

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

INARI MEDICAL, INC.,
Plaintiff,
vs.
IMPERATIVE CARE, INC.,
Defendant.

Civil Action No.
24-cv-3117-YGR

*** OUTSIDE COUNSEL EYES ONLY ***

VIDEOTAPED DEPOSITION OF BRIAN BROWN

Tuesday, August 27, 2024

8:09 A.M.

Stenographically reported by:

Lindsay DeWaide, RMR, CRR

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19 ALSO PRESENT: Pat Curto - Videographer

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1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF CALIFORNIA
3 OAKLAND DIVISION

4 INARI MEDICAL, INC.,
5 Plaintiff,
6 vs.
7 IMPERATIVE CARE, INC.,
8 Defendant.

Civil Action No.
24-cv-3117-YGR

12 VIDEOTAPED DEPOSITION OF BRIAN BROWN, taken
13 at the instance of the Defendant, pursuant
14 to the Federal Rules of Civil Procedure,
before Lindsay DeWaide, Registered Merit
Reporter and certified Realtime Reporter,
15 at JW Marriott Minneapolis Mall of America,
2141 Lindau Lane, Bloomington, Minnesota,
16 on the 27th day of August, 2024, commencing
at 8:09 a.m. and concluding at 3:49 p.m.

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1 INDEX

2 EXAMINATIONS

4 BY MR. STOWELL

Page

7

6 EXHIBITS

7 No.	Description	Page
8 Exhibit 1011	Declaration of Brian Brown in Support of Inari's Motion for a Preliminary Injunction	17

10 Exhibit 1012	Notice of Allowance and Fees Due for Application No. 17/226,318	134
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13 PREVIOUSLY MARKED EXHIBITS

15 No.	Description	Page
16 Exhibit 1	U.S. Patent No. 11,974,910	41
17 Exhibit 2	U.S. Patent No. 11,844,921	46
18 Exhibit 4	United States Patent and Trademark Office Office Action in Application No. 18/342,553	90
20 Exhibit 29	United States Patent Application Publication US 2015/0173782 A1	92
22 Exhibit 31	United States Patent Application Publication US 2003/0116731 A1	136
24 Exhibit 32	United States Patent Application Publication US	143

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1	INDEX (CONTINUED)
2	
3	INFORMATION TO BE SUPPLIED
4	Page Line
5	(None)
6	
7	
8	QUESTIONS INSTRUCTED NOT TO ANSWER
9	Page Line
10	(None)
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	Page 6
1	BLOOMINGTON, MINNESOTA; TUESDAY, AUGUST 27, 2024
2	8:09 A.M.
3	* * *
4	(Whereupon Exhibit No. 1011 was marked for
5	identification.)
6	THE VIDEOGRAPHER: We are now on the
7	record. Today's date as indicated is August 27,
8	2024. The time as indicated is 8:10 a.m.
9	This is the video deposition of Brian Brown
10	in the matter of Inari Medical versus
11	Imperative Care, filed in the United States District
12	Court for the Northern District of California,
13	Case No. 4:24-cv-03117-YGR.
14	Let's see. This deposition is taking place
15	at JW Marriott, 2141 Lindau Lane, Bloomington,
16	Minnesota.
17	My name is Pat Curto. I'm a Certified
18	Legal Video Specialist representing Kayla Lotstein
19	Stenography.
20	Would counsel please state their
21	appearances for the record starting with the noticing
22	attorney.
23	MR. STOWELL: Joshua Stowell of
24	Knobbe Martens on behalf of the defendant,
25	Imperative Care. Joining me today is Nick Belair,

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1	also of Knobbe Martens.
2	MR. KEESE: Dan Keese of Perkins Coie LLP
3	on behalf of plaintiff, Inari, and with me is my
4	colleague, Amanda Tessar.
5	THE VIDEOGRAPHER: The court reporter today
6	is -- is Lindsay DeWaide also representing Kayla
7	Lotstein Stenography.
8	Sir, you may remain seated, and the court
9	reporter will swear you in.
10	BRIAN BROWN, called as a witness herein,
11	having been first duly sworn on oath, was
12	examined and testified as follows:
13	E X A M I N A T I O N
14	BY MR. STOWELL:
15	Q Good morning, Mr. Brown. Could you please
16	say and spell your name for the record.
17	A Brian Brown, B-R-I-A-N, B-R-O-W-N.
18	Q And what is your home address?
19	A It is 178 Jandel, J-A-N-D-E-L, Avenue
20	Northeast, Hanover, Minnesota.
21	Q And I know you've been deposed before, but
22	I'm just going to go over a couple of standard
23	operating procedures so we're on the same page.
24	You understand that you're under oath
25	today, and that you're required to tell the truth

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1	just as if you were in a court of law?
2	A I do.
3	Q Okay. The court reporter is writing down
4	our conversation today, so if you can try to wait for
5	me to finish asking my question, and I will wait for
6	you to answer before we proceed, and that way we can
7	avoid talking over each other.
8	Does that make sense?
9	A It does.
10	Q Your answers today will need to be verbal,
11	which you're already doing a good job with, but that
12	way the court reporter will be able to write down
13	your testimony.
14	Does that make sense?
15	A It does.
16	Q From time to time, your counsel may make
17	objections, but you will still need to answer all of
18	my questions unless you are specifically instructed
19	not to answer by your counsel.
20	Does that make sense?
21	A It does.
22	Q Okay. If at any point today you don't
23	understand one of my questions, which is bound to
24	happen, please speak up and let me know. If you
25	don't say anything, the assumption will be that you

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1 have understood the question.
2 Okay?
3 A Okay.
4 Q Additionally, and we discussed this before
5 the depo, but if you don't hear one of my questions
6 or you need me to speak louder, please let me know.
7 Okay?
8 A Okay.
9 Q If at any point you need a break, that's
10 fine. We can take one. I'll just ask that we finish
11 the line of questioning we're on before we take that
12 break.
13 All right?
14 A Sounds good.
15 Q Okay. Is there any reason that you aren't
16 able to tell the truth and testify accurately here
17 today?
18 A Not that I'm aware of.
19 Q Have you had any food or medication or
20 drink that would impair your ability to tell the
21 truth?
22 A Not that I'm aware of.
23 Q Okay. How did you prepare for your
24 deposition today?
25 MR. KEESE: And this obviously goes in, but

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1 I'm going to caution the witness not to reveal any
2 communications -- specific communications with
3 counsel.
4 But you can -- you can answer the question.
5 THE WITNESS: I reviewed my declaration, I
6 reviewed the references of the declaration, and
7 reviewed a few other documents.
8 BY MR. STOWELL:
9 Q Okay. So you reviewed the declaration that
10 you've submitted in this litigation?
11 A That is correct.
12 Q Okay. And you mentioned that you also
13 reviewed the references.
14 What references are you talking about?
15 A There are patents that are referenced. I
16 believe there was an IPR that was referenced.
17 Q And with respect to the patents that were
18 referenced, which patents are you talking about?
19 A I am referring to the Merritt patents. I
20 believe we're referring to one as the '910 and the
21 other as the '921.
22 Q And so you reviewed both of those patents
23 in preparation for your deposition today?
24 A I did.
25 Q Did you review any other patents in

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1 preparation for your deposition today?
2 A I did review a few other patents that were
3 referenced within the IPR.
4 Q And do you recall which patents those were
5 as you sit here?
6 A I believe they were what is being referred
7 to as the Hartley patent --
8 Q Okay.
9 A -- the Schaffer patent, which I believe is
10 also in my declaration, and the Eller patent.
11 Q Okay. Any others that you can think of
12 right now?
13 A Those are the ones that come to mind right
14 now.
15 Q Okay. You also mentioned that you reviewed
16 an IPR petition; is that right?
17 A I reviewed -- yes, I did review an IPR
18 petition.
19 Q Okay. And what -- what patent did that IPR
20 petition cover?
21 A That one covered the -- what is being
22 referred to as the '011 patent.
23 Q Okay. When was the first time that you'd
24 reviewed the '011 patent IPR?
25 A I believe I reviewed it as part of the

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1 construction of my declaration.
2 Q Did you review any other IPR petitions in
3 preparation for your deposition today?
4 A I took a quick look at what I believe is
5 the '691 IPR.
6 Q And what do you mean by "a quick look"?
7 A I was provided the IPR just to take a quick
8 look at it so I was aware of it. I did not review it
9 at a level to form any opinions.
10 Q And when was the first time you saw the IPR
11 petition based on the '691 patent?
12 A It was more recent. It was after my
13 declaration.
14 Q Other than the patents and the IPR petition
15 and your declaration, did you review any other
16 documents in preparation for your deposition today?
17 A I did. I did. I also reviewed the
18 deposition of Ben Merritt.
19 Q Did you review any other documents?
20 A I believe I saw some drafts of the --
21 MR. KEESE: I'm going to caution the
22 witness not to reveal any confidential legal
23 drafts --
24 THE WITNESS: Okay.
25 MR. KEESE: -- just to the extent that any

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[illegible]

Page 17

1 Q I know you reviewed his -- his deposition,
2 but have you spoken to Ben Merritt about this
3 litigation?
4 A I have not.
5 Q Okay. And have you spoken to Kevin Strange
6 about this litigation?
7 A I have not.
8 Q I will show you what's been marked as 1011.
9 It is a document titled "Declaration of Brian Brown
10 in Support of Inari's Motion for a Preliminary
11 Injunction."
12 MR. KEESE: And, Josh, just so we're clear,
13 his is single-sided, and mine is double-sided.
14 MR. STOWELL: Correct.
15 MR. KEESE: Okay. I just --
16 MR. STOWELL: Yes. Yeah. His is
17 single-sided. It will make it easier to flip.
18 MR. KEESE: Yeah.
19 THE WITNESS: Are you feeling cheated?
20 MR. KEESE: It just didn't look exactly the
21 same.
22 BY MR. STOWELL:
23 Q Mr. Brown, do you recognize [Exhibit 1011](#)?
24 A I do.
25 Q And is this the declaration you submitted

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1 in support of Inari's motion for preliminary
2 injunction?
3 A It is.
4 Q Okay. And if we turn to page 114, is that
5 your signature there?
6 A It is.
7 Q And did you sign this declaration on
8 July 23, 2024?
9 A I did.
10 Q And without revealing any attorney-client
11 privileged communications, can you tell me generally
12 how this declaration was put together.
13 MR. KEESE: Yeah. And understanding the
14 context of the question, I'm going to instruct the
15 witness not to reveal any specific communications
16 with counsel about it.
17 But I think you can answer the question in
18 general.
19 THE WITNESS: I partnered with the
20 attorneys at Perkins Coie to write this declaration.
21 BY MR. STOWELL:
22 Q And were there portions of the declaration
23 that you wrote and edited?
24 A There were.
25 Q Okay. And when you were preparing your

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1 declaration and pulling together the materials, did
2 you speak to anyone and gather information from
3 anyone that you relied upon in -- in forming your
4 opinions in the declaration?
5 MR. KEESE: And I'm going to, again,
6 caution the witness not to reveal outside the scope
7 of things that attorneys allowed you to rely on for
8 the declaration, so not, you know, general
9 communications with attorneys.
10 But I think you can answer the question.
11 THE WITNESS: I don't recall speaking to
12 anybody about any of the information within the
13 declaration. I did some of my own independent
14 Internet searches for -- for information.
15 BY MR. STOWELL:
16 Q Is it fair to say that the information
17 that's presented in your declaration either came from
18 you or came from your attorneys?
19 A Yes.
20 Q When you say you did some independent
21 Internet searches, can you tell me about those?
22 A If I recall correctly, I was looking for
23 information as far as the standard of care for
24 treating VTE.
25 Q Any other Internet searches you remember

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1 doing?
2 A I believe I looked at some of the
3 competitive products' websites.
4 Q And when you say "competitive products,"
5 what products are you talking about?
6 A I'm referring to products that would be on
7 the market that would have similar indications to
8 what the Inari device has.
9 Q And which products were those that you
10 looked at?
11 A I recall looking at the Penumbra website.
12 I'm hoping I get the name right. I think it was
13 AngioMedic's website.
14 Q Maybe AngioDynamics?
15 A Might be AngioDynamics. Thank you.
16 I also looked at the Truvis website. Those
17 are the ones I recall.
18 Q Okay. And when you were on those websites,
19 were there specific products that you were looking
20 at?
21 A I was looking at their products for
22 treating veins and PE, if they did have a product for
23 PE.
24 Q And so for Penumbra, did Penumbra have a
25 product or products for treating veins and PE?

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1 A I believe they do.
2 Q And do you know what that product is
3 called?
4 A I can't say with certainty, but I think
5 it's the Indigo.
6 Q And did you look at the Web pages for the
7 Indigo when you were on the Penumbra website?
8 A Whatever product was indicated for treating
9 veins and venous thrombus and PE, I -- I did look at
10 the website, yes.
11 Q Okay. And you think it might have been
12 Indigo, but it sounds like maybe you're not sure
13 today?
14 A I would have to look at my declaration. I
15 know it's -- the name of it's included in my
16 declaration.
17 Q Okay. What about AngioDynamics? Do you
18 remember the product you looked at on that website?
19 A It was a product, again, for doing
20 venous -- or I should just say for doing
21 thrombectomy. I do not recall whether it was for
22 venous or not.
23 Q And do you remember the product name?
24 A I do not. It's in my declaration.
25 Q And when you refer to Truvic, are you

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1 referring to Imperative Care?
2 A I believe they are one and the same. I
3 believe the website is under Truvic.
4 Q And when you looked at the Truvic website,
5 what products were you looking at?
6 A I was looking at their Symphony device and
7 their Prodigy device.
8 Q Any other Truvic devices that you looked
9 at?
10 A The Symphony device would include the
11 accessories that go with it.
12 Q Okay. Any -- anything else on the Truvic
13 website that you looked at?
14 A Not that I recall.
15 Q So you mentioned for your Internet
16 searches, you looked at the competitor websites. You
17 looked at the standard of care.
18 Was there anything else that you did
19 research on when you were preparing your declaration?
20 A Not that comes to mind right now. We may
21 find something in my declaration that reminds me of
22 other things.
23 Q Okay. Did you physically inspect any
24 products in preparing your declaration?
25 A I did not inspect any products in

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1 preparation of the declaration as far as physically
2 inspect them.
3 And I'm assuming when you say "physically,"
4 meaning I've held it in my hand and looked at it.
5 Q Correct. Yeah. That's what I meant by
6 "physically."
7 Did you have an opportunity to inspect the
8 products or products in any other way, virtually or
9 something like that?
10 A I was -- for my declaration, I was supplied
11 images of the products.
12 Q Okay. And who supplied those images to
13 you?
14 A The attorneys.
15 Q And did you do anything to confirm that the
16 images you were supplied were representative of the
17 actual products you were testifying about?
18 A Nothing more than they looked -- they
19 looked identical to what I was seeing on the website,
20 and, also, I had no reason to believe that they did
21 not represent the actual product.
22 Q In terms of the products that you were
23 supplied images of, we'll go through the declaration
24 and look at those. But just as you sit here, do you
25 recall which -- which products you received pictures

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1 of?
2 A I received photos of the Inari FlowTrierer
3 and the Inari ClotTrierer, photos of the -- do you
4 prefer to use Imperative Care or Truvic?
5 Q Truvic no longer exists, so we use
6 Imperative Care usually. Yeah.
7 A Oh, okay.
8 Q Yeah.
9 A Even though on their product it says
10 Truvic?
11 Q It no longer does.
12 A Oh, it doesn't.
13 Q Yeah.
14 A Okay. So I looked at the Imperative Care
15 Symphony. Those are the ones that come to mind right
16 now.
17 Q Did you, other than looking at the website,
18 inspect any of the Penumbra products in creating your
19 declaration?
20 A I did not physically have the Penumbra
21 products.
22 Q And what about any AngioDynamics products?
23 Did you physically inspect any AngioDynamics products
24 in preparing your declaration?
25 A I did not.

Page 25

1 Q And did you speak with any doctors about
2 the topics that are discussed in your declaration?
3 A I did not.
4 Q Let's look at paragraph 2 of your
5 declaration. This is on page 1. Let me know when
6 you've found it.
7 A I am there.
8 Q Okay. The second sentence says, "I focus
9 for purposes of this declaration on Claim 1 of the
10 '910 Patent and 10 (which depends from and therefore
11 requires discussion of Claim 1) of the '921 Patent."
12 Do you see where I am?
13 A I do.
14 Q And are Claim 1 of the '910 patent and
15 Claim 10 of the '921 patent the only claims that you
16 have rendered opinions on in this declaration?
17 A Yes, at a high level. And as it says here,
18 of course, that had to include Claim 1 of the '910.
19 Q Okay. So you believe you've also rendered
20 opinions on Claim 1 of the '921 patent?
21 A I believe there are a few comments about
22 the Claim 1 in here.
23 Q Okay. And did you have any involvement in
24 selecting the claims that you are opining on in this
25 declaration?

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1 A I did not.
2 Q I apologize, but I'm going to make you jump
3 around again. Can we go to page 91 of your
4 declaration.
5 At page 91, there's a section where you
6 render some opinions regarding the validity of the
7 '910 patent and the '921 patent; is that correct?
8 A That does appear to be what is on this
9 page.
10 Q On -- in the second sentence, you say,
11 "Based on information currently available to me."
12 And we just reviewed a lot of the information that --
13 that you had reviewed in preparing your declaration.
14 Is there any other information that was
15 currently available to you and that you relied upon
16 that we -- that we haven't discussed so far?
17 A The information that I personally hold as
18 far as having been a person who has worked in the
19 industry, that has worked on similar products, so
20 that information was also considered in writing this
21 declaration.
22 Q Okay. So you have personal experiences
23 with thrombectomy devices that you relied upon in
24 creating your declaration?
25 A Yes.

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1 Q Any other information that we haven't
2 already discussed today that was available to you
3 that you relied upon, particularly in forming your
4 validity opinions here?
5 A Nothing comes to mind, but we may find
6 something in this declaration that may remind me of
7 something.
8 Q Okay. In paragraph 196, there are four
9 patents identified. The shorthand for them is
10 Garrison I, Garrison III, Hartley, and Schaffer.
11 Do you -- do you see that?
12 A I do see that.
13 Q And do you agree that I've accurately
14 stated that there are four patents listed there, or
15 patents or patent applications?
16 A Thank you. Yes.
17 Q Okay. Prior to your involvement in this
18 litigation, were you aware of any of these patents
19 from your experience in the field?
20 A When you say "in the field," you mean just
21 general, prior to anything to this case, or are you
22 being more specific when you say "in the field"?
23 Q That's a -- that's a fair question.
24 Prior to this case, were you aware of any
25 of these references?

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1 A I was.
2 Q Okay. And which references were you aware
3 of prior to this litigation?
4 A I was aware of some of the Garrison
5 patents. I can't point to exactly which one of these
6 Garrison applications or patents, but I am familiar
7 with Garrison.
8 Q And when did you become familiar with
9 Garrison?
10 A One of my previous court cases.
11 Q And who were you working for in that court
12 case?
13 A Penumbra.
14 Q And was that an IPR matter that you were
15 working for Penumbra on where Garrison came up?
16 A It was.
17 Q And was Garrison used as a reference in
18 that case?
19 A I don't believe it was.
20 Q How did Garrison come up in that IPR?
21 A It was a prior art search for thrombectomy
22 devices, and it was one of the prior arts that I was
23 asked to review.
24 Q And do you know if that Garrison reference
25 ultimately became one of the references you relied

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1 upon in the IPR?
2 A As I stated earlier, I don't think it was,
3 but I -- I'm a little bit unsure, but I don't think
4 it was.
5 Q Okay. Other than one of the Garrison
6 references, were you aware of any of the other
7 patents listed in 196 -- paragraph 196 before this
8 litigation?
9 A I was not.
10 Q In 197, paragraph 197, you mention the
11 inter partes review of the '011 patent.
12 And I believe you testified earlier that
13 you have reviewed that IPR petition relating to the
14 '011 patent; is that correct?
15 A That is correct.
16 Q And in paragraph 197, there is an
17 additional patent that's referenced called Eller.
18 Have you reviewed the Eller patent?
19 A I have.
20 Q In paragraph 196, going back one, you state
21 that you understand that Inari communicated with
22 Truvic about Inari's patents prior to the lawsuit;
23 right?
24 A Correct.
25 Q And where does your understanding of that

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1 come from?
2 A From the attorneys.
3 Q Did you review any of the correspondence
4 between the parties that were written prior to the
5 litigation?
6 A I did not review any of those documents.
7 Q Other than reviewing the '011 patent IPR
8 and quickly taking a look at the '691 patent IPR, did
9 you do anything else to educate yourself about
10 Imperative Care's invalidity positions?
11 A I did not do anything in addition, other
12 than I believe in what we were talking about earlier
13 relative to the communications, early communications,
14 I believe Imperative Care did provide some prior art
15 references, and so those were included.
16 Q So it's your understanding that in the
17 presuit communications between the parties,
18 Imperative Care identified prior art references, and
19 you believe those references are discussed in your
20 declaration; is that correct?
21 A Correct.
22 Q And your understanding of which references
23 were identified in those communications comes from
24 Inari's counsel; is that correct?
25 A Correct.

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1 Q And you did not review the communications
2 that went back and forth between the parties;
3 correct?
4 A Correct.
5 Q In paragraph 198, which is on page 92, you
6 state in the last sentence, "I am not aware of any
7 aspiration-based thrombectomy devices marketed
8 specifically for VTE before Inari launched its
9 FlowTrier and ClotTrier products."
10 Do you see where I am?
11 A I do.
12 Q Okay. And where does that understanding
13 come from?
14 A That understanding came from my familiarity
15 with thrombectomy devices. It came from some of my
16 Internet searches of devices. I think that is a good
17 summary of it.
18 Q Okay. And so when you were doing your
19 Internet searching, were you specifically looking for
20 evidence of thrombect- -- aspiration-based
21 thrombectomy devices that predated FlowTrier and
22 ClotTrier?
23 A I was looking for information on that, yes.
24 Q Okay. And you went to the websites of the
25 companies for that information; is that correct?

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1 A You could -- typically the -- the websites
2 don't contain a lot of information as far as when
3 they received regulatory approval. The FDA website
4 does contain some of that information. The Internet
5 contains some of that information relative to press
6 releases.
7 Q And did you search the FDA website to
8 determine when competitor products were released for
9 VTE treatment?
10 A I didn't do a specific search of the FDA
11 website. I did an Internet search, and sometimes an
12 FDA document would come up in the search.
13 Q And just so I understand, when you were
14 doing your Internet search, what were you searching
15 for?
16 A You could -- I was searching for aspiration
17 devices, DVT, PE.
18 Q And did you do a specific search for
19 aspiration-based thrombectomy devices that predated
20 FlowTrier and ClotTrier?
21 A I did not do a search of that as specific
22 as you just said.
23 Q Do you know when the FlowTrier received
24 FDA approval?
25 A I believe I have it in my declaration here.

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1 I believe it was somewhere in the mid-teens.
2 Q Okay. And what about the ClotTrieve
3 product?
4 A Very similar.
5 Q And when you were doing your searches, did
6 you discover that Penumbra had some devices that were
7 approved and used to treat VTE before Inari marketed
8 its products?
9 A I do not recall seeing that.
10 Q Are you aware that Penumbra had received
11 FDA approval for products that could be used for VTE
12 before Inari had received approval for the
13 FlowTrieve and ClotTrieve?
14 A Based on the statement here in my
15 declaration, I would have to say no.
16 Q What aspiration-based thrombectomy devices
17 did you find were on the market before the
18 FlowTrieve and the ClotTrieve?
19 MR. KEESE: Vague.
20 THE WITNESS: So aspiration devices on the
21 market go all the way back into the 1990s, so that
22 would be a very long list.
23 BY MR. STOWELL:
24 Q Okay. Did you do any specific searches to
25 see what aspiration-based thrombectomy devices were

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1 first approved for the treatment of the peripheral
2 vasculature?
3 A I did not. That was outside the scope of
4 what I was searching for.
5 Q And do you consider aspiration thrombectomy
6 for the treatment of the peripheral vasculature to be
7 part of treating VTE?
8 MR. KEESE: Calls for a legal conclusion.
9 THE WITNESS: There is a little bit of a
10 crossover. Peripheral vasculature does include
11 peripheral veins at a clinical level.
12 At a regulatory level, sometimes regulatory
13 agencies do view the treatment of veins as being
14 different than the treatment of arteries. And so
15 when you do receive peripheral vasculature approval,
16 it may not include the veins of the periphery.
17 BY MR. STOWELL:
18 Q But it might include the veins; right?
19 A It might, yes.
20 Q In paragraph 200, you have a sentence about
21 clots in the cerebral and coronary arteries versus
22 clots in the peripheral and pulmonary vasculatures.
23 Do you see the sentence I'm talking about?
24 It's the first one in -- in paragraph 200.
25 A I do see the sentence here, the first

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1 sentence in paragraph 200.
2 Q Okay. And one of the statements here is
3 that the clots in the pulmonary vasculature typically
4 remain in the blood vessels for quite a while.
5 What -- what do you mean that -- by that?
6 A Yes. When -- when I wrote that, I was
7 referring to the blood clots in the periphery are
8 clots that are either forming in the arterial side or
9 the venous side.
10 And when I say they're there for a long --
11 I'm trying to make sure I say what -- yes, "typically
12 remain in the blood vessels for quite a while," what
13 I'm referring to there is that when blood clots form
14 in your periphery -- when I say "periphery," I'm
15 referring to -- could be arms, it could be your legs,
16 lower legs, your thighs, your pelvic region -- those
17 areas of the body aren't as critical to have blood
18 supplied to them as blood being supplied, for
19 instance, to your heart or to your brain.
20 And so when you do have a blood clot that
21 forms in the periphery, as a patient, we typically
22 don't react to that blood clot in the same way that
23 we would react if that blood clot were to form in our
24 heart or our brain. I mean, if it forms in your
25 heart, forms in your brain, that's an emergent

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1 situation. You need to have that treated right now.
2 If it forms in your legs, typically the first
3 symptoms are just simply pain.
4 And I hate to say this, but us men, we --
5 we typically go, well, I'm man enough to deal with
6 this pain, so we just live with it until it gets to
7 be so severe that we go in for treatment. Well, that
8 may take days.
9 And that's what I'm referring to here as
10 far as them being there for a while longer.
11 Q Thank you for that answer.
12 I'm more curious about the part about the
13 pulmonary vasculature, because it's my understanding
14 that a pulmonary embolism is a medical emergency that
15 would be treated immediately.
16 Do you have that same understanding?
17 A The treatment of pulmonary embolism, yes,
18 many times the treatment will start immediately. It
19 doesn't always get resolved immediately.
20 But what I'm referring to here is that the
21 clot that does go into the pulmonary is older clot
22 because that clot originated from the lower
23 extremities or from the DVT.
24 Q Okay. So you would agree, though, that a
25 clot that is in the pulmonary vasculature would not

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1 remain there for quite a while before it is diagnosed 2 and removed; right? 3 MR. KEESE: Objection. Vague. 4 THE WITNESS: It could be there longer than 5 for cerebral or coronary. Again, sometimes it's 6 shortness of breath and we just live with it. 7 BY MR. STOWELL: 8 Q In paragraph 204, which is on page 94 of 9 your declaration, you discuss some of the challenges 10 that Inari overcame; correct? 11 A That is correct. 12 Q Okay. And where did the information for 13 paragraph 204 come from? 14 A It was information that was on their 15 website. It was information that I worked with the 16 partnering attorneys to collect. And also it comes 17 from my knowledge of thrombectomy cases. 18 Q And in this paragraph, you identify what 19 you call Inari's unique patented combinations. 20 Do you see that? 21 A Where are you at? 22 Q It's line 4 to 5 in the declaration. 23 A Please restate what was in that line. 24 Q Sure. 25 You identify what you call Inari's unique	1 Q So you believe you saw information about 2 Inari's clinical trials on Inari's website? 3 A I believe so. 4 Q And did you do any further investigation 5 of -- of the statements on Inari's website? 6 A I did not. 7 Q The first combination you identify here is 8 accelerated and precharged aspiration. 9 Do you see that? 10 A I do. 11 Q And what are you referring to by 12 accelerated and precharged aspiration? 13 A As shown there in parentheses, sometimes 14 that is referred to as the "whoosh" technique. And 15 what it really involves is utilizing a pressure 16 generator to create a vacuum and then storing that 17 vacuum, having a fluid control valve that you're able 18 to open and close to control that vacuum. 19 Once the vacuum has been generated and 20 stored, opening the control valve and then having a 21 very rapid aspiration through the catheter utilizing 22 the stored vacuum. 23 Q And in order to release that stored vacuum, 24 does the valve need to be operated in any particular 25 way?
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1 patented combinations; correct? 2 A Yes. 3 Q Okay. And you weren't involved in the 4 development of the FlowTrieve or the ClotTrieve; 5 correct? 6 A That is correct. 7 Q And so how did you identify these unique 8 patented combinations? 9 MR. KEESE: Asked and answered. 10 THE WITNESS: A lot of this comes from my 11 knowledge of thrombectomy cases and what exists in 12 the market, what the challenges are of performing 13 thrombectomy. 14 Other portions of this are included within 15 the -- the body of the patents. 16 BY MR. STOWELL: 17 Q Anything else you relied on in identifying 18 these, as you call them, unique patented 19 combinations? 20 A Inari also has done clinical trials, and 21 I've seen some of the results of the clinical trials. 22 Q So you've reviewed some of the results of 23 Inari's clinical trials? 24 A I have seen some of the information on the 25 Internet. I believe on the Inari website.	1 A It needs to be closed during the storing of 2 the vacuum, and it needs to be opened during the -- 3 the whoosh. 4 Q And does it need to be fully opened during 5 the whoosh, or can it be slowly opened so that 6 pressure leaks out of the system? 7 MR. KEESE: Objection. Vague. 8 THE WITNESS: It does not need to be fully 9 opened. It's really up to the physician to determine 10 at what rate he wants to apply the whoosh. 11 BY MR. STOWELL: 12 Q So if the physician just barely opened the 13 valve so that pressure slowly started to -- to leak 14 out into the catheter, you would consider that 15 whoosh? 16 MR. KEESE: Objection. Incomplete 17 hypothetical. 18 THE WITNESS: It falls under the definition 19 of what we have defined whoosh as. And, as I said, 20 it's really up to the physician to decide how fast he 21 wants to apply the vacuum. 22 BY MR. STOWELL: 23 Q And do you believe that accelerated and 24 precharged aspiration is required by Claim 1 of the 25 '910 patent?

