27:06
12	acting as the reservoir that we see, you know, in other	12:27:14
13	shocks that we've been discussing. So it could be an	12:27:19
14	atmospheric pressure or higher than atmospheric	12:27:24
15	pressure.	12:27:30
16	Q. So what I'm asking is that valve 31 and 35 does	12:27:30
17	not either enter air or relieve air from the oil	12:27:35
18	containing portions of the Ceriani's lower fork;	12:27:46
19	correct?	12:27:50
20	MR. HICKEY: Objection; form.	12:27:50
21	THE WITNESS: What do you mean by the oil	12:27:53
22	containing -- I mean, I look at it as it's releasing air	12:27:54
23	from the lower fork leg or introducing air into the	12:27:58
24	lower fork leg.	12:28:02
25	///	

1 BY MS. BHATTACHARYYA:

2 Q. It is releasing air or introducing air into the 12:28:05

3 air pocket 29 of the you expansion chamber; correct? 12:28:08

4 A. It's introducing air into the pocket 29, which 12:28:17

5 is inside the lower fork. 12:28:21

6 Q. Again, there might be a dispute about whether 12:28:24

7 pocket 29 is inside the lower fork. So let me just ask 12:28:28

8 you. 12:28:31

9 The valve 31 and 35 is either entering air or 12:28:32

10 removing air from just the pocket 29; correct? 12:28:36

11 MR. HICKEY: Objection; form. 12:28:45

12 THE WITNESS: Again, I think we got -- I got a 12:28:47

13 little ahead of myself. We kept saying lower fork. It 12:28:50

14 should be -- I should have corrected myself and said 12:28:54

15 lower fork leg in this case. But, again, I think we're 12:28:57

16 saying the same thing. Pocket 29, the valve 31, 35 12:29:00

17 introduces or releases air from pocket 29, which is 12:29:07

18 inside the lower fork. And that pocket is communicating 12:29:11

19 with the oil. 12:29:14

20 BY MS. BHATTACHARYYA: 12:29:18

21 Q. And when you say the pocket is communicating 12:29:19

22 with the oil -- 12:29:22

23 A. Sorry. I keep saying lower fork. I should say 12:29:23

24 lower fork leg. 12:29:25

25 Q. Okay. 12:29:27

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1	When you say the pocket is communicating with	12:29:27
2	oil, what do you mean by that?	12:29:33
3	A. It's touching the oil.	12:29:35
4	Q. There is no direct flow of air from the pocket	12:29:39
5	29 to the oil; correct?	12:29:48
6	MR. HICKEY: Objection; form.	12:29:51
7	THE WITNESS: Say it one more time. I'm sorry.	12:29:57
8	BY MS. BHATTACHARYYA:	12:29:59
9	Q. There was no flow of air from the pocket 29 to	12:29:59
10	the oil; correct?	12:30:02
11	A. The air is contained fully within pocket 29.	12:30:04
12	It should not. It should not enter the oil.	12:30:07
13	Q. The intention of the Ceriani fork is to not	12:30:13
14	have air in the hydraulic oil within the piston chamber	12:30:17
15	19 opposite of Ceriani 4; correct?	12:30:28
16	A. I would say that the purpose is you're trying	12:30:31
17	to fill -- well, not the purpose. What you're trying to	12:30:33
18	fill -- 19 and 26, those are two cavities with oil. And	12:30:37
19	what I said in my report, and I stand by that, is	12:30:42
20	filling that completely with oil without trapping any	12:30:47
21	air in there would be very difficult.	12:30:50
22	Q. Okay.	12:30:51
23	What is the level of oil in Ceriani's lower	12:30:52
24	fork within the piston chamber 19?	12:30:57
25	A. So there would be two different oil levels.	12:31:01

