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Page 1
          UNITED STATES PATENT AND TRADEMARK OFFICE
1
              BEFORE THE PATENT TRIAL AND APPEAL BOARD
 2
 3
     MEDTRONIC, INC., AND MEDTRONIC
     VASCULAR, INC.,
 4
                 Petitioners,
 5
           vs.
 6
     TELEFLEX INNOVATIONS S.A.R.L.,
 7
                 Patent Owner.
 8
 9
            IPR2020-00126 (Patent 8,048,032 B2)
           IPR2020-00127 (Patent 8,048,032 B2)
            IPR2020-00128 (Patent RE45,380 E)
10
           IPR2020-00129 (Patent RE45,380 E)
11
           IPR2020-00130 (Patent RE45,380 E)
           IPR2020-00132 (Patent RE45,760 E)
12
           IPR2020-00134 (Patent RE45,760 E)
           IPR2020-00135 (Patent RE45,776 E)
13
           IPR2020-00136 (Patent RE45,776 E)
           IPR2020-00137 (Patent RE47,379 E)
14
           IPR2020-00138 (Patent RE47,379 E)
15
                           VOLUME II
16
                REMOTE VIDEOTAPED DEPOSITION OF
17
                         MICHEAL JONES
18
19
                 January 20, 2021
     DATE:
20
     TIME:
                 7:58 a.m. (Pacific)
21
     PLACE:
                Veritext Virtual Videoconference
2.2
23
24
     PAGES:
                      1 to 163
     JOB NO.:
                      MW 4402861
25
                      Merilee Johnson, RDR, CRR, CRC, RSA
     REPORTED BY:
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	Page 2	Page 4
1 A P P E A R A N C E S (All appearing remotely via videoconference)		1 EXHIBITS
2		2 (Continued)
3 ON BEHALF OF THE PETITIONERS:		3 Exhibit 1015 Baim Article: Section VII: 30
4 ROBINS KAPLAN LLP BY: Christopher A. Pinahs, Esq.		4 Interventional Techniques
5 Cyrus A. Morton, Esq.		5 Exhibit 1025 United States Patent Application 53
Shelley R. Gilliss, Ph.D. 6 800 LaSalle Avenue		6 Publication No. 2005/0015073 A1,
Suite 2800		7 Publication Date: January 20,
7 Minneapolis, Minnesota 55402		8 2005
Phone: (612) 349-8500 8 Email: CMorton@RobinsKaplan.com		9 Exhibit 1055 Sakurada Brochure: 65
Email: CPinahs@RobinsKaplan.com	10	
9 Email: SGilliss@RobinsKaplan.com 10	1	
11 ON BEHALF OF THE PATENT OWNERS:	1	
12 CARLSON, CASPERS, VANDENBURGH,		
LINDQUIST & SCHUMAN, PA 13 BY: Joseph W. Winkels, Esq.		3 Exhibit 1807 Declaration of Michael Jones 6
Peter M. Kohlhepp, Esq.	1.	Tr.
14 225 South Sixth Street Suite 4200	1:	· · · · · · · · · · · · · · · · · · ·
Stitle 4200 Minneapolis, Minnesota 55402	1	
Phone: (612) 436-9600	1	7
16 Email: JWinkels@CarlsonCaspers.com Email: PKohlhepp@CarlsonCaspers.com	1	8
17	1	9
18 ALSO APPEARED: 19 Greg Smock (Teleflex)	20	0
19 Greg Smock (Teleflex) Peter Keith (Teleflex)	2	1
20 Justin Bond (Videographer)	2:	2
21 22	2:	3
23	2	
24 25	2:	
F	Page 3	Page 5
1 INDEX	-	1 (PROCEEDINGS, 01/20/2021, 9:58 a.m.)
2		THE VIDEOGRAPHER: Good morning. Today
3 WITNESS: MICHEAL JONES PAGE		3 is January 20, 2021. We're on the record at
4 Examination by Mr. Winkels 5		4 7:58 a.m. Today we'll take the videotaped
5 Examination by Mr. Pinahs161		5 deposition in Case No. IPR2020-00138.
6		
7 CAUTION OR INSTRUCTIONS NOT TO ANSWER		7 Counsel, please state your appearance and
8 Page 156, Line 13	1	8 affiliation for the record.
	1 .	
9		9 MR. WINKELS: Good morning. On behalf
10 EXHIBITS	10	0 of patent owner, Joe Winkels with the Carlson
10 EXHIBITS 11	10	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter
10 EXHIBITS	10 11 GE 12	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from
10 EXHIBITS 11 12 EXHIBITS FIRST REFERRED TO: PAG	10 11 GE 12	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter