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1 MR. KEESE: Objection. Calls for a legal
2 conclusion.
3 THE WITNESS: I'm not an attorney. I would
4 have to see that claim again to recall if it is.
5 BY MR. STOWELL:
6 Q Okay. I will give you what's been marked
7 as [Exhibit 1](#) previously in this litigation. It is
8 U.S. Patent No. 11,974,910.
9 Okay. And the question pending was: Do
10 you believe that accelerated and precharged
11 aspiration is required by Claim 1 of the '910 patent?
12 MR. KEESE: Vague. Calls for a legal
13 conclusion.
14 THE WITNESS: As stated earlier, I'm not an
15 attorney; but, in my opinion, this is describing the
16 whoosh technique.
17 BY MR. STOWELL:
18 Q And what limitations are describing the
19 whoosh technique?
20 A Well, I mean, all the limitations here are
21 together describing the whoosh technique. I mean,
22 you have to have a catheter. You have to have a
23 pressure source. You have to have a fluid control
24 device. You have to be able to actuate the fluid
25 control device.

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1 Q And can you be any more specific about
2 which limitations recite accelerated and precharged
3 aspiration?
4 A So the precharged is spoken about here,
5 having a fluid control device in a -- I believe a
6 first position in which the first pressure source is
7 fluidly connected to the first catheter. And so
8 pressure is generated when that valve is closed, and
9 then the whoosh occurs when that fluid control device
10 is opened.
11 Q And in your experience in the field with
12 aspiration-based thrombectomy devices, had you ever
13 had experiences where doctors or other engineers
14 built up pressure in a line before releasing it for
15 aspiration?
16 MR. KEESE: Objection. Incomplete. Vague.
17 THE WITNESS: I have.
18 BY MR. STOWELL:
19 Q And in what circumstances have you seen
20 that before?
21 A Many times. The aspiration systems are
22 designed to have a vacuum applied to a catheter. And
23 as part of the system, there is a fluid control
24 valve, which many times is referred to as a stopcock
25 valve, and those are all part of the system that I've

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1 seen before.
2 Q And when you say systems you've seen
3 before, what time frame are you talking about here?
4 A Those systems could date back into the
5 1990s, into the 2000s. Those systems were systems
6 that were being designed for coronary aspiration, for
7 cerebral aspirations.
8 Q And in those applications, would the
9 stopcock be closed to create accelerated and
10 precharged aspiration?
11 A I don't recall whether they included a
12 pressure canister or an area to store the -- the
13 vacuum, but they would have a -- something that would
14 generate the vacuum and a stopcock that would be able
15 to turn the vacuum on and off.
16 Q And when the vacuum was turned on, would
17 the stopcock be closed sometimes so that pressure
18 would build up in the line between the generator and
19 the stopcock?
20 MR. KEESE: Vague.
21 THE WITNESS: Yes.
22 BY MR. STOWELL:
23 Q And this device that you're familiar with,
24 was this something that you saw prior to 2018?
25 MR. KEESE: Objection. Vague.

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1 THE WITNESS: The devices I'm referring to,
2 yes, were before 2018. As I mentioned earlier, they
3 were devices for treating coronary and cerebral
4 thrombus.
5 BY MR. STOWELL:
6 Q And did you personally work on any of these
7 devices?
8 A I have worked on thrombectomy devices. I
9 am trying to recall whether we had a precharged
10 system and those are not -- I'm -- at the present
11 time, I'm not recalling whether we did or not.
12 Q The systems that you recall with the
13 precharging, were any of them commercial systems?
14 MR. KEESE: Objection. Vague. Misstates
15 the prior testimony.
16 THE WITNESS: I believe they were, yes.
17 BY MR. STOWELL:
18 Q And do you recall what names those systems
19 had?
20 A I don't recall the exact name of the
21 systems. I believe Penumbra did have a system that
22 would turn the vacuum on and off.
23 Q And do you recall what application that
24 Penumbra system was for, what part of the
25 vasculature?

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1 A Yes. It would have been either for
2 coronary or cerebral.
3 Q Do you recall any other systems that you
4 had experience with or saw that had accelerated and
5 precharged aspiration?
6 MR. KEESE: Vague.
7 THE WITNESS: That's the one that comes to
8 mind right now.
9 BY MR. STOWELL:
10 Q Okay. And did that Penumbra system have a
11 stopcock that could be opened and closed to release
12 the built-up negative pressure?
13 MR. KEESE: Foundation. Vague.
14 THE WITNESS: There may have been. I would
15 have to see the system to answer that.
16 BY MR. STOWELL:
17 Q Earlier, you said the pressure could be
18 turned on and off.
19 What were you talking about?
20 MR. KEESE: Objection to the extent it
21 misstates previous testimony.
22 THE WITNESS: The -- we were talking about
23 having a vacuum generation source and a vacuum
24 source, so we were turning that vacuum on and off
25 with a fluid control valve.

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1 BY MR. STOWELL:
2 Q And so the Penumbra system you -- that you
3 were talking about that was used for coronary and
4 cerebral, you remember that having a fluid control
5 valve?
6 MR. KEESE: Vague.
7 THE WITNESS: From what I recall, yes, it
8 has a fluid control valve.
9 BY MR. STOWELL:
10 Q Do you recall any other systems that you
11 had exposure to, commercial or otherwise, that had
12 accelerated and precharged aspiration?
13 A The Penumbra system is the one that I
14 recall right now.
15 Q Do you believe that Claims 1 or 10 of the
16 '921 patent require accelerated and precharged
17 aspiration?
18 A I would need to see the claim.
19 Q I'll show you what's been previously marked
20 in this litigation as [Exhibit 2](#). It is U.S. Patent
21 11,844,921.
22 MR. KEESE: And, Josh, I don't want to
23 interrupt your line of questioning; but we're, you
24 know, coming up on an hour, so I don't want to cramp
25 you. I'm just making the statement.

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1 MR. STOWELL: Sure. Dan, I apologize. I
2 wrote on yours, but it's --
3 MR. KEESE: It's fine.
4 MR. STOWELL: -- it's not otherwise
5 adulterated.
6 MR. KEESE: Yeah.
7 MR. STOWELL: I apologize.
8 MR. KEESE: No, you're good.
9 MR. STOWELL: I got a little highlighter
10 pen happy.
11 MR. KEESE: It's just the slip sheet
12 anyway.
13 MR. STOWELL: Yeah. Okay.
14 MS. TESSAR: So are we breaking or --
15 MR. STOWELL: No. No. Let's just finish
16 this line of questioning and do it.
17 BY MR. STOWELL:
18 Q Okay. Mr. Brown, so in front of you, you
19 have the '921 patent.
20 Do you recognize this patent?
21 A I do.
22 Q Okay. And is this one of the patents that
23 you reviewed in preparation for your deposition
24 today?
25 A It is.

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1 Q And so the question was: Do you believe
2 that Claims 1 or 10 of the '921 patent require
3 accelerated and precharged aspiration?
4 MR. KEESE: Calls for a legal conclusion.
5 THE WITNESS: As stated earlier, I'm not a
6 patent attorney; but, in my opinion, I do not see any
7 requirement for accelerated aspiration.
8 MR. STOWELL: Okay, Dan. Why don't we take
9 a quick break. Maybe we can keep it to between 5 and
10 10 minutes.
11 MR. KEESE: Yeah.
12 MR. STOWELL: Okay.
13 MR. KEESE: Perfect.
14 THE VIDEOGRAPHER: Okay. We're going off
15 the record at 9:13 a.m.
16 (Recess taken from 9:13 a.m. to 9:22 a.m.)
17 THE VIDEOGRAPHER: We are back on the
18 record at 9:23 a.m.
19 BY MR. STOWELL:
20 Q Okay, Mr. Brown. Why don't we return to
21 paragraph 204 of your declaration, which is on
22 page 94.
23 A Okay. I'm there.
24 Q And I'm going to continue looking at what
25 you've called Inari's unique patented combinations.

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1 We talked about accelerated and precharged
2 aspiration. I'd next like to go to telescoping
3 catheters.
4 Do you see that?
5 A I do see that.
6 Q And what is your understanding of
7 telescoping catheters?
8 MR. KEESE: Vague. Calls for a legal
9 conclusion.
10 THE WITNESS: In my opinion, telescoping
11 catheters are when you have two catheters that are of
12 the same intent or family that are passing through
13 each other. So you have a first catheter and a
14 second catheter, and the -- typically referred to as
15 the second catheter would be passing through the
16 first catheter.
17 This is used many times to be able to reach
18 to distal locations. Sometimes it's used to uncork
19 the primary catheter, to be able to allow for
20 reaching distal locations so they're able to travel
21 over each other.
22 The other thing it provides is it really
23 gives you the opportunity to sometimes do cases
24 faster because you're able to have a runway to take
25 the -- what we refer to as the second catheter, take

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1 it in and out of the patient multiple times and have
2 a runway to get to and from that location quickly.
3 BY MR. STOWELL:
4 Q And we'll -- we'll go through your
5 background, but I know you were at Boston
6 Scientific/SciMed for a large part of your career.
7 How many years were you with
8 Boston Scientific and SciMed?
9 A The two of them combined. I was there for
10 24 years.
11 Q Okay. And during what years were you with
12 those companies?
13 A I started in SciMed in 1990, and then
14 Boston Scientific purchased them in 1995, and then I
15 left in 2014.
16 Q And during your time working for -- maybe
17 I'll -- just to keep it simple, I'll refer to it as
18 Boston Scientific. But when I'm doing that, I'm
19 referring to your time at Boston Scientific and
20 SciMed.
21 Is that okay?
22 A That is okay.
23 Q Okay. During your time at Boston
24 Scientific, did you have an opportunity to work with
25 telescoping catheters?

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1 MR. KEESE: Objection. Vague.
2 THE WITNESS: As I have defined telescoping
3 catheters here, I do not recall working with
4 telescoping catheters at Boston Scientific.
5 BY MR. STOWELL:
6 Q Okay.
7 A I was aware of telescoping catheters, but
8 when you say working with, I did not work with
9 telescoping catheters.
10 Q What telescoping catheters were you aware
11 of at Boston Scientific?
12 A What was referred to as guide catheters for
13 coronary applications. Guide catheters would be
14 placed into the ostium of coronary arteries, and
15 sometimes physicians would then take a second guide
16 catheter and travel through the first catheter to
17 extend its length into the coronary arteries.
18 Q Were you aware of any other uses of
19 telescoping catheters during your time at
20 Boston Scientific?
21 A That is the one that comes to mind.
22 Q And were you aware of any telescoping
23 aspiration catheters during your time at Boston
24 Scientific?
25 MR. KEESE: Objection. Vague. Calls for a

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1 legal conclusion.
2 THE WITNESS: Not that I recall.
3 BY MR. STOWELL:
4 Q The catheter that you described that had
5 the guide catheters that were telescoping that went
6 into the coronary artery, what was the purpose of
7 those catheters?
8 A Guide catheters for coronary applications
9 are used for -- I spoke earlier about having kind of
10 a runway or a pathway to get to and from the
11 treatment site. Guide catheters are used as that
12 runway.
13 So they are -- for coronary cases, they're
14 either entered into the radial artery in your arm or
15 your femoral artery in your leg. Then the catheter
16 is then led up to the coronary arteries and then
17 placed there, and then your treatment devices then
18 are run up and down to this guide catheter.
19 Q And what types of treatment devices were
20 used with the guide catheters at Boston Scientific?
21 A Pretty much any catheter that is being used
22 for treating coronary disease, so if it's referred to
23 as a coronary intervention, would be run up and down
24 the guide catheter. So it could be anything from
25 the -- the guidewires to balloon catheters to stents

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1 to ultrasound catheters to aspiration catheters.
2 Q And the telescoping catheters that were run
3 into the coronary arteries when -- while you were
4 working at Boston Scientific, what was the -- what
5 were the dimensions in terms of the diameter of those
6 catheters?

7 A Coronary applications typically are relying
8 more on -- on small-bore catheters. Your coronary
9 arteries are much smaller than other arteries within
10 the body, and so typical catheter size for a guide
11 catheter for coronary applications is probably 6 to 8
12 French in size.

13 Q And then -- so any aspiration catheter or
14 other catheter that was placed through the guide
15 catheter would need to have a smaller diameter than
16 that?

17 A Yes. For coronary applications, it would
18 be smaller.

19 Q Okay. And while you were at Boston
20 Scientific, what kind of range of size of catheters
21 did you work with?

22 MR. KEESE: Objection. Vague.

23 THE WITNESS: The size of catheters really
24 depended upon the application, and so whether it was
25 a catheter for serving as a guide catheter or whether

1 Q And during your stint at Boston, at what
2 time periods were you working on structural heart
3 with these large catheters?

4 A The structural heart catheters were being
5 worked on in the last five to ten years that I was
6 there.

7 Q So in paragraph 204, you refer to
8 telescoping catheters.

9 Is it your understanding that Claim 1 of
10 the '910 patent requires telescoping catheters?

11 And the '910 patent is [Exhibit 1](#) for your
12 reference.

13 A So, again, I'm not a patent attorney; but
14 in my opinion, the -- the Claim 1 does not say
15 telescoping, but many of the other claims do speak to
16 telescoping.

17 Q And when you say "many of the other
18 claims," can you point me to one of the claims that
19 you believe discusses telescoping catheters?

20 A I'm going to retract what I just said
21 because I just realized I didn't finish reading
22 Claim 1.

23 Q Okay.

24 A I got to the bottom of the page here and
25 didn't look to the top of the next page.

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1 it was a treatment catheter, the types of diseases
2 that we were working on were typically either
3 peripheral disease or coronary disease and cerebral
4 or neural disease. So the range was quite extensive
5 as far as from being relatively small to relatively
6 large.

7 And, as an example, if you were to take
8 structural heart catheters, so these are catheters
9 for delivering heart valves, those -- those are very
10 large. Those can be up in the 20 French in diameter
11 size.

12 BY MR. STOWELL:

13 Q And did you work on structural heart when
14 you were at Boston Scientific?

15 A I did.

16 Q And so did you work with catheters that
17 were in the 24 French range?

18 MR. KEESE: Objection. Vague.

19 THE WITNESS: I don't recall that it was 24
20 French, but they were in the 20 French range.

21 BY MR. STOWELL:

22 Q And were those catheters used to deliver
23 heart valves into the patient's heart?

24 A That was one example of where they would be
25 used.

1 So yes. In my opinion, Claim 1 does
2 describe telescoping catheters.

3 Q Okay. In your opinion, do Claims 1 or 10
4 of the '921 patent describe telescoping catheters?

5 MR. KEESE: Objection. Vague. Legal
6 conclusion.

7 BY MR. STOWELL:

8 Q I'll also just mention the '921 patent is a
9 little tricky because it does have numbering earlier
10 in the patent that looks like claims.

11 The claims begin on Column 22, I'll
12 represent for you, so we're all in the same place.

13 A Thank you.

14 Q Yeah.

15 Just so my question is clear, in your
16 opinion, do Claims 1 and 10 of the '921 patent
17 describe telescoping catheters?

18 MR. KEESE: Same objections.

19 THE WITNESS: I'm not a patent attorney,
20 but in my opinion, the Claim 1 here is not specific
21 to telescoping catheters but definitely can be used
22 for telescoping catheters.

23 BY MR. STOWELL:

24 Q And what about Claim 10?

25 A The same for Claim 10.

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1 Q Going back to paragraph 204 of your
2 declaration on page 94, you mentioned "measures to
3 minimize and mitigate blood loss, such as improved
4 hemostasis valves, blood filtration, and blood
5 return."
6 Do you see where I am?
7 A I do.
8 Q Okay. You use "such as" in that clause.
9 Are there other measures to minimize and
10 mitigate blood loss that you believe are part of
11 Inari's unique patented combinations?
12 A Yes, I do. Here it is speaking to the fact
13 that Inari has designed a system that includes the
14 hemostasis valve, it includes blood filtration
15 systems, blood return systems, which are all part of
16 the innovative nature of -- of the Inari product.
17 We spoke earlier, though, about the whoosh
18 concept. The whoosh concept definitely is another
19 way of minimizing blood loss because it allows you to
20 do a procedure faster. So the faster you can do that
21 procedure, the less blood loss that you're going to
22 have.
23 Another technique is telescoping catheters.
24 Telescoping catheters, again, allow you to do a
25 procedure quicker.

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1 Q Just on the -- the whoosh concept real
2 quick. If you're using a syringe to generate your
3 whoosh concept, the blood loss is whatever that
4 syringe holds; correct?
5 MR. KEESE: Objection. Vague.
6 THE WITNESS: The blood loss -- the maximum
7 blood loss for that particular draw of the syringe
8 would be whatever the syringe would hold.
9 Now, when we talk about blood loss, we're
10 talking about blood loss during a procedure. And so,
11 for instance, if you were to utilize Inari's blood
12 return system, you could then take that blood that
13 was drawn into that syringe and put it back into the
14 patient.
15 BY MR. STOWELL:
16 Q I guess my point is, the speed with which
17 that syringe fills with blood doesn't really impact
18 how much blood you withdraw. You withdraw a syringe
19 worth of blood in each pull; is that fair?
20 A Yes. The volume of blood that is removed
21 from the patient, the maximum amount would be the
22 volume of that syringe.
23 Q So going back to the measures to minimize
24 and mitigate blood loss, you have the listed measures
25 here, and you've identified whoosh and telescoping

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1 catheters.
2 Any other measures to minimize and mitigate
3 blood loss that you can think of that you would add
4 here?
5 A Those are the ones that come to mind.
6 Q Okay. When you refer to improved
7 hemostasis valves, what are you referring to?
8 A I am referring to the valve that is on the
9 Inari system that is the -- the valve that Inari
10 refers to as a garrote-style valve. It is a valve
11 that is designed specifically for sealing around
12 large-bore catheters.
13 Q And is it your understanding that that --
14 we'll refer to it as -- shorthand as the garrote
15 valve.
16 Is that okay?
17 A I'm okay with that, yes.
18 Q Okay. So is it your understanding that
19 garrote valve is claimed in Claims 1 -- or recited in
20 Claims 1 and 10 of the '921 patent?
21 MR. KEESE: Objection. Legal conclusion.
22 THE WITNESS: Yes. I believe the -- the
23 Inari garrote valve is included in Claims 1 and 10.
24 It speaks here about having an active tensioning
25 mechanism, an actuator, the filament, Claim 10 having

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1 a second actuator.
2 Yes, I think that describes the -- the
3 Inari hemostasis valve.
4 BY MR. STOWELL:
5 Q Do you believe that Claim 1 of the '910
6 patent recites an improved hemostasis valve?
7 MR. KEESE: Asked and answered.
8 THE WITNESS: So please reask the question.
9 BY MR. STOWELL:
10 Q Sure.
11 Do you believe that Claim 1 of the '910
12 patent recites an improved hemostasis valve?
13 A So as I read Claim 1 of the '910, it speaks
14 to having a second catheter advanceable through a
15 first catheter. And in order to do that, utilizing
16 this French size that is being spoken of here, yeah,
17 they would have to go -- I mean, ideally, you'd want
18 to be going through an improved hemostasis valve.
19 Q So is it your opinion that Claim 1 of the
20 '910 patent requires a hemostasis valve?
21 A I don't know whether it calls it out that
22 it's required, but, I mean, to -- when you have a
23 second catheter passing through a first catheter, it
24 is traditional that it would be going through a
25 hemostasis valve.

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1 Q And is it your opinion that Claim 1 of the
2 '910 patent requires Inari's garrote valve, which
3 you've described as an improved hemostasis valve?
4 MR. KEESE: Calls for a legal conclusion.
5 Vague.
6 THE WITNESS: I'm not a lawyer. I don't
7 see here where it requires the garrote valve. But as
8 we were speaking earlier, I mean, it provides a lot
9 of advantages for -- for doing these large-diameter,
10 large-bore catheters and doing the telescoping
11 procedures.
12 BY MR. STOWELL:
13 Q Do -- does Claim 1 of the '910 patent
14 require blood filtration or blood return?
15 A I'm not a patent attorney. But as I read
16 Claim 1, I don't see blood return a requirement.
17 Now, when you read the specification of the
18 '910 patent, it definitely does teach of the blood
19 filtration and blood return.
20 Q Okay. But, as you sit here today, it's
21 your opinion that Claim 1 of the '910 patent does not
22 require blood filtration and blood return; is that
23 fair?
24 A In my quick review of this, I may have
25 missed something, but I do not see that.

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1 Q And what about in Claims 1 and 10 of the
2 '921 patent? Do you believe either of those claims
3 requires blood filtration or blood return?
4 A I'm not a patent attorney, but as I read
5 these quickly, I do not see that as being a
6 requirement, although that is part of what is being
7 taught and what is part of the system of Inari.
8 Q And so the features that you've identified
9 in paragraph 204 of your declaration, is it your
10 position that all of those features combined make
11 Inari's system unique?
12 MR. KEESE: Objection. Misstates the
13 document. Vague.
14 THE WITNESS: So any -- any system, yes, is
15 made up of multiple elements; and that is what is
16 being described here, are all those elements that
17 make for a very high-performing, unique product.
18 Inari basically went into a market that was
19 underserved and was able to combine these elements
20 here to be able to create a product that was able to
21 treat VTE.
22 BY MR. STOWELL:
23 Q In that same paragraph, you mention a
24 combination of aspiration and mechanical intervention
25 devices.

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1 When you refer to mechanical intervention
2 devices, what are you referring to?
3 A What I typically am referring to when I say
4 "mechanical intervention devices" are the devices
5 that can provide some level of interaction or some
6 type of disturbance to the thrombus.
7 Sometimes people will even refer to it
8 as -- a water jet as a mechanical inter- --
9 mechanical intervention even though it may not
10 necessarily be something that you view that's --
11 that's physical and firm. But, yeah, the -- whereas
12 aspiration typically is viewed more as the
13 application of a vacuum.
14 Q And when you're using the term "mechanical
15 intervention devices," would you include a water jet?
16 A I would say at a high level, yes. It
17 depends upon where that water jet is.
18 Q And do Inari's FlowTrievers and ClotTrievers
19 products have a feature that you would consider a
20 mechanical intervention device?
21 A Yes.
22 Q And let's start with the FlowTrievers. On
23 the FlowTrievers, what would you consider to be the
24 mechanical intervention device?
25 A On the FlowTrievers, the FlowTrievers

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1 includes the nitinol baskets on the FlowTrievers
2 catheter that can be unsheathed, and they expand into
3 the clot material. And once they're expanded into
4 the clot material, then that can be retracted back
5 into the catheter. So the nitinol baskets are your
6 mechanical intervention.
7 Q And on the ClotTrievers, then, what part of
8 that would you consider to be the mechanical
9 intervention device?
10 A The ClotTrievers device and catheter
11 includes a nitinol frame and a braid that extends
12 beyond that utilized to capture DVT. That would be
13 your mechanical intervention.
14 Q On Imperative Care's Symphony device, are
15 there any features that you would consider to be a
16 mechanical intervention device?
17 A Yes, sir. The -- I don't recall the name
18 of it off the top of my head, but they have a
19 corkscrew device that is placed into the distal end
20 of the aspiration catheter.
21 Q And what's your understanding of the
22 purpose of the corkscrew device?
23 A It is to engage with the clot and draw it
24 into the catheter.
25 Q And when you say "engage with the clot,"

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1 where -- how -- or where does it engage with the
2 clot?
3 MR. KEESE: Scope.
4 THE WITNESS: Are you referring to what
5 portion of the clot does it engage with?
6 BY MR. STOWELL:
7 Q Well, where in relation to the catheter
8 does it engage the clot, if you know?
9 A I believe that that corkscrew device -- I
10 believe it remains at the distal end of the catheter,
11 but I would have to go back and verify that.
12 Q Does Claim 1 of the '910 patent require a
13 mechanical intervention device?
14 A I'm not a patent attorney, but I am not
15 seeing within Claim 1 here a requirement for a
16 mechanical intervention device.
17 Now, the mechanical intervention device is
18 part of the Inari system, both for the FlowTrievers
19 and the ClotTrievers. It may be included in following
20 claims here. You did not ask me to look at other
21 claims. But as far as Claim 1, I'm not seeing it.
22 Q And what about Claims 1 and 10 of the '921
23 patent? Do those claims require a mechanical
24 intervention device?
25 A Claims 1 and -- I'm not a patent attorney.