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1 One would be in chamber 19. You'd, ideally, fill all 12:31:05
2 that up to the bottom of -- I can't see what is labeled 12:31:09
3 there. But the bottom of -- close to where 17 is 12:31:13
4 labeled -- I'm not sure what the bottom of that is that 12:31:17
5 is labeled there -- and, also, you're trying to fill up 12:31:21
6 26. Those are two different cavities that are in 12:31:23
7 communication with each other. The air could be in 12:31:28
8 both. So the oil level could be different. Air could 12:31:29
9 be outside of pocket 29, inside of chamber 26 when you 12:31:32
10 fill it. In fact, it's almost guaranteed to happen when 12:31:34
11 you first introduce the air into -- you open the screw 12:31:38
12 plug. You start introducing oil. What happens to the 12:31:43
13 air that's currently in there? 12:31:46
14 Q. Okay. 12:31:49
15 A. Some air is bound to get trapped inside. 12:31:50
16 Q. So piston chamber 19 and expansion chamber 26 12:31:55
17 are completely filled with oil; correct? 12:31:58
18 MR. HICKEY: Objection; form. 12:32:01
19 THE WITNESS: That's what you hope. In 12:32:02
20 practice, that's probably not going to be the case 12:32:05
21 initially. 12:32:07
22 BY MS. BHATTACHARYYA: 12:32:08
23 Q. So there will be oil in the piston chamber 19 12:32:15
24 up to and maybe above the level at which the unlabeled 12:32:18
25 oil plug is situated in Ceriani's lower fork; correct? 12:32:24

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1	MR. HICKEY: Objection; form.	12:32:30
2	THE WITNESS: That depends on a lot of things.	12:32:33
3	I mean, as shown there, it's not clear whether that's	12:32:35
4	the uncompressed data or partially compressed. So where	12:32:38
5	that begins, I'm not sure that it's labeled, the piston	12:32:42
6	there that surfaces near number 17. It's not labeled	12:32:46
7	17, but it's near 17. That could be higher or lower.	12:32:50
8	But as shown, the oil in 19 would only go up to that	12:32:53
9	point, which is just above the number 17. And so that	12:32:58
10	would be below the screw. And that's only in the	12:33:02
11	orientation shown. It happens to be shown vertically,	12:33:05
12	but that doesn't mean that you have to open the valve --	12:33:08
13	open the plug in this orientation. In fact, you	12:33:10
14	probably wouldn't want to do that when you're filling	12:33:14
15	it. So, you know, it depends a lot on orientation.	12:33:17
16	BY MS. BHATTACHARYYA:	
17	Q. In an upright orientation in figure 4, the fork	12:33:22
18	is shown in a slightly compressed state; correct?	12:33:29
19	A. I have to go back and look at the patent.	12:33:33
20	Based on figures 2 and 4, I would say it's	12:34:05
21	shown in a slightly compressed state.	12:34:10
22	Q. So if you look at figure 2 where the fork is	12:34:12
23	shown in a fully extended state, that are labeled	12:34:19
24	outward plug, is at a position with respect to piston	12:34:28
25	chamber 19 where there will be oil where the plug is	12:34:36

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1	located; correct?	12:34:43
2	A. No. I don't agree there. Again, you know,	12:34:44
3	it's hard to say. But the bottom of this whole	12:34:48
4	mechanism is labeled -- you know, it's labeled it looks	12:34:54
5	like 18. I'm not sure -- without reading the patent,	12:34:58
6	I'm not sure what 18 is referring to. But that	12:35:00
7	structure that 18 is pointing to, you would expect the	12:35:04
8	height of the oil to be somewhere around there, and that	12:35:08
9	is below the plug.	12:35:11
10	Q. And where --	12:35:13
11	A. In figure 2. I'm looking at figure 2.	12:35:13
12	Q. The plug is right around where the number 18 is	12:35:16
13	pointing to; correct?	12:35:20
14	A. Yes. And I would say that you might fill the	12:35:21
15	chamber 19 up to the bottom of that structure that 18 is	12:35:27
16	pointing to. The bottom of the structure is below the	12:35:29
17	plug.	12:35:36
18	Q. If the fork was extended a little bit higher,	12:35:40
19	then there would be oil up to the level of the plug;	12:35:43
20	correct?	12:35:48
21	A. But earlier you said this is a fully extended	12:35:48
22	position shown.	12:35:51
23	Q. I misunderstood figure 2.	12:35:53
24	So even in figure 2, the fork is in a slightly	12:35:55
25	compressed state; correct?	12:35:59

