In The Matter Of:

LifeCORE Fitness, Inc. v. Woodway USA, Inc.

Robert Giachetti, Ph.D., P.E. January 10, 2024 Patent No. 9,039,580

NorthStar Deposition Services

Original File 011024Giachetti2.txt

Min-U-Script® with Word Index

	CORE Fitness, Inc. v. Patent Podway USA, Inc.	10. 9,0	39,380	Robert G	Giachetti, Ph.D., P. January 10, 202
	Page	1			Page
1 2	UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD	1 x 2		P.E.	JANUARY 10, 2024
3	LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS,	3	Appearances		Page 2
4	Petitioner,	4			
5	v.	5	Exhibit Index		Page 4
6	WOODWAY USA, INC. Patent Owner.	6			
7	ratellt Owler.	7	Examination by Ms. Riege	er	Page 5
8	IPR023-00836	8	Examination by Mr. Turne	er	Page 57
9	U.S. Patent No. 9,039,580	9			
0	January 10, 2024 2:04 p.m.	x 10 11	Acknowledgement		Page 60
2		12	Certification		Page 61
3		13			
4	The deposition of ROBERT GIACHETTI, Ph.D.	, 14	Errata		Page 62
5	P.E., called as a witness herein for examination,	15			
6	taken pursuant to the rules of the United States	16	Word Index		Page 63
7	Patent and Trademark Office before JENNIFER L.	17			
8	BERNIER, a Certified Stenographic Reporter of the	18			
9	State of Illinois, CSR License No. 084-004190,	19			
0	Registered Merit Reporter and Certified Realtime	20			
1	Reporter, at Foley & Lardner LLP, 321 North Clark	21			
2	Street, Suite 3000, Chicago, Illinois.	22			
3		23			
4		24			
5		25			
	Page	2			Page
1	APPEARANCES	1	ROBERT GIACHETTI, Ph.D.,	P.E.	JANUARY 10, 2024
2		2	EXHI	BITS	
3	ON BEHALF OF PETITIONER LIFECORE FITNESS, INC.	3	Exhibits 1001 through 10	30 were p	remarked and
4	d/b/a ASSAULT FITNESS: BROOKS KUSHMAN	4	retained by counsel.		
5	150 W. Second Street Suite 400N	5	- 000	-	
6	Royal Oak, Michigan 48067-3846 (248) 226-2707	6			
7	BY: ANDREW B. TURNER, ESQ.	7			
8	aturner@brookskushman.com	8			
9		9			
0	ON BEHALF OF PATENT OWNER WOODWAY USA, INC.:	10			
1	FOLEY & LARDNER LLP	11			
2	777 East Wisconsin Avenue Milwaukee, Wisconsin 53202	12			
3	(414) 319-7324	13			
	BY: KADIE M. JELENCHICK, ESQ. kjelenchick@foley.com	14			
4	3 · · · · · · · · · · · · · · · · · · ·	1 -			
	SARAH E. RIEGER, ESQ.	15			
5	-	16			
.5 .6	SARAH E. RIEGER, ESQ.				
.5 .6 .7	SARAH E. RIEGER, ESQ.	16			
.5 .6 .7	SARAH E. RIEGER, ESQ.	16 17			
.5 .6 .7 .8	SARAH E. RIEGER, ESQ.	16 17 18			
.5 .7 .8 .9	SARAH E. RIEGER, ESQ.	16 17 18 19			
.5 .6 .7 .8 .9	SARAH E. RIEGER, ESQ.	16 17 18 19 20			
5 6 7 8 9 0 1	SARAH E. RIEGER, ESQ.	16 17 18 19 20 21			
.4 .5 .6 .7 .8 .9 .0 .1 .2 .3	SARAH E. RIEGER, ESQ.	16 17 18 19 20 21			