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1 Claims 1 and 10, in my opinion here, do not speak to
2 a mechanical intervention device; but the valve, as
3 it's being defined here, is designed to allow for the
4 use of mechanical intervention devices.
5 Q And do you believe it's a requirement of
6 Claim 1 or 10 of the '921 patent that the valve be
7 designed to allow for the use of mechanical
8 intervention devices?
9 MR. KEESE: Objection. Legal conclusion.
10 THE WITNESS: I don't know whether this
11 requires that or not. It definitely is designed so
12 that it is capable of doing that.
13 BY MR. STOWELL:
14 Q In paragraph 205 of your declaration, which
15 is [Exhibit 1011](#), you state that -- or you give an
16 opinion that "Inari's invention satisfies a long-felt
17 need in the industry."
18 Do you see where I am?
19 A I do.
20 Q And what was the long-felt need that you
21 think Inari addressed?
22 A As I continued to write here, namely, the
23 efficient and safe aspiration of percutaneous
24 medical -- mechanical thrombectomy devices with large
25 catheters for peripheral and pulmonary vasculature,

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1 really to enable the improved outcomes and improve
2 mortality rates.
3 I mean, the Inari device really is serving
4 an unmet, underserved market. In the world of
5 aspiration catheters, people have tried to treat DVT
6 and tried to treat PE unsuccessfully. I mean,
7 they -- they aren't the first ones to ever have tried
8 to do aspiration within those indications, but they
9 definitely are one of the first to -- to be able to
10 have a device that works well there.
11 Q In that paragraph 205, you reference
12 something called the "secondary indicia of
13 nonobviousness."
14 Do you see that?
15 A Not yet.
16 Q Sorry. First sentence of paragraph 205.
17 A Okay. I do see that.
18 Q Okay. And from your experience serving as
19 an expert, I take it you are familiar with the
20 secondary indicia of nonobviousness?
21 A I have worked with it in the past, yes.
22 Q And in paragraph 205, you identify
23 long-felt need, which is a secondary indicia of
24 nonobviousness; correct?
25 A Correct.

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1 Q Is that the only secondary indicia of
2 nonobviousness that you are rely -- relying on in
3 your expert declaration?
4 MR. KEESE: Objection. Document speaks for
5 itself.
6 THE WITNESS: I believe there are other
7 secondaries that I've identified within my
8 declaration.
9 BY MR. STOWELL:
10 Q Here, we're in a section of your expert
11 report that addresses the '910 patent; correct?
12 A Are you able to reference me to
13 something --
14 Q Sure.
15 A -- to confirm that?
16 Q Yeah. If you go to page 92 at the top, it
17 starts with Section A, "The '910 Patent."
18 A Yes.
19 Q And -- okay. And so on page 94, we are
20 still within that section referring to the '910
21 patent; correct?
22 A That does appear to be correct.
23 Q Okay. And so for secondary indicia of
24 nonobviousness relating to the '910 patent, is
25 long-felt need the only secondary indicia that you

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1 are relying upon?

2 MR. KEESE: Document speaks for itself.

3 THE WITNESS: I believe there are others

4 identified within my declaration.

5 BY MR. STOWELL:

6 Q Are there any others in this section that

7 we're looking at called innovation over the prior art

8 that you can identify for me?

9 A Would you like me to read through this

10 whole thing?

11 Q It -- yeah. It's just -- it's three

12 paragraphs, so it shouldn't take long.

13 A Within the three paragraphs that you've

14 allowed me to read, I don't see a -- anything written

15 as far as additional secondary indices of

16 nonobviousness.

17 But within the context of what is written

18 here, that there are numerous other ones as far as --

19 you know, it speaks here about the innovativeness of

20 the device, the fact that they were probably one of

21 the first to markets with the device. I don't

22 remember all of the secondary indices.

23 Is that indices? Is that correct or --

24 Q Indicia.

25 A Indicia. Thank you.

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1 The -- as I said, I don't recall all of

2 them off the top of my head. But, as I mentioned

3 earlier, the Inari devices do satisfy a number of

4 them and -- due to the innovativeness of their

5 device.

6 Q And is there another section of your expert

7 declaration that I could look at to understand your

8 opinions regarding the secondary indicia of

9 nonobviousness for the '910 patent?

10 A There is. I don't know the paragraph off

11 the top of my head.

12 Q Okay. Maybe at a -- when we have a break,

13 you can look and see if there's another section that

14 deals with the secondary indicia of nonobviousness.

15 I wasn't able to find it, which is why I'm curious to

16 see.

17 A Okay.

18 Q Okay. We'll come back to that.

19 You had mentioned a minute ago when we were

20 talking that Inari hadn't been the only ones to try

21 aspiration for PE or DVT.

22 What other companies or entities were you

23 thinking of that had tried that previously?

24 A I don't know whether I can give you a

25 specific company name, but physicians have tried to

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1 utilize aspiration for treating DVT and PE over the

2 history of aspiration catheters, but they've always

3 been doing it with devices that weren't designed for

4 treating DVT and PE.

5 So they were typically using a coronary

6 aspiration catheter, a neurovascular coronary

7 catheter. These -- these are catheters that are much

8 smaller. They're smaller in diameter to be able to

9 go into the -- the size of the vessels. They are

10 really not designed to be able to pull out the size

11 of the clot that's in DVT and PE.

12 Even when you look at the morphology of the

13 clot in DVT and PE, it's so much different. And so

14 they have -- they were basically unsuccessful in

15 utilizing these other catheters for the treatment of

16 DVT and PE.

17 Q You're not aware of any successful

18 extractions of DVTs or PEs using the prior art

19 catheters?

20 A The definition of success always is

21 someone's opinion, so for some physicians, it may be

22 just creating a lumen to allow a little bit of blood

23 to flow. I mean, if you have a blockage in your lung

24 and you're not getting any blood flow into your lung,

25 if you're able to get a small orifice through that

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1 and some blood, that could be defined as success for

2 some people.

3 But in the -- in the perspective of what

4 the Inari devices are capable of doing and the

5 success that they create in treating DVT and PE, the

6 coronary and the neurovascular devices, I would say

7 that they would be unsuccessful relative to the Inari

8 device.

9 Q In paragraph 206 of your expert

10 declaration, you have the opinion that -- that there

11 are several competitors on the market, but none of

12 them have experienced the degree of success that

13 Inari has.

14 I'm paraphrasing the first sentence there.

15 Do you see where I'm at?

16 A Yes.

17 Q Okay. What basis or what metric are you

18 using to make the claim that they haven't experienced

19 the degree of success that Inari has?

20 A I'm referring to the -- the growth of Inari

21 as a company. And I don't have the exact numbers,

22 but I can tell you that if I look, we'll say roughly

23 ten years ago, Inari was but a dot on the spectrum of

24 medical device companies, and now they have a product

25 line, and they're being successful.

Page 73 1 I look at the clinical data that has been 2 generated by the Inari products and the success that 3 they're having with their clinical results. 4 Q So when you refer to the growth of Inari, 5 did you do any sorts of comparisons to growths of 6 other companies in the space to see how the growths 7 compare across companies? 8 A I did not do any market analysis. 9 Q And on the -- you mentioned clinical data. 10 Did you do any comparison of clinical data 11 between Inari and its competitors to see how the 12 companies measure up? 13 A I was looking at the results that they were 14 using relative to the -- I can't remember if they 15 were comparing to the standard of care, but they were 16 basically talking about how historically would have 17 been the clinical complications of DVT and PE and 18 where their results are at. 19 We know that physicians are using the Inari 20 device, and they're using the Inari device because 21 they haven't found other products that work as well 22 as what the Inari device works. 23 Q And so when you were referring to the 24 clinical data, you were referring to data that was 25 comparing Inari to the traditional standard of care;	Page 75 1 applications? 2 A When you take a look at those designs, they 3 are pretty much a replicate of the designs that are 4 being used for coronary and neurovascular 5 applications. The sizes are very similar. The 6 ancillary equipment is very similar. 7 Q Do you have any personal knowledge that 8 Penumbra adapted its thrombectomy devices from small 9 neurovasculature applications? 10 A I am basing -- 11 MR. KEESE: Vague. 12 THE WITNESS: -- off of, yeah, the products 13 that I'm seeing, and I'm basing it off of, like I 14 said, the size of the devices, the components of the 15 device. 16 BY MR. STOWELL: 17 Q In your time doing legal work for Penumbra, 18 did you have any involvement in designing any of 19 their products? 20 A I have not been involved with the design of 21 their product. 22 Q And so is it fair to say that when you say 23 you believe that the Penumbra products are adapted 24 from its thrombectomy devices designed for removing 25 clots from small neurovasculatures, that is a --
Page 74 1 is that fair? 2 A I don't know whether it was a randomized 3 trial. But, basically, when you look at historical 4 data for -- might be survival rates of patients, 5 complication rates, they were basically showing that 6 their data is superior to that. 7 Q Did you do any comparisons of clinical data 8 between Inari and its competitors and their devices? 9 A I did not specifically do that. But, as I 10 mentioned earlier, I think the -- the results and the 11 feedback that's being received from physicians is a 12 strong testimony as far as how well this product is 13 working. 14 Q In the next sentence, you mention 15 Penumbra's DVT and PE thrombectomy devices, and you 16 opine that those devices were adapted from its 17 thrombectomy device designed for removing clots from 18 small neurovasculatures. 19 Do you see where I'm at? 20 A Are you still on 205? 21 Q Yes. Or 206. We're in 206. 22 A Okay. Yes, I do see that. 23 Q Okay. And what is your basis for your 24 opinion that Penumbra's devices were adapted from its 25 thrombectomy devices for small neurovasculature	Page 76 1 something you have assumed based on your observation 2 of the devices themselves? 3 A Yes. This is my opinion. 4 Q Okay. You also mentioned that the Inari 5 [sic] device uses computer-actuated suction, which 6 Inari's products do not. 7 Is that a correct statement? 8 MR. KEESE: Vague. Misstates the document. 9 THE WITNESS: So please reask the question. 10 BY MR. STOWELL: 11 Q Sure. 12 You also mention here that Penumbra's 13 devices use computer-actuated suction, which Inari's 14 products do not; is that correct? 15 A I do say that here. 16 Q Yeah. And what do you mean by 17 "computer-actuated suction"? 18 A We earlier were talking about a fluid 19 control valve to be able to turn the vacuum on and 20 off to the catheter. They are utilizing a computer 21 to actuate valves to turn the vacuum on and off. 22 Q And are you aware of doctors that prefer 23 computer-actuated suction to Inari's syringe-based 24 system? 25 A I haven't spoken to physicians that have

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1 said that, but it doesn't surprise me. It's --
2 it's -- it's kind of like the Ford and Chevy analogy.
3 Right? You're always going to find some people that
4 like one product better than another product.
5 Q Do you have an opinion on whether Inari's
6 FlowTrievers system is superior to Penumbra's Indigo
7 Lightning system?
8 A I don't have first -- firsthand knowledge.
9 That being when I say "knowledge," I don't have the
10 hands-on experience of that.
11 What I do know is that the Inari devices
12 and how they're designed are capable of doing things
13 that the penumbra device is not capable of doing.
14 And we were talking earlier about some of
15 the mechanical interventions, to be able to go out
16 there and interact with the clot mechanically and be
17 able to draw it in, to be able to do this -- this
18 high-volume whoosh technique, to be able to have
19 large-diameter catheters that are able to capture
20 very large pieces of a clot and put high forces on
21 those clots.
22 We talked about the clot that's in DVT and
23 PE and how it's different than a clot that's in
24 coronary applications and neuro applications as far
25 as the age of it and the fibrous nature of it. You

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1 need those larger diameters to be able to pull that
2 in.
3 MR. KEESE: And I just want to --
4 (Reporter clarification.)
5 MR. KEESE: Yeah. Scope. I apologize.
6 BY MR. STOWELL:
7 Q And, as you state here, Inari now has a
8 large-diameter -- or sorry. Strike that.
9 As you state here, Penumbra now has a
10 large-diameter catheter that is a 16 French sheath
11 for the Lightning Flash system; correct?
12 MR. KEESE: Objection. Document speaks for
13 itself. Misstates the document.
14 THE WITNESS: The -- Inari does have a 16
15 French available now. They're sheathed. And I'm
16 trying to recall exactly where that sheath is used
17 within that system.
18 BY MR. STOWELL:
19 Q Yeah. So I believe you said Inari does
20 have a 16 French sheath.
21 I'm asking about Penumbra. Penumbra also
22 has a 16 French sheath?
23 A I'm sorry. I misspoke. I meant to say
24 Penumbra has a 16 French sheath, and I'm not sure
25 exactly where that's used within their system as far

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1 as just off the top of my head, but I can quickly
2 learn if I took a look at their product.
3 Q You had talked about the things that
4 Inari's system was capable of doing that Penumbra
5 system is not capable of doing.
6 Are there things that Penumbra's system is
7 capable of doing that Inari's system is not capable
8 of doing?
9 MR. KEESE: Scope.
10 THE WITNESS: Well, we just spoke about the
11 fact that they have a computer-actuated system. The
12 Inari system is not computer-actuated.
13 What the benefits would be clinically, a
14 little bit unknown. So as far as the -- whether the
15 Penumbra system has any advantages over an Inari
16 system is unclear to me. I do know, though, that the
17 Inari system has features that definitely
18 differentiate it from the Penumbra system and allow
19 it to treat PE and DVT very effectively.
20 BY MR. STOWELL:
21 Q Are you aware that over the last several
22 years, Penumbra has been taking market share from
23 Inari?
24 MR. KEESE: Scope. Vague.
25 THE WITNESS: I -- I have not been involved

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1 with the market side of this product.
2 BY MR. STOWELL:
3 Q Do you have any opinions on why Penumbra
4 may be taking market share from Inari?
5 MR. KEESE: Objection. Scope. Vague.
6 THE WITNESS: I can give you a very
7 high-level kind of potential as to, you know, whether
8 it's factual or not; but many times in, whether it
9 would be the medical device industry or other
10 industries, sales are driven more by your sales force
11 than the product.
12 Penumbra has a very, very good sales force,
13 very large sales force. That might be the reason why
14 they're able to -- to grow market share. It could be
15 pricing. Hospitals right now are very driven by
16 pricing.
17 So, yeah, it's hard to speculate, but those
18 could be potential reasons.
19 BY MR. STOWELL:
20 Q And just so I have a clear record, do you
21 have any opinion, as you sit here today, on whether
22 the Inari FlowTrievers is superior to Penumbra's
23 Indigo Lightning system?
24 A I --
25 MR. KEESE: Asked and answered.

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1 THE WITNESS: I -- as I said, I haven't sat
2 down and used both systems, but what I can tell you
3 is what features the Inari system has and what
4 they've designed into their system for treating PE
5 and DVT that become -- as a system, when you put them
6 all together, make that device work very, very well
7 for treating DVT and PE.
8 We've talked about some of them, as far as
9 the large diameters. We talked about the -- the
10 hemostasis valves, the telescoping catheters, the --
11 this whoosh technique. Those are things that the
12 Inari system does not have.
13 BY MR. STOWELL:
14 Q Do you believe that the -- that the
15 Penumbra's Indigo Lightning system --
16 A Did I say the Inari system? No. I'm
17 sorry. I'm sorry. The Penumbra system does not
18 have.
19 Q Okay. Yeah. Okay.
20 Do you believe that the Penumbra Indigo
21 Lightning system works very well for treating DVT?
22 MR. KEESE: Objection. Scope.
23 THE WITNESS: Reask the question, please.
24 BY MR. STOWELL:
25 Q Yeah.

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1 Do you believe that the Penumbra Indigo
2 Lightning system works very well for treating DVT?
3 MR. KEESE: Scope.
4 THE WITNESS: Again, I have not used it,
5 but when I look at the design of it, I believe that
6 it would not work as well as the Inari system works
7 for DVT.
8 Inari typically recommends the use of the
9 ClotTrievers. The ClotTrievers, both through use of
10 aspiration and the use of their ClotTrievers nitinol
11 device and their bag, is able to capture the very
12 large thrombus that forms in DVT.
13 BY MR. STOWELL:
14 Q And do you --
15 MR. STOWELL: Oh, we'll have to take a
16 break to change the tape. I'm sorry.
17 THE WITNESS: Okay.
18 THE VIDEOGRAPHER: We're going off the
19 record. That will be the end of Media 1 in the video
20 deposition of Brian Brown. The time is 10:17 a.m.
21 (Recess taken from 10:17 a.m. to
22 10:24 a.m.)
23 THE VIDEOGRAPHER: We are back on the
24 record. This is the continuation of the video
25 deposition of Brian Brown, the beginning of Media 2.

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1 And the time is 10:25 a.m.
2 THE WITNESS: Josh, before we start, I just
3 wanted to bring your attention to a typo that I saw
4 as we were reviewing --
5 BY MR. STOWELL:
6 Q Okay.
7 A -- this document. Paragraph 195.
8 Q Okay. I'm there.
9 A Okay. It refers to the fact that I
10 evaluated the '910 patent and the '921 patent. And
11 then a little further down, it talks about the -- my
12 opinions at this time of Claim 1 of the '921 and
13 Claims 1 and 10 of the '910 patent.
14 Those have been flip-flopped. So it would
15 be -- actually be Claims 1 and 10 of the '921 and
16 Claim 1 of the '910.
17 Q Got it. Thank you for the correction.
18 Okay. When we left, you had -- we had --
19 we were talking about the ClotTrievers, and you had
20 mentioned that the ClotTrievers has a nitinol device
21 and a bag to capture large thrombus.
22 Is it your view that the nitinol device and
23 the bag are an important part of the ClotTrievers for
24 treating DVT?
25 A Yes. It is one of many components that

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1 make that product work well. And as you ask, is it
2 an important part? Yeah, there's many important
3 parts of it. But, yes, it is one of the important
4 parts.
5 Q Okay. Do you believe that Penumbra's
6 Indigo Lightning system works very well for treating
7 PE?
8 MR. KEESE: Objection. Scope.
9 THE WITNESS: They -- they have regulatory
10 approval for the treatment of PE, and so based on the
11 fact that they have approval, one of the requirements
12 FDA has is that you're able to demonstrate that it's
13 safe and effective. And so I can sit here and tell
14 you that it's safe and effective.
15 I cannot tell you if it's necessarily
16 better or worse than the Inari device, but I can tell
17 you that the features that the Inari device has
18 definitely makes it work very well for the treatment
19 of PE.
20 BY MR. STOWELL:
21 Q I'm going to move to paragraph 211 of your
22 expert declaration. This spans pages 95 to 96.
23 A Okay. I'm there.
24 Q Okay. And in this portion of your expert
25 report, you are discussing a nonfinal rejection that

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1 Inari received from the patent office; correct?
 2 A That is correct.
 3 Q And did you review that nonfinal rejection
 4 that's being referred to in paragraph 211?
 5 A Yes. I reviewed the portion of that
 6 rejection that was related to what's being discussed
 7 here.
 8 Q But did you -- did you review the entire
 9 rejection and all the examiner's statements?
 10 A I did not review every single statement. I
 11 reviewed the ones associated with what is being
 12 discussed here.
 13 Q So paragraph 211, generally speaking, looks
 14 to refer to the Garrison I reference; correct?
 15 A Correct.
 16 Q Okay. And so did you review all the
 17 portions of the nonfinal rejection that dealt with
 18 the Garrison I reference?
 19 A I believe I looked at both the Garrison --
 20 Garrison I and the Garrison III here.
 21 Q But did you review the portions of the
 22 nonfinal rejection that related to Garrison I?
 23 A I did, yes.
 24 Q And in paragraph 211 on page 96, you quote
 25 a portion of the nonfinal rejection that says,

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1 "Garrison fails to teach a second catheter
 2 advanceable through the first. The second catheter
 3 (2045) does not advance through first catheter
 4 (2025), as shown in Figure 33."
 5 Do you see that?
 6 A I do.
 7 Q Okay. And did you carefully review that
 8 statement in the nonfinal rejection?
 9 A I did.
 10 Q Okay. And did you review the Garrison
 11 reference to determine whether that statement made by
 12 the examiner was accurate?
 13 A I did.
 14 Q Okay. And what did you determine?
 15 A That it is accurate.
 16 Q Okay. And, in fact, in paragraph 212, you
 17 state that you disagree with the examiner that
 18 Garrison I fails to disclose a telescoping
 19 configuration; correct?
 20 MR. KEESE: Vague.
 21 THE WITNESS: I do say that, yes.
 22 BY MR. STOWELL:
 23 Q Okay. And is that still your opinion
 24 today?
 25 A Yes.

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1 Q And when you were reviewing the examiner's
 2 statement in paragraph 211, did you carefully review
 3 the item numbers to make sure the examiner was
 4 referring to all the correct components?
 5 A I was reviewing the components as he has
 6 them listed here.
 7 Q Okay. And did you see any mistakes that
 8 were made by the examiner?
 9 MR. KEESE: Vague. Legal conclusion.
 10 THE WITNESS: No. I think he was -- I
 11 mean, when he referred to, for instance, in
 12 parentheses 2025, 2025 was on the Figure 33, and so I
 13 don't see a mistake there.
 14 BY MR. STOWELL:
 15 Q Okay. And -- and you reviewed the document
 16 to determine that 2045 was a second catheter?
 17 A 2045, yes, is a component of the second
 18 catheter.
 19 Q Well, you said "a component of the second
 20 catheter."
 21 What do you mean, "a component of the
 22 second catheter"?
 23 A A catheter is made up of many, many parts.
 24 And so when you say "of the second catheter," it
 25 would be, yes, one of the components of the -- of

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1 that catheter.
 2 Q Okay. But here, it says, "The second
 3 catheter (2045)."
 4 Is it your understanding that 2045 doesn't
 5 actually refer to what's called the second catheter
 6 in the -- in the patent?
 7 A It is part of the second catheter.
 8 Q Okay. And did you review Figure 33 of the
 9 Garrison I reference as well?
 10 A I have.
 11 Q Okay. Did you review it in detail?
 12 A I believe I reviewed it enough to be
 13 familiar with it.
 14 Q And did you review the description in
 15 the -- written description that goes with
 16 paragraph -- or goes with Figure 33?
 17 A I believe I did.
 18 Q Okay. In paragraph 212, you state that you
 19 agree with the examiner that Garrison I fails to
 20 disclose a telescoping configuration and, indeed,
 21 teaches against doing so by teaching a second,
 22 separate catheter that is not advanced through the
 23 first catheter.
 24 Do you see where I am?
 25 A I do see that.

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1 Q Okay. And is that still your understanding
2 of Garrison I today?
3 A Yes. As -- as the examiner has defined it
4 up above, that -- that is what I am agreeing with
5 there.
6 Q Okay. And is that determination that
7 Garrison does not teach a telescoping configuration,
8 was that important to your conclusion that Garrison
9 does not render Claim 1 of the '910 patent invalid?
10 MR. KEESE: Objection. Document speaks for
11 itself.
12 THE WITNESS: That was part of what drew me
13 to that conclusion, yes.
14 BY MR. STOWELL:
15 Q And you actually go a little bit further,
16 and you say that Garrison I actually teaches against
17 the telescoping configuration.
18 Is that still your opinion today?
19 A Where are you reading now?
20 Q Yeah. I'm in paragraph 212, first
21 sentence.
22 A Okay. Well, I would say that it teaches
23 against it by the fact that it doesn't teach to do
24 it.
25 Q Okay. But is there a -- "teaching against"

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1 is kind of a term of -- of art in patent law.
2 Is there a -- do you believe there's an
3 express teaching in Garrison I that says: Do not
4 telescope a first catheter through -- or a second
5 catheter through a first catheter?
6 A Not that I recall.
7 Q I'm going to hand you what's been
8 previously marked in this case as [Exhibit 4](#). This is
9 an office action from the patent office in
10 Application No. 18/342,553. The notification date on
11 this document is November 6, 2023.
12 MR. STOWELL: Here you go, Dan.
13 MR. KEESE: Thank you.
14 BY MR. STOWELL:
15 Q Mr. Brown, are you familiar with this
16 document, [Exhibit 4](#)?
17 A As mentioned earlier, I've seen portions of
18 this.
19 Q Okay. And in paragraph 211, when you refer
20 to the nonfinal rejection dated November 6, 2023, are
21 you referring to [Exhibit 4](#)?
22 A I'm looking for that date on this document,
23 if you're aware of where it is.
24 Q Sure.
25 If you go to kind of the first page,

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1 there's a notification date on the right-hand side
2 that says November 6, 2023.
3 A Based on the -- that date, it does appear
4 to be the same document.
5 Q And when you were drafting your
6 declaration, do you recall seeing [Exhibit 4](#) and
7 reviewing it?
8 A As I mentioned, I reviewed portions of it.
9 Q Okay. This document has some stamping at
10 the top, and it says -- for example, on the first
11 page, it says page 1 of 9.
12 Do you have that on your copy? Yeah.
13 Okay.
14 So what I'll do, when I refer to pages in
15 this document, because it's not sequentially
16 paginated, I'll refer to the page number on the top.
17 A Very good.
18 Q Okay. If you could turn to page 4 of 9.
19 A I am there.
20 Q Okay. And there is a bullet No. 4, and
21 then it begins "Claim 18."
22 Do you see where I'm at?
23 A I do.
24 Q Okay. And this is where the examiner is
25 explaining the examiner's review of Claim 18. And

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1 the examiner says, "Regarding Claim 18, Garrison
2 teaches a clot treatment system."
3 Do you see that?
4 A I do.
5 Q Okay. And do you agree with the examiner
6 that Garrison teaches a clot treatment system?
7 A I do. That is what the Garrison patent is
8 teaching.
9 Q Okay. And the examiner also concluded that
10 Garrison teaches a first clot aspiration assembly.
11 Do you agree that Garrison teaches a first
12 clot aspiration assembly?
13 A I don't believe I have Garrison in front of
14 me, do I?
15 Q I don't think you do among your stuff
16 there. Do you need Garrison?
17 A That would be helpful.
18 Q Okay. Okay, Mr. Brown. I'm going to
19 provide to you what has been previously marked in
20 this case as [Exhibit 29](#). It is U.S. Publication
21 No. U.S. 2015/0173782, and this is a patent to
22 Mr. Garrison.
23 MR. KEESE: I just want to object to the
24 extent that it mischaracterizes the document.
25 MR. STOWELL: What part of it do you think

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1 is mischaracterized?
2 MR. KEESE: It's not an issued patent;
3 right?
4 MR. STOWELL: Yeah. It says U.S.
5 Application Number.
6 MR. KEESE: Okay. I just want to be clear.
7 MR. STOWELL: Yeah. Let me -- I'll be
8 clear on the record.
9 [Exhibit 29](#) is U.S. Publication No. U.S.
10 2015/0173782 A1.
11 BY MR. STOWELL:
12 Q Okay. Mr. Brown, you now have Garrison in
13 front of you.
14 Do you agree with the examiner's conclusion
15 that Garrison teaches a first clot aspiration
16 assembly?
17 A I do not.
18 Q Okay. And what do you think the examiner
19 got wrong?
20 A Well, he's using a different term for that
21 assembly than what Garrison does.
22 Q Sure. The terms may be different across
23 the patents, but -- but do you believe that the
24 examiner was correct when the -- when the examiner
25 concluded that Garrison teaches a first clot

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1 aspiration assembly?
2 A I do not recall whether Garrison teaches
3 that to be a first aspiration assembly.
4 Q Did you review this portion of [Exhibit 4](#) of
5 the nonfinal rejection when you were rendering the
6 opinions in your declaration?
7 A I did. I have to say, though, that I -- as
8 I'm looking at it right now, I don't recall whether
9 that is what Garrison refers to as that assembly, a
10 first clot aspiration assembly.
11 Q And you're aware that the prior art can use
12 different words to describe the device, and it can
13 still meet the limitations of the claim; right?
14 MR. KEESE: Objection. Calls for a legal
15 conclusion.
16 THE WITNESS: I don't know that officially,
17 but it sounds reasonable.
18 BY MR. STOWELL:
19 Q Okay. And so as we sit here, if I
20 understand your testimony, you're -- you're not sure
21 if you agree with the examiner's conclusion that
22 Garrison teaches a first clot aspiration assembly?
23 A And, like I said, it's just based on -- I
24 know that Garrison uses different terminology, so
25 that's my just initial reaction as -- as I'm reading

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1 this.
2 Q Okay. Do you believe that the examiner was
3 mistaken in concluding that Garrison teaches a first
4 clot aspiration assembly?
5 A I would have to go back and look to see how
6 Garrison describes it.
7 Q When you were rendering your expert
8 opinion, did you assess whether Garrison discloses a
9 first clot aspiration assembly?
10 A What I recall from Garrison is the -- what
11 is being referred to as a first clot aspiration
12 assembly was referred to by Garrison as access
13 device.
14 Q So you believe that what the examiner is
15 identifying as a first clot aspiration assembly, you
16 believe that Garrison refers to that as an access
17 device?
18 A Correct. So they are referring to the
19 first aspiration assembly connected to line 2025, so
20 the aspiration assembly, I'm assuming, is device
21 2010.
22 Q Okay. And what -- and what is your
23 understanding of what device 2010 is?
24 A A access device.
25 Q Okay. And is it your understanding that

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1 the access device is not a first clot aspiration
2 assembly?
3 A As I said, I would have to look again at
4 Garrison to see if he describes it that way. My
5 recollection is that he describes it as an access
6 device.
7 Q Okay. But do you believe it meets the
8 limitation of the claim that the examiner was
9 reviewing requiring a first clot aspiration assembly?
10 MR. KEESE: Calls for a legal conclusion.
11 THE WITNESS: Again, not without going back
12 and reading Garrison.
13 BY MR. STOWELL:
14 Q Okay. The examiner also concluded that
15 Garrison teaches a first catheter, a first pressure
16 source.
17 Do you agree with those conclusions by the
18 examiner?
19 A For the most part, yes.
20 Q Okay. The examiner also concluded on the
21 next page that Garrison discloses a fluid control
22 device which may be a stopcock.
23 Do you agree with that conclusion?
24 A As shown in Figure 34, I do agree with
25 that.