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1 A. I don't know that for sure. I have to read the 12:36:01
2 patent and see what figure 2 is. Let's see. It should 12:36:10
3 have a description of the drawings. 12:36:13
4 Figure 2, description of the drawings, this is 12:36:16
5 column 1, line 54. A side -- partly section taken -- it 12:36:18
6 doesn't say whether it's compressed or uncompressed. 12:36:24
7 Q. The oil port plug communicates with piston 12:36:43
8 chamber 19; correct? 12:36:49
9 A. Through a very -- 12:36:50
10 MR. HICKEY: Objection; form. 12:36:57
11 THE WITNESS: It will communicate through a 12:36:58
12 very small annular surface. Chamber 19 I think only 12:37:00
13 extends up to that structure we've been talking about, 12:37:06
14 the bottom of 18. But then, of course, there's a small 12:37:10
15 annular section. And I don't know if I consider that 12:37:13
16 chamber 19 or not. But there would be a small annular 12:37:17
17 section between these sliding elements. And the plug 12:37:21
18 communicates with that little annular structure. 12:37:26
19 BY MS. BHATTACHARYYA: 12:37:39
20 Q. Do you think the purposes of the oil fill port 12:37:39
21 is to inject oil into the piston chamber 19; correct? 12:37:44
22 A. Well, I don't think he calls it an oil fill 12:37:51
23 port because I don't think -- it's not numbered. My 12:37:54
24 recollection, it's not referenced. So he probably 12:37:56
25 doesn't call it an oil fill port. But that plug, the 12:37:59

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1	purpose 0would be to fill the oil to chamber 19 and 26	12:38:02
2	and also expel any air that is also in chamber 19 and	12:38:05
3	26.	12:38:09
4	Q. But Ceriani does not disclose the function of	12:38:12
5	that unlabeled plug as expelling air from the piston	12:38:18
6	chamber 19; correct?	12:38:25
7	MR. HICKEY: Objection; form, misstates	12:38:27
8	testimony, mischaracterizes the evidence.	12:38:30
9	THE WITNESS: Again, I'm wary of these legal	12:38:35
10	terms. Those exact words do not appear. But it's clear	12:38:38
11	that that's what it's for. I mean, it's not labeled,	12:38:43
12	yet we both -- you and I both agree that it's there for	12:38:47
13	a reason. We may not agree on the reason, but it's	12:38:49
14	there to both introduce oil. And by definition, if	12:38:55
15	you're introducing oil, you're expelling air. Unless	12:38:59
16	you originally start with a vacuum, which means when you	12:39:02
17	open it, air will rush in. So no matter what, there	12:39:07
18	will be -- before you introduce any oil, there will be	12:39:10
19	air in there. And you're going to expel that air.	12:39:12
20	You're going to equalize that air that's in there with	12:39:14
21	ambient.	12:39:19
22	BY MS. BHATTACHARYYA:	12:39:19
23	Q. I am going to introduce Kashima as Exhibit 147.	12:39:48
24	And I'm marking Exhibit 6, your invalidity report that	12:40:24
25	relates to Kashima as Exhibit 148.	12:40:26