	voouway USA, IIIC.		January 10, 2024
		Page 5	Page 7
	1 PROCEEDINGS	1	assemblies 94 including the rollers 98 bearings
	2 JANUARY 10, 2024	2	
		3	
	4 (Deposition Exhibits 1001 through	4	
	5 1030 were premarked for identification.)	5	
	6 (Witness sworn.)	6	350 to mean that you are identifying Socwell's
	7 WHEREUPON:	7	cover members 168 as meeting the bearing rail
	8 ROBERT S. GIACHETTI, Ph.D., P.E.,	8	limitations in elements 1.4 and 1.5?
	9 called as a witness herein, having been	9	A. I think the bearing rail limitation
1	o first duly sworn, was examined and	10	is is covered by the cover member, yes, because
1	testified as follows:	11	it holds the roller bearings and the deck bearing.
1	EXAMINATION	12	
1	BY MS. RIEGER:	13	member 168 holds the deck bearing. That's not
1	Q. Welcome back, Dr. Giachetti.	14	referenced in this specific paragraph, right?
1	During the break, did you discuss your	15	A. I believe it's in one of the
1	testimony with Mr. Turner at all?	16	subsequent paragraphs.
1	.7 A. No.	17	Q. Well, let's look at paragraph 356. In
1	Q. I've got a new set of binders in front	18	that paragraph, you state that's on page 192.
1	of you. If you could open Binder 2 to Exhibit	19	A. Okay.
2	1003 or, sorry Binder 1 to Exhibit 1003.	20	Q. In that paragraph, you state: As
2	A. Okay.	21	explained for claims 1.4 and 1.5, the cover
2	Q. Do you recognize that document?	22	members 168 bearing rails are mounted to the frame
2	A. Yeah. It looks like my declaration in	23	and support the deck 56 and rollers 98.
2	this matter for the '580 patent, and that looks	24	^^
2	like my signature on the last page.	25	
		Page 6	Page 8
	And did you maying the declaration for		the the counties on more 107 and also discuss
	1 Q. And did you review the declaration for		
	2 completeness and accuracy before you signed		1 0 1
	3 A. Yes.	3	Q. All right. Well, looking at that
	And similar to the other declarations		
	4 Q. And similar to the other declarations	4	graphic on page 187, which is under that
	5 in the other matters, does this declaration	5	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how
	in the other matters, does this declarationreflect all of the opinions that you reached in	5 6	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56?
	in the other matters, does this declarationreflect all of the opinions that you reached inconnection with the '580 IPR?	5 6 7	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened
	 in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. 	5 6 7 8	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we
	 in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to 	5 6 7 8 9	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through
	 in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text 	5 6 7 8 9	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are
	 in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call elements 	5 6 7 8 9 7, 10	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings.
1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5.	5 6 7 8 9 1, 10 ats 11	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the
1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that?	5 6 7 8 9 7, 10	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by
1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that.	5 6 7 8 9 1, 10 tts 11 12 13 14	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member?
1 1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first	5 6 7 8 9 1, 10 1ts 11 12 13 14 15	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the
1 1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the	5 6 7 8 9 1, 10 tts 11 12 13 14 15 16	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame.
1 1 1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the	5 6 7 8 9 1, 10 11s 12 13 14 15 16 17	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is?
1 1 1 1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a	5 6 7 8 9 1, 10 112 13 14 15 16 17	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes.
1 1 1 1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail	5 6 7 8 9 1, 10 11 12 13 14 15 16 17 18 19	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so?
1 1 1 1 1 1 1	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail attached to a right side of the frame. End quot	5 6 7 8 9 1, 10 11 12 13 14 15 16 17 18 19	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so? A. By the bolt.
1 1 1 1 1 1 1 1 1 2	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail attached to a right side of the frame. End quot Did I read that correctly?	5 6 7 8 9 9 1, 10 11s 11 12 13 14 15 16 17 18 19 1e. 20 21	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so? A. By the bolt. Q. Wouldn't the bolts connect the deck to
1 1 1 1 1 1 1 2 2	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail attached to a right side of the frame. End quot Did I read that correctly? A. I think you did.	5 6 7 8 9 9 10 11 12 13 14 15 16 17 18 19 1e. 20 21 22	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so? A. By the bolt. Q. Wouldn't the bolts connect the deck to the frame in that case?
1 1 1 1 1 1 1 2 2	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail attached to a right side of the frame. End quot Did I read that correctly? A. I think you did. Q. If you go ahead to paragraph 350, you	5 6 7 8 9 9 10 11 12 13 14 15 16 17 18 19 1e. 20 21 22 23	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so? A. By the bolt. Q. Wouldn't the bolts connect the deck to the frame in that case? A. It's like a sandwich. So the bolt,
1 1 1 1 1 1 1 2 2 2	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail attached to a right side of the frame. End quot Did I read that correctly? A. I think you did. Q. If you go ahead to paragraph 350, you state that Socwell discloses a cover member 1	5 6 7 8 9 9 10 11 12 13 14 15 16 17 18 19 1e. 20 21 22 23	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so? A. By the bolt. Q. Wouldn't the bolts connect the deck to the frame in that case? A. It's like a sandwich. So the bolt, which is the cover member, and it all holds
1 1 1 1 1 1 1 2 2 2 2	in the other matters, does this declaration reflect all of the opinions that you reached in connection with the '580 IPR? A. I think so. Q. So in your declaration, if we go to page 180, starting on this page in the bold text you discuss two elements that you call element 1.4 and 1.5. Do you see that? A. I see that. Q. And those elements recite "a first bearing rail having a plurality of bearings, the first bearing rail attached to a left side of the frame," and a second bearing rail having a plurality of bearings, the second bearing rail attached to a right side of the frame. End quot Did I read that correctly? A. I think you did. Q. If you go ahead to paragraph 350, you	5 6 7 8 9 9 10 11 12 13 14 15 16 17 18 19 1e. 20 21 22 23	graphic on page 187, which is under that paragraph 350, can you explain to me exactly how the cover member 168 supports the deck 56? A. Yeah. So the cover member is fastened to the frame in that fastening action as we describe here in 351. That fastener goes through the deck, and the two of those things together are the plurality of bearings. Q. How does simply being fastened to the cover member mean that the deck is supported by the cover member? A. Right. So it's used to attach the deck to the frame. Q. The cover member is? A. Yes. Q. How so? A. By the bolt. Q. Wouldn't the bolts connect the deck to the frame in that case? A. It's like a sandwich. So the bolt, which is the cover member, and it all holds