10 EXHIBITS 11 12 EXHIBITS FIRST REFERRED TO: PAGE 13 Exhibit 1001 United States Patent No. 56	10 11 GE 12	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from 3 Teleflex, as well as Pete Keith.
10 E X H I B I T S 11 12 EXHIBITS FIRST REFERRED TO: PAG 13 Exhibit 1001 United States Patent No. 56 14 8,048,032 B@, Date of Patent:	10 11 3E 12 13	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from 3 Teleflex, as well as Pete Keith.
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10 E X H I B I T S 11 12 EXHIBITS FIRST REFERRED TO: PAG 13 Exhibit 1001 United States Patent No. 56 14 8,048,032 B@, Date of Patent: 15 November 1, 2011 16 Exhibit 1007 United States Patent No. 22 17 7,736,355 B2, Date of Patent:	10 11 12 12 14 11 10	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from 3 Teleflex, as well as Pete Keith. 4 MR. PINAHS: Christopher Pinahs from 5 the Robins Kaplan law firm on behalf of the 6 petitioner, Medtronic. I'm also joined this 7 morning by my colleague Cyrus Morton and
10 EXHIBITS 11 12 EXHIBITS FIRST REFERRED TO: PAG 13 Exhibit 1001 United States Patent No. 14 8,048,032 B@, Date of Patent: 15 November 1, 2011 16 Exhibit 1007 United States Patent No. 17 7,736,355 B2, Date of Patent: 18 June 15, 2010	10 11 12 13 14 14 15 16 17	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from 3 Teleflex, as well as Pete Keith. 4 MR. PINAHS: Christopher Pinahs from 5 the Robins Kaplan law firm on behalf of the 6 petitioner, Medtronic. I'm also joined this 7 morning by my colleague Cyrus Morton and 8 Shelley Gilliss.
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10 EXHIBITS 11 12 EXHIBITS FIRST REFERRED TO: PAG 13 Exhibit 1001 United States Patent No. 56 14 8,048,032 B@, Date of Patent: 15 November 1, 2011 16 Exhibit 1007 United States Patent No. 22 17 7,736,355 B2, Date of Patent: 18 June 15, 2010 19 Exhibit 1009 United States Patent No. 89 20 5,439,445, Date of Patent: August 21 8, 1995 22 Exhibit 1010 Takahashi Brochure: 82 23 Catheterization and	10 11 12 12 14 15 16 17 18 19 20 22 22 22	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from 3 Teleflex, as well as Pete Keith. 4 MR. PINAHS: Christopher Pinahs from 5 the Robins Kaplan law firm on behalf of the 6 petitioner, Medtronic. I'm also joined this 7 morning by my colleague Cyrus Morton and 8 Shelley Gilliss. 9 THE VIDEOGRAPHER: Thank you. Would 10 you please swear the witness. 1 MICHEAL JONES, 2 duly sworn, was examined and testified as follows: 3 EXAMINATION
10 E X H I B I T S 11 12 EXHIBITS FIRST REFERRED TO: PAG 13 Exhibit 1001 United States Patent No. 56 14 8,048,032 B@, Date of Patent: 15 November 1, 2011 16 Exhibit 1007 United States Patent No. 22 17 7,736,355 B2, Date of Patent: 18 June 15, 2010 19 Exhibit 1009 United States Patent No. 89 20 5,439,445, Date of Patent: August 21 8, 1995 22 Exhibit 1010 Takahashi Brochure: 82	10 11 12 12 14 15 16 17 18 19 20 22 22 22	0 of patent owner, Joe Winkels with the Carlson 1 Caspers firm. Also with me from my firm is Peter 2 Kohlhepp. And on the line is Greg Smock from 3 Teleflex, as well as Pete Keith. 4 MR. PINAHS: Christopher Pinahs from 5 the Robins Kaplan law firm on behalf of the 6 petitioner, Medtronic. I'm also joined this 7 morning by my colleague Cyrus Morton and 8 Shelley Gilliss. 9 THE VIDEOGRAPHER: Thank you. Would 10 you please swear the witness. 1 MICHEAL JONES, 2 duly sworn, was examined and testified as follows: 1 EXAMINATION 4 BY MR. WINKELS:

