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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INARI MEDICAL, INC., Plaintiff, vs. IMPERATIVE CARE, INC., Defendant.	Civil Action No. 24-cv-3117-YGR

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

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ALSO PRESENT: Pat Curto - Videographer

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PREVIOUSLY MARKED EXHIBITS

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Exhibit 4	United States Patent and Trademark Office Office Action in Application No. 18/342,553	90
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INFORMATION TO BE SUPPLIED

Page Line

(None)

QUESTIONS INSTRUCTED NOT TO ANSWER

Page Line

(None)

BLOOMINGTON, MINNESOTA; TUESDAY, AUGUST 27, 2024
8:09 A.M.
* * *

(Whereupon Exhibit No. 1011 was marked for identification.)

THE VIDEOGRAPHER: We are now on the record. Today's date as indicated is August 27, 2024. The time as indicated is 8:10 a.m.

This is the video deposition of Brian Brown in the matter of Inari Medical versus Imperative Care, filed in the United States District Court for the Northern District of California, Case No. 4:24-cv-03117-YGR.

Let's see. This deposition is taking place at JW Marriott, 2141 Lindau Lane, Bloomington, Minnesota.

My name is Pat Curto. I'm a Certified Legal Video Specialist representing Kayla Lotstein Stenography.

Would counsel please state their appearances for the record starting with the noticing attorney.

MR. STOWELL: Joshua Stowell of Knobbe Martens on behalf of the defendant, Imperative Care. Joining me today is Nick Belair,

also of Knobbe Martens.

MR. KEESE: Dan Keese of Perkins Coie LLP on behalf of plaintiff, Inari, and with me is my colleague, Amanda Tessar.

THE VIDEOGRAPHER: The court reporter today is -- is Lindsay DeWaide also representing Kayla Lotstein Stenography.

Sir, you may remain seated, and the court reporter will swear you in.

BRIAN BROWN, called as a witness herein, having been first duly sworn on oath, was examined and testified as follows:

E X A M I N A T I O N

BY MR. STOWELL:

Q Good morning, Mr. Brown. Could you please say and spell your name for the record.

A Brian Brown, B-R-I-A-N, B-R-O-W-N.

Q And what is your home address?

A It is 178 Jandel, J-A-N-D-E-L, Avenue Northeast, Hanover, Minnesota.

Q And I know you've been deposed before, but I'm just going to go over a couple of standard operating procedures so we're on the same page.

You understand that you're under oath today, and that you're required to tell the truth

just as if you were in a court of law?

A I do.

Q Okay. The court reporter is writing down our conversation today, so if you can try to wait for me to finish asking my question, and I will wait for you to answer before we proceed, and that way we can avoid talking over each other.

Does that make sense?

A It does.

Q Your answers today will need to be verbal, which you're already doing a good job with, but that way the court reporter will be able to write down your testimony.

Does that make sense?

A It does.

Q From time to time, your counsel may make objections, but you will still need to answer all of my questions unless you are specifically instructed not to answer by your counsel.

Does that make sense?

A It does.

Q Okay. If at any point today you don't understand one of my questions, which is bound to happen, please speak up and let me know. If you 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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were shown. But you can --
THE WITNESS: Okay.
Can you please reask the question?
BY MR. STOWELL:
Q Sure.
Did you review any other documents in preparation for your deposition?
A For the deposition, I do not believe I did -- I reviewed any other documents.
Q Did you speak with anyone to prepare for your deposition today other than counsel?
A I have not.
Q Mr. Brown, do you have any prior relationship with Inari Medical, as in before -- before this litigation?
A Not that I'm aware of.
Q Okay. Do you have any financial interest in Inari Medical?
A I do not.
Q Do you have any prior relationship with the law firm of Perkins Coie?
A This would be my first relationship with them.
Q Had you ever done any work with Perkins Coie in the past?

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A I had not been contracted to do any work with them in the past.
Q Okay. Have you ever had any sort of informal relationship with Perkins Coie in the past?
A I have interacted with them in the past.
Q And what was the nature of the interaction?
A It was a separate court case for IPR. They were the opposing side.
Q And who were the parties in that IPR?
A The parties were Penumbra Medical and RapidPulse.
Q And it's your understanding that Perkins Coie represented RapidPulse in that IPR?
A That was my understanding.
Q Okay. Do you have -- have you had any prior relationship or contact with Imperative Care?
A I have not. Not that I'm aware of.
Q I understand in the past you've done work for Penumbra.
Do you have any financial interest in Penumbra?
A Not that I'm aware of.
Q And you're aware in this case that Inari is seeking a preliminary injunction?
A I am aware of that.

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[redacted]

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[redacted]
BY MR. STOWELL:
Q Okay. Other than talking to attorneys, did you talk to anyone else about the complaint?
A I have not.
Q Okay. Have you spoken with Andrew Hykes about this litigation?
A I have not.

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Q I know you reviewed his -- his deposition, but have you spoken to Ben Merritt about this litigation?
A I have not.
Q Okay. And have you spoken to Kevin Strange about this litigation?
A I have not.
Q I will show you what's been marked as 1011. It is a document titled "Declaration of Brian Brown in Support of Inari's Motion for a Preliminary Injunction."
MR. KEESE: And, Josh, just so we're clear, his is single-sided, and mine is double-sided.
MR. STOWELL: Correct.
MR. KEESE: Okay. I just --
MR. STOWELL: Yes. Yeah. His is single-sided. It will make it easier to flip.
MR. KEESE: Yeah.
THE WITNESS: Are you feeling cheated?
MR. KEESE: It just didn't look exactly the same.
BY MR. STOWELL:
Q Mr. Brown, do you recognize Exhibit 1011?
A I do.
Q And is this the declaration you submitted

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

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

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doing?
A I believe I looked at some of the competitive products' websites.
Q And when you say "competitive products," what products are you talking about?
A I'm referring to products that would be on the market that would have similar indications to what the Inari device has.
Q And which products were those that you looked at?
A I recall looking at the Penumbra website. I'm hoping I get the name right. I think it was AngioMedic's website.
Q Maybe AngioDynamics?
A Might be AngioDynamics. Thank you.
I also looked at the Truvic website. Those are the ones I recall.
Q Okay. And when you were on those websites, were there specific products that you were looking at?
A I was looking at their products for treating veins and PE, if they did have a product for PE.
Q And so for Penumbra, did Penumbra have a product or products for treating veins and PE?

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A I believe they do.
Q And do you know what that product is called?
A I can't say with certainty, but I think it's the Indigo.
Q And did you look at the Web pages for the Indigo when you were on the Penumbra website?
A Whatever product was indicated for treating veins and venous thrombus and PE, I -- I did look at the website, yes.
Q Okay. And you think it might have been Indigo, but it sounds like maybe you're not sure today?
A I would have to look at my declaration. I know it's -- the name of it's included in my declaration.
Q Okay. What about AngioDynamics? Do you remember the product you looked at on that website?
A It was a product, again, for doing venous -- or I should just say for doing thrombectomy. I do not recall whether it was for venous or not.
Q And do you remember the product name?
A I do not. It's in my declaration.
Q And when you refer to Truvic, are you

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referring to Imperative Care?
A I believe they are one and the same. I believe the website is under Truvic.
Q And when you looked at the Truvic website, what products were you looking at?
A I was looking at their Symphony device and their Prodigy device.
Q Any other Truvic devices that you looked at?
A The Symphony device would include the accessories that go with it.
Q Okay. Any -- anything else on the Truvic website that you looked at?
A Not that I recall.
Q So you mentioned for your Internet searches, you looked at the competitor websites. You looked at the standard of care.
Was there anything else that you did research on when you were preparing your declaration?
A Not that comes to mind right now. We may find something in my declaration that reminds me of other things.
Q Okay. Did you physically inspect any products in preparing your declaration?
A I did not inspect any products in

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

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of?
A I received photos of the Inari FlowTriever and the Inari ClotTriever, photos of the -- do you prefer to use Imperative Care or Truvic?
Q Truvic no longer exists, so we use Imperative Care usually. Yeah.
A Oh, okay.
Q Yeah.
A Even though on their product it says Truvic?
Q It no longer does.
A Oh, it doesn't.
Q Yeah.
A Okay. So I looked at the Imperative Care Symphony. Those are the ones that come to mind right now.
Q Did you, other than looking at the website, inspect any of the Penumbra products in creating your declaration?
A I did not physically have the Penumbra products.
Q And what about any AngioDynamics products? Did you physically inspect any AngioDynamics products in preparing your declaration?
A I did not.

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

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

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

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A I was.
Q Okay. And which references were you aware of prior to this litigation?
A I was aware of some of the Garrison patents. I can't point to exactly which one of these Garrison applications or patents, but I am familiar with Garrison.
Q And when did you become familiar with Garrison?
A One of my previous court cases.
Q And who were you working for in that court case?
A Penumbra.
Q And was that an IPR matter that you were working for Penumbra on where Garrison came up?
A It was.
Q And was Garrison used as a reference in that case?
A I don't believe it was.
Q How did Garrison come up in that IPR?
A It was a prior art search for thrombectomy devices, and it was one of the prior arts that I was asked to review.
Q And do you know if that Garrison reference 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 FlowTriever and ClotTriever 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 FlowTriever and
22 ClotTriever?
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 FlowTriever and ClotTriever?
21 A I did not do a search of that as specific
22 as you just said.
23 Q Do you know when the FlowTriever 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 ClotTriever
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 FlowTriever and ClotTriever?
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 FlowTriever and the ClotTriever?
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

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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 FlowTriever or the ClotTriever;
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.

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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 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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MR. KEESE: Objection. Calls for a legal conclusion.
THE WITNESS: I'm not an attorney. I would have to see that claim again to recall if it is.
BY MR. STOWELL:
Q Okay. I will give you what's been marked as Exhibit 1 previously in this litigation. It is U.S. Patent No. 11,974,910.
Okay. And the question pending was: Do you believe that accelerated and precharged aspiration is required by Claim 1 of the '910 patent?
MR. KEESE: Vague. Calls for a legal conclusion.
THE WITNESS: As stated earlier, I'm not an attorney; but, in my opinion, this is describing the whoosh technique.
BY MR. STOWELL:
Q And what limitations are describing the whoosh technique?
A Well, I mean, all the limitations here are together describing the whoosh technique. I mean, you have to have a catheter. You have to have a pressure source. You have to have a fluid control device. You have to be able to actuate the fluid control device.