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1	(Exhibits 147 through 148 marked)	12:40:32
2	THE WITNESS: Okay. I have both those open.	12:40:58
3	BY MS. BHATTACHARYYA:	12:41:00
4	Q. Kashima teaches a system having a threaded hole	12:41:19
5	5, a set screw 6, and an oil seal 7 to provide a way to	12:41:25
6	vent air that is trapped in the clearance between the	12:41:30
7	upper and lower forks during assembly or maintenance;	12:41:36
8	correct?	12:41:40
9	MR. HICKEY: Objection; form, compound.	12:41:41
10	THE WITNESS: Again, I think what Kashima is --	12:41:44
11	Kashima, yes -- is disclosing, is discussing is that you	12:41:48
12	have that screw 6 you can remove and you can expel air,	12:41:55
13	which is, by definition, equalizing the pressure from	12:42:06
14	inside to outside from that annular space.	12:42:12
15	BY MS. BHATTACHARYYA:	12:42:16
16	Q. And Kashima explicitly teaches removing	12:42:17
17	residual air from the clearance between the upper and	12:42:20
18	the lower forks; correct?	12:42:24
19	MR. HICKEY: Objection; form.	12:42:25
20	THE WITNESS: I think he explicitly says that	12:42:27
21	that air breather, what he calls an air breather, can be	12:42:31
22	used to expel air.	12:42:36
23	Sorry. What was the question again? I lost	12:42:40
24	track. I'm sorry. Been a long day.	12:42:42
25	///	

1	BY MS. BHATTACHARYYA:	12:42:44
2	Q. Kashima discloses removing residual air from	12:42:46
3	the clearance between the upper and the lower forks;	12:42:52
4	correct?	12:42:56
5	MR. HICKEY: Objection; form.	12:42:56
6	THE WITNESS: So he explicitly states that he's	12:42:58
7	going to -- that he or she -- Kashima is going to remove	12:43:00
8	the air from that space. But that air that's there is	12:43:05
9	being vented, is being equalized to ambient air pressure	12:43:09
10	when you open that valve. Or not that valve. That	12:43:16
11	plug.	12:43:20
12	BY MS. BHATTACHARYYA:	12:43:24
13	Q. Kashima does not disclose equalizing air	12:43:25
14	pressure within the lower fork with ambient air	12:43:28
15	pressure; correct?	12:43:32
16	MR. HICKEY: Objection; form, mischaracterizes	12:43:33
17	the evidence.	12:43:35
18	THE WITNESS: Again, he doesn't use the exact	12:43:35
19	words of equalizing pressure. He says -- I think he	12:43:37
20	says releasing the trapped pressure, or venting. Those	12:43:44
21	terms, by definition, you have to be equalizing. The	12:43:48
22	pressure inside the fork -- the pressure inside the fork	12:43:54
23	will be equal to the ambient when you remove that plug.	12:43:58
24	BY MS. BHATTACHARYYA:	12:44:01
25	Q. And when the plug is open to release air in the	12:44:06

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1 clearance, oil will also be released through that same 12:44:13
2 opening; right? 12:44:17
3 MR. HICKEY: Objection; form. 12:44:18
4 THE WITNESS: Ideally, no. I mean, the point 12:44:23
5 is is to not release the oil, you know. He's saying you 12:44:25
6 want to equalize the pressure and try and get air out. 12:44:28
7 So you wouldn't want to release oil. You'd -- is I said 12:44:32
8 in my report, you know, you would -- I think I saved 12:44:39
9 my -- let me scroll down and let me find it. 12:44:43
10 Paragraph 142 of my report, you know, I think I 12:44:46
11 stepped through step by step exactly how you would use 12:44:50
12 it to release that trapped air, equalize that trapped 12:44:53
13 air. 12:44:57
14 BY MS. BHATTACHARYYA: 12:44:57
15 Q. But those step-by-step process that you talk 12:44:59
16 about in your report, that process is during assembly or 12:45:01
17 maintenance of the fork; correct, and not for use during 12:45:05
18 the course of a ride? 12:45:09
19 A. Oh. Well, that would depend. Again, much like 12:45:11
20 Ceriani, there is a high likelihood of air being trapped 12:45:16
21 in the main chamber. Air is very small. Annular spaces 12:45:20
22 could be very small. So air may not, you know, migrate 12:45:27
23 naturally from the main, you know, oil chamber. I'm not 12:45:31
24 sure that's labeled. But the main chamber. You know, 12:45:36
25 it may not instantly migrate all the way up to where the 12:45:40