2 (Pages 2 - 5)

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Page 6

- A. Good morning. 1
- 2 Q. Do you have Exhibit 1807 in front of you?
- 3 (Exhibit No. 1807 was introduced.)
- 4 A. Yes, I do. Hang on just a second. Let me 5 open to that. Okay.
- Q. All right. And Exhibit 1807 is your
- 7 declaration in this IPR matter, correct?
- A. That's correct.
- Q. Okay. And I'm going to try to start where
- 10 we kind of left off on Monday, and we'll keep going
- 11 through your declaration as we did on Monday.
- Does that sound okay?
- 13 A. Yes, it does.
- Q. All right. And, likely, I will also move
- 15 the exhibits into the Exhibits folder on the
- 16 Exhibit Share. Do you have the Exhibit Share up,
- 17 Mr. Jones?
- 18 A. Yes. Yes, I do.
- Q. Okay. And just to make sure we're seeing
- 20 the same things. If you go into the Marked
- 21 Exhibits folder, do you see your declaration there

Q. And just to orient us: On Monday evening

Q. And the two alternatives you proposed, one

9 is where you take the Ressemann collar and you set

10 the tab portion of the collar on top of the Itou

11 wire, and the other alternative is where you take 12 the Ressemann collar and you situate the tab

13 portion on the bottom of the Itou wire. Right?

14 A. Yes. I believe we were at that point when

Q. Yep. Perfect. And we discussed in the

17 situation -- or the proposal you have where you put

19 you said in that combination you would remove both

Q. In the alternative embodiment where you put

18 the Ressemann collar on top of the wire in Itou,

20 the Itou collar and the Itou coil; is that right?

23 the Ressemann collar and the tab portion of the

25 you also remove the Itou collar and the Itou coil

24 Ressemann collar underneath the Itou wire, would

4 when we concluded, we were discussing the two

5 alternatives that you proposed for modifying the

6 Itou reference with the Ressemann collar, right?

A. I believe that is correct.

15 we ended the deposition.

- 22 now, 1807?
- A. Yes, I do.

1 paragraph 121.

A. Okay.

- Q. Okay. Perfect. So if you could turn to
- 25 page 49 of your declaration. It's around

- 1 in that alternative combination?
 - A. Yes, I would.
 - Q. Okay. Now, at paragraph 124 of your
 - 4 declaration, in that first sentence of
 - 5 paragraph 124 you're discussing Itou and Ressemann.

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- 6 And you say, "...these areas can be estimated based
- 7 on the figures and dimensions reported in each
- 8 patent."
- 9 Correct?
- 10 A. Yes, I do.
- Q. You agree it is appropriate to look at the
- 12 figures in Itou and Ressemann to estimate relative
- 13 dimensions of the various portions of the device,
- 14 right?
- A. I believe when you take the figures of both
- 16 Itou and Ressemann and then bring them -- scale one
- 17 relative to the other to bring them to the same, in
- 18 my case, internal dimension -- ID of the two, or
- 19 the ID of the opening, then at that point you can
- 20 approximate the area of the openings to give a
- 21 relative size comparison.
- Q. Right. And that's the only point I wanted
- 23 to make, is that throughout your declaration you
- 24 are looking at patent figures, and if a patent
- 25 figure doesn't have a specific dimension specified

Page 7

1 in the specification, you are using that patent

- 2 figure and scaling that patent figure to try to
- 3 ascertain dimensions of that structure, right?
- A. I'll re- -- I'll try to answer your
- 5 question in my verbiage.
- So where a patent had a dimension
- 7 specified, we've applied -- I've applied those
- 8 dimensions to the drawing to translate or place in
- 9 the drawing the appropriate dimensions that are
- 10 specified in its patent.
- 11 And then where there are not dimensions
- 12 specified from those patents, estimating, based on
- 13 some known dimensions or some known geometric
- 14 reference, what the drawing represents as the --
- 15 what the drawing represents dimensionally.
- 16 And then in the cases where we have patents
- 17 with different IDs, I'm bring- -- scale the
- 18 assembly to the same internal dimension and then
- 19 run my calculations or estimations based on those
- 20 similar internal dimensions as the basis for, say,
- 21 the scale between the two -- two patents.
- 22 Q. And in doing the estimation part of the
- 23 analysis you just described, you are using the
- 24 figures of the patents to aid you in that
- 25 estimation of various dimensions, right?