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

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

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THE WITNESS: The devices I'm referring to, yes, were before 2018. As I mentioned earlier, they were devices for treating coronary and cerebral thrombus.
BY MR. STOWELL:
Q And did you personally work on any of these devices?
A I have worked on thrombectomy devices. I am trying to recall whether we had a precharged system and those are not -- I'm -- at the present time, I'm not recalling whether we did or not.
Q The systems that you recall with the precharging, were any of them commercial systems?
MR. KEESE: Objection. Vague. Misstates the prior testimony.
THE WITNESS: I believe they were, yes.
BY MR. STOWELL:
Q And do you recall what names those systems had?
A I don't recall the exact name of the systems. I believe Penumbra did have a system that would turn the vacuum on and off.
Q And do you recall what application that Penumbra system was for, what part of the vasculature?

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A Yes. It would have been either for coronary or cerebral.
Q Do you recall any other systems that you had experience with or saw that had accelerated and precharged aspiration?
MR. KEESE: Vague.
THE WITNESS: That's the one that comes to mind right now.
BY MR. STOWELL:
Q Okay. And did that Penumbra system have a stopcock that could be opened and closed to release the built-up negative pressure?
MR. KEESE: Foundation. Vague.
THE WITNESS: There may have been. I would have to see the system to answer that.
BY MR. STOWELL:
Q Earlier, you said the pressure could be turned on and off.
What were you talking about?
MR. KEESE: Objection to the extent it misstates previous testimony.
THE WITNESS: The -- we were talking about having a vacuum generation source and a vacuum source, so we were turning that vacuum on and off with a fluid control valve.

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

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MR. STOWELL: Sure. Dan, I apologize. I wrote on yours, but it's --
MR. KEESE: It's fine.
MR. STOWELL: -- it's not otherwise adulterated.
MR. KEESE: Yeah.
MR. STOWELL: I apologize.
MR. KEESE: No, you're good.
MR. STOWELL: I got a little highlighter pen happy.
MR. KEESE: It's just the slip sheet anyway.
MR. STOWELL: Yeah. Okay.
MS. TESSAR: So are we breaking or --
MR. STOWELL: No. No. Let's just finish this line of questioning and do it.
BY MR. STOWELL:
Q Okay. Mr. Brown, so in front of you, you have the '921 patent.
Do you recognize this patent?
A I do.
Q Okay. And is this one of the patents that you reviewed in preparation for your deposition today?
A It is.

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

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

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

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MR. KEESE: Objection. Vague.
THE WITNESS: As I have defined telescoping catheters here, I do not recall working with telescoping catheters at Boston Scientific.
BY MR. STOWELL:
Q Okay.
A I was aware of telescoping catheters, but when you say working with, I did not work with telescoping catheters.
Q What telescoping catheters were you aware of at Boston Scientific?
A What was referred to as guide catheters for coronary applications. Guide catheters would be placed into the ostium of coronary arteries, and sometimes physicians would then take a second guide catheter and travel through the first catheter to extend its length into the coronary arteries.
Q Were you aware of any other uses of telescoping catheters during your time at Boston Scientific?
A That is the one that comes to mind.
Q And were you aware of any telescoping aspiration catheters during your time at Boston Scientific?
MR. KEESE: Objection. Vague. Calls for a

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

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to ultrasound catheters to aspiration catheters.
Q And the telescoping catheters that were run into the coronary arteries when -- while you were working at Boston Scientific, what was the -- what were the dimensions in terms of the diameter of those catheters?
A Coronary applications typically are relying more on -- on small-bore catheters. Your coronary arteries are much smaller than other arteries within the body, and so typical catheter size for a guide catheter for coronary applications is probably 6 to 8 French in size.
Q And then -- so any aspiration catheter or other catheter that was placed through the guide catheter would need to have a smaller diameter than that?
A Yes. For coronary applications, it would be smaller.
Q Okay. And while you were at Boston Scientific, what kind of range of size of catheters did you work with?
MR. KEESE: Objection. Vague.
THE WITNESS: The size of catheters really depended upon the application, and so whether it was a catheter for serving as a guide catheter or whether

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it was a treatment catheter, the types of diseases that we were working on were typically either peripheral disease or coronary disease and cerebral or neural disease. So the range was quite extensive as far as from being relatively small to relatively large.
And, as an example, if you were to take structural heart catheters, so these are catheters for delivering heart valves, those -- those are very large. Those can be up in the 20 French in diameter size.
BY MR. STOWELL:
Q And did you work on structural heart when you were at Boston Scientific?
A I did.
Q And so did you work with catheters that were in the 24 French range?
MR. KEESE: Objection. Vague.
THE WITNESS: I don't recall that it was 24 French, but they were in the 20 French range.
BY MR. STOWELL:
Q And were those catheters used to deliver heart valves into the patient's heart?
A That was one example of where they would be used.

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Q And during your stint at Boston, at what time periods were you working on structural heart with these large catheters?
A The structural heart catheters were being worked on in the last five to ten years that I was there.
Q So in paragraph 204, you refer to telescoping catheters.
Is it your understanding that Claim 1 of the '910 patent requires telescoping catheters?
And the '910 patent is Exhibit 1 for your reference.
A So, again, I'm not a patent attorney; but in my opinion, the -- the Claim 1 does not say telescoping, but many of the other claims do speak to telescoping.
Q And when you say "many of the other claims," can you point me to one of the claims that you believe discusses telescoping catheters?
A I'm going to retract what I just said because I just realized I didn't finish reading Claim 1.
Q Okay.
A I got to the bottom of the page here and didn't look to the top of the next page.

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So yes. In my opinion, Claim 1 does describe telescoping catheters.
Q Okay. In your opinion, do Claims 1 or 10 of the '921 patent describe telescoping catheters?
MR. KEESE: Objection. Vague. Legal conclusion.
BY MR. STOWELL:
Q I'll also just mention the '921 patent is a little tricky because it does have numbering earlier in the patent that looks like claims.
The claims begin on Column 22, I'll represent for you, so we're all in the same place.
A Thank you.
Q Yeah.
Just so my question is clear, in your opinion, do Claims 1 and 10 of the '921 patent describe telescoping catheters?
MR. KEESE: Same objections.
THE WITNESS: I'm not a patent attorney, but in my opinion, the Claim 1 here is not specific to telescoping catheters but definitely can be used for telescoping catheters.
BY MR. STOWELL:
Q And what about Claim 10?
A The same for Claim 10.

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Q Going back to paragraph 204 of your declaration on page 94, you mentioned "measures to minimize and mitigate blood loss, such as improved hemostasis valves, blood filtration, and blood return."

Do you see where I am?

A I do.

Q Okay. You use "such as" in that clause.

Are there other measures to minimize and mitigate blood loss that you believe are part of Inari's unique patented combinations?

A Yes, I do. Here it is speaking to the fact that Inari has designed a system that includes the hemostasis valve, it includes blood filtration systems, blood return systems, which are all part of the innovative nature of -- of the Inari product.

We spoke earlier, though, about the whoosh concept. The whoosh concept definitely is another way of minimizing blood loss because it allows you to do a procedure faster. So the faster you can do that procedure, the less blood loss that you're going to have.

Another technique is telescoping catheters. Telescoping catheters, again, allow you to do a procedure quicker.

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Q Just on the -- the whoosh concept real quick. If you're using a syringe to generate your whoosh concept, the blood loss is whatever that syringe holds; correct?

MR. KEESE: Objection. Vague.

THE WITNESS: The blood loss -- the maximum blood loss for that particular draw of the syringe would be whatever the syringe would hold.

Now, when we talk about blood loss, we're talking about blood loss during a procedure. And so, for instance, if you were to utilize Inari's blood return system, you could then take that blood that was drawn into that syringe and put it back into the patient.

BY MR. STOWELL:

Q I guess my point is, the speed with which that syringe fills with blood doesn't really impact how much blood you withdraw. You withdraw a syringe worth of blood in each pull; is that fair?

A Yes. The volume of blood that is removed from the patient, the maximum amount would be the volume of that syringe.

Q So going back to the measures to minimize and mitigate blood loss, you have the listed measures here, and you've identified whoosh and telescoping

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catheters.

Any other measures to minimize and mitigate blood loss that you can think of that you would add here?

A Those are the ones that come to mind.

Q Okay. When you refer to improved hemostasis valves, what are you referring to?

A I am referring to the valve that is on the Inari system that is the -- the valve that Inari refers to as a garrote-style valve. It is a valve that is designed specifically for sealing around large-bore catheters.

Q And is it your understanding that that -- we'll refer to it as -- shorthand as the garrote valve.

Is that okay?

A I'm okay with that, yes.

Q Okay. So is it your understanding that garrote valve is claimed in Claims 1 -- or recited in Claims 1 and 10 of the '921 patent?

MR. KEESE: Objection. Legal conclusion.

THE WITNESS: Yes. I believe the -- the Inari garrote valve is included in Claims 1 and 10. It speaks here about having an active tensioning mechanism, an actuator, the filament, Claim 10 having

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a second actuator.

Yes, I think that describes the -- the Inari hemostasis valve.

BY MR. STOWELL:

Q Do you believe that Claim 1 of the '910 patent recites an improved hemostasis valve?

MR. KEESE: Asked and answered.

THE WITNESS: So please reask the question.

BY MR. STOWELL:

Q Sure.

Do you believe that Claim 1 of the '910 patent recites an improved hemostasis valve?

A So as I read Claim 1 of the '910, it speaks to having a second catheter advanceable through a first catheter. And in order to do that, utilizing this French size that is being spoken of here, yeah, they would have to go -- I mean, ideally, you'd want to be going through an improved hemostasis valve.

Q So is it your opinion that Claim 1 of the '910 patent requires a hemostasis valve?

A I don't know whether it calls it out that it's required, but, I mean, to -- when you have a second catheter passing through a first catheter, it is traditional that it would be going through a hemostasis valve.