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1	plug is. So you may be riding along with air in your	12:45:43
2	fork for some time. And you realize, oh, there's some	12:45:47
3	air in my fork. And you want to release that.	12:45:51
4	Q. The intention of Kashima is to relieve all the	12:45:54
5	residual area from the clearance between the upper and	12:46:01
6	the lower fork so oil can go up and be close to the	12:46:06
7	bushings and the seal between the upper and the lower	12:46:12
8	fork; correct?	12:46:15
9	MR. HICKEY: Objection; form, compound.	12:46:16
10	THE WITNESS: So Kashima specifically states	12:46:21
11	something along the lines of, you know, why it's	12:46:23
12	beneficial to have oil in this annular space and trying	12:46:25
13	to get the air out of that annular space. So, again,	12:46:29
14	air may be trapped. Ideally, that's what would happen.	12:46:33
15	But, you know, user may go fill their oil, or may be	12:46:36
16	filled incorrectly and there's air inside. At some	12:46:40
17	point during the ride, we may want to expel it. Don't	12:46:43
18	forget the 331 -- this is the 331 patent? Yeah. 331	12:46:49
19	patent -- doesn't specify, you know, you do this during	12:46:54
20	a ride. You could do it during maintenance. You could	12:46:57
21	do it during disassembly. You could do it during	12:47:01
22	assembly.	12:47:05
23	BY MS. BHATTACHARYYA:	12:47:05
24	Q. So during a ride, the intention of Kashima is	12:47:06
25	to have oil all the way up to the bushings. And so if	12:47:12

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1	during a ride a rider opens the set screw 6, oil will	12:47:15
2	come out; correct?	12:47:28
3	MR. HICKEY: Objection; form, compound.	12:47:29
4	THE WITNESS: I think that would be unlikely	12:47:31
5	during a ride for a couple of reasons. One is if --	12:47:33
6	let's say you -- let's assume that you set it up	12:47:36
7	apparently correctly. So you think you got all the oil	12:47:39
8	out. And now you go on a ride, and you find out -- you	12:47:42
9	want to open it because something is weird. And,	12:47:45
10	presumably, air has now worked its way up to the top of	12:47:48
11	that annular surface. So you opened it. Air would come	12:47:52
12	out, not oil.	12:47:57
13	BY MS. BHATTACHARYYA:	12:47:57
14	Q. But if you had -- if you had filled the	12:48:01
15	clearance up with oil, as Kojima asks you to do, in that	12:48:08
16	scenario, if during the course of a ride a rider opens	12:48:13
17	that screw 6, then oil will come out of the port;	12:48:16
18	correct?	12:48:22
19	A. No. I disagree. Again, let's say you assume	12:48:22
20	you set it up correctly. If you open the valve -- open	12:48:27
21	the screw in the same orientation that you filled, let's	12:48:30
22	say it's in the vertical shown, by definition, unless	12:48:33
23	you somehow squirted oil in and closed it up	12:48:40
24	immediately, when you filled it, you only filled to the	12:48:44
25	level of the screw. Any oil that you overfilled would	12:48:47

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1 have come out. So when you went to open it again, 12:48:52
2 assuming, again, it's in the same orientation, the same 12:48:54
3 amount of compression or extension, no oil would come 12:48:58
4 out. The oil level would be right at the level of the 12:49:00
5 screw. 12:49:03
6 In fact, now that I think about it, there 12:49:24
7 always has to be air in there. 12:49:27
8 Q. The --
9 A. There always has to be a little bit of air on 12:49:30
10 top of that oil. Because you -- unless you fill it in 12:49:33
11 the orientation vertically like shown, there's no way 12:49:35
12 you're going to fill oil above the screw. That's not 12:49:41
13 going to be possible. You can't inject oil and then 12:49:44
14 close the screw. So there will always be some air in 12:49:44
15 the orientation shown. 12:49:47
16 Q. According to Kashima, oil should be all the way 12:49:49
17 up in the clearance so that oil gets to the oil seal and 12:49:54
18 the bushings between the upper and the lower forks; 12:49:58
19 correct? 12:50:02
20 MR. HICKEY: Objection; form. 12:50:02
21 THE WITNESS: I can't remember the exact. But 12:50:05
22 we can look through the patent. But my recollection, he 12:50:06
23 says the intention is to fill all the oil in that small 12:50:08
24 annular space. But in the orientation shown, I would 12:50:12
25 argue that it would be very difficult to fill the oil. 12:50:18