3 (Pages 6 - 9)

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Page 10

A. Yes. I am using the patent drawings to aid 2 me in that estimation.

Q. Okay. Looking down to paragraph 127.

4 A. Okay.

5 Q. All right. Now, in 127 you are saying that

6 using Ressemann's collar would reduce kinking

7 because it would eliminate the weld point between

8 the wire 25 and the proximal opening, right?

A. Hold on a second. Let me read that

10 paragraph before you . . . (Reviewing document.)

Okay. Okay. So, again, your question, 12 please?

13 Q. Yeah. Are you saying that you would use

14 Ressemann's collar to eliminate the weld point in

15 Itou to reduce kinking?

MR. PINAHS: Objection. Form. 16

17 A. Can you re-ask that question?

Q. Let's just break it up. Are you saying you

19 would use Ressemann's collar 2141 in your proposed

20 combination that you discuss in paragraph 127 to

21 eliminate the weld point in Itou?

2 and the opening of Itou.

12 shortness of the transition.

16 the wire at that location.

25 of the wire in Itou?

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A. The answer is yes. So I would be using the

Q. Is it your opinion that the weld point in

A. Yeah. It's my -- it's my opinion that the 6 weld point being -- essentially having -- sorry.

It's my opinion that the transition between

4 Itou is a location that may increase kinkability?

8 the Itou collar and the wire would have a -- the

9 transition area where the wire has been flattened

10 and welded to the Itou collar provides a risk of a

And the fact that the -- flattening the

15 work hardening and a decrease in the ductility of

Q. Right. I want to talk about that. Before

Q. Can you see at -- in paragraph 121 of your 23 declaration, you show your proposed combination

24 where you've included the Ressemann collar on top

14 wire by crushing it is going to locally result in

18 we get to that, though, I have a -- my first

20 show in paragraph 121 of your declaration.

A. Okay. Let me flip over to that.

19 question is: If you look at the combination you

11 kink forming at that joint, just due to the

23 collar in Ressemann in place or to trans- -- in

24 place of the weld point in Itou. So the collar

25 would provide an increase -- or the ability to

A. Mm-hmm. Yes, I see that.

Q. In the combination you show in

3 paragraph 121, the weld point is still present,

4 right,

5 A. No, I --

MR. PINAHS: Object to form.

7 A. -- think --

8 MR. PINAHS: You can answer, Mr. Jones.

Page 12

A. Now, in this schematic I basically overlaid

10 what the -- where the -- where I would place the

11 collar in relation to the Itou construction.

12 So the wire that's shown in Itou here is

13 unmodified. It's just the Itou form that was

provided, and then on top of it is placed the

15 Ressemann collar. And you can see it's embedded

16 within the wall on the top, and there's some

17 manipulation or modification I'd have to make to

18 get it fully embedded in the wall at the proximal

19 end of Itou.

20 So the -- I don't -- my attempt is not to

21 show the weld point of Itou. My attempt is to show

22 where I believe the Ressemann collar would fit

23 within this construction.

Q. Okay. So is it fair to say that the figure

25 you show in paragraph 121 is not an accurate

Page 11

1 provide a transition in stiffness between the wire

1 representation of the ultimate combination you are

2 proposing between Ressemann and Itou? 3

MR. PINAHS: Objection. Form. A. Can you rephrase that, please? Just to

5 make sure I answer the right question.

Q. Sure. Is it fair to say that the figure

7 you show in paragraph 121 is not an accurate

8 representation of the ultimate combination you are

9 proposing between Ressemann and Itou?

10 MR. PINAHS: Same objection.

A. It's in an -- it's an attempt -- my attempt

12 to demonstrate what the combination -- what Itou's

13 layout would look like with the Ressemann collar

14 attached.

15 I think this is, you know, an interim view

16 of what would be done with the product. There are

17 other changes that I would probably make in

18 conjunction with this, where I would make this full

19 change, but this is -- my best description, an

20 interim view of the -- what it would look like.