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

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

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When you refer to mechanical intervention devices, what are you referring to?
A What I typically am referring to when I say "mechanical intervention devices" are the devices that can provide some level of interaction or some type of disturbance to the thrombus.
Sometimes people will even refer to it as -- a water jet as a mechanical inter- -- mechanical intervention even though it may not necessarily be something that you view that's -- that's physical and firm. But, yeah, the -- whereas aspiration typically is viewed more as the application of a vacuum.
Q And when you're using the term "mechanical intervention devices," would you include a water jet?
A I would say at a high level, yes. It depends upon where that water jet is.
Q And do Inari's FlowTriever and ClotTriever products have a feature that you would consider a mechanical intervention device?
A Yes.
Q And let's start with the FlowTriever. On the FlowTriever, what would you consider to be the mechanical intervention device?
A On the FlowTriever, the FlowTriever

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includes the nitinol baskets on the FlowTriever catheter that can be unsheathed, and they expand into the clot material. And once they're expanded into the clot material, then that can be retracted back into the catheter. So the nitinol baskets are your mechanical intervention.
Q And on the ClotTriever, then, what part of that would you consider to be the mechanical intervention device?
A The ClotTriever device and catheter includes a nitinol frame and a braid that extends beyond that utilized to capture DVT. That would be your mechanical intervention.
Q On Imperative Care's Symphony device, are there any features that you would consider to be a mechanical intervention device?
A Yes, sir. The -- I don't recall the name of it off the top of my head, but they have a corkscrew device that is placed into the distal end of the aspiration catheter.
Q And what's your understanding of the purpose of the corkscrew device?
A It is to engage with the clot and draw it into the catheter.
Q And when you say "engage with the clot,"

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where -- how -- or where does it engage with the clot?
MR. KEESE: Scope.
THE WITNESS: Are you referring to what portion of the clot does it engage with?
BY MR. STOWELL:
Q Well, where in relation to the catheter does it engage the clot, if you know?
A I believe that that corkscrew device -- I believe it remains at the distal end of the catheter, but I would have to go back and verify that.
Q Does Claim 1 of the '910 patent require a mechanical intervention device?
A I'm not a patent attorney, but I am not seeing within Claim 1 here a requirement for a mechanical intervention device.
Now, the mechanical intervention device is part of the Inari system, both for the FlowTriever and the ClotTriever. It may be included in following claims here. You did not ask me to look at other claims. But as far as Claim 1, I'm not seeing it.
Q And what about Claims 1 and 10 of the '921 patent? Do those claims require a mechanical intervention device?
A Claims 1 and -- I'm not a patent attorney.

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

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

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Q Is that the only secondary indicia of nonobviousness that you are rely -- relying on in your expert declaration?
MR. KEESE: Objection. Document speaks for itself.
THE WITNESS: I believe there are other secondaries that I've identified within my declaration.
BY MR. STOWELL:
Q Here, we're in a section of your expert report that addresses the '910 patent; correct?
A Are you able to reference me to something --
Q Sure.
A -- to confirm that?
Q Yeah. If you go to page 92 at the top, it starts with Section A, "The '910 Patent."
A Yes.
Q And -- okay. And so on page 94, we are still within that section referring to the '910 patent; correct?
A That does appear to be correct.
Q Okay. And so for secondary indicia of nonobviousness relating to the '910 patent, is 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.

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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;

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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

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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 --

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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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said that, but it doesn't surprise me. It's -- it's -- it's kind of like the Ford and Chevy analogy. Right? You're always going to find some people that like one product better than another product.

Q Do you have an opinion on whether Inari's FlowTriever system is superior to Penumbra's Indigo Lightning system?

A I don't have first -- firsthand knowledge. That being when I say "knowledge," I don't have the hands-on experience of that.

What I do know is that the Inari devices and how they're designed are capable of doing things that the penumbra device is not capable of doing.

And we were talking earlier about some of the mechanical interventions, to be able to go out there and interact with the clot mechanically and be able to draw it in, to be able to do this -- this high-volume whoosh technique, to be able to have large-diameter catheters that are able to capture very large pieces of a clot and put high forces on those clots.

We talked about the clot that's in DVT and PE and how it's different than a clot that's in coronary applications and neuro applications as far as the age of it and the fibrous nature of it. You

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need those larger diameters to be able to pull that in.

MR. KEESE: And I just want to --

(Reporter clarification.)

MR. KEESE: Yeah. Scope. I apologize.

BY MR. STOWELL:

Q And, as you state here, Inari now has a large-diameter -- or sorry. Strike that.

As you state here, Penumbra now has a large-diameter catheter that is a 16 French sheath for the Lightning Flash system; correct?

MR. KEESE: Objection. Document speaks for itself. Misstates the document.

THE WITNESS: The -- Inari does have a 16 French available now. They're sheathed. And I'm trying to recall exactly where that sheath is used within that system.

BY MR. STOWELL:

Q Yeah. So I believe you said Inari does have a 16 French sheath.

I'm asking about Penumbra. Penumbra also has a 16 French sheath?

A I'm sorry. I misspoke. I meant to say Penumbra has a 16 French sheath, and I'm not sure exactly where that's used within their system as far

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as just off the top of my head, but I can quickly learn if I took a look at their product.

Q You had talked about the things that Inari's system was capable of doing that Penumbra system is not capable of doing.

Are there things that Penumbra's system is capable of doing that Inari's system is not capable of doing?

MR. KEESE: Scope.

THE WITNESS: Well, we just spoke about the fact that they have a computer-actuated system. The Inari system is not computer-actuated.

What the benefits would be clinically, a little bit unknown. So as far as the -- whether the Penumbra system has any advantages over an Inari system is unclear to me. I do know, though, that the Inari system has features that definitely differentiate it from the Penumbra system and allow it to treat PE and DVT very effectively.

BY MR. STOWELL:

Q Are you aware that over the last several years, Penumbra has been taking market share from Inari?

MR. KEESE: Scope. Vague.

THE WITNESS: I -- I have not been involved

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with the market side of this product.

BY MR. STOWELL:

Q Do you have any opinions on why Penumbra may be taking market share from Inari?

MR. KEESE: Objection. Scope. Vague.

THE WITNESS: I can give you a very high-level kind of potential as to, you know, whether it's factual or not; but many times in, whether it would be the medical device industry or other industries, sales are driven more by your sales force than the product.

Penumbra has a very, very good sales force, very large sales force. That might be the reason why they're able to -- to grow market share. It could be pricing. Hospitals right now are very driven by pricing.

So, yeah, it's hard to speculate, but those could be potential reasons.

BY MR. STOWELL:

Q And just so I have a clear record, do you have any opinion, as you sit here today, on whether the Inari FlowTriever is superior to Penumbra's Indigo Lightning system?

A I --

MR. KEESE: Asked and answered.

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THE WITNESS: I -- as I said, I haven't sat down and used both systems, but what I can tell you is what features the Inari system has and what they've designed into their system for treating PE and DVT that become -- as a system, when you put them all together, make that device work very, very well for treating DVT and PE.

We've talked about some of them, as far as the large diameters. We talked about the -- the hemostasis valves, the telescoping catheters, the -- this whoosh technique. Those are things that the Inari system does not have.

BY MR. STOWELL:

Q Do you believe that the -- that the Penumbra's Indigo Lightning system --

A Did I say the Inari system? No. I'm sorry. I'm sorry. The Penumbra system does not have.

Q Okay. Yeah. Okay.

Do you believe that the Penumbra Indigo Lightning system works very well for treating DVT?

MR. KEESE: Objection. Scope.

THE WITNESS: Reask the question, please.

BY MR. STOWELL:

Q Yeah.

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Do you believe that the Penumbra Indigo Lightning system works very well for treating DVT?

MR. KEESE: Scope.

THE WITNESS: Again, I have not used it, but when I look at the design of it, I believe that it would not work as well as the Inari system works for DVT.

Inari typically recommends the use of the ClotTriever. The ClotTriever, both through use of aspiration and the use of their ClotTriever nitinol device and their bag, is able to capture the very large thrombus that forms in DVT.

BY MR. STOWELL:

Q And do you --

MR. STOWELL: Oh, we'll have to take a break to change the tape. I'm sorry.

THE WITNESS: Okay.

THE VIDEOGRAPHER: We're going off the record. That will be the end of Media 1 in the video deposition of Brian Brown. The time is 10:17 a.m.

(Recess taken from 10:17 a.m. to 10:24 a.m.)

THE VIDEOGRAPHER: We are back on the record. This is the continuation of the video deposition of Brian Brown, the beginning of Media 2.

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And the time is 10:25 a.m.

THE WITNESS: Josh, before we start, I just wanted to bring your attention to a typo that I saw as we were reviewing --

BY MR. STOWELL:

Q Okay.

A -- this document. Paragraph 195.

Q Okay. I'm there.

A Okay. It refers to the fact that I evaluated the '910 patent and the '921 patent. And then a little further down, it talks about the -- my opinions at this time of Claim 1 of the '921 and Claims 1 and 10 of the '910 patent.

Those have been flip-flopped. So it would be -- actually be Claims 1 and 10 of the '921 and Claim 1 of the '910.

Q Got it. Thank you for the correction.

Okay. When we left, you had -- we had -- we were talking about the ClotTriever, and you had mentioned that the ClotTriever has a nitinol device and a bag to capture large thrombus.

Is it your view that the nitinol device and the bag are an important part of the ClotTriever for treating DVT?

A Yes. It is one of many components that

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make that product work well. And as you ask, is it an important part? Yeah, there's many important parts of it. But, yes, it is one of the important parts.

Q Okay. Do you believe that Penumbra's Indigo Lightning system works very well for treating PE?

MR. KEESE: Objection. Scope.

THE WITNESS: They -- they have regulatory approval for the treatment of PE, and so based on the fact that they have approval, one of the requirements FDA has is that you're able to demonstrate that it's safe and effective. And so I can sit here and tell you that it's safe and effective.

I cannot tell you if it's necessarily better or worse than the Inari device, but I can tell you that the features that the Inari device has definitely makes it work very well for the treatment of PE.

BY MR. STOWELL:

Q I'm going to move to paragraph 211 of your expert declaration. This spans pages 95 to 96.

A Okay. I'm there.