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1 You know, if I'm looking at -- let me open Kashima here. 12:50:21
2 If I look at figure -- well, I guess there's only one 12:50:25
3 figure there. Look at that figure 1, Kashima. In that 12:50:28
4 orientation shown, I'm not sure how you'd fill oil above 12:50:34
5 the level of the screw. 12:50:39
6 BY MS. BHATTACHARYYA: 12:50:41
7 Q. But the intention of Kashima is to fill oil 12:50:41
8 above the level of the screw so that oil is touching 12:50:44
9 element 3; correct? 12:50:49
10 A. Well, okay. So let's look at the orientation 12:50:50
11 shown. This is the way I imagine it would work. Look 12:50:55
12 at the orientation shown. The shock is, let's say it's 12:50:58
13 fully extended. So I remove that screw 6. I fill up 12:51:01
14 the oil up to the level of the hole. You can't fill it 12:51:05
15 above the hole because it's not going to stay in there. 12:51:08
16 So I fill up the level of the oil to the hole. There's 12:51:12
17 some air in there because there's some volume above the 12:51:16
18 level of the screw. I put the screw back in. Now as I 12:51:19
19 ride, of course, there's still air in there, which is
20 bad. But as the shock compresses, that oil will be 12:51:27
21 forced up and down, you know, touching the seals that 12:51:29
22 you're trying to lubricate that end up in the bushings. 12:51:31
23 So the oil will be moving up and down because of 12:51:33
24 compression. 12:51:37
25 Q. And --

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1 A. But I maintain the lead air inside. And yet, 12:51:38
2 if you tried to fill it in the orientation shown, 12:51:41
3 there's no way to get all the air out. 12:51:43
4 Q. Because oil is almost at the level of the set 12:51:45
5 screw 6 and maybe even up. It's sloshing up and down. 12:51:52
6 If you opened set screw 6 during the course of a ride, 12:51:59
7 oil will come out along with the air; right? 12:52:03
8 A. If you compress the fork and then open the 12:52:08
9 screw, oil will come out. But that's true of a lot of 12:52:11
10 different things. If you're talking about when it's 12:52:15
11 fully extended, now you're saying, oh, I've been riding 12:52:18
12 around, sloshed oil around. You open it. Some oil 12:52:21
13 which was sloshing around may come out. But then you're 12:52:24
14 introducing air. If oil comes out, you're introducing 12:52:28
15 air, which is bad. That probably is going to be 12:52:31
16 incentivizing you to open it again later to try and vent 12:52:33
17 that air you just introduced. 12:52:37
18 Q. So entering air would be bad; right? So if you 12:52:39
19 open set screw 6 during the course of a ride, air may go 12:52:43
20 in, air may go out; correct? 12:52:49
21 A. Depending on the elevation changed. If you 12:52:52
22 open the fork at a very high elevation, higher than the 12:52:58
23 assembly when you closed it, from the pressure inside, 12:53:01
24 that air volume inside would be higher and the air would 12:53:05
25 come out. If you opened it at an elevation lower than 12:53:08