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1 Q The examiner also concluded that Garrison
2 discloses "Wherein the fluid control device may be a
3 stopcock valve or a flow controller with a simple
4 actuation which selects the open or closed
5 configuration."
6 Do you agree with that description of
7 Garrison?
8 A Yes.
9 Q Okay. The examiner also concluded that
10 Garrison discloses wherein the fluid control device
11 "is moveable between (a) an open position in which
12 the first pressure source is fluidly connected to the
13 first catheter and (b) a closed position in which the
14 first pressure source is fluidly disconnected from
15 the first catheter."
16 Do you agree with that portion of the
17 examiner's conclusion?
18 A Yes.
19 Q The examiner also concluded that Garrison
20 discloses "Wherein the first pressure source is
21 configured to generate vacuum pressure while the
22 fluid control device is in the closed position."
23 Do you agree with that portion of the
24 examiner's conclusion?
25 MR. KEESE: Vague.

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1 THE WITNESS: Yeah. For the most part,
2 I -- I do. It's -- it's kind of odd here when it
3 talks about a pressure source. I mean, earlier, I
4 think they defined the pressure source, at least
5 Garrison defined it or the examiner defined it, as
6 31 -- I guess 3125.
7 BY MR. STOWELL:
8 Q And what do you think is odd about that?
9 A I guess I'm just looking at it from the
10 image there of a roller pump. As I look at it more,
11 I guess I can see where it could generate the vacuum
12 that's being discussed here.
13 Q The examiner also concluded that Garrison
14 discloses "Wherein, upon movement of the fluid
15 control device from the open position to the closed
16 position, the vacuum pressure is applied to the first
17 catheter to generate suction at a distal portion of
18 the first catheter."
19 Do you agree with that portion of the
20 examiner's conclusion?
21 A It seems to be written backwards. Where it
22 says, wherein, upon movement of the fluid control
23 device from an open position to the closed position,
24 the vacuum pressure is applied to the first catheter,
25 my initial reaction is it would be just the opposite

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1 as -- of what's written there.
2 Q I would agree with you. I think the
3 examiner mixed up open and closed position.
4 Is that your interpretation, as a person of
5 skill in the art, reading this statement?
6 A It is.
7 Q Do you agree, then, that if we flip the
8 words there, that Garrison discloses, wherein, upon
9 movement of the fluid control device from the closed
10 position to the open position, the vacuum pressure is
11 applied to the first catheter to generate suction at
12 a distal portion of the first catheter?
13 A Yes.
14 Q The examiner also concluded that Garrison
15 discloses a second clot aspiration assembly.
16 Do you agree with that portion of the
17 examiner's conclusion?
18 A I do believe that the second catheter is
19 defined as a aspiration assembly.
20 Q And the examiner concludes that Garrison
21 discloses a second clot aspiration assembly that
22 includes a second catheter and a second pressure
23 source configured to be fluidly coupled to the second
24 catheter.
25 Do you agree with that portion of the

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1 examiner's conclusion?
2 MR. KEESE: Vague.
3 THE WITNESS: For the most part, yes.
4 BY MR. STOWELL:
5 Q When you say "for the most part," is there
6 a portion of it that you don't agree with?
7 A I think just the fact that it is a little
8 bit vague is making it a little bit questionable, but
9 I would say as I -- as I look at this and I
10 understand this, I would say that it is accurate.
11 Q And the examiner also concluded that
12 Garrison discloses "a second pressure source
13 configured to be fluidly coupled to the second
14 catheter and to generate suction at a distal portion
15 of the second catheter."
16 Do you agree with that portion of the
17 examiner's conclusion?
18 A Yes.
19 Q Now, if we move to paragraph 6, the
20 examiner reiterates that Garrison teaches all of the
21 limitations we just discussed, and Garrison further
22 teaches a second clot aspiration assembly, including
23 a second catheter and a second pressure source
24 configured to be fluidly coupled to the second
25 catheter and to generate suction at a distal portion

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1 of the second catheter.
2 Do you agree with that conclusion?
3 A Yes.
4 Q And then I think we get to the portion that
5 you quoted in your expert report where the examiner
6 concludes that "Garrison fails to teach a second
7 catheter advanceable through the first catheter."
8 Do you agree with that portion of the
9 examiner's conclusion?
10 A As he had written it there, yes, I do agree
11 with it.
12 Q Okay. And then the examiner says, "The
13 second catheter (2045) does not advance through the
14 first catheter (2025), as shown in Figure 33."
15 Do you agree with that portion of the
16 examiner's conclusion?
17 A Yes, as he has written there.
18 Q Okay. Now, if we go to Figure 33 of
19 Garrison.
20 Do you have that in front of you?
21 A I do.
22 Q Okay. Item 2045 is not the second
23 catheter, is it?
24 MR. KEESE: Objection. Calls for a legal
25 conclusion.

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1 THE WITNESS: 2045 is part of the catheter
2 assembly.
3 BY MR. STOWELL:
4 Q Well, in Garrison, 2045 is described as
5 being a flow line; correct?
6 A I would have to go look, but --
7 Q Sure. Why don't we -- you can look at
8 paragraph 0130 and 0131 of Garrison which describe
9 Figures 32 and 33 as well as some related figures.
10 A Yes. Garrison describes 2045 to be a flow
11 line of the catheter 2030.
12 Q Well, that's not exactly what it says.
13 Right? It says, "Any or all of the arterial access
14 device 2010 and the catheter 2030 may be connected to
15 sources of passive or active aspiration via flow
16 lines 2025 or 2045."
17 Correct?
18 A It does say that. And further down, it
19 says, "In Figure 33, the flow line 2045 of catheter
20 2030."
21 Q Okay. And so in Garrison, element 2045 is
22 not identified as being the catheter; correct?
23 A It's of the catheter 2030.
24 Q Right. So Item 2030 is defined as being
25 the catheter in Garrison; correct?

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1 A Yes. And, as I mentioned, 2045 is a
2 component of the catheter.
3 Q Okay. And Item 2025 is not identified in
4 Garrison as being a catheter or a first catheter;
5 correct?
6 A It is defined as the flow line of catheter
7 2010.
8 Q Okay. And do we agree that the arterial
9 access device 2010 is a catheter?
10 MR. KEESE: Vague. Legal conclusion.
11 THE WITNESS: Yes. I would say it's a
12 catheter.
13 BY MR. STOWELL:
14 Q And based on your experience, is catheter
15 2030 telescoping through catheter 2010 in Figure 33?
16 A It is not based on how I had defined it to
17 you earlier today.
18 Q And why isn't catheter 2030 telescoping
19 through catheter 2010?
20 A As I had defined telescoping to you earlier
21 today, it is to take a catheter of the same type,
22 as -- the two catheters must be of the same type, and
23 the intentions of the telescope is to allow
24 advancement of the first catheter to a more distal
25 location or also allow other modes of treatment of

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1 the first catheter.
2 And so if we take a look at what's
3 happening here, this is just what I refer to as a
4 conventional interventional procedure. You have an
5 access catheter, and you have a treatment catheter
6 passing through an access catheter. But that is not
7 defined as telescoping.
8 Q When you say catheter of the same type,
9 what are you referring to?
10 A So two guide catheters, two aspiration
11 catheters, two -- I'm trying to think of another
12 example, but those are the two that come to mind.
13 Q And where does that understanding of
14 telescoping come from?
15 A That was the initial use of the term
16 "telescoping" back late '90s, early 2000. The --
17 just passing a catheter through another catheter is
18 an interventional procedure. That's normal. That's
19 done every single day.
20 Telescoping is taking a given catheter of a
21 given design and then a second catheter of a -- of
22 the similar type of design but of smaller profile
23 that is able to go through the first catheter, and
24 that is telescoping.
25 Q Now, the Garrison reference discloses that

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1 aspiration can be done through item 2010.
2 Does that change your view on whether these
3 catheters are the same type?
4 A It does, because that's an access device as
5 defined by Garrison. And you can aspirate through an
6 access device. You can -- you can aspirate through a
7 guide catheter even though you may put an aspiration
8 catheter through a guide catheter. But that's not --
9 again, that's not telescoping.
10 Q So you mentioned you're using a definition
11 of telescoping that existed in the 1990s.
12 Is that definition of telescoping used in
13 the '910 patent?
14 MR. KEESE: Calls for a legal conclusion.
15 THE WITNESS: The '910 patent describes two
16 catheters of the same type that are telescoping
17 relative to each other in order to improve the
18 performance of the procedure.
19 So that first catheter is the
20 larger-diameter catheter that's on the outside. The
21 second catheter is the smaller-diameter catheter. In
22 the case of Inari, the smaller-diameter catheter is,
23 I believe, typically their 16 French. The larger
24 diameter catheter is their 20 or their 24 French.
25 You're able to start the procedure with the

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1 20 or the 24 French catheter, and if you need to do
2 more -- if you run into challenges with that first
3 catheter -- it could be corking, it could be
4 difficulty navigating, it could be difficulty
5 reaching the location that you want to get to --
6 you're allowed to then telescope the second catheter
7 through the first catheter to address those
8 challenges.
9 BY MR. STOWELL:
10 Q Is it your view that Claim 1 of the '910
11 patent requires the first and second catheter to be
12 of the same type?
13 MR. KEESE: Objection. Calls for a legal
14 conclusion.
15 THE WITNESS: I have not formed an opinion
16 on that. I just know that it talks about there being
17 a first catheter and a second catheter that are
18 interacting with each other to do the procedure.
19 BY MR. STOWELL:
20 Q Is there any requirement in Claim 1 as far
21 as your opinion goes that the catheters must be of
22 the same type? And we're talking about Claim 1 of
23 the '910 patent.
24 A So when I look at Claim 1 of the '910
25 patent, it is referring to a first aspiration

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1 assembly, and it's talking about a second clot
2 aspiration assembly. And that -- those two, then,
3 are telescoping relative to each other. So that is
4 what the claim is describing, two clot assembly
5 catheters telescoping.
6 Q But as we discussed earlier, Claim 1
7 doesn't use the term "telescoping," does it?
8 A It doesn't use the term "telescoping." It
9 uses the term of the second catheter passing through
10 the first catheter, which is, as we've been talking
11 about, telescoping.
12 Q So in Garrison Figure 33, does catheter
13 2030 -- is it advanceable through catheter 2010?
14 A It is advanceable through -- the two
15 catheters are advanceable through each other there,
16 as you've described. The difference, though, is that
17 they're not of the same catheter to treat the same
18 condition. They -- they are there for two completely
19 different reasons.
20 Q Well, that's not exactly true; right?
21 Because they're both there to aspirate the clot;
22 correct?
23 A They both --
24 MR. KEESE: Argumentative.
25 THE WITNESS: They both can -- are capable

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1 of aspirating, but the first device is an access
2 device.
3 BY MR. STOWELL:
4 Q Sorry. What were you saying?
5 So what is your understanding of the
6 difference between an access device and catheter
7 2030?
8 A I'm looking in the patent because I just
9 want to get the term that is being used for catheter
10 2030.
11 Q I think if you look at paragraph 130, it'll
12 have it. 131 will also have it, I think.
13 A Yes. Garrison just refers to it as -- to
14 2030 as the catheter.
15 Q Okay.
16 A And, to me, that is referring to the
17 treatment catheter.
18 Q And so, in your opinion, why does Garrison
19 disclose using aspiration for catheter 2010 if it's
20 not a treatment catheter?
21 A Aspiration can be done with the access
22 device as it's shown here. So if there is any
23 residual clot in the system, in the anatomy, it can
24 be aspirated out. But it's not being used in a
25 telescoping fashion as telescoping is defined.

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1 Q But we agree telescoping is not in Claim 1
2 of the '910 patent; correct?
3 MR. KEESE: Objection.
4 MS. TESSAR: Objection.
5 MR. KEESE: Misstates prior testimony.
6 MR. STOWELL: Amanda, you don't get to
7 object.
8 MS. TESSAR: I know. Apologies. Just
9 couldn't resist on that one.
10 THE WITNESS: As I said, Claim 1 speaks of
11 the first catheter and a second catheter, the second
12 catheter advanceable through the first catheter to
13 perform as a telescoping catheter for the treatment
14 of aspirating clot.
15 BY MR. STOWELL:
16 Q Right. And so Garrison discloses a second
17 catheter 2030, that it is advanceable through a first
18 catheter 2010, and the catheter 2030 is capable of
19 aspirating clot; correct?
20 MR. KEESE: Objection. Argumentative.
21 Asked and answered.
22 THE WITNESS: When you phrase it that way,
23 you're accurate, but you're not phrasing it the same
24 way I am phrasing it from the standpoint that that
25 access device was not intended to be treating the

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1 clot. The access device is doing nothing more than
2 providing a runway for the catheter that is treating
3 the clot.
4 BY MR. STOWELL:
5 Q In Claim 1 of the '910 patent, is it your
6 testimony or opinion that the first catheter must
7 aspirate the clot?
8 MR. KEESE: Document speaks for itself.
9 Calls for a legal conclusion.
10 THE WITNESS: The -- sorry. I've got to
11 find it.
12 Claim 1 is referring to a first clot
13 aspiration assembly. So the first clot -- so I'm
14 sorry. The first catheter, yes, is capable of
15 aspirating a clot --
16 BY MR. STOWELL:
17 Q And --
18 A -- at the treatment site.
19 Q Well, where does it say at the treatment
20 site for -- for the first catheter?
21 A Well, but that is what its purpose is.
22 That is -- that is what is being taught in this
23 patent.
24 Q So you are -- are reading into Claim 1 that
25 the first catheter must aspirate clot at the

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1 treatment site?
2 MR. KEESE: Misstates the prior testimony.
3 The document speaks for itself.
4 THE WITNESS: It must be capable of doing
5 that. That is kind of what is being taught here.
6 This is an aspiration device.
7 BY MR. STOWELL:
8 Q If Garrison teaches that catheter 2010 can
9 aspirate clot at the treatment site, would you agree,
10 then, that Garrison discloses the limitations of
11 Claim 1 of the '910 patent?
12 A I guess if you could say if he --
13 MR. KEESE: Objection.
14 THE WITNESS: -- disclosed that. I don't
15 believe he did disclose that, if he had disclosed
16 that that was a treatment catheter.
17 MR. KEESE: I apologize. I didn't get the
18 actual objection on the -- but it was vague.
19 BY MR. STOWELL:
20 Q So in terms of when you're referring to the
21 same type of catheter, what criteria do you look at
22 to identify when two catheters are the same type of
23 catheter?
24 A Whether they are intended to do the same
25 purpose during a procedure. I gave the example of

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1 telescoping guide catheters. They're both intended
2 to -- to guide other devices. The example of two
3 aspiration catheters, they're both designed to be
4 aspirating clot at the treatment site.
5 Q And so with respect to Garrison Figure 33,
6 why do you believe that catheter 2010 is not the same
7 type as catheter 2030?
8 MR. KEESE: I'm going to object that it
9 misstates the document.
10 THE WITNESS: I have too much stuff in
11 front of me right now.
12 BY MR. STOWELL:
13 Q [Exhibit 29](#).
14 A As you can see in Figure 33, catheter 2010
15 is not positioned anywhere near the treatment site.
16 It is an access catheter. In this case, they're
17 referring to the internal carotid artery, the ICA.
18 The treatment site is up where they're showing it to
19 be MCA, and that's where catheter 2030 is.
20 Q And so is it fair to say that you're saying
21 that these catheters aren't the same type because
22 catheter 2010 doesn't extend close enough to the
23 treatment site?
24 MR. KEESE: Objection. Misstates prior
25 testimony.

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1 THE WITNESS: That is not what I'm saying.
2 BY MR. STOWELL:
3 Q Okay.
4 A What I'm saying is these are not the same
5 catheter. And proof of the fact that they're not the
6 same catheter is, one, Garrison doesn't call them the
7 same name; and, two, they don't even reach -- what is
8 referred to as the first catheter doesn't even reach
9 the treatment site.
10 Q In the FlowTrieve device, a 16 French
11 catheter can be extended through a 24 French
12 catheter; right?
13 A Yes.
14 Q And the 16 French catheter extends further
15 into the patient than the 24 French catheter;
16 correct?
17 A Correct.
18 Q The 16 French catheter can reach all the
19 way to the treatment site, and the 24 French catheter
20 may not reach the treatment site; is that fair?
21 A And so -- yes. I'm going to agree with
22 you, and I'm going to just clarify something.
23 So when I say it doesn't reach the
24 treatment site, what I'm referring to is not
25 necessarily the exact location, but I'm talking about

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1 more the anatomy, trying to get to the location of
2 treatment.
3 Now, one of the purposes of telescoping is
4 if the first catheter can't -- can't get there. Now,
5 it may be that it's a little bit too short or it
6 might be that it's too big in diameter or it could be
7 that it's not flexible enough. And so then you do
8 need to telescope the second catheter.
9 But the first catheter is still a treatment
10 catheter. It's capable of treating and -- the
11 indication that you're trying to treat. It just so
12 happens that it either is incapable of doing the
13 things I just said or sometimes it gets corked, and
14 then you have to telescope the second catheter
15 through the first catheter to help get it uncorked.
16 Q Is it your position that the FlowTrieve 16
17 French catheter and 24 French catheter are the same
18 types of catheter?
19 A Yes.
20 Q Is it your position that in Figure 33 of
21 Garrison, catheter 2010 could not treat a blood clot
22 in the ICA?
23 A There is that potential because it does
24 reach there, but this -- this is not defined as a
25 treatment catheter. It is defined as an access

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1 device.
2 Q But you're aware that the patent -- because
3 you've reviewed it carefully, that Garrison explains
4 that aspiration can be applied to catheter 2010 to
5 capture blood clot; right?
6 A Correct.
7 Q Okay. I know we're jumping around a lot,
8 but if you could just pull out the '910 patent again
9 real quick and Claim 1.
10 A I am there.
11 Q Okay. You will agree with me that at the
12 very end of the claim, the claim explains that the
13 second catheter -- that the distal portion of the
14 second catheter can aspirate blood and at least a
15 portion of the pulmonary embolism into the second
16 catheter; correct?
17 A That is what is written.
18 Q Okay. And you'll agree with me that there
19 is no such requirement associated with the first
20 catheter.
21 MR. KEESE: Vague.
22 THE WITNESS: It's not written in the same
23 way as what you just read to me, but it does describe
24 the first catheter as generating suction at the
25 distal portion of the first catheter, and it

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1 describes it as an aspiration catheter. So
2 aspirating clot.
3 BY MR. STOWELL:
4 Q But you'll agree with me that Claim 1
5 doesn't specifically require the first catheter to
6 aspirate the pulmonary embolism; correct?
7 A It doesn't require it for the claim.
8 Q I'd like to go back to [Exhibit 4](#), which is
9 the nonfinal rejection from the patent office.
10 A Okay.
11 Q And I'm on page 6 of 9, and I'm in Item 6,
12 bullet point 6, and I'm down towards the bottom where
13 the examiner states that "The second catheter (2045)
14 does not advance through the first catheter (2025),
15 as shown in Figure 33."
16 Do you see that?
17 A I do.
18 Q Okay. And can we agree that 2045 and 2025
19 are flow lines?
20 A As we discussed earlier, yes, they are the
21 flow lines for the first and second catheter.
22 Q Does it strike you as odd that the examiner
23 is referring to the flow lines as catheters?
24 A It would be nice if he had used the
25 terminology that Garrison had used.

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1 Q When you were practicing and working with
2 catheters, would you ever refer to the tubing or the
3 flow line as the catheter itself?
4 A I would refer to it more as a catheter
5 assembly.
6 Q And in Garrison Figure 33, which the
7 examiner was referring to, would you agree with me
8 that it does describe a second catheter that is
9 advanced through the first catheter -- through a
10 first catheter?
11 A I'm sorry. Reask the question.
12 Q Sure.
13 In Garrison Figure 33, would you agree with
14 me that it does show a second catheter advanced
15 through a first catheter?
16 A Yes. It does show a first catheter
17 advanced through a second catheter in what I would
18 refer as a more conventional procedure, where you
19 have a therapeutic catheter being advanced through an
20 access device. That is something that is done for
21 every single procedure that is performed. It is not
22 what we're referring to as telescoping catheters.
23 Q So would you -- I'll take that back.
24 If we could go to paragraph 215 of your
25 declaration, which is [Exhibit 1011](#).

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1 A Okay. I am there.
2 Q Okay. Here, you're talking about a further
3 statement by the examiner, and you are agreeing with
4 the examiner's reasoning, and you state, "The
5 addition of the claim language reciting large
6 catheter sizes for treatment of pulmonary embolisms
7 is another reason why the issued claims, including
8 Claim 1, is not anticipated or obvious in view of
9 Garrison I."
10 Do you see that?
11 A I do.
12 Q And the recitation of large catheter sizes
13 and the recitation of treating pulmonary embolisms,
14 those are reasons why you believe Claim 1 is not
15 anticipated or obvious in view of Garrison I?
16 A Yes.
17 Q Okay. And so is it your view that the
18 treatment of pulmonary embolisms is a requirement of
19 Claim 1 of the '910 patent?
20 MR. KEESE: Document speaks for itself.
21 Legal conclusion.
22 THE WITNESS: Claim 1 does speak of the
23 catheters being positioned to treat pulmonary
24 embolisms.
25 \\\

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1 BY MR. STOWELL:
2 Q And it's your view or your opinion today
3 that -- that the treatment of pulmonary embolism is
4 one of the requirements of Claim 1?
5 MR. KEESE: Misstates prior testimony.
6 Calls for a legal conclusion.
7 THE WITNESS: Yes. I'm not -- I'm not a
8 patent attorney. What I'm telling you is that I see
9 that included here within Claim 1.
10 BY MR. STOWELL:
11 Q And is it your view that a source of
12 distinguishment of Garrison is that Garrison was not
13 a catheter designed to treat pulmonary embolisms?
14 A That is what I am including within my
15 declaration, yes.
16 Q At the end of paragraph 215, you state that
17 large-diameter catheter -- "The large-diameter
18 catheter requires significantly different design
19 choices."
20 What design choices are you referring to?
21 A Making a large-diameter aspiration catheter
22 for treating VTE, which includes both DVT and PE, is
23 not just a simple procedure of taking an existing
24 catheter and just making it larger.
25 So when I talk here about having design

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1 choices, the design choices have to deal with the
2 issues of, okay, as I go larger, it gets very stiff.
3 As -- as I go larger, I have potentials for more
4 blood loss. As I go larger, I have potentially
5 safety issues. As I go larger, I have to manage more
6 fluid. I have to have different types of hemostasis
7 valves to prevent blood loss and to seal around these
8 larger devices. There's a list of very unique design
9 requirements to go to a larger design.
10 Q You mentioned that larger catheters get
11 stiffer as they -- they grow in diameter.
12 A Larger diameter catheters will become
13 stiffer if I simply take and upsize the same design
14 that I used for a small-diameter catheter.
15 As an example, if I took a coronary
16 catheter, if I took a neurovascular catheter of a
17 given diameter, which is typically a small-diameter
18 catheter -- if I took that exact same design, so same
19 materials, same wall thickness, and scaled it up to a
20 larger diameter, it becomes much stiffer.
21 When using engineering equations and
22 formulas, the first one that just jumps out is what's
23 referred to as the area moment of inertia. When you
24 take a circular structure and increase its diameter,
25 the stiffness of it goes up by the power of -- I

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1 can't remember if it's three or four.
 2 So it's not like you just double -- if you
 3 double the diameter, it doesn't double the stiffness.
 4 It goes up, like I said, by a power of three or four.
 5 It becomes very, very stiff. And so you have to
 6 create -- come up with very unique and novel designs
 7 to be able to make a large-diameter catheter perform
 8 the way you need to.
 9 Q And what methods were out there in the
 10 field before 2018 to design a larger catheter so it
 11 wasn't too stiff to reach parts of the vasculature?
 12 A I'm sorry. You said before?
 13 Q Right. Before 2018 --
 14 A Right.
 15 Q -- before the '910 patent, were there
 16 methods out there in the field that you were aware of
 17 to design catheters in a way to decrease their
 18 stiffness?
 19 A Yes. Absolutely.
 20 Q And what were some of those methods that
 21 were available?
 22 A You could choose different materials. You
 23 could choose different wall thicknesses. When I talk
 24 about materials, you can use composite materials.
 25 The -- yeah. It's really up to the engineer to kind

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1 of reach into his toolbox and try to figure out how
 2 they can make a device that's capable of having the
 3 features that you want as you go up in diameter.
 4 But as I was saying earlier, it's not a
 5 simple task. And, as an example, when I say it's not
 6 a simple task, prior to Inari, people were not making
 7 large-diameter catheters -- they were struggling to
 8 make large-diameter catheters perform well and safely
 9 for the treatment of DVT and PE. Inari engineers
 10 came up with some really unique designs.
 11 Q You had mentioned an engineer's toolbox.
 12 Is it customary, or was it customary prior
 13 to 2018, for catheter engineers to regularly
 14 experiment with wall thicknesses, materials,
 15 composites on their catheters to get the desired
 16 stiffness that they want?
 17 MR. KEESE: Objection. Vague.
 18 THE WITNESS: Yes. That's the toolbox that
 19 we're talking about. And so when you talk about were
 20 engineers using the toolbox before 2018, yes,
 21 absolutely.
 22 Now, does that mean that the toolbox, which
 23 includes not only the tools but the know-how, existed
 24 before 2018? Not necessarily because no one had done
 25 it.