Q Okay. And in this portion of your expert 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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Q Okay. And is that still your understanding of Garrison I today?
A Yes. As -- as the examiner has defined it up above, that -- that is what I am agreeing with there.
Q Okay. And is that determination that Garrison does not teach a telescoping configuration, was that important to your conclusion that Garrison does not render Claim 1 of the '910 patent invalid?
MR. KEESE: Objection. Document speaks for itself.
THE WITNESS: That was part of what drew me to that conclusion, yes.
BY MR. STOWELL:
Q And you actually go a little bit further, and you say that Garrison I actually teaches against the telescoping configuration.
Is that still your opinion today?
A Where are you reading now?
Q Yeah. I'm in paragraph 212, first sentence.
A Okay. Well, I would say that it teaches against it by the fact that it doesn't teach to do it.
Q Okay. But is there a -- "teaching against"

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

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there's a notification date on the right-hand side that says November 6, 2023.
A Based on the -- that date, it does appear to be the same document.
Q And when you were drafting your declaration, do you recall seeing Exhibit 4 and reviewing it?
A As I mentioned, I reviewed portions of it.
Q Okay. This document has some stamping at the top, and it says -- for example, on the first page, it says page 1 of 9.
Do you have that on your copy? Yeah. Okay.
So what I'll do, when I refer to pages in this document, because it's not sequentially paginated, I'll refer to the page number on the top.
A Very good.
Q Okay. If you could turn to page 4 of 9.
A I am there.
Q Okay. And there is a bullet No. 4, and then it begins "Claim 18."
Do you see where I'm at?
A I do.
Q Okay. And this is where the examiner is explaining the examiner's review of Claim 18. And

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the examiner says, "Regarding Claim 18, Garrison teaches a clot treatment system."
Do you see that?
A I do.
Q Okay. And do you agree with the examiner that Garrison teaches a clot treatment system?
A I do. That is what the Garrison patent is teaching.
Q Okay. And the examiner also concluded that Garrison teaches a first clot aspiration assembly.
Do you agree that Garrison teaches a first clot aspiration assembly?
A I don't believe I have Garrison in front of me, do I?
Q I don't think you do among your stuff there. Do you need Garrison?
A That would be helpful.
Q Okay. Okay, Mr. Brown. I'm going to provide to you what has been previously marked in this case as Exhibit 29. It is U.S. Publication No. U.S. 2015/0173782, and this is a patent to Mr. Garrison.
MR. KEESE: I just want to object to the extent that it mischaracterizes the document.
MR. STOWELL: What part of it do you think

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is mischaracterized?
MR. KEESE: It's not an issued patent; right?
MR. STOWELL: Yeah. It says U.S. Application Number.
MR. KEESE: Okay. I just want to be clear.
MR. STOWELL: Yeah. Let me -- I'll be clear on the record.
Exhibit 29 is U.S. Publication No. U.S. 2015/0173782 A1.
BY MR. STOWELL:
Q Okay. Mr. Brown, you now have Garrison in front of you.
Do you agree with the examiner's conclusion that Garrison teaches a first clot aspiration assembly?
A I do not.
Q Okay. And what do you think the examiner got wrong?
A Well, he's using a different term for that assembly than what Garrison does.
Q Sure. The terms may be different across the patents, but -- but do you believe that the examiner was correct when the -- when the examiner concluded that Garrison teaches a first clot

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aspiration assembly?
A I do not recall whether Garrison teaches that to be a first aspiration assembly.
Q Did you review this portion of Exhibit 4 of the nonfinal rejection when you were rendering the opinions in your declaration?
A I did. I have to say, though, that I -- as I'm looking at it right now, I don't recall whether that is what Garrison refers to as that assembly, a first clot aspiration assembly.
Q And you're aware that the prior art can use different words to describe the device, and it can still meet the limitations of the claim; right?
MR. KEESE: Objection. Calls for a legal conclusion.
THE WITNESS: I don't know that officially, but it sounds reasonable.
BY MR. STOWELL:
Q Okay. And so as we sit here, if I understand your testimony, you're -- you're not sure if you agree with the examiner's conclusion that Garrison teaches a first clot aspiration assembly?
A And, like I said, it's just based on -- I know that Garrison uses different terminology, so that's my just initial reaction as -- as I'm reading

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this.
Q Okay. Do you believe that the examiner was mistaken in concluding that Garrison teaches a first clot aspiration assembly?
A I would have to go back and look to see how Garrison describes it.
Q When you were rendering your expert opinion, did you assess whether Garrison discloses a first clot aspiration assembly?
A What I recall from Garrison is the -- what is being referred to as a first clot aspiration assembly was referred to by Garrison as access device.
Q So you believe that what the examiner is identifying as a first clot aspiration assembly, you believe that Garrison refers to that as an access device?
A Correct. So they are referring to the first aspiration assembly connected to line 2025, so the aspiration assembly, I'm assuming, is device 2010.
Q Okay. And what -- and what is your understanding of what device 2010 is?
A A access device.
Q Okay. And is it your understanding that

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the access device is not a first clot aspiration assembly?
A As I said, I would have to look again at Garrison to see if he describes it that way. My recollection is that he describes it as an access device.
Q Okay. But do you believe it meets the limitation of the claim that the examiner was reviewing requiring a first clot aspiration assembly?
MR. KEESE: Calls for a legal conclusion.
THE WITNESS: Again, not without going back and reading Garrison.
BY MR. STOWELL:
Q Okay. The examiner also concluded that Garrison teaches a first catheter, a first pressure source.
Do you agree with those conclusions by the examiner?
A For the most part, yes.
Q Okay. The examiner also concluded on the next page that Garrison discloses a fluid control device which may be a stopcock.
Do you agree with that conclusion?
A As shown in Figure 34, I do agree with that.

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Q The examiner also concluded that Garrison discloses "Wherein the fluid control device may be a stopcock valve or a flow controller with a simple actuation which selects the open or closed configuration."

Do you agree with that description of Garrison?

A Yes.

Q Okay. The examiner also concluded that Garrison discloses wherein the fluid control device "is moveable between (a) an open position in which the first pressure source is fluidly connected to the first catheter and (b) a closed position in which the first pressure source is fluidly disconnected from the first catheter."

Do you agree with that portion of the examiner's conclusion?

A Yes.

Q The examiner also concluded that Garrison discloses "Wherein the first pressure source is configured to generate vacuum pressure while the fluid control device is in the closed position."

Do you agree with that portion of the examiner's conclusion?

MR. KEESE: Vague.

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THE WITNESS: Yeah. For the most part, I -- I do. It's -- it's kind of odd here when it talks about a pressure source. I mean, earlier, I think they defined the pressure source, at least Garrison defined it or the examiner defined it, as 31 -- I guess 3125.

BY MR. STOWELL:

Q And what do you think is odd about that?

A I guess I'm just looking at it from the image there of a roller pump. As I look at it more, I guess I can see where it could generate the vacuum that's being discussed here.

Q The examiner also concluded that Garrison discloses "Wherein, upon movement of the fluid control device from the open position to the closed position, the vacuum pressure is applied to the first catheter to generate suction at a distal portion of the first catheter."

Do you agree with that portion of the examiner's conclusion?

A It seems to be written backwards. Where it says, wherein, upon movement of the fluid control device from an open position to the closed position, the vacuum pressure is applied to the first catheter, my initial reaction is it would be just the opposite

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as -- of what's written there.

Q I would agree with you. I think the examiner mixed up open and closed position.

Is that your interpretation, as a person of skill in the art, reading this statement?

A It is.

Q Do you agree, then, that if we flip the words there, that Garrison discloses, wherein, upon movement of the fluid control device from the closed position to the open position, the vacuum pressure is applied to the first catheter to generate suction at a distal portion of the first catheter?

A Yes.

Q The examiner also concluded that Garrison discloses a second clot aspiration assembly.

Do you agree with that portion of the examiner's conclusion?

A I do believe that the second catheter is defined as a aspiration assembly.

Q And the examiner concludes that Garrison discloses a second clot aspiration assembly that includes a second catheter and a second pressure source configured to be fluidly coupled to the second catheter.

Do you agree with that portion of the

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examiner's conclusion?

MR. KEESE: Vague.

THE WITNESS: For the most part, yes.

BY MR. STOWELL:

Q When you say "for the most part," is there a portion of it that you don't agree with?

A I think just the fact that it is a little bit vague is making it a little bit questionable, but I would say as I -- as I look at this and I understand this, I would say that it is accurate.

Q And the examiner also concluded that Garrison discloses "a second pressure source configured to be fluidly coupled to the second catheter and to generate suction at a distal portion of the second catheter."

Do you agree with that portion of the examiner's conclusion?

A Yes.

Q Now, if we move to paragraph 6, the examiner reiterates that Garrison teaches all of the limitations we just discussed, and Garrison further teaches a second clot aspiration assembly, including a second catheter and a second pressure source configured to be fluidly coupled to the second catheter and to generate suction at a distal portion

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of the second catheter.
Do you agree with that conclusion?
A Yes.
Q And then I think we get to the portion that you quoted in your expert report where the examiner concludes that "Garrison fails to teach a second catheter advanceable through the first catheter."
Do you agree with that portion of the examiner's conclusion?
A As he had written it there, yes, I do agree with it.
Q Okay. And then the examiner says, "The second catheter (2045) does not advance through the first catheter (2025), as shown in Figure 33."
Do you agree with that portion of the examiner's conclusion?
A Yes, as he has written there.
Q Okay. Now, if we go to Figure 33 of Garrison.
Do you have that in front of you?
A I do.
Q Okay. Item 2045 is not the second catheter, is it?
MR. KEESE: Objection. Calls for a legal conclusion.