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1	when you assembled it, air would go in.	12:53:11
2	Q. And air going into the set screw 6 is against	12:53:14
3	the teachings of Kashima; correct?	12:53:17
4	MR. HICKEY: Objection; form.	12:53:19
5	THE WITNESS: Air going in would be	12:53:20
6	undesirable. I'm not sure that Kashima talks about --	12:53:24
7	explicitly talks about air going into or out. Kashima	12:53:29
8	talks about trying to get all of the air out of that	12:53:33
9	annular space. And I'm arguing that it would be very	12:53:36
10	difficult to get all of the air out.	12:53:39
11	MR. HICKEY: Arpita, we've been going for about	12:53:56
12	an hour 20. Is there a good time for a break coming up?	12:53:59
13	MS. BHATTACHARYYA: I'm done with my questions.	12:54:02
14	No further questions for Dr. Wang.	12:54:04
15	MR. HICKEY: Oh. Period?	12:54:07
16	MS. BHATTACHARYYA: Yeah. I'm done with my	12:54:11
17	questioning.	12:54:14
18	MR. HICKEY: Oh, okay. All right.	12:54:15
19	Let's take a quick break, and I'll see if	12:54:16
20	there's anything to follow-up on.	12:54:19
21	MS. BHATTACHARYYA: Okay.	12:54:20
22	MR. HICKEY: Five minutes?	12:54:22
23	MS. BHATTACHARYYA: Five minutes? Okay.	12:54:22
24	Let's take a break for five minutes.	12:54:25
25	MR. HICKEY: Five minutes, and you're going to	12:54:27

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1 do some follow-up questions? That's what happens? 12:54:31
2 THE VIDEOGRAPHER: Pardon me. 12:54:31
3 Going off record. 12:54 p.m. 12:54:32
4 (Recess) 13:02:02
5 THE VIDEOGRAPHER: We're back on the record. 13:02:02
6 1:02 p.m. 13:02:08
7 MR. HICKEY: I have no further questions for 13:02:10
8 Dr. Wang at this time. 13:02:12
9 We'll read and sign. 13:02:16
10 MS. BHATTACHARYYA: Thank you, Dr. Wang. 13:02:19
11 THE WITNESS: That's it? 13:02:21
12 MR. HICKEY: Yep. 13:02:24
13 MS. BHATTACHARYYA: Yes. 13:02:24
14 THE WITNESS: Okay. 13:02:25
15 THE VIDEOGRAPHER: Going off record. 1:02 p.m. 13:02:25
16 this concludes today's testimony given by Dr. Eric Wang. 13:02:28
17 THE REPORTER: Does anyone want a copy? 13:02:34
18 MR. HICKEY: Yes, I'd like a copy. 13:02:45
19 (The deposition concluded at 1:03 p.m.)

20 * * *
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25

DECLARATION UNDER PENALTY OF PERJURY

I, DR. ERIC WANG, do hereby certify under penalty of perjury that I have read the foregoing transcript of my deposition taken May 3, 2024; that I have made such corrections as appear noted herein, in ink, initialed by me; that my testimony as contained herein, as corrected, is true and correct.

DATED this _____ day of _____, 2024,
at _____, California.

DR. ERIC WANG

REPORTER'S CERTIFICATION

I, Michelle K. Bailey, Certified Shorthand Reporter, in and for the State of California, do hereby certify:

That the foregoing witness was by me duly sworn; that the deposition was then taken before me at the time and place herein set forth; that the testimony and proceedings were reported stenographically by me and later transcribed into typewriting under my direction; that the foregoing is a true record of the testimony and proceedings taken at that time.

IN WITNESS WHEREOF, I have subscribed my name this 8TH day of May, 2024.



Michelle K. Bailey

RPR, CSR No. 10713

1 MICHAEL HICKEY, ESQ.
2 mhickey@lewisrice.com

3 MAY 8, 2024

4 RE: FOX FACTORY V. SRAM

5 MAY 3, 2024, DR. ERIC WANG, JOB NO. 6664802

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23 as determined at the deposition.

24 ___ Signature Waived - Reading & Signature was waived at the
25 time of the deposition.

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10 requested before the completion of the deposition.

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FOX FACTORY V. SRAM

DR. ERIC WANG (#6664802)

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WITNESS

Date

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

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Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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