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1 BY MR. STOWELL:
 2 Q But what about in other applications? For
 3 example, you talked about transcatheter heart valves,
 4 for example. Some of those catheters are quite
 5 sophisticated and -- and have varying stiffnesses;
 6 correct? And are able to articulate and track very
 7 well; right?
 8 MR. KEESE: Compound.
 9 THE WITNESS: There existed large-diameter
 10 catheters prior to Inari's inventions. The
 11 large-diameter catheters, though, were not used for
 12 the treatment of DVT and PE.
 13 As an example, you talk about structural
 14 heart devices. They are -- have a relatively
 15 straightforward pathway to get from their leg up to
 16 the heart, whereas when you're talking about treating
 17 pulmonary embolisms, very, very challenging pathway.
 18 You have to cross through chambers of the heart. You
 19 have to be -- have to go through multiple heart
 20 valves. You have to be able to go around very
 21 tortuous curves to get into the pulmonary arteries.
 22 BY MR. STOWELL:
 23 Q But that was true with some heart
 24 procedures; right?
 25 For example, the first aortic valve that

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1 was implanted was a retrograde procedure, right,
 2 through the heart, which required a tremendous amount
 3 of articulation of the catheter; right?
 4 A So the very first heart -- percutaneous
 5 heart treatment devices were -- let me make sure I
 6 get the terminology correct here. I believe it was
 7 referred to as transapical.
 8 And transapical is not done through the
 9 femoral vessel. It's actually done right through
 10 your chest, through the apex, meaning the bottom of
 11 the heart, and then up into the heart valve location.
 12 Q So I'm talking about the first transfemoral
 13 procedures.
 14 A So the very first transfemoral procedures,
 15 correct. They navigated from the femoral artery up
 16 over the aortic arch and placed that valve. But they
 17 weren't traveling through the heart. They weren't
 18 traveling through multiple heart valves.
 19 Q Well, the first procedure was through the
 20 femoral vein, which did go through multiple heart
 21 valves. Right? It went through the mitral valve,
 22 and then the valve was implanted.
 23 Do you know the history the -- of -- of
 24 transcatheter heart valve development?
 25 A I thought I did. Now you're telling me

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1 that the first heart valve that was implanted
2 percutaneously was not placed as an aortic heart
3 valve?
4 Q It was an aortic heart valve; however, it
5 was inserted through the femoral vein.
6 MR. KEESE: I was going to say, this is way
7 beyond the scope.
8 MR. STOWELL: Yeah. I'm just -- just
9 trying to --
10 THE WITNESS: I was not aware.
11 BY MR. STOWELL:
12 Q Okay. Are any of the toolbox elements for
13 managing catheter stiffness described in the '910
14 patent based on your review of the patent?
15 MR. KEESE: Document speaks for itself.
16 THE WITNESS: Not that I'm aware of. I
17 don't believe the '910 patent gets into novel designs
18 as far as the actual specific catheter. I think it
19 gets into more talking about the components that are
20 required to make for a very successful device.
21 BY MR. STOWELL:
22 Q And do you believe that Claim 1 of the '910
23 patent has any specific claim elements that are
24 directed to this issue of catheter stiffness?
25 MR. KEESE: Calls for a legal conclusion.

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1 Vague.
2 THE WITNESS: So I'm not a lawyer. The
3 patent talks about the treatment of PE, and the claim
4 speaks to the treatment of PE. And so you have to
5 inherently have that flexibility in order to -- to
6 reach that location and treat it safely and
7 effectively.
8 BY MR. STOWELL:
9 Q So do you believe Claim 1 of the '910
10 patent has a flexibility requirement for the
11 catheters?
12 A I believe it has a requirement to be able
13 to reach the location of the PE, which includes
14 flexibility.
15 Q Okay. And -- and is the specific
16 flexibility that's required described in the '910
17 patent?
18 A Not that I'm aware of.
19 Q I'd like to move to page 98 of your expert
20 declaration, paragraph 218. And here, you're talking
21 about -- in paragraph 218, you discuss the
22 traditional hemostasis valves with a Tuohy,
23 T-U-O-H-Y, dash, Borst, B-O-R-S-T, design.
24 Do you see where I'm at?
25 A I do, yes --

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1 Q Okay.
2 A -- as related to the '921 patent.
3 Q Correct.
4 You talk about the Tuohy-Borst design.
5 Were there other -- other types of hemostasis valves
6 that were available prior to 2017, which is the
7 earliest priority date of the '921 patent?
8 A Yes, there were other types of hemostasis
9 valves available prior to 2017.
10 Q And when you were rendering your opinions
11 in this declaration, did you consider those other
12 types of valves, or did you kind of limit your
13 comparison here to Tuohy-Borst design valves?
14 A I primarily was looking at the
15 Tuohy-Borst-style valves, and -- and that was because
16 the Tuohy-Borst design is the most common and
17 frequently used hemostasis valve used within the
18 medical device industry.
19 Q What other types of hemostasis valves are
20 you aware of that existed before 2017?
21 A There are valves that are referred to as
22 bileaflet. Sometimes people use the terminology
23 duckbill to define a bileaflet type of a hemostasis
24 valve.
25 There's also what's referred to as kind of

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1 a slit or a star style of a hemostasis valve where
2 the elastic membrane is cut either in a slit fashion
3 or a star fashion to allow the device to pass through
4 it and seal around it.
5 Those are the ones I'm most familiar with.
6 Q Okay. I've heard the term "static valve."
7 Are you familiar with that term for a
8 hemostasis valve?
9 A I -- I don't know if I heard that term
10 directly, but I guess I could kind of envision
11 what -- what they're referring to.
12 Q What would you envision?
13 A A static valve would be one that you don't
14 have to actuate to -- to be able to pass something
15 through it or to seal.
16 Q Do you need to actuate the bileaflet valve
17 that you talked about?
18 A The ones I'm familiar with, you do not need
19 to, but there may be ones that do require actuation.
20 Q What about the slit or star valve? The
21 ones you're -- you're aware of, do those need to be
22 actuated?
23 A I believe some of them do have actuators on
24 them.
25 Q And for those actuators, what type of

Page 129 1 actuation mechanism is it? 2 A It's more of a linear plunger that 3 compresses down the -- the elastomer portion along 4 its length, which is also very similar to how a 5 Tuohy-Borst valve would work for compression. 6 Q And how does the user of the valve actuate 7 the plunger? 8 A By hand. 9 Q And is it by twisting? Pushing? What -- 10 what kind of physical action would the user need to 11 use to actuate the valve? 12 A And you'd have to be more specific on which 13 valve you're referring to. 14 Q Sorry. On the -- the slit or star valve. 15 A The ones I'm familiar with are more of a 16 linear or a plunger type of an actuator, so maybe 17 your thumb that is pushing the end of the valve to 18 advance the plunger and release the elastic member. 19 Q And what about with the traditional 20 Tuohy-Borst valve? How does the user actuate the 21 valve? 22 A Those valves are actuated in a rotary 23 motion. I mentioned earlier that you have an elastic 24 member inside the valve. Most Tuohy-Borst valves 25 have a member that looks very similar to an O-ring.	Page 131 1 Q What about the bileaflet valve? Can that 2 be operated with one hand? 3 A As we were talking about earlier, I'm -- 4 I'm more familiar with bileaflet valves not having an 5 actuator, and so I would then say that it does not 6 require a hand to actuate. 7 Q Okay. 8 A It would just simply require a hand to hold 9 it. 10 Q In your section on the '910 patent, you had 11 mentioned secondary indicia of nonobviousness and 12 specifically long-felt need was identified in there. 13 I don't see any mention of that in this Section B 14 '921 that begins on page 98 of your declaration. 15 Is there any secondary considerations of 16 nonobviousness that you are relying on for the '921 17 patent; and, if so, can you point me to where you 18 describe those. 19 MR. KEESE: Document speaks for itself. 20 Compound. 21 THE WITNESS: Yes. You had -- you had 22 asked us earlier to find that example. I think we 23 still have that as a task. 24 BY MR. STOWELL: 25 Q Okay. As -- as we sit here now, are you
Page 130 1 And then you have a rotary member that is on the 2 proximal end of the valve that, as it is rotated, it 3 is advancing on threads that advance it distally to 4 compress that O-ring. And as the O-ring is 5 compressed, then the ID of the O-ring gets smaller 6 and seals the valve. 7 Q Okay. And Tuohy-Borst valves, could those 8 be operated with one hand? 9 A I have seen physicians operate them with 10 one hand. They can operate them from the standpoint 11 that you can make fine adjustments with a single hand 12 as long as the device has not been tightened down. 13 So as long as everything's kind of loose, you can -- 14 you can make fine adjustments with one hand. 15 But once the device has been clamped down 16 tight, so whether you're -- you're actually just 17 closing it, whether you're trying to seal around a 18 guidewire, whether you're trying to seal around a 19 second device, it's very difficult to do that with 20 one hand. It typically requires two hands then to 21 loosen the rotary actuator. 22 Q And what about with the slit and star 23 valves? Can those be operated -- or could those be 24 operated with one hand? 25 A The ones I have seen, yes, they can be.	Page 132 1 aware of any secondary considerations of 2 nonobviousness for the '921 patent that you are 3 relying on? 4 A I would have to find it in my declaration 5 to find out what is written in here, but I am very 6 aware of secondary considerations that apply to the 7 '921. 8 Q And do you believe those are explained 9 somewhere in your expert report? 10 A I believe they are. 11 Q Okay. 12 A That is what my memory tells me. 13 Q Okay. We'll -- we'll take a lunch break 14 soon. And maybe at lunch -- 15 A Okay. 16 Q -- if you have some time, you can look for 17 those. 18 A Okay. 19 Q On page 99 of your declaration, and 20 particularly I'll talk about paragraph 225, there 21 again, you summarize a document called the "Notice of 22 Allowability" that was dated October 18, 2023. 23 Do you recall reviewing the notice of 24 allowability for the '921 patent? 25 A I do.

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1 Q And did you review that document in full?
2 A I reviewed it at a high level in full. I
3 focused on the areas that are related to what is
4 being discussed here in the declaration.
5 Q And do you recall seeing any errors in that
6 notice of -- notice of allowability?
7 A Not at this time.
8 Q Okay. And did you carefully look at the
9 examiner's statements in the notice of allowability
10 and compare those to the prior art references to make
11 sure you agreed with the examiner?
12 A Again, at a high level.
13 Q What does that mean, "at a high level"?
14 A Meaning, for instance, earlier today, we
15 went through that document and we found a couple of
16 things that we questioned whether it was -- was
17 accurate or not.
18 I reviewed this prosecution history, and I
19 don't recall finding anything. That doesn't mean
20 that we won't find anything if you and I review it
21 again.
22 Q And in paragraph 226, you state, "I agree
23 with the examiner that Hartley fails to disclose a
24 biasing member that is configured to bias the
25 actuator of the valve to a first (constricted)

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1 position."
2 Do you see where I'm at?
3 A I don't. I'm sorry. Start over, please.
4 Q Yeah. Sorry. It's the first -- first
5 sentence in paragraph 226.
6 A Okay. I'm at the paragraph, and I have
7 read the first sentence.
8 Q Okay. And -- and do you agree with the
9 examiner that Hartley fails to disclose a biasing
10 member?
11 A I do.
12 Q And that's still your opinion today?
13 A It is.
14 Q Okay. I'm going to ask our court reporter
15 to mark as [Exhibit 1012](#) the notice of allowance and
16 fees due for Application No. 17/226,318. The date
17 mailed on this document is October 18, 2023.
18 (Whereupon [Exhibit No. 1012](#) was marked for
19 identification.)
20 MR. STOWELL: Here you go, Dan.
21 MR. KEESE: Thank you.
22 BY MR. STOWELL:
23 Q Okay, Mr. Brown. Do you recognize this
24 notice of allowance?
25 A It does appear to be the notice of

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1 allowance that I am referencing in my declaration.
2 Q When you say referencing in your
3 declaration, are you talking about in paragraph 225?
4 A Correct.
5 Q Okay. And this document, you reviewed it
6 as you were preparing your declaration?
7 A Yes, as we discussed earlier.
8 Q Okay. On page 3 -- the pages are in the
9 upper right-hand corner once you get into the
10 document -- the examiner discusses the Hartley
11 reference beginning under the heading "Prior Art
12 Hartley."
13 Do you see where I am?
14 A I do.
15 Q Okay. And the examiner concludes that
16 "Hartley discusses a valve comprising an elongate
17 member defining a lumen."
18 Do you agree with that portion of the
19 examiner's conclusion?
20 A I have no reason to disagree, but I don't
21 have the image in front of me.
22 Q Would it help if you had the Hartley
23 patent?
24 A It would.
25 Q Okay.

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1 MR. KEESE: And, Josh, while we're doing
2 that, I know we've been on for -- for quite a while.
3 I just -- I don't know when you're planning on
4 stopping for lunch, but --
5 MR. STOWELL: Yeah. Why don't we -- let's
6 just finish up this line of questioning --
7 MR. KEESE: Yep.
8 MR. STOWELL: -- and then we can break.
9 Yeah.
10 BY MR. STOWELL:
11 Q Okay. Mr. Brown, I'm going to show you
12 what's been previously marked in this case as
13 [Exhibit 31](#). It is U.S. Patent Publication No. U.S.
14 2003/0116731 A1, and the inventor is Hartley.
15 Okay. Mr. Brown, have you seen this patent
16 publication before?
17 A I have.
18 Q Okay. And is this the Hartley reference
19 that you discuss in your expert declaration?
20 A I believe it is.
21 Q Okay. And so the examiner concluded that
22 "Hartley discloses a valve comprising an elongate
23 member defining a lumen," and I had asked you whether
24 you agree with that portion of the examiner's
25 conclusion.

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1 A I do.

2 Q Okay. And the examiner also concluded that

3 Hartley discloses a valve comprising "an active

4 tensioning mechanism, including an actuator 12

5 coupled to the elongate member via a filament 20

6 extending at least partially around the elongate

7 member."

8 Do you agree with that portion of the

9 examiner's conclusion?

10 A I'm not sure why, but I am not finding

11 filament 20.

12 Q Do you believe the examiner's reference to

13 filament 20 is an error?

14 A Without studying this more, I cannot give

15 an opinion.

16 Q Do you believe that Hartley discloses a

17 filament?

18 A I believe Hartley defines a filament as

19 Inari has defined a filament.

20 Q And do you believe that Hartley discloses a

21 filament within the valve that's described in the

22 Hartley reference?

23 A I'm sorry. Please ask again.

24 Q Yeah. Maybe I can do it a little quicker.

25 In Hartley, on page 2, at the top

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1 right-hand column, it refers to a string 14.

2 A Yes.

3 Q Okay. Is it your understanding that

4 Hartley's string 14 is a filament?

5 A Yes, as filament has been defined.

6 Q Okay. And so is it your understanding that

7 Hartley discloses an active tensioning mechanism,

8 including an actuator coupled to the elongate member

9 via a filament 14 extending at least partially around

10 the elongate member?

11 A That is my understanding.

12 Q Okay. The examiner also concluded that

13 Hartley discloses a valve "wherein the actuator is

14 moveable between a first position, wherein the lumen

15 is constricted and concealed, and a second position

16 wherein the lumen is at least partially open."

17 Do you agree with that portion of the

18 examiner's conclusion?

19 A I do.

20 Q Okay. There's a portion a little further

21 down in [Exhibit 1012](#), which is the notice of

22 allowability, that says "Regarding Claim 67." I'm on

23 page 3 of the exhibit.

24 A Yes. I'm at that location.

25 Q Your document looks different than mine.

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1 Is that right? Oh, it is. You're -- you're way

2 ahead of me.

3 A Okay.

4 Q Okay. So it says "Regarding Claim 67," it

5 says, "Hartley discloses a valve comprising an

6 elongate member defining a lumen."

7 I believe above, you had agreed that

8 Hartley -- that that portion of the examiner -- or

9 that you agree with that portion of the examiner's

10 conclusion; right?

11 A That is correct.

12 Q Okay. And then the examiner concluded that

13 Hartley discloses "a filament 20 coupled to the

14 elongate member."

15 I believe we've corrected the examiner's

16 mistake, and the filament is actually item 14.

17 So do you agree that Hartley discloses a

18 filament 14 coupled to the elongate member 22?

19 A I do.

20 Q And do you agree with the examiner's

21 conclusion that Hartley discloses "an actuator 12

22 coupled to the elongate member, wherein the actuator

23 12 is moveable between a first position in which the

24 actuator pulls the filament to collapse the elongate

25 member such that the lumen is constricted and sealed

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1 and a second position wherein the lumen is at least

2 partially open"?

3 A I do.

4 MR. STOWELL: Okay. Okay. We have reached

5 a good spot to stop for lunch if people are --

6 MR. KEESE: Yeah.

7 MS. TESSAR: I'm hungry.

8 MR. KEESE: Yeah. Certainly.

9 THE VIDEOGRAPHER: All right. We're

10 going -- we're going off the record. That will be

11 the end of Media 2 in the video deposition of

12 Brian Brown. The time is 11:58 a.m.

13 (Recess taken from 11:58 a.m. to

14 12:46 p.m.)

15 THE VIDEOGRAPHER: We are back on the

16 record. This is the continuation of the video

17 deposition of Brian Brown, beginning of Media 3. The

18 time is 12:47 p.m.

19 Off the record.

20 (Off the record.)

21 THE VIDEOGRAPHER: Back on again at 12:52.

22 Go ahead.

23 BY MR. STOWELL:

24 Q Okay, Mr. Brown. If you could look at

25 paragraph 228 of your declaration, which is

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1 [Exhibit 1011](#).
 2 A Okay. I'm at 228.
 3 Q Okay. There, you say -- you're referring
 4 to a piece of prior art referred to as Schaffer.
 5 You remember the Schaffer reference?
 6 A I do.
 7 Q And that's one of the ones that you had
 8 reviewed in preparation for your deposition today?
 9 A Correct.
 10 Q Okay. And it says there, "Schaffer itself
 11 also does not disclose circumferential constriction
 12 of the valve using a filament."
 13 What do you mean by "circumferential
 14 constriction"?
 15 A "Circumferential" is a term referring to
 16 the outside surface of a cylinder, and so the
 17 constriction of that outside circumference.
 18 And so what is meant by "circumferential
 19 constriction" is that the constriction is happening
 20 throughout that -- that entire outer perimeter. Now,
 21 when I say "entire," it doesn't have to be the
 22 entire, but it's -- it's wrapping around that
 23 circumference, and it's bringing it down
 24 circumferentially. It's not pancaking it. It's not
 25 twisting it. It's just -- it's bringing it down.

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1 We talked earlier about some of the other
 2 types of Tuohy-Borst -- excuse me -- of hemostasis
 3 valves and how they close by longitudinal
 4 compression.
 5 So in the case of Schaffer here, yeah, it's
 6 talking -- they -- he teaches more of a -- having a
 7 force on a left side and a right side and then
 8 bringing them together, versus circumferential, as I
 9 said, that's where it's wrapping around and bringing
 10 it down.
 11 Q Is it your understanding that Claims 1 and
 12 10 of the '921 patent require circumferential
 13 constriction?
 14 MR. KEESE: Calls for a legal conclusion.
 15 THE WITNESS: So Claim 1 and 10 do not use
 16 the term "circumferential," but what they -- what it
 17 does require is the use of filament. And as taught
 18 in the '921 patent, that filament wraps
 19 circumferentially around the -- the elongate member.
 20 BY MR. STOWELL:
 21 Q So Claim 1 states that the filament extends
 22 at least partially around the elongate member.
 23 Are you -- is it your understanding of at
 24 least "partially around" to mean circumferential?
 25 A I understand that to mean that the partial

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1 around would be on the circumference, so it would be
 2 wrapping circumferentially.
 3 Q And the U-shaped members in Schaffer, do
 4 those extend at least partially around Schaffer's
 5 elongate member?
 6 MR. KEESE: Objection. Calls for a legal
 7 conclusion.
 8 THE WITNESS: Can you point to what you're
 9 referring to in Schaffer?
 10 BY MR. STOWELL:
 11 Q Okay. I'll show you what's been previously
 12 marked as [Exhibit 32](#). It is U.S. Publication
 13 No. U.S. 2003/0225379 A1. The first inventor is
 14 Schaffer, S-C-H-A-F-F-E-R.
 15 So the -- the figures in the actual
 16 Schaffer reference are a little bit grainy,
 17 Figures 30 through 34. But I understand you've
 18 reviewed the IPR petition for the '011 patent, which
 19 includes some of the clearer pictures for Schaffer;
 20 is that correct?
 21 A I have reviewed the IPR. I don't recall
 22 whether the images --
 23 Q Okay.
 24 A -- were clear or not.
 25 Q So Schaffer has actuating members No. 55,

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1 and they're probably -- you can kind of see them in
 2 Figure 31. They wrap around the central lumen. I
 3 don't think No. -- oh, there's No. 55. There are two
 4 U-shaped members in the center that extend from the
 5 springs around the central lumen.
 6 A Even though it's very difficult to -- to
 7 see here, I -- I do know what you're talking about
 8 and -- and do remember seeing them clearer before.
 9 Q Okay. So my question was, do those --
 10 well, I want to use the right term.
 11 Do those U-shaped actuating members -- do
 12 they at least -- do they extend at least partially
 13 around the elongate member?
 14 A I would say, just based on what I'm seeing
 15 in these figures -- and, again, it's rather
 16 challenging to see in the figures. But if I recall
 17 correctly, when the valve in -- is in its open
 18 configuration, which would be the uncompressed
 19 configuration, these rigid U-shaped members, as shown
 20 in Figure 31 here, would wrap partially around the
 21 circumference of the center member.
 22 Q And you -- you just said "rigid U-shaped
 23 members."
 24 Why do you think the U-shaped members are
 25 rigid?

1 A Based on the teachings of Schaffer and in
2 the materials and how he has described them, I have
3 interpreted that to -- to be rigid, whereas if you've
4 taken a look at the '921 patent, it clearly defines
5 that what's wrapping circumferentially around is the
6 filament.
7 Q And so you say Schaffer described the
8 actuating members as rigid, you believe?
9 A The construction of them would make them
10 rigid.
11 Q Okay. And what in Schaffer leads you to
12 that conclusion?
13 A I would have to spend some time to find it
14 in here where it talks about the materials of
15 construction, but that is what has led me to believe
16 that.
17 Q Okay.
18 A And when I say "materials," it's not only
19 the materials but the -- the method of manufacturing
20 and how it's described.
21 Also, if you've taken a look at Figure 32,
22 which I believe is the actuated version of 31, there,
23 the U-shaped members have not deformed. They're
24 remaining rigid.
25 Q Okay. And do you recall a method of

1 manufacturing for the U-shaped members being
2 disclosed in Schaffer?
3 A I don't recall the exact words that were
4 used, but there was some mention of the materials in
5 the description of the -- the fabrication or the --
6 the making of those U-shaped members.
7 Q Can I take you to paragraph 0081 of
8 Schaffer. There is a description of the actuating
9 member there.
10 Does this help refresh your recollection
11 about what you -- you read about the actuating
12 member?
13 MR. KEESE: Vague.
14 THE WITNESS: It is part of what I recall.
15 I don't remember if there was more than this or not,
16 but I remember reading this.
17 BY MR. STOWELL:
18 Q Okay. And if the actuating member were
19 made of aluminum, which is one of the options in
20 paragraph 81, is it your testimony that that U-shaped
21 member would be rigid?
22 A It is my opinion that if the actuator shown
23 in Figure 31 is made of aluminum and is of the size
24 and dimensions that it is shown in Figure 31, that it
25 would be rigid.

1 Q I want to test your concept of rigidity
2 here.
3 Do you mean to suggest that it would have
4 no ability to flex?
5 A That is not my definition of rigid.
6 Q Okay. What --
7 A And just to clarify, so when you asked what
8 the -- is my definition of rigid, everything flexes.
9 Given enough force, everything flexes.
10 What I'm referring to as far as rigid, I
11 think it's in comparison to something that is not
12 rigid. So if -- something that's not rigid would be
13 a filament. Something that is threadlike. Something
14 that -- that is able to bend, is able to be sewn. It
15 is very easy to bend it.
16 What is shown here in Schaffer is not
17 something that would fit the definition of flexible
18 or a filament.
19 Q And is it your understanding that all of
20 the filaments that are described in the '921 patent
21 are something that could be sewn?
22 A I would say at a -- kind of a first
23 reaction to the question, I would say, yes, we may
24 find an exception to that. But my initial reaction
25 is yes.

1 Q And is it your understanding that the
2 filaments that are described in the '921 patent, that
3 they're all threadlike?
4 A Being we haven't defined threadlike but --
5 other than the fact that threadlike would be
6 something that can be sewn, I would say, again, at a
7 very high level, yes.
8 Q And so you raise a good point.
9 Is your definition of threadlike something
10 that can be sewn?
11 MR. KEESE: Misstates prior testimony.
12 THE WITNESS: It's something that can be
13 threaded, which -- so the use of thread can be used
14 in a lot of different ways, sewing being one of them.
15 And so could it -- could it be used for sewing?
16 Possibly.
17 Obviously, you know, if you had something
18 that was so large you couldn't thread it through a
19 needle, it can't be sewn, but it still may be
20 flexible.
21 BY MR. STOWELL:
22 Q And so in paragraph 81, the actuating
23 member can also optionally be made of plastic;
24 correct?
25 A Yes.