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

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A Yes. And, as I mentioned, 2045 is a component of the catheter.
Q Okay. And Item 2025 is not identified in Garrison as being a catheter or a first catheter; correct?
A It is defined as the flow line of catheter 2010.
Q Okay. And do we agree that the arterial access device 2010 is a catheter?
MR. KEESE: Vague. Legal conclusion.
THE WITNESS: Yes. I would say it's a catheter.
BY MR. STOWELL:
Q And based on your experience, is catheter 2030 telescoping through catheter 2010 in Figure 33?
A It is not based on how I had defined it to you earlier today.
Q And why isn't catheter 2030 telescoping through catheter 2010?
A As I had defined telescoping to you earlier today, it is to take a catheter of the same type, as -- the two catheters must be of the same type, and the intentions of the telescope is to allow advancement of the first catheter to a more distal location or also allow other modes of treatment of

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

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

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

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

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

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Q But we agree telescoping is not in Claim 1 of the '910 patent; correct?
MR. KEESE: Objection.
MS. TESSAR: Objection.
MR. KEESE: Misstates prior testimony.
MR. STOWELL: Amanda, you don't get to object.
MS. TESSAR: I know. Apologies. Just couldn't resist on that one.
THE WITNESS: As I said, Claim 1 speaks of the first catheter and a second catheter, the second catheter advanceable through the first catheter to perform as a telescoping catheter for the treatment of aspirating clot.
BY MR. STOWELL:
Q Right. And so Garrison discloses a second catheter 2030, that it is advanceable through a first catheter 2010, and the catheter 2030 is capable of aspirating clot; correct?
MR. KEESE: Objection. Argumentative. Asked and answered.
THE WITNESS: When you phrase it that way, you're accurate, but you're not phrasing it the same way I am phrasing it from the standpoint that that access device was not intended to be treating the

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clot. The access device is doing nothing more than providing a runway for the catheter that is treating the clot.
BY MR. STOWELL:
Q In Claim 1 of the '910 patent, is it your testimony or opinion that the first catheter must aspirate the clot?
MR. KEESE: Document speaks for itself. Calls for a legal conclusion.
THE WITNESS: The -- sorry. I've got to find it.
Claim 1 is referring to a first clot aspiration assembly. So the first clot -- so I'm sorry. The first catheter, yes, is capable of aspirating a clot --
BY MR. STOWELL:
Q And --
A -- at the treatment site.
Q Well, where does it say at the treatment site for -- for the first catheter?
A Well, but that is what its purpose is. That is -- that is what is being taught in this patent.
Q So you are -- are reading into Claim 1 that the first catheter must aspirate clot at the

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

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telescoping guide catheters. They're both intended to -- to guide other devices. The example of two aspiration catheters, they're both designed to be aspirating clot at the treatment site.
Q And so with respect to Garrison Figure 33, why do you believe that catheter 2010 is not the same type as catheter 2030?
MR. KEESE: I'm going to object that it misstates the document.
THE WITNESS: I have too much stuff in front of me right now.
BY MR. STOWELL:
Q Exhibit 29.
A As you can see in Figure 33, catheter 2010 is not positioned anywhere near the treatment site. It is an access catheter. In this case, they're referring to the internal carotid artery, the ICA. The treatment site is up where they're showing it to be MCA, and that's where catheter 2030 is.
Q And so is it fair to say that you're saying that these catheters aren't the same type because catheter 2010 doesn't extend close enough to the treatment site?
MR. KEESE: Objection. Misstates prior 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 FlowTriever 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 FlowTriever 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 a 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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Q When you were practicing and working with catheters, would you ever refer to the tubing or the flow line as the catheter itself?
A I would refer to it more as a catheter assembly.
Q And in Garrison Figure 33, which the examiner was referring to, would you agree with me that it does describe a second catheter that is advanced through the first catheter -- through a first catheter?
A I'm sorry. Reask the question.
Q Sure.
In Garrison Figure 33, would you agree with me that it does show a second catheter advanced through a first catheter?
A Yes. It does show a first catheter advanced through a second catheter in what I would refer as a more conventional procedure, where you have a therapeutic catheter being advanced through an access device. That is something that is done for every single procedure that is performed. It is not what we're referring to as telescoping catheters.
Q So would you -- I'll take that back.
If we could go to paragraph 215 of your declaration, which is Exhibit 1011.

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A Okay. I am there.
Q Okay. Here, you're talking about a further statement by the examiner, and you are agreeing with the examiner's reasoning, and you state, "The addition of the claim language reciting large catheter sizes for treatment of pulmonary embolisms is another reason why the issued claims, including Claim 1, is not anticipated or obvious in view of Garrison I."
Do you see that?
A I do.
Q And the recitation of large catheter sizes and the recitation of treating pulmonary embolisms, those are reasons why you believe Claim 1 is not anticipated or obvious in view of Garrison I?
A Yes.
Q Okay. And so is it your view that the treatment of pulmonary embolisms is a requirement of Claim 1 of the '910 patent?
MR. KEESE: Document speaks for itself. Legal conclusion.
THE WITNESS: Claim 1 does speak of the catheters being positioned to treat pulmonary embolisms.
\\\

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

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

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

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

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

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

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

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

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Q Okay.
A -- as related to the '921 patent.
Q Correct.
You talk about the Tuohy-Borst design. Were there other -- other types of hemostasis valves that were available prior to 2017, which is the earliest priority date of the '921 patent?
A Yes, there were other types of hemostasis valves available prior to 2017.
Q And when you were rendering your opinions in this declaration, did you consider those other types of valves, or did you kind of limit your comparison here to Tuohy-Borst design valves?
A I primarily was looking at the Tuohy-Borst-style valves, and -- and that was because the Tuohy-Borst design is the most common and frequently used hemostasis valve used within the medical device industry.
Q What other types of hemostasis valves are you aware of that existed before 2017?
A There are valves that are referred to as bileaflet. Sometimes people use the terminology duckbill to define a bileaflet type of a hemostasis valve.
There's also what's referred to as kind of

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a slit or a star style of a hemostasis valve where the elastic membrane is cut either in a slit fashion or a star fashion to allow the device to pass through it and seal around it.
Those are the ones I'm most familiar with.
Q Okay. I've heard the term "static valve."
Are you familiar with that term for a hemostasis valve?
A I -- I don't know if I heard that term directly, but I guess I could kind of envision what -- what they're referring to.
Q What would you envision?
A A static valve would be one that you don't have to actuate to -- to be able to pass something through it or to seal.
Q Do you need to actuate the bileaflet valve that you talked about?
A The ones I'm familiar with, you do not need to, but there may be ones that do require actuation.
Q What about the slit or star valve? The ones you're -- you're aware of, do those need to be actuated?
A I believe some of them do have actuators on them.
Q And for those actuators, what type of

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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.

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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.

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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

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

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

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

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MR. KEESE: And, Josh, while we're doing that, I know we've been on for -- for quite a while. I just -- I don't know when you're planning on stopping for lunch, but --
MR. STOWELL: Yeah. Why don't we -- let's just finish up this line of questioning --
MR. KEESE: Yep.
MR. STOWELL: -- and then we can break. Yeah.
BY MR. STOWELL:
Q Okay. Mr. Brown, I'm going to show you what's been previously marked in this case as Exhibit 31. It is U.S. Patent Publication No. U.S. 2003/0116731 A1, and the inventor is Hartley.
Okay. Mr. Brown, have you seen this patent publication before?
A I have.
Q Okay. And is this the Hartley reference that you discuss in your expert declaration?
A I believe it is.
Q Okay. And so the examiner concluded that "Hartley discloses a valve comprising an elongate member defining a lumen," and I had asked you whether you agree with that portion of the examiner's conclusion.

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A I do.
Q Okay. And the examiner also concluded that Hartley discloses a valve comprising "an active tensioning mechanism, including an actuator 12 coupled to the elongate member via a filament 20 extending at least partially around the elongate member."
Do you agree with that portion of the examiner's conclusion?
A I'm not sure why, but I am not finding filament 20.
Q Do you believe the examiner's reference to filament 20 is an error?
A Without studying this more, I cannot give an opinion.
Q Do you believe that Hartley discloses a filament?
A I believe Hartley defines a filament as Inari has defined a filament.
Q And do you believe that Hartley discloses a filament within the valve that's described in the Hartley reference?
A I'm sorry. Please ask again.
Q Yeah. Maybe I can do it a little quicker.
In Hartley, on page 2, at the top

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right-hand column, it refers to a string 14.
A Yes.
Q Okay. Is it your understanding that Hartley's string 14 is a filament?
A Yes, as filament has been defined.
Q Okay. And so is it your understanding that Hartley discloses an active tensioning mechanism, including an actuator coupled to the elongate member via a filament 14 extending at least partially around the elongate member?
A That is my understanding.
Q Okay. The examiner also concluded that Hartley discloses a valve "wherein the actuator is moveable between a first position, wherein the lumen is constricted and concealed, and a second position wherein the lumen is at least partially open."
Do you agree with that portion of the examiner's conclusion?
A I do.
Q Okay. There's a portion a little further down in Exhibit 1012, which is the notice of allowability, that says "Regarding Claim 67." I'm on page 3 of the exhibit.
A Yes. I'm at that location.
Q Your document looks different than mine.

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Is that right? Oh, it is. You're -- you're way ahead of me.
A Okay.
Q Okay. So it says "Regarding Claim 67," it says, "Hartley discloses a valve comprising an elongate member defining a lumen."
I believe above, you had agreed that Hartley -- that that portion of the examiner -- or that you agree with that portion of the examiner's conclusion; right?
A That is correct.
Q Okay. And then the examiner concluded that Hartley discloses "a filament 20 coupled to the elongate member."
I believe we've corrected the examiner's mistake, and the filament is actually item 14.
So do you agree that Hartley discloses a filament 14 coupled to the elongate member 22?
A I do.
Q And do you agree with the examiner's conclusion that Hartley discloses "an actuator 12 coupled to the elongate member, wherein the actuator 12 is moveable between a first position in which the actuator pulls the filament to collapse the elongate member such that the lumen is constricted and sealed

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and a second position wherein the lumen is at least partially open"?
A I do.
MR. STOWELL: Okay. Okay. We have reached a good spot to stop for lunch if people are --
MR. KEESE: Yeah.
MS. TESSAR: I'm hungry.
MR. KEESE: Yeah. Certainly.
THE VIDEOGRAPHER: All right. We're going -- we're going off the record. That will be the end of Media 2 in the video deposition of Brian Brown. The time is 11:58 a.m.
(Recess taken from 11:58 a.m. to 12:46 p.m.)
THE VIDEOGRAPHER: We are back on the record. This is the continuation of the video deposition of Brian Brown, beginning of Media 3. The time is 12:47 p.m.
Off the record.
(Off the record.)
THE VIDEOGRAPHER: Back on again at 12:52. Go ahead.
BY MR. STOWELL:
Q Okay, Mr. Brown. If you could look at 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?