Q. Thank you. That's all I'm trying to

22 establish, is that the figure you show in

paragraph 121, you would make further modifications

24 beyond those shown in that figure to arrive at the

25 ultimate combination you are proposing between

4 (Pages 10 - 13)

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Page 14 Page 16

- 1 Ressemann and Itou, right?
- 2 A. Yeah. I make other modifications that are
- 3 routine engineering decisions to improve the
- 4 transition from one to the other.
- 5 Q. Okay. Let's talk about that ductility
- 6 issue you referenced. And I'll draw your attention
- 7 back to paragraph 127. That's where you talk about
- 8 ductility. Let me know when you're there, please.
- A. Okay. Back to 127.
- 10 Q. Okay. In that paragraph you refer to
- 11 "ductility." What is ductility?
- 12 A. Ductility is essentially the -- the
- 13 materials in the -- in relation to metal, ductility
- 14 is the ability for material to bend, to be
- 15 reshaped. I think those would be the two features
- 16 that would -- are related to the ductility of a 17 metal.
- 18 Q. Do you agree that "ductility" refers to a
- 19 metal's ability to permanently deform?
- 20 A. Can you rephrase that question? It's -- I
- 21 just want to make sure we're accurate on wording
- 22 there -- or my understanding of your question.
- 23 Q. Yeah. And that's what I'm trying to
- 24 understand, is what you mean by "ductility." Does

A. Yes, in general, it does. In the case of

4 this case a crushing action, adds work-hardening.

7 Q. Okay. And in the context of these 8 interventional devices we're talking about, we

A. In regards to a metal, it typically does

14 can look at the second-to-last sentence of that

16 ductility at a critical stiffness transition point

15 paragraph. And what you say is, "A reduction in

17 is known in the art to be susceptible to kinking."

Right? That's what you said, right?

Q. I just read what you said in paragraph 127.

Q. Okay. My question is: When you say a

25 reduction in ductility would be susceptible to

Q. Okay. Okay. So in paragraph 127, if you

9 refer to "kinking." And "kinking" implies

10 permanent deformation, right?

A. "A reduction..."

Q. Okay.

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A. Yes, I'm reading it.

A. Yes, that's what's written.

12 refer to a permanent deformation.

3 stainless steels, permanently deforming them by, in

5 So that work-hardening reduces the ductility of the

25 "ductility" refer to a material's ability to

1 permanently deform?

6 metal locally.

1 kinking, are you saying a reduction in ductility

- 2 would be more susceptible to kinking?
- 3 A. No, I don't think -- well, I don't think
- 4 that's the intent -- or I don't believe that is
- 5 accurate.
- 6 The localized -- so in this -- in the Itou
- 7 collar-to-wire weld, the combination of the
- 8 work-hardening and the welding will make a -- the
- 9 work-hardening due to crushing the wire and the
- 10 welding to attach the collar to the wire, we're
- 11 going to have a dis- -- there will be a
- 12 discontinuity in the stiffness of the wire. And
- 13 that discontinuity is the place most likely to
- 14 kink.
- So it may not be necessarily at the -- that
- 16 transition, but immediately adjacent to it.
- 17 Q. Okay. Are you saying that the
- 18 work-hardening that Itou does reduces the
- 19 ductility?
- 20 A. Yes, I am.
- 21 Q. Okay. And isn't something that is ductile
- 22 more able to bend and kink than something that is
- 23 not ductile?
- 24 A. No.
- 25 Q. Okay.

Page 15

- 1 A. So if we want to use -- so a nonductile
- 2 wire may be able to bend in a large curvature --
- 3 yeah, when it's forced into a small curvature will
- 4 exceed its elastic limit, producing a permanent
- 5 change in shape that's not recoverable.
- 6 A ductile wire will have -- in a similar
- 7 circumstance, could go through a large-diameter
- 8 bend and not be affected, but a ductile wire would
- 9 have -- have a permanent deformation happen at
- 10 potentially a less -- under a less extreme bend.
- 11 So . . .
- 12 Q. Okay. I just want to understand what you
- 13 believe ductility relates to in this context. My
- 14 question is: Do you agree that the more something
- 15 is ductile, the more likely it is to kink?
- 16 A. Not necessarily. I want to -- I would
- 17 rephrase that statement slightly, I think. The
- 18 more something is ductile, the easier it is to bend
- 19 and the easier it is for that bend to become
- 20 permanent. And similarly, the more something is
- 21 ductile, the easier it is to unbend and
- 22 restraighten.
- The less ductile a wire is, the production
- 24 of a kink, from whatever reason, would be nearly --
- 25 would require substantial amount of work to

5 (Pages 14 - 17)

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