1 Q Okay. And is it your understanding that a
2 U-shaped actuating member made of plastic would also
3 be rigid?
4 A It would depend very much on which plastic
5 it's made of. But going back to Figures 31 and 32,
6 the U-shaped members there, if made from plastic, are
7 rigid.
8 Q Are there types of plastics that, if they
9 were formed into the shapes you see in Figure 31 for
10 the actuating members, that would be flexible?
11 A There is the possibility that plastic could
12 be flexible, yes.
13 Q And a plastic that's formed in the shape of
14 the U-shaped actuating members, are there plastics
15 where that shape could also be flexible?
16 A It could be flexible, but go back to what
17 we were talking about earlier as far as it -- is
18 it threadlike, is it filament-like. I would struggle
19 with saying that even if that was made from a
20 flexible plastic in those dimensions, that it would
21 be -- have those properties.
22 Q Would you consider a sheet of plastic to be
23 threadlike?
24 MR. KEESE: Vague.
25 THE WITNESS: A sheet of plastic in itself

1 as far as the entire sheet would not be threadlike,
2 but you could make a threadlike object from a sheet.
3 BY MR. STOWELL:
4 Q For the U-shaped actuating members that are
5 described in Schaffer, why is it your understanding
6 that those U-shaped members cannot be flexible?
7 A It is based on the description that he has
8 as far as compressing that inner member from the two
9 opposing sides. It is based on Figures -- I believe
10 it was 31 and 32. Those are the main two reasons.
11 Q Is there a reason that Schaffer's U-shaped
12 actuating members couldn't be replaced with a
13 flexible filament, for example?
14 MR. KEESE: Vague. Calls for a legal
15 conclusion.
16 THE WITNESS: I believe that if someone had
17 invented that, such as Inari, they could design a
18 valve that has a filament for constricting the inner
19 member.
20 BY MR. STOWELL:
21 Q Do you believe in 2017 that a person of
22 ordinary skill in the art would have found it obvious
23 to replace Schaffer's U-shaped actuating members with
24 a filament?
25 A Not as the way that Schaffer has described

1 what he's attempting to do with his inner member.
2 Q And why wouldn't a person of skill in the
3 art find that obvious to do?
4 A Because he is trying to compress his inner
5 member either on the opposing sides of the inner
6 lumen or down the length of the inner member. So it
7 would not be obvious to replace his U-shaped member
8 with a filament.
9 Q Why couldn't the U-shaped member just be a
10 U-shaped filament? Why wouldn't that work?
11 A Because it would not just compress on the
12 left and the right side.
13 It goes back to what I was referring to
14 earlier as far as the -- what is circumferential
15 constriction versus pancaking or flattening. What --
16 what Schaffer is showing here is this pancaking or
17 flattening to constrict that inner member, inner
18 lumen.
19 Q And so if the U-shaped actuating members
20 were replaced with a U-shaped filament on both sides,
21 why wouldn't that also pancake the filament -- or
22 the -- the inner lumen?
23 A Well, in order for it to -- to pancake, you
24 have to just be applying the forces on the opposing
25 sides, whereas if you wrap a filament around it, even

1 if it's just partially around it, as -- as you pull
2 on the ends of the filament, they will narrow down
3 and constrict, so you get the circumferential
4 constriction.
5 Q And so if the -- if a filament had the
6 exact same shape as the U-shaped actuating members
7 and was connected to the buttons in the exact same
8 way so that all the angles and curvature was exactly
9 the same, why wouldn't a person of ordinary skill in
10 the art have found it obvious to replace the U-shaped
11 actuating member with a filament?
12 A Because it would have constricted
13 differently than what Schaffer is teaching.
14 Q But you would agree it would still
15 constrict the lumen?
16 A I agree it would constrict the lumen, but
17 in a different way than what is being taught by
18 Schaffer.
19 Q And why wouldn't have -- that different way
20 have been obvious?
21 A Because that was not what Schaffer was
22 trying to do.
23 Q Schaffer was trying to constrict the lumen;
24 correct?
25 A Schaffer was trying to constrict the lumen

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1 by flattening it.

2 Q Where in Schaffer is it described that they

3 are trying to constrict the lumen by flattening it?

4 A I would have to find the paragraph, but I

5 will tell you what I remember is that it teaches that

6 they are applying a force on opposing sides.

7 Q And is that description true, in your

8 opinion, with respect to the embodiments in

9 Figures 30 through 34?

10 A Yes. Sorry. 30 through 34?

11 Q Correct.

12 A Okay. Yes is my answer.

13 Q Okay. Other than your understanding that

14 Schaffer teaches constricting the lumen by flattening

15 it, are there any other reasons a person of skill in

16 the art wouldn't have found it obvious to substitute

17 the U-shaped actuating members for filaments?

18 A Schaffer also teaches an assembly

19 procedure. And in his assembly procedure -- I should

20 look. I said "he." I'm assuming it's a he. It

21 might be a bad assumption. Yes, David Schaffer.

22 He teaches the assembly of the elastomeric

23 inner member through the U-shaped members, and it

24 would be very difficult to follow that manufacturing

25 procedure if he was using a filament rather than his

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1 rigid members.

2 Q And why is that?

3 A Because the rigid members are rigid enough

4 to maintain the opening in which to insert the inner

5 member, whereas if you have filaments inside of an

6 assembly, it would be very difficult to thread those

7 through the filaments, which are basically limp and

8 just dangling on the inside.

9 Q So you believe in Schaffer's embodiment in

10 Figures 30 and -- through 34, it is the -- the

11 U-shaped members that maintain the valve in the open

12 position?

13 A That is not what I said.

14 Q Okay. Well, you said "because the rigid

15 members are rigid enough to maintain the opening in

16 which to insert the inner member."

17 What did you mean by that?

18 A So what I was -- what we were talking about

19 was the assembly process for -- for building this

20 valve. Schaffer teaches that the inner member can be

21 inserted through the U-shaped members during the

22 manufacturing procedures.

23 If those U-shaped -- rigid U-shaped members

24 were replaced by a flexible threadlike filament, they

25 would be in there very limp. They would not be

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1 holding it. They would not be maintaining an opening

2 for you to insert the inner member through.

3 Q So you don't think a manufacturer could

4 slide that inner lumen through two different loops of

5 sutures or filaments?

6 A It would be difficult to do. It would

7 require more fixturing. It would require more time,

8 which would result in more cost.

9 Q And I see in paragraph 228 towards the

10 bottom there, you refer to the assembly process

11 "would become unnecessarily cumbersome and

12 expensive."

13 Is that what you're referring to there,

14 this idea that the inner tube would be challenging to

15 slide through the -- through loops of filaments?

16 A That is what I'm referring to.

17 Q Okay. So other than this -- your

18 interpretation of Schaffer to have a flat compression

19 of the inner tube and the cumbersome and expensive

20 assembly process, are there any other reasons a

21 person of skill wouldn't have found it obvious to

22 replace the rigid U-shaped actuating mechanisms in

23 Schaffer with filaments?

24 A Right. So we talked about the -- the

25 flattening versus the circumferentials, which is

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1 really kind of how it engages and disengages, so

2 they -- they truly are different between the two.

3 And Schaffer had intended to flatten. He

4 had intended to engage and disengage in a certain way

5 that a filament would not do.

6 Q Would you agree that Schaffer's valve

7 that's pictured in Figures 30 through 34 with the

8 U-shaped actuating members, that that valve could be

9 operated single-handedly?

10 A Without having held and touched one, I

11 can't give you a definitive answer; but my opinion as

12 I just look at it, I would think it could be.

13 Q On page 102 of your expert declaration,

14 which is [Exhibit 1011](#), you have a section that's

15 titled "Inari's Devices Also Practice the Claims."

16 Do you see where I am?

17 A I do.

18 Q And in paragraph 231, you opine on whether

19 Inari's FlowTrievers system practices Claim 1 of the

20 '910 patent and Claim 10 of the '921 patent; correct?

21 A That is correct.

22 Q Okay. Do you have any opinions or have you

23 offered any opinions on whether the ClotTrievers

24 practices Claim 1 of the '910 patent or Claim 1 and

25 10 of the '921 patent?

[illegible]

1 MR. STOWELL: Okay. Yeah, there's not much
2 in here that's confidential, but okay.
3 BY MR. STOWELL:
4 Q For the documentation that you reviewed for
5 the FlowTrievery, I know you said you went on the
6 website and looked at that, but where did you receive
7 or how did you receive the manufacturing assembly
8 instructions?
9 A It was provided to me by attorneys.
10 Q In paragraph 232, you state, "It is my
11 opinion that FlowTrievery practices Claim 1 of the
12 '910 patent when used in a telescoping configuration
13 with a Trievery16 catheter telescoped through a
14 Trievery24 or Trievery20 catheter for treatment of
15 pulmonary embolism."
16 Do you see where I am?
17 A I do see where you are, and I agree with
18 what you've read.
19 Q Okay. And you'll agree with me that an
20 aspiration system only can practice Claim 1 of the
21 '910 patent if it is used in a telescoping
22 configuration; right?
23 A I would say that as long as it's being used
24 in the telescoping configuration as laid out in
25 Claim 1, then that is an accurate statement.

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1 Q Okay. So a Trier16 being used or made on
2 its own would not practice Claim 1 of the '910
3 patent; correct?
4 A That is my understanding.
5 Q And in addition to being used in a
6 telescoping configuration, Claim 1 of the '910 patent
7 also requires that telescoping configuration to be
8 used for treatment of pulmonary embolism; correct?
9 A I believe that is correct.
10 Q Would you agree that the -- or let me back
11 up.
12 Are you aware that the FlowTrier system
13 is sometimes used in DVT procedures?
14 A I am aware of that.
15 Q Okay. Would you agree that the use of the
16 FlowTrier system, if it were used in a telescoping
17 configuration, would not practice Claim 1 of the '910
18 patent if that use were for DVT?
19 MR. KEESE: Objection. Calls for a legal
20 conclusion.
21 THE WITNESS: I'm not an attorney, and
22 so -- but my opinion, based on Claim 1 having the
23 requirement for the treatment of PE, DVT would not be
24 covered by Claim 1.
25 \\\

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1 BY MR. STOWELL:
2 Q Okay. In paragraph 233 of your
3 declaration, in the second sentence, you state, "I
4 further understand that the majority of treatments
5 for pulmonary embolisms use a telescoping
6 configuration."
7 Do you see where I am?
8 A I do see that.
9 Q Okay. Where did that understanding come
10 from?
11 MR. KEESE: And I'm going to caution the
12 witness not to reveal any specific communications
13 with attorneys.
14 But I think you can answer.
15 THE WITNESS: So, first, as I read that,
16 reading that sentence on its own looks like it does
17 need some clarification with the preceding sentence,
18 because if I just read that on its own --
19 (Interruption in proceedings.)
20 MR. STOWELL: Is it just me or --
21 MR. KEESE: No, it's not just you.
22 MR. STOWELL: Okay. Good.
23 THE WITNESS: It's getting dark.
24 MR. STOWELL: Okay.
25 THE WITNESS: Right. Because if I read

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1 that sentence on its own, it says, I further
2 understand the majority of treatments for pulmonary
3 embolisms uses telescoping configuration.
4 I -- I don't think that was ever meant to
5 be a generic statement for all treatment of pulmonary
6 embolisms, but it -- but it is referring to the
7 preceding sentence where it's talking about the
8 FlowTrier, if that makes sense.
9 BY MR. STOWELL:
10 Q Sure. Okay. Understood. That sentence is
11 referring to FlowTrier.
12 And where did your understanding that
13 it's -- that it's used in a telescoping configuration
14 in a majority of treatments come from?
15 MR. KEESE: I'm going to restate the
16 caution. Don't reveal any specific --
17 THE WITNESS: Yes. But, yeah, that
18 information has been provided to me.
19 BY MR. STOWELL:
20 Q Was it provided by counsel?
21 A It was provided by counsel, yes, through
22 information that they had.
23 Q In paragraph 234, you opine that
24 FlowTrier includes a first pressure source.
25 When you read the '910 patent, what is your

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1 understanding of the meaning of "pressure source"?
2 A My understanding of what a pressure source
3 is -- I believe at some point in my declaration I do
4 have that defined. Not knowing where it is, I can't
5 point you to it exactly. But what I do recall is
6 that pressure -- the pressure source includes both
7 what generates the pressure and all the items that
8 contain the pressure.
9 Q So you understand a pressure source to
10 include not only the device that generates the
11 pressure, but -- but anything else that would be
12 pressurized by the -- by the pressure generator?
13 A That would be pressurized or contain the
14 pressure, yes.
15 Q And where does that understanding of
16 pressure source come from?
17 A I'm trying to recall whether there is a
18 definition within the '910 of that.
19 Q Do you believe there's a definition of the
20 term "pressure source" in the '910 patent?
21 A I am unsure at this time. I would have to
22 study it to -- to know. It might be helpful if I
23 knew where to look in my declaration.
24 Q Unfortunately, I can't help you there
25 because I don't know what part you're referring to,

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1 but we can try one thing maybe with the -- the '910
2 patent.
3 Do you have the '910 patent in front of
4 you?
5 A I do somewhere. Right here.
6 Q Okay. If you turn to Figure 8, some of the
7 steps of operation are listed, and one of the steps,
8 806, is activate the pressure source to generate a
9 vacuum while the fluid control device is -- is
10 closed.
11 A I do see that.
12 Q Okay. Does that help you further define
13 "pressure source"?
14 A It helps from the standpoint that the
15 pressure source includes the generator of the
16 pressure -- of the pressure.
17 Q Okay. Do you think there's a different
18 description in the '910 patent that further explains
19 what the pressure source is, based on your
20 recollection?
21 A As I said, I don't know if there's a
22 definition. But as described in the '910 patent,
23 they teach having a fluid control valve, which, when
24 it's opened, takes and relieves the pressure or
25 applies the pressure.

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1 The pressure is everything that is
2 contained within the pressure source. The pressure
3 source is what I had defined earlier.
4 Q In the -- in paragraph 234 on the top of
5 page 103, you describe the FlowTrievery, and you
6 define a first pressure source, and then in parens,
7 you say "a first syringe."
8 Do you see that?
9 A I do.
10 Q Okay. And is it your opinion that the
11 syringe is the first pressure source within the
12 FlowTrievery device?
13 A As we were discussing earlier, the pressure
14 source would be the pressure generator and everything
15 that is containing or holding that pressure, which in
16 this case would be a vacuum. And so the first
17 syringe would be part of that pressure source.
18 Q And what else would be part of the pressure
19 source?
20 A Everything up to that first stopcock, as
21 shown in the image right below what we just read.
22 Q So, for example, tubing that exists between
23 the stopcock and the syringe, you would consider that
24 to be a pressure source?
25 A Correct.

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1 Q In paragraph 238, you refer to a second
2 pressure source. And there, you identify a second
3 syringe; is that correct?
4 A Were you reading from this, or were you --
5 were you then just inserting the syringe --
6 Q No. I was reading at line 5, "a second
7 pressure source (a second syringe)."
8 A Thank you. That is correct.
9 Q And so here, in paragraph 238, we're
10 talking about the Trievery16 catheter; correct?
11 A Correct. Because we were talking about the
12 second clot aspiration assembly.
13 Q And there -- it's your understanding
14 there's a second syringe that would be attached to
15 the Trievery16 catheter, and that's what you're
16 identifying as the second pressure source?
17 A In what is written here, that is correct.
18 Just for clarity, you don't always have to have a
19 second pressure source as long as you have a pressure
20 source that can be used on this assembly. It can be
21 used -- one pressure source could be used for both
22 catheters or you could have two separate pressure
23 sources, one for each catheter, or you can even have
24 two pressure sources that are linked and connected to
25 the two catheters.

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1 Q Okay. But here in your -- in your expert
2 declaration, you identify the second pressure source
3 as a second syringe; correct?
4 A As I have it written here, yes.
5 Q Okay. And am I understanding your
6 testimony correctly that if the Inari Trievery24 and
7 Trievery16 were only packaged with a single syringe,
8 you would consider that syringe to be a first
9 pressure source and a second pressure source?
10 MR. KEESE: Objection. Misstates prior
11 testimony.
12 THE WITNESS: It -- if it's connected to
13 both catheters, it can be the pressure source for
14 each of them; therefore, it could be the first and
15 the second pressure source, just as defined in -- I
16 believe it was Claim 4 of the '921.
17 BY MR. STOWELL:
18 Q I guess I'm confused because the claim
19 requires a first pressure source and a second
20 pressure source.
21 How can one pressure source be first and
22 second?
23 A So by plumbing one source to the two
24 catheters, you can select which catheter through the
25 fluid control valve that you want to apply the

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1 pressure to. So as long as it's plumbed properly,
2 one pressure source can apply the pressure to either
3 catheter.
4 Q And is there any support for that
5 description you just gave in the '910 patent?
6 A Yes.
7 Q Where do you think the '910 patent
8 describes that sort of configuration?
9 MR. KEESE: Asked and answered.
10 THE WITNESS: I believe that the claims
11 describe it. Claim 4 says the clot treatment system
12 of Claim 1 wherein the first pressure source is the
13 same as the second pressure source.
14 BY MR. STOWELL:
15 Q Okay. And in the -- in the patent itself,
16 in the written description, is there any description
17 of that, that you're aware of?
18 A There is. It will take me a little reading
19 to find it.
20 Q As you sit here, are you -- I guess, rather
21 than having you read the whole patent, are you aware
22 kind of right now of any figure or description in the
23 patent that describes that that you could point us to
24 quickly?
25 A I don't recall a figure, but I do recall a

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1 description.
2 Q Now, in this example that you've used here
3 where there is one pressure source connected to both
4 catheters, is the tubing and everything up to the
5 valve still considered part of the pressure source in
6 that example?
7 MR. KEESE: Misstates prior testimony.
8 THE WITNESS: As I had previously defined
9 pressure source, I believe what you just said is
10 accurate, that the pressure source would include the
11 tubing up to the fluid control valves.
12 BY MR. STOWELL:
13 Q It would include anything that's been
14 pressurized by the pressure source; correct?
15 A That is my opinion, yes.
16 Q And do you know whether the FlowTrier24
17 and Trier16 are sold with two catheter -- or
18 sorry -- two syringes?
19 A It is my understanding that a syringe is
20 supplied with each catheter, with each FlowTrier
21 catheter, which I believe is also, from a marketing
22 standpoint, referred to as a Trier catheter. Each
23 one of the Trier catheters, whether it be the 16,
24 the 20, or the 24, is supplied with a syringe.
25 Q And are you aware of any situations where a

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1 single syringe has been hooked up to --
2 simultaneously hooked up to two Trier catheters?
3 A I personally am not aware of it. It is
4 something that is described, though, within the '910
5 patent.
6 Q But you're not aware of anybody using the
7 Trier catheters in a way where a single -- where a
8 single syringe is hooked up to both catheters; is
9 that correct?
10 A Right. Your statement is correct. I
11 personally am not aware of it because I have not
12 spent time in the field watching physicians use this.
13 Q Okay.
14 MR. KEESE: Hey, Josh, I think we're coming
15 up on an hour. I don't want to interrupt your line
16 of questioning, but just getting close to where I'd
17 like to take a break.
18 MR. STOWELL: Okay. Yeah. We started a
19 little late, so I was going to push until 2:00, if
20 that's okay.
21 MR. KEESE: Sure.
22 BY MR. STOWELL:
23 Q If we turn to paragraph 244 of your
24 declaration --
25 A I am there.

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1 Q Okay. Here, you are discussing Inari's
2 products that you believe practice Claim 1 of the
3 '921 patent; is that correct?
4 A That appears to be correct.
5 Q And it looks like you've opined that
6 catheters associated with the FlowTrier system
7 practice Claim 1 of the '921 patent; is that correct?
8 A That is correct.
9 Q Okay. Do you opine anywhere on whether the
10 ClotTrier product practices Claim 1 of the '921
11 patent?
12 MR. KEESE: Document speaks for itself.
13 Legal conclusion.
14 THE WITNESS: Based on the remaining pages
15 of this declaration, it does not appear that I have.
16 BY MR. STOWELL:
17 Q In paragraph 244, you refer to an active
18 tensioning mechanism, and I believe that comes from
19 the claim.
20 What is your understanding of what an
21 active tensioning mechanism is?
22 A An active tensioning mechanism, as used in
23 the claims, is referring to something that will apply
24 a tension to, in this case, a filament. And active,
25 to me, means that it's something that is moveable.

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1 Q So it's something that applies tension and
2 is moveable.
3 Are there any other features of the active
4 tensioning mechanism as you understand that term?
5 A There's a lot of elements of an active
6 tensioning mechanism, but if you're focusing on just
7 the word "active," as I said, that is moveable.
8 But in the case of this design, the active
9 tensioning mechanism are the buttons and the linear
10 motion of the buttons. And, of course, in the case
11 of the Trierer hemostasis, it is also biased to be
12 closed, so it is applying tension.
13 Q And so as the term "active tensioning
14 mechanism" is used in the claims of the '921 patent,
15 I understand you believe that the active tensioning
16 mechanism is moveable and that it provides tension.
17 Are there any other requirements for the
18 active tensioning mechanism, in your view?
19 MR. KEESE: Calls for a legal conclusion.
20 THE WITNESS: Yeah. Based on my
21 understanding of the patent, the patent shows these
22 as being linear actuators. I'm not sure if that
23 limits them to only being linear, but yeah, the
24 active tensioning mechanism here for the '921, yeah,
25 is a moveable, linear actuator.

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1 BY MR. STOWELL:
2 Q I guess a way to ask the question is if I
3 was looking at a hemostasis valve and I wanted to
4 figure out whether it had an active tensioning
5 mechanism, what features should I look at to
6 determine whether a valve has an active tensioning
7 mechanism?
8 MR. KEESE: Claim language speaks for
9 itself.
10 THE WITNESS: So just a valve in general or
11 the valve of the '921 patent?
12 BY MR. STOWELL:
13 Q Well, as the term "active tensioning
14 member" is used in the '921 patent, if I am looking
15 at a prior art valve or a competing valve and trying
16 to determine whether it has that active tensioning
17 member, what features should I be looking for?
18 MR. KEESE: Misstates the document.
19 THE WITNESS: It would be the features that
20 we have spoken about.
21 BY MR. STOWELL:
22 Q Okay. At the top of page 112, you mention
23 the biasing mechanism, and in parens you have "a
24 compression spring."
25 Do you see where I'm at?

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1 A I do.
2 Q What was your understanding of the term
3 "biasing mechanism" as it's used in the '921 patent
4 claims?
5 MR. KEESE: Calls for a legal conclusion.
6 THE WITNESS: A biasing mechanism, bias is
7 the first actuator to a first position.
8 BY MR. STOWELL:
9 Q So a biasing mechanism biases.
10 Are there any other requirements for the
11 biasing member?
12 MR. KEESE: Document speaks for itself.
13 THE WITNESS: When you say "other
14 requirements," other requirements where?
15 BY MR. STOWELL:
16 Q Well, does the claim language "biasing
17 mechanism" have any other requirements attached to it
18 other than the device has something that biases?
19 A Okay. You're referring to the claims --
20 Q Yes.
21 A -- is what you're referring to.
22 It appears that the only requirement is a
23 biasing member configured to bias the actuator to the
24 first position.
25 Q Okay. And as you applied that term to the

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1 FlowTrierer and the Symphony, did you add any other
2 requirements to that other than just that the biasing
3 member must bias?
4 MR. KEESE: Misstates the claim language.
5 THE WITNESS: Well, the fact that we're
6 discussing an active tensioning mechanism, and active
7 being moving, to me, that would mean that it would
8 move it to that position so that the biasing would --
9 would include movement.
10 BY MR. STOWELL:
11 Q Okay. Anything else besides biasing and
12 movement?
13 A And I think biasing also means that it
14 would do it on its own. It wouldn't need any
15 additional assistance.
16 Q Okay. Anything else?
17 A Those are the things that come to mind.
18 Q Looking at paragraph 248, here, you're
19 describing the Trierer catheter assemblies, and I
20 just want to check if there's a typo here.
21 You state in 248, "In the first position,
22 the second compression spring (second spring) pushes
23 against the second button, pulling the first filament
24 tightly around the elongate member."
25 Is that reference to first filament correct

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1 there?
2 A So as I'm reading this, is it referring to
3 any figures, or is it just -- it's talking about
4 first and second. I'm wondering if it's pointing to
5 a figure someplace. It's referring to Claim 10.
6 As I read this, I'm thinking it is a
7 mistake, but I -- I have nothing right now to confirm
8 that for you. Yeah. As I read Claim 10, which is
9 what this is referring to, the actual Claim 10 talks
10 about it being connected to a second filament.
11 Based on what I'm reading here, that does
12 appear to be a mistake. But, as I said, I would have
13 to discuss that with counsel to get -- gain agreement
14 on that.
15 Q Okay. But, as you sit here, you think that
16 perhaps the pulling the first filament should read
17 pulling the second filament in paragraph 248?
18 A There -- there is a possibility that that
19 is accurate.
20 MR. STOWELL: Okay. Why don't we take our
21 break now.
22 THE VIDEOGRAPHER: We're going off the
23 record at 1:56 p.m.
24 (Recess taken from 1:56 p.m. to 2:08 p.m.)
25 THE VIDEOGRAPHER: We are back on the

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1 record at 2:08 p.m.
2 BY MR. STOWELL:
3 Q All right, Mr. Brown. If you could turn to
4 page 45 of your expert declaration.
5 A I'm sorry. What number?
6 Q Page 45.
7 A Thank you.
8 Okay. I am there.
9 Q Okay. And in this section, I believe you
10 are assessing whether the Symphony system infringes
11 Claim 1 of the '910 patent; correct?
12 A That appears to be accurate.
13 Q Okay. And under Claim 1, heading A, which
14 is the preamble of the claim, in paragraph 132, you
15 state that the Symphony system is "for treating clot
16 material comprising a pulmonary embolism in the
17 vasculature of the patient," and then you say, "as it
18 is currently being used in clinical trials for
19 treatment of pulmonary embolism."
20 Do you see where I'm at?
21 A I do see that.
22 Q Okay. And that -- that use of Symphony in
23 the clinical trials is the only use that you identify
24 under heading A of Claim 1; correct?
25 MR. KEESE: Objection. Calls for a legal

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1 conclusion. Misstates testimony.
2 THE WITNESS: I think that is -- that is
3 one of the examples that is shown here. It talks
4 about it being used for a clinical trial. It talks
5 about it seeking FDA clearance for it. I think we
6 also are aware that it is used off-label for the
7 treatment of PE.
8 BY MR. STOWELL:
9 Q And when you say we are aware of that, who
10 are you talking about?
11 A I'm -- when I say "we," I guess I'm
12 referring to Inari is aware of that.
13 Q Do you have any evidence to support Inari's
14 allegation that the Symphony is used off-label to
15 treat PE?
16 A I personally do not. I'm going by what has
17 been shared with me.
18 Q And who shared that information with you?
19 A I believe that in Ben's declaration, he
20 mentioned something about that, and that's probably
21 the primary source.
22 Q Do you mean Ben's deposition?
23 A His declaration.
24 Q Okay.
25 A I am mixed up. Sorry. His deposition.