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A Based on the teachings of Schaffer and in the materials and how he has described them, I have interpreted that to -- to be rigid, whereas if you've taken a look at the '921 patent, it clearly defines that what's wrapping circumferentially around is the filament.
Q And so you say Schaffer described the actuating members as rigid, you believe?
A The construction of them would make them rigid.
Q Okay. And what in Schaffer leads you to that conclusion?
A I would have to spend some time to find it in here where it talks about the materials of construction, but that is what has led me to believe that.
Q Okay.
A And when I say "materials," it's not only the materials but the -- the method of manufacturing and how it's described.
Also, if you've taken a look at Figure 32, which I believe is the actuated version of 31, there, the U-shaped members have not deformed. They're remaining rigid.
Q Okay. And do you recall a method of

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manufacturing for the U-shaped members being disclosed in Schaffer?
A I don't recall the exact words that were used, but there was some mention of the materials in the description of the -- the fabrication or the -- the making of those U-shaped members.
Q Can I take you to paragraph 0081 of Schaffer. There is a description of the actuating member there.
Does this help refresh your recollection about what you -- you read about the actuating member?
MR. KEESE: Vague.
THE WITNESS: It is part of what I recall. I don't remember if there was more than this or not, but I remember reading this.
BY MR. STOWELL:
Q Okay. And if the actuating member were made of aluminum, which is one of the options in paragraph 81, is it your testimony that that U-shaped member would be rigid?
A It is my opinion that if the actuator shown in Figure 31 is made of aluminum and is of the size and dimensions that it is shown in Figure 31, that it would be rigid.

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Q I want to test your concept of rigidity here.
Do you mean to suggest that it would have no ability to flex?
A That is not my definition of rigid.
Q Okay. What --
A And just to clarify, so when you asked what the -- is my definition of rigid, everything flexes. Given enough force, everything flexes.
What I'm referring to as far as rigid, I think it's in comparison to something that is not rigid. So if -- something that's not rigid would be a filament. Something that is threadlike. Something that -- that is able to bend, is able to be sewn. It is very easy to bend it.
What is shown here in Schaffer is not something that would fit the definition of flexible or a filament.
Q And is it your understanding that all of the filaments that are described in the '921 patent are something that could be sewn?
A I would say at a -- kind of a first reaction to the question, I would say, yes, we may find an exception to that. But my initial reaction is yes.

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

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Q Okay. And is it your understanding that a U-shaped actuating member made of plastic would also be rigid?
A It would depend very much on which plastic it's made of. But going back to Figures 31 and 32, the U-shaped members there, if made from plastic, are rigid.
Q Are there types of plastics that, if they were formed into the shapes you see in Figure 31 for the actuating members, that would be flexible?
A There is the possibility that plastic could be flexible, yes.
Q And a plastic that's formed in the shape of the U-shaped actuating members, are there plastics where that shape could also be flexible?
A It could be flexible, but go back to what we were talking about earlier as far as is it -- is it threadlike, is it filament-like. I would struggle with saying that even if that was made from a flexible plastic in those dimensions, that it would be -- have those properties.
Q Would you consider a sheet of plastic to be threadlike?
MR. KEESE: Vague.
THE WITNESS: A sheet of plastic in itself

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

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

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if it's just partially around it, as -- as you pull on the ends of the filament, they will narrow down and constrict, so you get the circumferential constriction.
Q And so if the -- if a filament had the exact same shape as the U-shaped actuating members and was connected to the buttons in the exact same way so that all the angles and curvature was exactly the same, why wouldn't a person of ordinary skill in the art have found it obvious to replace the U-shaped actuating member with a filament?
A Because it would have constricted differently than what Schaffer is teaching.
Q But you would agree it would still constrict the lumen?
A I agree it would constrict the lumen, but in a different way than what is being taught by Schaffer.
Q And why wouldn't have -- that different way have been obvious?
A Because that was not what Schaffer was trying to do.
Q Schaffer was trying to constrict the lumen; correct?
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 FlowTriever 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 ClotTriever
24 practices Claim 1 of the '910 patent or Claim 1 and
25 10 of the '921 patent?

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A Just give me a minute.
Q Sure.
A It appears that I do.
Q And let's start with Claim 1 of the '910 patent.
Do you opine on whether the ClotTriever practices -- or do you have any opinions on whether the ClotTriever practices Claim 1 of the '910 patent?
A Sorry. I'm going to -- I'm going to retract what I just said because I realize what I came to now is the '921 patent. You had asked me whether I had opined on the ClotTriever.
Q Correct.
A Yes. So I'm going to retract my last answer.
I do not see that in my declaration, at least going forward from page 102.
Q Okay. And do you know whether the ClotTriever practices Claim 1 of the '910 patent?
A From what I recall, it does not practice the claims of -- Claim 1 of the -- I'm sorry, the '910 patent.
Q Okay. In paragraph 232, in the first sentence, you say you've reviewed Inari Medical's FlowTriever documentation.

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Earlier, we had talked that you had reviewed some documentation or some -- some websites.
A Correct.
Q Is there anything else that you reviewed with respect to the FlowTriever when you referred to documentation?
A Yes. This is -- this is refreshing my memory as I look through this. I did look at some of the manufacturing assembly drawings.
Q Okay. Anything else besides the manufacturing assembly drawings?
A I'm seeing images that were captured from animations from their website.
Q Okay. Anything else?
A That's all I'm seeing right now.
[redacted]

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[redacted]
MR. KEESE: Hey, Josh, I apologize to interject, but we're starting to get into kind of the confidential part of his declaration, and the declaration is confidential. So I want to just designate the transcript for now. And, obviously, we'll work on the back end to -- to -- you know, to dedesignate the parts that make sense to dedesignate.

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MR. STOWELL: Okay. Yeah, there's not much in here that's confidential, but okay.
BY MR. STOWELL:
Q For the documentation that you reviewed for the FlowTriever, I know you said you went on the website and looked at that, but where did you receive or how did you receive the manufacturing assembly instructions?
A It was provided to me by attorneys.
Q In paragraph 232, you state, "It is my opinion that FlowTriever practices Claim 1 of the '910 patent when used in a telescoping configuration with a Triever16 catheter telescoped through a Triever24 or Triever20 catheter for treatment of pulmonary embolism."
Do you see where I am?
A I do see where you are, and I agree with what you've read.
Q Okay. And you'll agree with me that an aspiration system only can practice Claim 1 of the '910 patent if it is used in a telescoping configuration; right?
A I would say that as long as it's being used in the telescoping configuration as laid out in Claim 1, then that is an accurate statement.

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Q Okay. So a Triever16 being used or made on its own would not practice Claim 1 of the '910 patent; correct?
A That is my understanding.
Q And in addition to being used in a telescoping configuration, Claim 1 of the '910 patent also requires that telescoping configuration to be used for treatment of pulmonary embolism; correct?
A I believe that is correct.
Q Would you agree that the -- or let me back up.
Are you aware that the FlowTriever system is sometimes used in DVT procedures?
A I am aware of that.
Q Okay. Would you agree that the use of the FlowTriever system, if it were used in a telescoping configuration, would not practice Claim 1 of the '910 patent if that use were for DVT?
MR. KEESE: Objection. Calls for a legal conclusion.
THE WITNESS: I'm not an attorney, and so -- but my opinion, based on Claim 1 having the requirement for the treatment of PE, DVT would not be covered by Claim 1.
\\\

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

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

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understanding of the meaning of "pressure source"?
A My understanding of what a pressure source is -- I believe at some point in my declaration I do have that defined. Not knowing where it is, I can't point you to it exactly. But what I do recall is that pressure -- the pressure source includes both what generates the pressure and all the items that contain the pressure.
Q So you understand a pressure source to include not only the device that generates the pressure, but -- but anything else that would be pressurized by the -- by the pressure generator?
A That would be pressurized or contain the pressure, yes.
Q And where does that understanding of pressure source come from?
A I'm trying to recall whether there is a definition within the '910 of that.
Q Do you believe there's a definition of the term "pressure source" in the '910 patent?
A I am unsure at this time. I would have to study it to -- to know. It might be helpful if I knew where to look in my declaration.
Q Unfortunately, I can't help you there because I don't know what part you're referring to,

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

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The pressure is everything that is contained within the pressure source. The pressure source is what I had defined earlier.
Q In the -- in paragraph 234 on the top of page 103, you describe the FlowTriever, and you define a first pressure source, and then in parens, you say "a first syringe."
Do you see that?
A I do.
Q Okay. And is it your opinion that the syringe is the first pressure source within the FlowTriever device?
A As we were discussing earlier, the pressure source would be the pressure generator and everything that is containing or holding that pressure, which in this case would be a vacuum. And so the first syringe would be part of that pressure source.
Q And what else would be part of the pressure source?
A Everything up to that first stopcock, as shown in the image right below what we just read.
Q So, for example, tubing that exists between the stopcock and the syringe, you would consider that to be a pressure source?
A Correct.

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Q In paragraph 238, you refer to a second pressure source. And there, you identify a second syringe; is that correct?
A Were you reading from this, or were you -- were you then just inserting the syringe --
Q No. I was reading at line 5, "a second pressure source (a second syringe)."
A Thank you. That is correct.
Q And so here, in paragraph 238, we're talking about the Triever16 catheter; correct?
A Correct. Because we were talking about the second clot aspiration assembly.
Q And there -- it's your understanding there's a second syringe that would be attached to the Triever16 catheter, and that's what you're identifying as the second pressure source?
A In what is written here, that is correct. Just for clarity, you don't always have to have a second pressure source as long as you have a pressure source that can be used on this assembly. It can be used -- one pressure source could be used for both catheters or you could have two separate pressure sources, one for each catheter, or you can even have two pressure sources that are linked and connected to the two catheters.

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Q Okay. But here in your -- in your expert declaration, you identify the second pressure source as a second syringe; correct?
A As I have it written here, yes.
Q Okay. And am I understanding your testimony correctly that if the Inari Triever24 and Triever16 were only packaged with a single syringe, you would consider that syringe to be a first pressure source and a second pressure source?
MR. KEESE: Objection. Misstates prior testimony.
THE WITNESS: It -- if it's connected to both catheters, it can be the pressure source for each of them; therefore, it could be the first and the second pressure source, just as defined in -- I believe it was Claim 4 of the '921.
BY MR. STOWELL:
Q I guess I'm confused because the claim requires a first pressure source and a second pressure source.
How can one pressure source be first and second?
A So by plumbing one source to the two catheters, you can select which catheter through the 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 FlowTriever24
17 and Triever16 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 FlowTriever
21 catheter, which I believe is also, from a marketing
22 standpoint, referred to as a Triever catheter. Each
23 one of the Triever 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 Triever 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 Triever 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 FlowTriever 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 ClotTriever 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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Q So it's something that applies tension and is moveable.
Are there any other features of the active tensioning mechanism as you understand that term?
A There's a lot of elements of an active tensioning mechanism, but if you're focusing on just the word "active," as I said, that is moveable.
But in the case of this design, the active tensioning mechanism are the buttons and the linear motion of the buttons. And, of course, in the case of the Triever hemostasis, it is also biased to be closed, so it is applying tension.
Q And so as the term "active tensioning mechanism" is used in the claims of the '921 patent, I understand you believe that the active tensioning mechanism is moveable and that it provides tension.
Are there any other requirements for the active tensioning mechanism, in your view?
MR. KEESE: Calls for a legal conclusion.
THE WITNESS: Yeah. Based on my understanding of the patent, the patent shows these as being linear actuators. I'm not sure if that limits them to only being linear, but yeah, the active tensioning mechanism here for the '921, yeah, is a moveable, linear actuator.

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BY MR. STOWELL:
Q I guess a way to ask the question is if I was looking at a hemostasis valve and I wanted to figure out whether it had an active tensioning mechanism, what features should I look at to determine whether a valve has an active tensioning mechanism?
MR. KEESE: Claim language speaks for itself.
THE WITNESS: So just a valve in general or the valve of the '921 patent?
BY MR. STOWELL:
Q Well, as the term "active tensioning member" is used in the '921 patent, if I am looking at a prior art valve or a competing valve and trying to determine whether it has that active tensioning member, what features should I be looking for?
MR. KEESE: Misstates the document.
THE WITNESS: It would be the features that we have spoken about.
BY MR. STOWELL:
Q Okay. At the top of page 112, you mention the biasing mechanism, and in parens you have "a compression spring."
Do you see where I'm at?

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A I do.
Q What was your understanding of the term "biasing mechanism" as it's used in the '921 patent claims?
MR. KEESE: Calls for a legal conclusion.
THE WITNESS: A biasing mechanism, bias is the first actuator to a first position.
BY MR. STOWELL:
Q So a biasing mechanism biases.
Are there any other requirements for the biasing member?
MR. KEESE: Document speaks for itself.
THE WITNESS: When you say "other requirements," other requirements where?
BY MR. STOWELL:
Q Well, does the claim language "biasing mechanism" have any other requirements attached to it other than the device has something that biases?
A Okay. You're referring to the claims --
Q Yes.
A -- is what you're referring to.
It appears that the only requirement is a biasing member configured to bias the actuator to the first position.
Q Okay. And as you applied that term to the

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FlowTriever and the Symphony, did you add any other requirements to that other than just that the biasing member must bias?
MR. KEESE: Misstates the claim language.
THE WITNESS: Well, the fact that we're discussing an active tensioning mechanism, and active being moving, to me, that would mean that it would move it to that position so that the biasing would -- would include movement.
BY MR. STOWELL:
Q Okay. Anything else besides biasing and movement?
A And I think biasing also means that it would do it on its own. It wouldn't need any additional assistance.
Q Okay. Anything else?
A Those are the things that come to mind.
Q Looking at paragraph 248, here, you're describing the Triever catheter assemblies, and I just want to check if there's a typo here.
You state in 248, "In the first position, the second compression spring (second spring) pushes against the second button, pulling the first filament tightly around the elongate member."
Is that reference to first filament correct

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

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

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conclusion. Misstates testimony.
THE WITNESS: I think that is -- that is one of the examples that is shown here. It talks about it being used for a clinical trial. It talks about it seeking FDA clearance for it. I think we also are aware that it is used off-label for the treatment of PE.
BY MR. STOWELL:
Q And when you say we are aware of that, who are you talking about?
A I'm -- when I say "we," I guess I'm referring to Inari is aware of that.
Q Do you have any evidence to support Inari's allegation that the Symphony is used off-label to treat PE?
A I personally do not. I'm going by what has been shared with me.
Q And who shared that information with you?
A I believe that in Ben's declaration, he mentioned something about that, and that's probably the primary source.
Q Do you mean Ben's deposition?
A His declaration.
Q Okay.
A I am mixed up. Sorry. His deposition.

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Q Okay.
A Yes.
Q And so you read in Ben's deposition his allegation that they're -- that doctors are using Symphony off-label to treat PE?
A Correct.
Q Okay. Do you have any other source for that allegation?
A I do not.
Q Okay. Do you have any reason to believe that Imperative Care is in any way involved in those off-label uses?
A Are you asking do I believe that they are promoting an off-label usage?
Q Correct.
A I am not aware of them promoting off-label usage.
Q And are you opining that the doctors' off-label use of Symphony for PE is an infringement of Claim 1 of the '910 patent?
A I'm not a lawyer, so I don't know whether it's infringement or not. I guess I'm just saying that that is another example of where it is being used for the treatment of PE.
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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from all of those components. They are holding that pressure; therefore, they are the source to -- to provide aspiration.
BY MR. STOWELL:
Q You said the pressure for aspiration comes from all those components, but the pressure really only comes from the pump; right? That's what generates the pressure.
MR. KEESE: Mischaracterizes the testimony. Vague.
THE WITNESS: You used the proper term saying it generates the pressure, but the pressure is then stored; so, therefore, the source is also the storage. The source of pressure for aspiration comes from the storage.
BY MR. STOWELL:
Q The way you're using the term "source" and "first pressure source," is that a use that you believe is specific to the '910 patent, or is that how you would traditionally use "source" in the field of mechanical thrombectomy?
MR. KEESE: Vague. Calls for a legal conclusion.
THE WITNESS: At a high level, I would say that, yes, source would include the storage and the

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

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

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

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

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

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

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When you make those allegations, are you alleging that the vacuum pump or generator that is part of the first pressure source is also the same vacuum pump or generator that's part of the second source?
Is there just one vacuum generator or pressure source, or are you assuming two different vacuum pumps or generators?
MR. KEESE: Objection. Calls for a legal conclusion. Vague.
THE WITNESS: Yeah. I don't think I am assuming either-or as far as is it one or is it two. I think what I am assuming here is that each catheter is connected to a pressure source.
Now, the generation of that pressure can come from one generation source, but the -- each catheter has access to a pressure source. And as the claim of '921 says, the pressure source can be the same, can be a single source for both catheters.
BY MR. STOWELL:
Q So Claim 1 of the '910 patent doesn't say that, does it?
MR. KEESE: Objection. Calls for a legal conclusion.
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

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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 FlowTriever or the ClotTriever.
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

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

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

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POSITA under your -- in your view?
A If they are also treating peripheral vasculature, yes.
Q Okay. So the -- the doctor, person of ordinary skill in the art under your definition, must have some experience treating pulmonary embolisms or DVTs; is that fair?
A I said that that would be ideal.
Q Okay.
A What I'm saying, though, is if you are an interventional radiologist or a pulmonologist, in order to receive that title, you have experience in the peripheral vessels. So that -- that in itself defines that requirement that you have experience in the peripheral vessels.
Q Okay. Okay. You then say in your last sentence, "A person with less education but more relevant practical experience or more relevant education but less practical experience may also meet this standard."
What -- what do you mean by that?
A There's always the exception to the rule.
Q Okay.
A And, of course, the exceptions are going to have to be justified somehow. So these would be some

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of the justifications for the exception.
Q You provide a claim construction for the term "filament" in paragraph 90 of your expert declaration; correct?
A I do.
Q And you opine that filament should mean "a thin, flexible length of material formed by one or more strands of material"; correct?
A Correct.
Q And where did that definition come from?
A Came from the context of the '921 patent.
Q The '921 patent never refers to the filament as thin, does it?
A I would have to take a look.
Q Do you have a recollection of seeing the word "thin" in the '921 patent?
A I do not have a recollection of that specific word.
Q And so how was it that you came to insert "thin" into your definition of "filament"?
A Before I answer that question, I'd like to find where '921 does speak to the definition of filament.
Q I think Column 9. Based on the citations in your expert report, the top of Column 9 may be one

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

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

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word "filament."
Do you see that?
A I do.
Q And Imperative Care's construction was "at least one or more threads, lines, cords, ropes, ribbons, flat wires, sheets, or tapes."
Is that your understanding?
MR. KEESE: Objection. Misstates the testimony. Document speaks for itself.
THE WITNESS: So the Truvic proposed construction includes any structure having the items that you just listed.
BY MR. STOWELL:
Q Is that your -- your interpretation of Truvic's proposed construction?
A That is my understanding of what their proposed construction is, that is, of any structure, including those.
And what is not fitting relative to the definition of "filament" is where it speaks of any structure having at least one of these objects.
So you basically could have a very large object containing a thread or a line or a cord or a rope, and it would then fit the definition of "filament." That is not the intention of what the

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

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the very bottom of paragraph 90, where it says, "The filament 150 can comprise one or several threads, lines, cords, rope, ribbon, flat wire, sheet, or tape."

Are you aware of that?

MR. KEESE: Objection. Misstates the testimony. Misstates the document.

THE WITNESS: Correct. So that -- that is what a filament can be comprised of. That's not necessarily the definition of filament.

BY MR. STOWELL:

Q Well, it doesn't say "comprised of." It says, "The filament can comprise one or more"; right?

A You are correct. So it can comprise these items.

Q Right. So the filament could be a flat wire, for example?

A Correct.

Q And the filament could be a sheet?

A Correct.

Q Okay. And do you dispute, I guess, at the bottom of page 90 that the filament can comprise one or several threads, lines, cords, rope, ribbon, flat wire, sheet, or tape?

MR. KEESE: I apologize. Objection.

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Vague.

There's a reference to page 90?

MR. STOWELL: Paragraph 90.

MR. KEESE: Sorry.