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1 Q Okay.
2 A Yes.
3 Q And so you read in Ben's deposition his
4 allegation that they're -- that doctors are using
5 Symphony off-label to treat PE?
6 A Correct.
7 Q Okay. Do you have any other source for
8 that allegation?
9 A I do not.
10 Q Okay. Do you have any reason to believe
11 that Imperative Care is in any way involved in those
12 off-label uses?
13 A Are you asking do I believe that they are
14 promoting an off-label usage?
15 Q Correct.
16 A I am not aware of them promoting off-label
17 usage.
18 Q And are you opining that the doctors'
19 off-label use of Symphony for PE is an infringement
20 of Claim 1 of the '910 patent?
21 A I'm not a lawyer, so I don't know whether
22 it's infringement or not. I guess I'm just saying
23 that that is another example of where it is being
24 used for the treatment of PE.
25 Q I don't see it referred to here in your

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1 analysis of Claim 1, so I'm just trying to figure out
2 if that's part of the opinion you've rendered in this
3 case or that's just a separate fact that you're aware
4 of.
5 A As of right now, it's just a separate
6 fact --
7 Q Okay.
8 A -- that I'm aware of.
9 Q Okay. And is it fair to say that you're
10 not opining that the use of Symphony to treat DVT
11 infringes Claim 1 of the '910 patent?
12 MR. KEESE: Objection. Calls for a legal
13 conclusion. Misstates testimony.
14 THE WITNESS: I have not created an opinion
15 on Claim 1 for DVT.
16 BY MR. STOWELL:
17 Q Let's turn to page 48. On this page are
18 some -- I guess I'll describe them as cropped images
19 of the Symphony system; correct?
20 A That is a fair description, yes.
21 Q Okay. And this particular catheter that's
22 shown here is the 24 French catheter; correct?
23 A Do you have -- I guess I'm looking at the
24 previous page where it does speak to a 24 French
25 aspiration catheter.

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1 Q Well, on page 48, you've actually labeled
2 it "24 French catheter (first catheter)."
3 A I see that now. So, yes, that is correct.
4 Q Okay. And here, you have some lines
5 underneath the words "first pressure source" in the
6 image at the top of 48, and there's a line going to
7 the clot canister, and there's a line going to what
8 you've called the vacuum pump.
9 Do you see that?
10 A I do see that.
11 Q And so what are you alleging is the first
12 pressure source required by Claim 1 of the '910
13 patent in the Symphony 24 French system?
14 A It is the vacuum pump, and of course, that
15 is pointing to that assembly. So anything within
16 that assembly that would hold or generate vacuum
17 would be included into the first pressure source
18 along with the clot canister that is -- I'll refer to
19 it as the handle of the Symphony device. Also, any
20 of the tubing that would be connecting those various
21 assemblies.
22 Q Would you agree with me that the clot
23 canister cannot generate vacuum?
24 A As shown on the Symphony system, I agree
25 with that.

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1 Q Okay. Would you agree with me that the
2 tubing on the Symphony system cannot generate vacuum?
3 A I would agree with that for the Symphony
4 system.
5 Q Would you agree with me that the only
6 component of the Symphony system that can generate a
7 vacuum is the vacuum pump?
8 A As shown in this image, it is pointing,
9 yes, just to the vacuum pump. A physician may elect
10 to use other sources to generate the vacuum. A
11 physician could use a syringe. A physician could use
12 the hospital vacuum source. All of those would then
13 be included.
14 Q Are you aware of any physicians that have
15 used a syringe with the Symphony system?
16 A I personally am not.
17 Q Are you aware of any physicians that have
18 used the hospital vacuum system with the Symphony
19 system?
20 A I personally am not. I'm trying to
21 remember whether the Symphony IFU, which is the
22 instructions for use, mentioned anything about
23 alternative vacuum sources.
24 Q Do you believe that the IFU mentioned
25 anything about alternative vacuum sources for the

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1 Symphony system?
2 A Sometimes they do.
3 Q But specifically for the Symphony system,
4 do you recall any separate statements in the IFU for
5 alternative vacuum sources?
6 A I'm telling you right now, I do not recall
7 whether it does or does not.
8 Q Why do you include the clot canister within
9 the -- with what you identify as the first pressure
10 source?
11 A Kind of going back to what we discussed
12 when we first were talking about the first pressure
13 source, it's anything that is the source of the
14 pressure. So it's holding, containing, generating
15 the pressure. So once the fluid control valve is
16 opened, it then is providing that pressure to the
17 system.
18 Q So is it fair to say you are using a broad
19 definition of source to include not just the
20 components that generate the pressure but anything
21 that contains the pressure?
22 MR. KEESE: Objection. Mischaracterizes
23 the testimony. Vague.
24 THE WITNESS: What I'm saying is that the
25 source of the pressure for -- for aspiration comes

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1 from all of those components. They are holding that
2 pressure; therefore, they are the source to -- to
3 provide aspiration.
4 BY MR. STOWELL:
5 Q You said the pressure for aspiration comes
6 from all those components, but the pressure really
7 only comes from the pump; right? That's what
8 generates the pressure.
9 MR. KEESE: Mischaracterizes the testimony.
10 Vague.
11 THE WITNESS: You used the proper term
12 saying it generates the pressure, but the pressure is
13 then stored; so, therefore, the source is also the
14 storage. The source of pressure for aspiration comes
15 from the storage.
16 BY MR. STOWELL:
17 Q The way you're using the term "source" and
18 "first pressure source," is that a use that you
19 believe is specific to the '910 patent, or is that
20 how you would traditionally use "source" in the field
21 of mechanical thrombectomy?
22 MR. KEESE: Vague. Calls for a legal
23 conclusion.
24 THE WITNESS: At a high level, I would say
25 that, yes, source would include the storage and the

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1 generation of the -- of whatever you're -- whatever
2 you're speaking of. In this case, we're speaking of
3 vacuum.
4 BY MR. STOWELL:
5 Q So you believe that the plain and ordinary
6 meaning of "source" includes the -- whatever
7 generates the pressure and whatever stores the
8 pressure?
9 MR. KEESE: Calls for a legal conclusion.
10 THE WITNESS: As -- as we've discussed,
11 that is how I'm defining it here in the '910 patent.
12 BY MR. STOWELL:
13 Q And is that -- is it your understanding
14 that that is -- that you're using the term "source"
15 consistent with its plain and ordinary meaning?
16 A I have no reason to believe that I'm using
17 it different than the plain and ordinary meaning.
18 Q So if you had a bottle of water and someone
19 told you it was bottled at the source, would you
20 think that the water had been bottled right where the
21 river is flowing into the ocean, for example, if
22 there were a dam there that stored the water? That
23 would have leapt to your mind?
24 MR. KEESE: Vague. Incomplete
25 hypothetical.

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1 THE WITNESS: It would be a difficult
2 question depending upon how it's being asked. It
3 would be similar to me asking you, if you had filled
4 it up at the water fountain in the hallway, what was
5 the source? It would be the water fountain because
6 it's storing it.
7 BY MR. STOWELL:
8 Q Let's go to page 50. I notice in your
9 expert report, you have a number of pictures that
10 look like a Symphony system has been opened up so you
11 can see the interior of the valve.
12 Did you physically inspect this opened-up
13 version of the Symphony?
14 A I have only received images of it.
15 Q Okay. I also notice that all of the
16 opened-up images have this orange handle which
17 indicates that this is a 16 French catheter.
18 Have you received any pictures or examined
19 any photographs of an opened-up 24 French catheter?
20 A I may have. I see that the declaration
21 just contains images of the orange handle.
22 Q Do you -- do you know, as we sit here
23 today, whether you saw an opened-up 24 French
24 Symphony system which would have a blue handle?
25 A I don't recall, as I'm sitting here,

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1 whether I have or have not.
2 Q Do you know whether the mechanisms in the
3 16 French and the 24 French for the hemostasis valve
4 are the same?
5 A I know that I was told that they were the
6 same.
7 Q Did you do anything to verify that?
8 A No. I had no reason to disbelieve that.
9 Q Let's go to page 56 of your expert
10 declaration.
11 On this page, you're addressing the
12 limitation in the claim that requires a second
13 catheter advanceable through the first catheter, and
14 the claim goes on.
15 Would you agree with me that if the
16 Symphony system were sold and someone used just the
17 24 French catheter, that that would not be an
18 infringement of Claim 1 of the '910 patent?
19 MR. KEESE: Calls for a legal conclusion.
20 THE WITNESS: I'm not a lawyer. My
21 understanding of Claim 1 is that it does require the
22 use of two catheters. If you were to use just one
23 catheter, it would not infringe Claim 1.
24 BY MR. STOWELL:
25 Q You had said, when we were looking at the

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1 FlowTrier device, that you understood the majority
2 of FlowTrier procedures to treat PE used catheters
3 in a telescoping configuration.
4 Am I summarizing your testimony correctly?
5 A You are.
6 Q Okay. Do you know how often Symphony is
7 used in a telescoping fashion to treat PE?
8 A I am unaware of what that -- that number
9 is.
10 Q Let's turn to page 60. We had previously
11 looked at your identification of a first pressure
12 source.
13 On this page, you are identifying a second
14 pressure source in the picture at the top of page 60,
15 and you have a line to what you've called the clot
16 canister, and you have a line to what you've called a
17 vacuum pump.
18 Do you see where I'm at?
19 A I do.
20 Q Okay. And so in this -- or in this
21 particular image, you are referring to the 16 French
22 Symphony system; is that correct?
23 A That is correct.
24 Q Okay. And what portions of the 16 French
25 Symphony system do you consider to be part of the

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1 second pressure source?
2 A I consider it to be the same as what we
3 just defined as being the first pressure source.
4 So in the case of this image, it would be
5 the clot canister, it would be the vacuum pump
6 assembly that is shown, which includes the generator
7 of the vacuum along with any containment of the
8 pressure, and the tubing.
9 Q The vacuum pump that you identify at the
10 top of page 60 as being part of the second pressure
11 source, that is the same vacuum pump that you also
12 identified as being part of the first pressure
13 source; correct?
14 MR. KEESE: Assumes facts.
15 THE WITNESS: I'm not sure I understand
16 your question when you say it's the same, meaning
17 could it be the same purchased component?
18 BY MR. STOWELL:
19 Q Why don't we look at -- why don't we flip
20 to page 69 of your report real quick.
21 A You said page --
22 Q Page 69. Yeah. 69. Yeah.
23 Okay. At the top of page 69 is an image
24 from the Symphony IFU; correct?
25 A That appears to be correct based on my

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1 memory. I'm not seeing anything here that suggests
2 this is the IFU, but that is what I recall.
3 Q Okay. In this image at the top of page 69,
4 it shows the 16 French catheter or Symphony catheter
5 and the 24 French Symphony catheter; correct?
6 A It shows them, one inside the other, yes.
7 Q Okay. And there is a single generator
8 attached to both catheters; correct?
9 A There is a single generator, yes, connected
10 through the tubing to the two catheters.
11 Q Okay. And the instructions for use
12 instruct the users to use the single generator and
13 attach it to both of the catheters; correct?
14 A I don't see that in writing, but
15 pictorially, that appears to be what they're
16 instructing you to do.
17 Q Okay. Did you review the Symphony IFU?
18 A I did.
19 Q Okay. Do you recall any teaching in the
20 IFU of attaching two different generators, one to the
21 16 French catheter and one to the 24 French catheter?
22 A We spoke about this a little earlier, that
23 there might be something in this IFU talking about
24 other vacuum sources.
25 Q But do you recall any teaching in the IFU

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1 of attaching two different generators, as is shown
2 here on page 69, one to the 16 French catheter and
3 one to the 24 French catheter?
4 MR. KEESE: Vague.
5 THE WITNESS: And you're referring
6 specifically to the Truic generator?
7 BY MR. STOWELL:
8 Q Correct. The generator that -- that
9 Imperative Care sells for its Symphony system.
10 A You're not referring to just a vacuum
11 generator?
12 Q Correct.
13 A I'm not sure whether there's anything in
14 here talking about two Truic generators.
15 Q Okay. Have -- as you sit here, do you
16 recall seeing either the IFU or any other literature
17 depicting the use of two Truic generators, one
18 attached to the 16 French catheter and one attached
19 to the 24 French catheter?
20 A I am unaware of anything other than what I
21 mentioned, that there may be something within this
22 IFU that speaks to the fact that you can do that or
23 provide even other sources of vacuum.
24 Q And if the IFU doesn't describe using
25 additional pressure sources, is there anything else

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1 you're aware of that would describe using two
2 different generators or pressure sources with the 16
3 French and 24 French Symphony catheters?
4 MR. KEESE: Objection. Vague.
5 THE WITNESS: It would be the physician's
6 decision if he wanted to use a single or dual, and I
7 suspect it would really depend on the -- the
8 treatment that they're trying to provide to the
9 patient.
10 As I look at this as an engineer and look
11 at a single pressure source going to two different
12 catheters and I look at that stopcock, it appears to
13 be a three-way stopcock, which means you can only be
14 applying the vacuum pressure to one catheter or the
15 other.
16 If, for some reason, the physician would
17 like to apply it to both catheters, which they
18 routinely do, then it may be better for the physician
19 to utilize two Truvic generators.
20 BY MR. STOWELL:
21 Q But are you aware of any instances where
22 two different pressure sources were actually used
23 with the Symphony catheter?
24 MR. KEESE: Objection. Misstates
25 testimony. Vague. Calls for a legal conclusion.

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1 THE WITNESS: I have not personally
2 witnessed the use of two separate generators with the
3 Symphony catheters.
4 BY MR. STOWELL:
5 Q If we turn back to page 60, where we were
6 previously, you identify the vacuum pump.
7 Is it your understanding that the vacuum
8 pump that you identify on page 60 is the same vacuum
9 pump that you identified for the first pressure
10 source previously?
11 MR. KEESE: Vague.
12 THE WITNESS: I ask the same question I did
13 before.
14 When you say is it the first pressure
15 source identified previously, are you referring to as
16 in a piece of capital equipment, is it the same piece
17 of capital equipment, meaning that I had purchased it
18 twice and they're the same, or are you referring to
19 I'm using one device for two different catheters?
20 BY MR. STOWELL:
21 Q It's the latter. You're using one device
22 for two different catheters.
23 A So as I see here, they have -- are showing
24 that there is a vacuum pump attached to the 16
25 French. The other image shows another vacuum pump

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1 attached to the 24 French.
2 Q And so is it your understanding that --
3 well, I guess the issue is that these are cropped
4 images; right?
5 So it doesn't actually show the connection
6 between the vacuum pump and the -- and the device;
7 correct?
8 A You are correct. It is lacking that.
9 Maybe I'm not quite understanding your question. I
10 think we know that that vacuum pump is connected to
11 the Symphony catheter in order for it to aspirate.
12 Q Right. And I'm trying to determine, for
13 the first pressure source and the second pressure
14 source --
15 A Okay.
16 Q -- are you relying on one generator, or are
17 you relying on two different generators?
18 MR. KEESE: Objection. Vague.
19 THE WITNESS: When you say am I relying on,
20 for what?
21 BY MR. STOWELL:
22 Q For your infringement analysis. You have
23 alleged that the Symphony has a first pressure
24 source, and you have alleged that the Symphony has a
25 second pressure source.

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1 When you make those allegations, are you
2 alleging that the vacuum pump or generator that is
3 part of the first pressure source is also the same
4 vacuum pump or generator that's part of the second
5 source?
6 Is there just one vacuum generator or
7 pressure source, or are you assuming two different
8 vacuum pumps or generators?
9 MR. KEESE: Objection. Calls for a legal
10 conclusion. Vague.
11 THE WITNESS: Yeah. I don't think I am
12 assuming either-or as far as is it one or is it two.
13 I think what I am assuming here is that each catheter
14 is connected to a pressure source.
15 Now, the generation of that pressure can
16 come from one generation source, but the -- each
17 catheter has access to a pressure source. And as the
18 claim of '921 says, the pressure source can be the
19 same, can be a single source for both catheters.
20 BY MR. STOWELL:
21 Q So Claim 1 of the '910 patent doesn't say
22 that, does it?
23 MR. KEESE: Objection. Calls for a legal
24 conclusion.
25 THE WITNESS: Claim 1 just speaks to

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1 pressure sources. Claim 4 speaks to the fact that
2 they can be the same pressure source.
3 BY MR. STOWELL:
4 Q Okay. But in Claim 1, is it your
5 understanding that they can be the -- that the first
6 pressure source and the second pressure source can be
7 the same pressure source?
8 A Based on Claim 4, yes.
9 Q And so if the Symphony system were being
10 operated with only one generation source that was
11 attached to both catheters, would you consider that
12 to practice Claim 1 of the '910 patent?
13 A I'm not a lawyer. I'm not going to get
14 into the exact details as far as whether it does
15 whether -- based on just Claim 1. I know that
16 Claim 4 is dependent on Claim 1; so therefore,
17 Claim 4 can be applied to Claim 1.
18 Q But you understand Claim 4 is not at issue
19 in the preliminary injunction; right?
20 A It is not at issue in the preliminary
21 injunction. That is correct. But, again, I'm not a
22 lawyer, so I don't know how Claim 4 is linked into
23 Claim 1 and whether it does apply to the preliminary
24 injunction.
25 Q Okay. So if the Symphony system were being

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1 operated with only one generation source that was
2 attached to both catheters, would you consider that
3 Symphony system to practice Claim 1 of the '910
4 patent?
5 MR. KEESE: The document speaks for itself.
6 THE WITNESS: As I have opined here, yes.
7 They are both connected to a pressure source. A
8 pressure source includes not -- not only that vacuum
9 pump; it includes the clot canister; it includes the
10 tubing. So they each have their own pressure source.
11 BY MR. STOWELL:
12 Q And you say they each have their own
13 pressure source even though there might be an overlap
14 in the generation source?
15 A Correct.
16 Q Okay. Let's go back to page 69 real quick.
17 And do you know whether the image on page 69 from the
18 Symphony IFU is an accurate representation of how
19 Imperative Care instructs doctors to set up the
20 Symphony system?
21 A I have to assume that it is if it's in the
22 IFU.
23 Q Okay. And have you done any investigation
24 to determine whether or not doctors set up the
25 Symphony system as shown on page 69 of your expert

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1 declaration?
2 A I have not done any investigation. I
3 suspect that some doctors do it exactly as it's shown
4 here, and other doctors may do what we discussed
5 earlier, that if they want to have both catheters
6 aspirating at the same time, they may utilize two
7 generators.
8 Q But you're not aware of any doctors that
9 have specifically used two generators; correct?
10 A I have not observed that.
11 Q Let's go to page 77 of your expert
12 declaration. And in this section, just to summarize,
13 it looks like you are explaining why you think the
14 Symphony hemostasis valve meets the limitations of
15 Claim 1 of the '921 patent.
16 Is that an accurate summary of where we're
17 at?
18 A Based on the images of the previous page
19 and what I'm seeing here, I would say that is
20 accurate.
21 Q Okay. And you say in paragraph 182, "The
22 Symphony system practices this limitation because the
23 hemostasis valve in the Symphony handle has an active
24 tensioning mechanism, including a first actuator."
25 And then in parens, you say, "(a first button, first

Page 200

1 lever, and a first pin)."
2 Why did you include the parenthetical
3 there?
4 A The actuator -- someone could question what
5 is all included within the actuator, so to provide
6 clarity, it's in parens.
7 Q And so you believe that the actuator in the
8 Symphony device includes the first button, the first
9 lever, and the first pin?
10 A That is correct.
11 Q Okay. Are there any other components that
12 you think are part of the first actuator that are not
13 listed there in paragraph 182?
14 A Not that I'm aware of right now.
15 Q Okay. And I notice that you didn't do the
16 same thing for an active tensioning mechanism.
17 What portions of the Symphony valve do you
18 believe make up the active tensioning mechanism?
19 A Are you up in paragraph 181?
20 Q I'm in -- I'm in 182. You say, "The
21 Symphony handle has an active tensioning mechanism."
22 And there's no parens after that, so I'm wondering
23 what portions of the Symphony valve do you believe
24 are the active tensioning mechanism?
25 MR. KEESE: The document speaks for itself.

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1 THE WITNESS: The -- the active tensioning
2 mechanism, as the document says includes. And so you
3 say it doesn't have parentheses, but it says
4 includes. So includes the first actuator and the
5 first filament. And that is what I'm seeing right
6 here.
7 BY MR. STOWELL:
8 Q Okay. Is there anything else that you
9 consider to be part of the active tensioning
10 mechanism in the Symphony handle?
11 A The -- the active tensioning member also in
12 the Symphony system has a biasing spring, and so that
13 spring would be included as part of the active
14 tensioning member.
15 Q Okay. Anything else?
16 A That is what I'm aware of right now.
17 Q On page 78, you have a picture of the valve
18 in the Symphony system, and there are a number of
19 annotations around the picture.
20 Did you make these annotations?
21 A I assisted in making them. I -- I didn't
22 do the actual artwork, but I assisted in them.
23 Q And did you review and agree with the
24 annotations?
25 A I did.

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1 Q Okay. On the right-hand side, one of the
2 boxes says, "2nd end of 1st filament."
3 Do you see that?
4 A I do.
5 Q And how is that the end of the first
6 filament? It looks like you're pointing to a portion
7 that's, you know, in the middle of the filament.
8 A If I remember the claim language or
9 possibly the specification, it talks about different
10 portions of the filament, and there's a first portion
11 and a second portion or something along those terms.
12 Let's see if I can find it here, what it's referring
13 to.
14 That's what I'm remembering right now. But
15 what is your question?
16 Q Well, I'm focused particularly on your use
17 of the word "end." You know, we can see the end in
18 the picture. One's on the left-hand side at the
19 bottom of the picture, and one's on the right-hand
20 side at the bottom of the picture, but you're calling
21 something in the middle of the filament the end.
22 So I'm trying to figure out, when you're
23 using the word "end," what -- what are you meaning?
24 A As I said earlier, I think that was
25 referring to what was in the specification as far as

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1 portions of the filament.
2 And, I mean, I'd have to spend time
3 reviewing, going through this to find it. But, like
4 I said, I believe that's what it's tied back to.
5 Q So help me out here. The picture uses the
6 word "end," and you keep referring to something in
7 the spec referring to portions of the filament.
8 How -- how are those linked to each other?
9 A So the filament -- there's a portion of
10 that filament that is wrapping around the elastomeric
11 member, and then there's a portion of the filament
12 that extends out to the actuators.
13 When I say the word "portion," I'm
14 referring to portions of the filament.
15 Now, I don't recall exactly what this
16 specification calls each one of those portions. It
17 may refer to as a first end, a second end, those
18 parts that are extending out.
19 Q Would you agree with me, though, that in
20 the picture at the top of page 78, where the arrow
21 for "2nd end of 1st filament" is pointing, that is
22 not actually the end of the filament; correct?
23 MR. KEESE: Objection. Calls for a legal
24 conclusion.
25 THE WITNESS: It's not the end of the

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1 filament, meaning the very end, but it may be the end
2 as it is defined in the '921 patent.
3 BY MR. STOWELL:
4 Q Okay.
5 MR. KEESE: Josh, while you're there, can
6 we plan to take a break at 3:00? I have a family
7 thing that I need to check in on, so --
8 MR. STOWELL: Okay.
9 BY MR. STOWELL:
10 Q Okay. Let's turn to page 26 of your expert
11 declaration.
12 A 26?
13 Q Page 26, yeah.
14 A I am there.
15 Q Okay. In paragraph 86, you state that, "In
16 my opinion, the field of invention is mechanical
17 thrombectomy, including aspiration-based mechanical
18 thrombectomy, in peripheral and pulmonary
19 vasculatures."
20 Do you see where I'm at?
21 A I do.
22 Q When you say "mechanical thrombectomy," I
23 take it that includes aspiration-only thrombectomy?
24 MR. KEESE: Objection. Misstates the
25 testimony.

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1 THE WITNESS: So the invention, meaning
2 the -- in this case, I believe we're talking about
3 the '910, the -- the invention does include
4 aspiration-only. It includes aspiration in
5 combination with the FlowTrieve or the ClotTrieve.
6 BY MR. STOWELL:
7 Q So earlier, we talked about mechanical
8 thrombectomy devices that could actually engage the
9 clot.
10 A Correct.
11 Q We had talked about those as being
12 different than aspiration.
13 When you use the term "mechanical
14 thrombectomy," are you referring to thrombectomy
15 devices with only those mechanical elements, or are
16 you including aspiration-only?
17 A I believe here I was referring to both.
18 Q Okay. And you had said you thought we were
19 referring to the '910 patent here. I don't see any
20 mention of the '910 patent.
21 Why do you think this level of ordinary
22 skill in the art is limited to the '910 patent?
23 MR. KEESE: Objection. Misstates the
24 testimony.
25 THE WITNESS: I was reading, in my opinion,

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1 the field of invention, and so I was assuming we were
2 talking about the '910 patent relative to the field.
3 BY MR. STOWELL:
4 Q Okay. Would the field of the invention be
5 different for the '921 patent?
6 MR. KEESE: Document speaks for itself.
7 THE WITNESS: I believe the '921 also
8 applies to this field.
9 BY MR. STOWELL:
10 Q Okay. And you have limited the field to
11 mechanical thrombectomy in peripheral and pulmonary
12 vasculatures.
13 Why is that?
14 A The invention of the '921 and the '910 are
15 primarily related to large-diameter catheters. They
16 are talking about the treatment of both PE and DVT.
17 The thing that is different than prior art
18 is prior art was focusing on mechanical thrombectomy
19 in the areas of coronary and neuro. The invention of
20 all of the unique attributes of the Inari system are
21 contained here in the '921 and the '910, and they are
22 for the treatment of peripheral and pulmonary
23 vasculatures.
24 Q And so do you consider mechanical
25 thrombectomy for neurovascular or coronary

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1 applications a different field than the -- than
2 mechanical thrombectomy for peripheral and pulmonary
3 vasculatures?
4 A It's a different field clinically, yes.
5 Q Okay. What about in terms of from the
6 perspective of a person of ordinary skill in the art?
7 Are you considering it a different field?
8 A If you're talking about a physician being
9 the person of ordinary skill in the art, yes, you
10 would not have a peripheral interventionalist doing
11 procedures in the neurovasculature or you wouldn't
12 have a neurovascular doing procedures in the coronary
13 arteries.
14 And so, yes, from -- from the clinical side
15 of it, yes, it's -- it can be different fields.
16 If you're looking at it from an engineering
17 standpoint, an engineer that has been involved with
18 coronaries and neurovascular and peripheral and
19 venous and has done thrombectomy catheters, yeah,
20 they would be able to cross all these fields.
21 Q Would you be surprised to learn that there
22 are doctors out there that remove clots in
23 neurovascular applications as well as in PE
24 circumstances?
25 A I am not surprised by that, no. I am aware

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1 of that, yes. And so I'm aware of cardiologists that
2 do neurovascular cases. But you would not take a
3 peripheral interventionalist without training for
4 neuro and have them do neuro.
5 MR. STOWELL: Okay. Yeah. Why don't we go
6 ahead. We'll break so you can do your call.
7 THE VIDEOGRAPHER: We're going off the
8 record. That will be the end of Media 3 in the video
9 deposition of Brian Brown. The time is 3:00 p.m.
10 (Recess taken from 3:00 p.m. to 3:07 p.m.)
11 THE VIDEOGRAPHER: We are back on the
12 record. This is the continuation of the video
13 deposition of Brian Brown, the beginning of Media 4,
14 and the time is 3:07 p.m.
15 BY MR. STOWELL:
16 Q Okay, Mr. Brown. When we left off, we were
17 in paragraph 86. And in that paragraph, you are
18 identifying what you believe to be the level of
19 ordinary skill in the art.
20 And you have a first definition of a
21 person. This is a person with a Bachelor of Science
22 degree in engineering or an equivalent field.
23 Do you see where I'm at?
24 (Interruption in proceedings.)
25 THE VIDEOGRAPHER: Could you ask that

Page 209

1 question again?