THE WITNESS: Please reask the question.

BY MR. STOWELL:

Q Yeah.

At the bottom of paragraph 90, do you dispute that the filament can comprise one or several threads, lines, cords, rope, ribbon, flat wire, sheet, or tape?

A I agree with that statement.

Q Okay. So you don't -- you don't dispute that those items are encompassed within the meaning of "filament"?

MR. KEESE: Vague.

THE WITNESS: I don't -- I feel like we're asking a double negative here.

The -- yeah. The filament can comprise the items listed there.

BY MR. STOWELL:

Q Okay. And is it your understanding that each of the items listed at the bottom of paragraph 90 in that citation 9:15-17, that each of those items are thin and flexible?

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A Yes, based on the definition of what a filament is.

Q And so, for example, a sheet, a sheet would be thin in one direction, but could be very wide in the other.

Would that still meet your definition of "thin" that you've used for filament?

A It can, yes. So the sheet would be thin. The sheet would be flexible. Not that much different than the sheet on a bed.

Q And earlier, you had talked about your understanding of a filament as being something that could be sewn.

Can a sheet be sewn?

A I said that it wasn't a requirement that it be sewn. So in the case of a sheet, as I had mentioned, if you are not able thread it through the eye of a needle, it would be very difficult to sew it. So this would be a perfect example of where a filament would not meet the requirement of sewing but would still be a filament.

Q Let's go back beginning of paragraph 5 of your declaration.

A Do you mind, if before we go back there, since we're here in this section, I saw something

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that reminded me of an earlier question that you had asked me.

Q Sure.

A Let me see here. It was paragraph 84.

Q Okay.

A So at the very -- well, the question you asked me earlier is whether the Inari devices utilized in the hemostasis valve, whether they practiced the '921 patent. And in my declaration, I speak to how the FlowTriever practices the '921.

You asked me whether the ClotTriever does or not as far as whether it is part of my declaration.

As we looked, we did not find anything specific in my declaration relating to whether or not the FlowTriever practices the '921, but you'll see here in paragraph 84 that I do speak to the fact that the ClotTriever and the FlowTriever both utilize the same hemostasis valve, so therefore they both practice the '921.

Q Okay. Is there a portion of your expert declaration where you apply the claim limitations to the ClotTriever?

A That -- no, there is not. That was probably a mistake on my part.

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Q Okay. Okay. You know, we did have one other outstanding question about long-felt need and which long-felt need factors were claiming -- or which -- sorry.

Outstanding question about the secondary indicia of nonobviousness.

A Yes.

Q And we were talking about which of those factors you thought applied to the '910 patent and the '921 patent.

Do you want to take a minute to see if you can find that, or have you had an opportunity during one of the breaks to see if you have a section discussing the secondary indicia of nonobviousness?

A So I did take a look at that during one of the breaks. What I learned was that what I have included in my declaration that was -- in my memory was the definitions of the secondary considerations.

Q Okay.

A Now, if we look at those definitions, yeah, it's very easy to take and apply what are those secondary considerations for the conditions that we were talking about, so for the products and the -- and the claims.

Q And so we looked at the -- the sections in

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the invalidity section where you specifically mentioned secondary considerations or indicia of nonobviousness.

A Right.

Q Are there other sections in this report where you address the secondary considerations of nonobviousness other than the part where you identify, generally speaking, what they are?

A It's not written up in the report, but the secondary considerations, as they are laid out, do apply to the products. As an example, for the hemostasis valve, there's not a good product on the market right now for providing hemostasis to large-diameter catheters. They don't provide the type of bleeding and vacuum sealing that is required.

There's been reports that the physicians were very surprised by how well that product works. They really like using it, the catheter. So when we talk about the telescoping catheters, the large-diameter catheters, doctors are being able -- able to treat patients and conditions that they have not been able to treat in the past as far as they're much more successful right now.

One of the things that's been rather interesting is the feedback from physicians that

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they -- it's not intuitive to them to use a large-diameter catheter.

In fact, when Inari was taking and trying to develop this product and they were bringing it out to physicians, the physicians were very skeptical on using a large-diameter catheter. And Inari was able to develop it and bring it to them, and they were able to utilize it, and they were very surprised on how well it worked.

Q And when you're referring to physicians' skepticism, I recall from our earlier conversation that you haven't actually talked to any physicians about the Inari products; is that correct?

A That is correct.

Q So where are you getting this information that there were skeptical physicians?

A Some of that has come from Ben's deposition.

Q Okay.

A I will also share with you on my own personal experience over my career that physicians are always against going larger because anytime you start going larger with a catheter, you risk having damage to -- to the vessels that you're treating.

Also, the other risk of going larger is the

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access site. So if the access site is in your leg, in your groin, the larger the catheter is, the more difficult it is for it to seal after the procedure is done. So, as I said, it's not intuitive for -- for physicians to want to go larger.

And, of course, they also view larger as being much stiffer, more difficult to manage and to be able to treat the conditions that they are trying to treat.

Q Do you think the size of Inari's catheters may be one reason why many doctors prefer Penumbra and why Penumbra is gaining market share on Inari?

MR. KEESE: Calls for speculation.

THE WITNESS: I don't know the reason. It could be a reason. As I mentioned, doctors always tend to migrate towards a smaller profile catheter for being able to do closure. It might be one of the reasons they do like it.

BY MR. STOWELL:

Q And then you had mentioned surprise for the hemostasis valve.

What is your basis for alleging that there was some sort of surprise for a hemostasis valve?

A Also from Ben's deposition, the fact that they are able to actuate that hemostasis valve with

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one hand. Many of the other valves that we discussed earlier require two hands to actuate. They also require many, many rotations to actuate.

So to go take a large-diameter opening that's in a hemostasis valve and take it from fully open all the way down to fully closed with a rotational type of an actuator takes many, many actuations, whereas the hemostasis valve in the Inari products, it is a single actuation. It's almost instant with one hand that they can go through the full travel of fully open to fully closed. It's also very simple to just do minor adjustments as you're moving catheters in and out.

Q And what -- what is your understanding of what specifically physicians were surprised about with the valve?

A How easy it is to use. How quick it is to use. How well it seals.

And when we talk about sealing, of course, that gets into the concerns about blood loss. It gets into the concerns about maintaining pressures.

Q And are you aware of any evidence that any of this surprise by physicians had anything to do with the use of the filament in the valve?

A It has to do with, yes, the filament from

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this -- from how that internal member is being compressed down. The fact that it's being circumferentially brought down allows for -- as an example, if you were to put a large-diameter catheter through there and then try to flatten it, which is more of a pancake type of a shape, it's not going to seal out on the outer edges. It will only seal on the top and the bottom.

Somewhat similar is you get real small, and you're taking and pancaking it down, you could get openings out on the ends of the pancake, versus if everything's circumferentially going down, more like the iris on a camera, it makes a much nicer seal.

Q Yeah. Let me ask a little more specific question.

Is any of the surprise by the physicians -- did any of them express surprise that the filament worked for that purpose, or do the physicians even know that a filament is inside the hemostasis valve?

A It is more the latter. Physicians have no idea what's on the inside of it.

Q Okay. I did want to ask you, on paragraph 5 of your --

A Okay.

Q -- declaration, you talk a little bit about

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your experience with Boston Scientific and SciMed.

A Okay. I'm on page 5.

Q And in that paragraph, you say you have over 30 years of research and development experience working in the cardiovascular and medical device industries across a wide variety of application areas, including development of neurovascular, cardiovascular, peripheral vascular, and pulmonary aspiration thrombectomy devices.

Do you see where I'm at?

A I don't. What paragraph are you in?

Q Paragraph 5.

A Sorry. I thought we were on page 5. That's why --

Q Sorry. I may have said page 5. Paragraph 5.

A Okay. Okay. I'm there, and I see what you've read.

Q Okay. And are those terms -- neurovascular, cardiovascular, peripheral vascular, and pulmonary -- all modifiers of aspiration thrombectomy devices?

A It is not.

Q Okay.

A Those are individual areas. Some of those

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areas of clinical treatment do include pulmonary -- excuse me -- aspiration devices.

Q So in what areas did you work on aspiration thrombectomy devices?

A I worked in the area of neurovascular and cardiovascular and peripheral vascular.

Q And were you helping to design and develop products for neurovascular, cardiovascular, and peripheral vascular?

A That is correct.

Q And these were aspiration thrombectomy devices?

A Correct.

Q And when you were developing an aspiration thrombectomy device for, let's say, a peripheral application, did you ever consult art or prior ideas from neurovascular and cardiovascular?

A I -- part -- part of my development process was to understand the prior art in neurovascular and cardiovascular.

Q And did you ever incorporate ideas or solutions that were developed for neurovascular and cardiovascular for your peripheral vascular thrombectomy devices?

A Yes.

Q Can you give me an example of something that you had taken from the neurovascular or cardiovascular space and -- and used in the peripheral application?
A I can. One example is in the work that I was performing, we were aspirating the thrombus into the catheter, many times the thrombus would cork or plug the orifice in which we were aspirating through. And so we had mechanical devices, very similar, in fact, to the Symphony's helical device that they have, so very similar to that, that we were utilizing for all three of those applications.
Q Okay.
A I was going to ask, though, keeping in mind it isn't necessarily going to be just a direct one-for-one transition of taking something from one space and using it into the next space.
So when we talk about, for instance, this helical mechanical device, we would have to custom design it for each one of those applications. And depending upon the diameter, depending upon the flexibility requirements, depending upon the type of thrombus that we were treating, we would customize it for those different applications.
MR. STOWELL: Okay. At this time, I have

no further questions for you, Mr. Brown. Thank you for your time.
MR. KEESE: No questions from me.
THE VIDEOGRAPHER: Read and sign?
MR. STOWELL: Yeah. I will assume the witness would want to read and sign.
MR. KEESE: Yes. We'll want to read and sign.
THE VIDEOGRAPHER: Okay. All right. We are going off the record. That will be the end of Media 4 and the conclusion of the video deposition of Brian Brown. The time is 3:49 p.m.
MR. KEESE: And we'll designate "OCEO," but we'll work with you to dedesignate it.
I'd like a rough, standard delivery. Mini and full with index.
(Videotaped Deposition concluded at 3:49 p.m.)

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

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.