2 BY MR. STOWELL:

3 Q This is a person with a Bachelor of Science

4 degree in engineer or an equivalent field. Do you

5 see where I'm at after parens 1?

6 A I do.

7 Q Okay. And what -- what would you consider

8 to be a sufficiently equivalent field to engineering?

9 A There are people who have physics degrees.

10 There are people who have engineering technology

11 degrees. And, obviously, depending upon what degree

12 they have, you would want more or less experience.

13 Q You also mentioned that the person would

14 have two to four years of academic or industry

15 experience in the mechanical thrombectomy industry or

16 comparable industry experience.

17 When you say "comparable industry

18 experience," what do you mean?

19 A So thrombectomy is related to the

20 management of blood clots, and so it's very much

21 involved with the -- the whole cardiovascular system.

22 So people that have experience with dealing with the

23 cardiovascular system from a standpoint of -- of

24 blood and what blood does and how it coagulates, how

25 you deal with the coagulation of blood would be

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1 important, people that also have experience with

2 fluid dynamics. Thrombectomy is very, very dependent

3 on fluid dynamics and the understanding of fluid

4 dynamics.

5 And then all, of course, dealing with --

6 with catheters, having that understanding of

7 catheters. The -- of course, anyone that's had the

8 opportunity to work with mechanical thrombectomy and

9 doing any design or invention and doing lab work

10 would definitely have the criteria that we're

11 speaking about here.

12 Q Would a person who had the requisite

13 engineering degree and two to four years of industry

14 experience designing cardiovascular stents or valves

15 meet your definition of a person of ordinary skill in

16 the art?

17 A I would say it would be dependent on

18 whether or not they were dealing with the blood

19 chemistry and how the blood coagulates, how they can

20 potentially manage that coagulation, whether they've

21 ever worked on catheters that are doing aspiration.

22 So, as an example, if -- if this person

23 you're describing had only worked on a balloon

24 catheter or worked on a stent and never worked in any

25 type of aspiration catheter or any type of

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1 thrombectomy catheter, I would say they would be less

2 qualified.

3 Q But would they still be -- they may be less

4 than someone who had worked on aspiration technology,

5 but would they still be a person of ordinary skill in

6 the art?

7 A I -- I think we're speculating here as far

8 as who this individual is. And whether they're

9 qualified or not, I guess we'd have to see their

10 qualifications.

11 Q Okay. You also mention here, you have a

12 parens that says, "including for smaller arteries."

13 Do you see that?

14 A I do.

15 Q Okay. And what are you referring to there?

16 How does the experience with smaller arteries come

17 into play in your definition of the engineering

18 POSITA?

19 A Right. What I'm referring to here is a

20 person of ordinary skill in the art relative to these

21 patents, the '910 and '921 -- of course, the '910 and

22 '921 are talking about catheters and products for

23 treating larger-diameter arteries and veins.

24 And so what I'm saying is if the person has

25 experience in thrombectomy procedures, that is the

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1 qualification they need. It doesn't necessarily have

2 to be just for large-diameter vessels. It could also

3 be for smaller-diameter vessels.

4 Q Got it. Okay.

5 And I realized I used an acronym, POSITA,

6 person of ordinary skill in the art.

7 Are you familiar with that acronym? Have

8 you heard that before?

9 A I am very familiar with that, yes.

10 Q Okay. Okay. Good.

11 So you have your engineering expert. You

12 also then have a second potential person of ordinary

13 skill in the art who would -- you've identified as an

14 interventional radiologist or a pulmonologist;

15 correct?

16 A That is correct.

17 Q Okay. And that person, you believe, would

18 need three years of experience developing or using

19 medical devices in thrombectomy procedures; correct?

20 A That is what I have written here, yes.

21 Q Okay. And so you believe that the -- the

22 doctor's experience would need to be specific to

23 thrombectomy procedures to qualify as a person of

24 ordinary skill in the art?

25 A That is correct.

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1 Q Okay. And as with the engineering expert,
2 it looks like you would agree that if that doctor has
3 experience in thrombectomy procedures in smaller
4 arteries but not necessarily larger -- larger
5 arteries, they could still qualify as a person of
6 ordinary skill in the art; is that correct?
7 A So for the engineer, yeah, I did speak
8 about the smaller arteries. When it comes to the
9 physician, it's very similar to -- to the
10 conversation that you and I were having before the
11 break where on the clinical side, I assume if you're
12 going to be pulling a physician in as a expert,
13 you're looking for their clinical expertise.
14 And so when it comes to the treatment of
15 DVT, the treatment of PE, I -- I don't think you
16 would necessarily want to pull in a neuro --
17 neurovascular individual or a cardiologist if they've
18 never done procedures in either the pulmonary or the
19 veins of the leg.
20 Q So where you have under parens 2, when
21 you're talking about the interventional radiologist
22 or pulmonologist, where you have the parens in line 8
23 "including for smaller arteries," is that a -- is
24 that a mistake, that "including for smaller
25 arteries"?

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1 A Well, and I should clarify, because, yes,
2 you do have smaller arteries, obviously, in PE and in
3 the -- in the veins of the leg, and so it could get
4 down into the smaller arteries.
5 What I'm saying, though, is we want to try
6 to find someone who has done procedures in -- for
7 doing -- treating PE or DVT. That would be the
8 ideal.
9 Q I think we can agree that would be the --
10 the ideal. But in terms of defining this fictional
11 person of ordinary skill in the art, would an
12 interventional radiologist or pulmonologist who just
13 has experience with thrombectomy in the neurovascular
14 space -- could they qualify as a person of ordinary
15 skill in the art, in your opinion?
16 A It's a hard one to answer. Because when I
17 lay out interventional radiologist and pulmonologist,
18 those -- those are people that are primarily not
19 treating neurovascular, not treating coronary.
20 Now, as you mentioned earlier, they can
21 because they've had additional training. But the
22 training they have is for treating the peripheral
23 vasculature, and that's what this is saying.
24 Q Would an interventional radiologist who
25 treats the neurovascular space -- could they be a

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1 POSITA under your -- in your view?
2 A If they are also treating peripheral
3 vasculature, yes.
4 Q Okay. So the -- the doctor, person of
5 ordinary skill in the art under your definition, must
6 have some experience treating pulmonary embolisms or
7 DVTs; is that fair?
8 A I said that that would be ideal.
9 Q Okay.
10 A What I'm saying, though, is if you are an
11 interventional radiologist or a pulmonologist, in
12 order to receive that title, you have experience in
13 the peripheral vessels. So that -- that in itself
14 defines that requirement that you have experience in
15 the peripheral vessels.
16 Q Okay. Okay. You then say in your last
17 sentence, "A person with less education but more
18 relevant practical experience or more relevant
19 education but less practical experience may also meet
20 this standard."
21 What -- what do you mean by that?
22 A There's always the exception to the rule.
23 Q Okay.
24 A And, of course, the exceptions are going to
25 have to be justified somehow. So these would be some

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1 of the justifications for the exception.
2 Q You provide a claim construction for the
3 term "filament" in paragraph 90 of your expert
4 declaration; correct?
5 A I do.
6 Q And you opine that filament should mean "a
7 thin, flexible length of material formed by one or
8 more strands of material"; correct?
9 A Correct.
10 Q And where did that definition come from?
11 A Came from the context of the '921 patent.
12 Q The '921 patent never refers to the
13 filament as thin, does it?
14 A I would have to take a look.
15 Q Do you have a recollection of seeing the
16 word "thin" in the '921 patent?
17 A I do not have a recollection of that
18 specific word.
19 Q And so how was it that you came to insert
20 "thin" into your definition of "filament"?
21 A Before I answer that question, I'd like to
22 find where '921 does speak to the definition of
23 filament.
24 Q I think Column 9. Based on the citations
25 in your expert report, the top of Column 9 may be one

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1 spot. I won't -- I won't try to represent that's the
2 only spot, but that may help you.
3 A Yeah. I think, as I look at this, that --
4 just looking at the one paragraph at the page -- at
5 the top of page 9, the definition of "filament" is
6 referring to items that are thin. And so including
7 the term "thin" is very appropriate in the
8 definition.
9 Q And so that term "thin," is that a term
10 that -- that you created for this definition?
11 MR. KEESE: Objection. Misstates the
12 testimony. Vague.
13 THE WITNESS: It is a -- it is my opinion
14 as far as what the definition of a filament is.
15 BY MR. STOWELL:
16 Q And did -- the use of the term "thin," did
17 that come from any other reference, such as a
18 dictionary, or is it just a term you thought of to
19 apply to the word "filament"?
20 A There is a chance it came also from a
21 dictionary. I do recall looking up the plain and
22 ordinary meaning of a filament. So there is that
23 chance that the dictionary did include that term.
24 Q Do you know if a dictionary was involved?
25 A Yes, I did utilize a dictionary to -- to

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1 look up the definition, the plain and ordinary
2 meaning of "filament."
3 Q And what dictionary did you use?
4 A I know I cited dictionaries in my
5 declaration. I don't recall whether I included it
6 for filament or something else.
7 Q Are you referring to paragraph 91 of your
8 declaration? It looks like there are some citations
9 there.
10 A That is correct.
11 Q And so did the word "thin" come from one of
12 the dictionaries cited in paragraph 91?
13 A It did, and that is spelled out here, where
14 it is a single thread or a thin, flexible, threadlike
15 object.
16 Q Now, in your proposed construction of
17 filament, you also used the term "flexible," and the
18 '921 patent also does not use the word "flexible" to
19 refer to the filament.
20 Is that another term that came from the
21 dictionary definitions in paragraph 91?
22 A It appears to be, yes.
23 Q You have accused Imperative Care of using a
24 definition of "filament" that you say in paragraph 92
25 is broader than the plain and ordinary meaning of the

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1 word "filament."
2 Do you see that?
3 A I do.
4 Q And Imperative Care's construction was "at
5 least one or more threads, lines, cords, ropes,
6 ribbons, flat wires, sheets, or tapes."
7 Is that your understanding?
8 MR. KEESE: Objection. Misstates the
9 testimony. Document speaks for itself.
10 THE WITNESS: So the Truvic proposed
11 construction includes any structure having the items
12 that you just listed.
13 BY MR. STOWELL:
14 Q Is that your -- your interpretation of
15 Truvic's proposed construction?
16 A That is my understanding of what their
17 proposed construction is, that is, of any structure,
18 including those.
19 And what is not fitting relative to the
20 definition of "filament" is where it speaks of any
21 structure having at least one of these objects.
22 So you basically could have a very large
23 object containing a thread or a line or a cord or a
24 rope, and it would then fit the definition of
25 "filament." That is not the intention of what the

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1 definition of "filament" is.
2 Q If Imperative Care didn't say "any
3 structure having," would you agree that the rest of
4 Imperative Care's construction that begins with "at
5 least one" accurately describes a filament as you
6 understand that term being used in the '921 patent?
7 MR. KEESE: Vague.
8 THE WITNESS: I'm sorry?
9 MR. KEESE: I said vague. Objection.
10 Vague.
11 THE WITNESS: Okay.
12 I have not had a chance to review what
13 you're proposing, so I would prefer not to provide an
14 opinion on it right now.
15 BY MR. STOWELL:
16 Q As we sit here today, do you -- do you --
17 can you see any issues with the definition of
18 filament that was "at least one or more threads,
19 lines, cords, ropes, ribbons, flat wires, sheets, or
20 tapes?"
21 A Yes, because this doesn't speak about
22 flexibility.
23 Q And are you aware that the definition that
24 was proposed by Imperative Care came from the '921
25 patent? You actually have it in paragraph 90 -- at

Page 221

1 the very bottom of paragraph 90, where it says, "The
2 filament 150 can comprise one or several threads,
3 lines, cords, rope, ribbon, flat wire, sheet, or
4 tape."
5 Are you aware of that?
6 MR. KEESE: Objection. Misstates the
7 testimony. Misstates the document.
8 THE WITNESS: Correct. So that -- that is
9 what a filament can be comprised of. That's not
10 necessarily the definition of filament.
11 BY MR. STOWELL:
12 Q Well, it doesn't say "comprised of." It
13 says, "The filament can comprise one or more"; right?
14 A You are correct. So it can comprise these
15 items.
16 Q Right. So the filament could be a flat
17 wire, for example?
18 A Correct.
19 Q And the filament could be a sheet?
20 A Correct.
21 Q Okay. And do you dispute, I guess, at the
22 bottom of page 90 that the filament can comprise one
23 or several threads, lines, cords, rope, ribbon, flat
24 wire, sheet, or tape?
25 MR. KEESE: I apologize. Objection.

Page 222

1 Vague.
2 There's a reference to page 90?
3 MR. STOWELL: Paragraph 90.
4 MR. KEESE: Sorry.
5 THE WITNESS: Please reask the question.
6 BY MR. STOWELL:
7 Q Yeah.
8 At the bottom of paragraph 90, do you
9 dispute that the filament can comprise one or several
10 threads, lines, cords, rope, ribbon, flat wire,
11 sheet, or tape?
12 A I agree with that statement.
13 Q Okay. So you don't -- you don't dispute
14 that those items are encompassed within the meaning
15 of "filament"?
16 MR. KEESE: Vague.
17 THE WITNESS: I don't -- I feel like we're
18 asking a double negative here.
19 The -- yeah. The filament can comprise the
20 items listed there.
21 BY MR. STOWELL:
22 Q Okay. And is it your understanding that
23 each of the items listed at the bottom of
24 paragraph 90 in that citation 9:15-17, that each of
25 those items are thin and flexible?

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1 A Yes, based on the definition of what a
2 filament is.
3 Q And so, for example, a sheet, a sheet would
4 be thin in one direction, but could be very wide in
5 the other.
6 Would that still meet your definition of
7 "thin" that you've used for filament?
8 A It can, yes. So the sheet would be thin.
9 The sheet would be flexible. Not that much different
10 than the sheet on a bed.
11 Q And earlier, you had talked about your
12 understanding of a filament as being something that
13 could be sewn.
14 Can a sheet be sewn?
15 A I said that it wasn't a requirement that it
16 be sewn. So in the case of a sheet, as I had
17 mentioned, if you are not able thread it through the
18 eye of a needle, it would be very difficult to sew
19 it. So this would be a perfect example of where a
20 filament would not meet the requirement of sewing but
21 would still be a filament.
22 Q Let's go back beginning of paragraph 5 of
23 your declaration.
24 A Do you mind, if before we go back there,
25 since we're here in this section, I saw something

Page 224

1 that reminded me of an earlier question that you had
2 asked me.
3 Q Sure.
4 A Let me see here. It was paragraph 84.
5 Q Okay.
6 A So at the very -- well, the question you
7 asked me earlier is whether the Inari devices
8 utilized in the hemostasis valve, whether they
9 practiced the '921 patent. And in my declaration, I
10 speak to how the FlowTrievers practices the '921.
11 You asked me whether the ClotTrievers does
12 or not as far as whether it is part of my
13 declaration.
14 As we looked, we did not find anything
15 specific in my declaration relating to whether or not
16 the FlowTrievers practices the '921, but you'll see
17 here in paragraph 84 that I do speak to the fact that
18 the ClotTrievers and the FlowTrievers both utilize the
19 same hemostasis valve, so therefore they both
20 practice the '921.
21 Q Okay. Is there a portion of your expert
22 declaration where you apply the claim limitations to
23 the ClotTrievers?
24 A That -- no, there is not. That was
25 probably a mistake on my part.

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1 Q Okay. Okay. You know, we did have one
2 other outstanding question about long-felt need and
3 which long-felt need factors were claiming -- or
4 which -- sorry.
5 Outstanding question about the secondary
6 indicia of nonobviousness.
7 A Yes.
8 Q And we were talking about which of those
9 factors you thought applied to the '910 patent and
10 the '921 patent.
11 Do you want to take a minute to see if you
12 can find that, or have you had an opportunity during
13 one of the breaks to see if you have a section
14 discussing the secondary indicia of nonobviousness?
15 A So I did take a look at that during one of
16 the breaks. What I learned was that what I have
17 included in my declaration that was -- in my memory
18 was the definitions of the secondary considerations.
19 Q Okay.
20 A Now, if we look at those definitions, yeah,
21 it's very easy to take and apply what are those
22 secondary considerations for the conditions that we
23 were talking about, so for the products and the --
24 and the claims.
25 Q And so we looked at the -- the sections in

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1 the invalidity section where you specifically
2 mentioned secondary considerations or indicia of
3 nonobviousness.
4 A Right.
5 Q Are there other sections in this report
6 where you address the secondary considerations of
7 nonobviousness other than the part where you
8 identify, generally speaking, what they are?
9 A It's not written up in the report, but the
10 secondary considerations, as they are laid out, do
11 apply to the products. As an example, for the
12 hemostasis valve, there's not a good product on the
13 market right now for providing hemostasis to
14 large-diameter catheters. They don't provide the
15 type of bleeding and vacuum sealing that is required.
16 There's been reports that the physicians
17 were very surprised by how well that product works.
18 They really like using it, the catheter. So when we
19 talk about the telescoping catheters, the
20 large-diameter catheters, doctors are being able --
21 able to treat patients and conditions that they have
22 not been able to treat in the past as far as they're
23 much more successful right now.
24 One of the things that's been rather
25 interesting is the feedback from physicians that

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1 they -- it's not intuitive to them to use a
2 large-diameter catheter.
3 In fact, when Inari was taking and trying
4 to develop this product and they were bringing it out
5 to physicians, the physicians were very skeptical on
6 using a large-diameter catheter. And Inari was able
7 to develop it and bring it to them, and they were
8 able to utilize it, and they were very surprised on
9 how well it worked.
10 Q And when you're referring to physicians'
11 skepticism, I recall from our earlier conversation
12 that you haven't actually talked to any physicians
13 about the Inari products; is that correct?
14 A That is correct.
15 Q So where are you getting this information
16 that there were skeptical physicians?
17 A Some of that has come from Ben's
18 deposition.
19 Q Okay.
20 A I will also share with you on my own
21 personal experience over my career that physicians
22 are always against going larger because anytime you
23 start going larger with a catheter, you risk having
24 damage to -- to the vessels that you're treating.
25 Also, the other risk of going larger is the

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1 access site. So if the access site is in your leg,
2 in your groin, the larger the catheter is, the more
3 difficult it is for it to seal after the procedure is
4 done. So, as I said, it's not intuitive for -- for
5 physicians to want to go larger.
6 And, of course, they also view larger as
7 being much stiffer, more difficult to manage and to
8 be able to treat the conditions that they are trying
9 to treat.
10 Q Do you think the size of Inari's catheters
11 may be one reason why many doctors prefer Penumbra
12 and why Penumbra is gaining market share on Inari?
13 MR. KEESE: Calls for speculation.
14 THE WITNESS: I don't know the reason. It
15 could be a reason. As I mentioned, doctors always
16 tend to migrate towards a smaller profile catheter
17 for being able to do closure. It might be one of the
18 reasons they do like it.
19 BY MR. STOWELL:
20 Q And then you had mentioned surprise for the
21 hemostasis valve.
22 What is your basis for alleging that there
23 was some sort of surprise for a hemostasis valve?
24 A Also from Ben's deposition, the fact that
25 they are able to actuate that hemostasis valve with

Page 229 1 one hand. Many of the other valves that we discussed 2 earlier require two hands to actuate. They also 3 require many, many rotations to actuate. 4 So to go take a large-diameter opening 5 that's in a hemostasis valve and take it from fully 6 open all the way down to fully closed with a 7 rotational type of an actuator takes many, many 8 actuations, whereas the hemostasis valve in the Inari 9 products, it is a single actuation. It's almost 10 instant with one hand that they can go through the 11 full travel of fully open to fully closed. It's also 12 very simple to just do minor adjustments as you're 13 moving catheters in and out. 14 Q And what -- what is your understanding of 15 what specifically physicians were surprised about 16 with the valve? 17 A How easy it is to use. How quick it is to 18 use. How well it seals. 19 And when we talk about sealing, of course, 20 that gets into the concerns about blood loss. It 21 gets into the concerns about maintaining pressures. 22 Q And are you aware of any evidence that any 23 of this surprise by physicians had anything to do 24 with the use of the filament in the valve? 25 A It has to do with, yes, the filament from	Page 231 1 your experience with Boston Scientific and SciMed. 2 A Okay. I'm on page 5. 3 Q And in that paragraph, you say you have 4 over 30 years of research and development experience 5 working in the cardiovascular and medical device 6 industries across a wide variety of application 7 areas, including development of neurovascular, 8 cardiovascular, peripheral vascular, and pulmonary 9 aspiration thrombectomy devices. 10 Do you see where I'm at? 11 A I don't. What paragraph are you in? 12 Q Paragraph 5. 13 A Sorry. I thought we were on page 5. 14 That's why -- 15 Q Sorry. I may have said page 5. 16 Paragraph 5. 17 A Okay. Okay. I'm there, and I see what 18 you've read. 19 Q Okay. And are those terms -- 20 neurovascular, cardiovascular, peripheral vascular, 21 and pulmonary -- all modifiers of aspiration 22 thrombectomy devices? 23 A It is not. 24 Q Okay. 25 A Those are individual areas. Some of those
Page 230 1 this -- from how that internal member is being 2 compressed down. The fact that it's being 3 circumferentially brought down allows for -- as an 4 example, if you were to put a large-diameter catheter 5 through there and then try to flatten it, which is 6 more of a pancake type of a shape, it's not going to 7 seal out on the outer edges. It will only seal on 8 the top and the bottom. 9 Somewhat similar is you get real small, and 10 you're taking and pancaking it down, you could get 11 openings out on the ends of the pancake, versus if 12 everything's circumferentially going down, more like 13 the iris on a camera, it makes a much nicer seal. 14 Q Yeah. Let me ask a little more specific 15 question. 16 Is any of the surprise by the physicians -- 17 did any of them express surprise that the filament 18 worked for that purpose, or do the physicians even 19 know that a filament is inside the hemostasis valve? 20 A It is more the latter. Physicians have no 21 idea what's on the inside of it. 22 Q Okay. I did want to ask you, on 23 paragraph 5 of your -- 24 A Okay. 25 Q -- declaration, you talk a little bit about	Page 232 1 areas of clinical treatment do include pulmonary -- 2 excuse me -- aspiration devices. 3 Q So in what areas did you work on aspiration 4 thrombectomy devices? 5 A I worked in the area of neurovascular and 6 cardiovascular and peripheral vascular. 7 Q And were you helping to design and develop 8 products for neurovascular, cardiovascular, and 9 peripheral vascular? 10 A That is correct. 11 Q And these were aspiration thrombectomy 12 devices? 13 A Correct. 14 Q And when you were developing an aspiration 15 thrombectomy device for, let's say, a peripheral 16 application, did you ever consult art or prior ideas 17 from neurovascular and cardiovascular? 18 A I -- part -- part of my development process 19 was to understand the prior art in neurovascular and 20 cardiovascular. 21 Q And did you ever incorporate ideas or 22 solutions that were developed for neurovascular and 23 cardiovascular for your peripheral vascular 24 thrombectomy devices? 25 A Yes.

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1 Q Can you give me an example of something
2 that you had taken from the neurovascular or
3 cardiovascular space and -- and used in the
4 peripheral application?

5 A I can. One example is in the work that I
6 was performing, we were aspirating the thrombus into
7 the catheter, many times the thrombus would cork or
8 plug the orifice in which we were aspirating through.
9 And so we had mechanical devices, very similar, in
10 fact, to the Symphony's helical device that they
11 have, so very similar to that, that we were utilizing
12 for all three of those applications.

13 Q Okay.

14 A I was going to ask, though, keeping in mind
15 it isn't necessarily going to be just a direct
16 one-for-one transition of taking something from one
17 space and using it into the next space.

18 So when we talk about, for instance, this
19 helical mechanical device, we would have to custom
20 design it for each one of those applications. And
21 depending upon the diameter, depending upon the
22 flexibility requirements, depending upon the type of
23 thrombus that we were treating, we would customize it
24 for those different applications.

25 MR. STOWELL: Okay. At this time, I have

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1 no further questions for you, Mr. Brown. Thank you
2 for your time.

3 MR. KEESE: No questions from me.

4 THE VIDEOGRAPHER: Read and sign?

5 MR. STOWELL: Yeah. I will assume the
6 witness would want to read and sign.

7 MR. KEESE: Yes. We'll want to read and
8 sign.

9 THE VIDEOGRAPHER: Okay. All right. We
10 are going off the record. That will be the end of
11 Media 4 and the conclusion of the video deposition of
12 Brian Brown. The time is 3:49 p.m.

13 MR. KEESE: And we'll designate "OCEO," but
14 we'll work with you to dedesignate it.

15 I'd like a rough, standard delivery. Mini
16 and full with index.

17 (Videotaped Deposition concluded at
18 3:49 p.m.)
19
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23
24
25

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BE IT KNOWN that the foregoing proceedings were taken
before me; that the witness before testifying was duly
sworn to testify to the whole truth; that the foregoing
pages are a full, true and accurate record of the
proceedings, all done to the best of my skill and
ability; that the proceedings were taken down by me in
stenographic shorthand and thereafter reduced to print
under my direction.

I CERTIFY that I am in no way related to
any of the parties hereto, nor am I in any
way interested in the outcome thereof.

(X) Review and signature requested.

() Review and signature waived.

() Review and signature neither requested
nor waived.

IN WITNESS WHEREOF, I have subscribed my
name this 30 day of August, 2024.

Lindsay DeWaide

Lindsay DeWaide, RMR, CRR

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I, Brian Brown, do hereby certify that I
have read the foregoing transcript of proceedings, taken
on the 27th day of August, 2024, at JW Marriott
Minneapolis Mall of America, 2141 Lindau Lane,
Bloomington, Minnesota, and that the same is true and
correct except for the list of corrections, if any,
noted on the annexed errata sheet.

Brian Brown

Dated at _____, _____,
(City) (State)
this _____ day of _____, 2024.