	dway OSA, Inc.		3anuary 10, 2024
	Page 9		Page 11
_	O So is it your opinion that anything	_	Q. The deck is flexible?
1	Q. So is it your opinion that anything	1	
2	connected to that cover member is supported by the	2	A. Well, that's why you need the
3	cover member?	3	crossmembers underneath it.
4	A. I don't know if I have an opinion on	4	Q. Which crossmembers are you referring
5	that.	5	to?
6	Q. Is the frame supported by the cover	6	A. Support rib 54.
7	member?	7	Q. You testified that the cover members
8	A. No. I think a frame is the thing that	8	hold the deck in a curved formation. Isn't it the
	E		
9	is providing support to the device.	9	belt that those are designed to hold in a
10	Q. Why is the frame not also supporting	10	particular shape?
11	the deck versus the cover member supporting the	11	A. Well, you can see from Figure 5 that
12	deck?	12	we cite above paragraph 351 that the whole thing
13	A. Well, without the cover member to hold	13	is sandwiched together. So the cover member, when
14	everything down, you would have to find some other	14	you bolt it down, will smash the running belt to
15	way of keeping the deck in place. And so in this	15	the deck; and then as you tighten it down, it will
	one, it's all the it's all an assembly.	16	smash the deck into the crossmember there. And so
16	· · · · · · · · · · · · · · · · · · ·		
17	Q. If you look at that paragraph cited in	17	it will enforce the curvature on the deck and the
18	paragraph 351 or I should say that excerpt from	18	belt at the same time.
19	Socwell, you quote Socwell as saying:	19	Q. Please go to Socwell, specifically to
20	Alternatively, the bolt 118 may be disposed	20	column 8. And Socwell is going to be Exhibit
21	through an aperture 116 formed in a support rib 54	21	1011.
22	which may further serve to secure the support rib	22	Looking at it looks like line 8
23	54 to the support frame.	23	on just let me know when you get there. I
24	Did I read that right?	24	don't want to jump the gun.
	——————————————————————————————————————		
25	A. That was on page 188?	25	A. Just give me one second.
	Page 10		Page 12
1	Q. Yes.	1	Q. Sure.
1 2	Q. Yes.A. That sounds about right.	1 2	Q. Sure.A. Okay. Where were we?
	Q. Yes.A. That sounds about right.Q. Why is it the case that that support		Q. Sure.A. Okay. Where were we?Q. Column 8
2	Q. Yes.A. That sounds about right.	2	Q. Sure.A. Okay. Where were we?
2	Q. Yes.A. That sounds about right.Q. Why is it the case that that support rib 54 is not what supports the deck versus the	2	Q. Sure.A. Okay. Where were we?Q. Column 8A. Column 8, okay.
2 3 4 5	Q. Yes.A. That sounds about right.Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck?	2 3 4 5	 Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that
2 3 4 5 6	Q. Yes.A. That sounds about right.Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck?A. The deck would not have the curved	2 3 4 5 6	 Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts
2 3 4 5 6 7	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and 	2 3 4 5 6 7	 Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred
2 3 4 5 6 7 8	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for 	2 3 4 5 6 7 8	 Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a
2 3 4 5 6 7 8 9	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. 	2 3 4 5 6 7 8 9	 Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide
2 3 4 5 6 7 8 9	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above 	2 3 4 5 6 7 8 9	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately
2 3 4 5 6 7 8 9 10	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? 	2 3 4 5 6 7 8 9 10	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the
2 3 4 5 6 7 8 9	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. 	2 3 4 5 6 7 8 9	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10."
2 3 4 5 6 7 8 9 10	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? 	2 3 4 5 6 7 8 9 10	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the
2 3 4 5 6 7 8 9 10 11	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. 	2 3 4 5 6 7 8 9 10 11	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10."
2 3 4 5 6 7 8 9 10 11 12 13	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. 	2 3 4 5 6 7 8 9 10 11 12 13 14	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did.
2 3 4 5 6 7 8 9 10 11 12 13 14	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned 	2 3 4 5 6 7 8 9 10 11 12 13 14	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote,
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material?
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And so that's why it's supporting. 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support ribs. And it also mentions that you could also
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support ribs. And it also mentions that you could also use things like fiberglass and graphite or things
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And so that's why it's supporting. 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support ribs. And it also mentions that you could also
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And so that's why it's supporting. Q. The deck is a is a single structure, correct? 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support ribs. And it also mentions that you could also use things like fiberglass and graphite or things like that to use like plastics as well.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And so that's why it's supporting. Q. The deck is a is a single structure, correct? A. I would say that it's a single piece. 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support ribs. And it also mentions that you could also use things like fiberglass and graphite or things like that to use like plastics as well. Q. Are any of those not sturdy, rigid
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	 Q. Yes. A. That sounds about right. Q. Why is it the case that that support rib 54 is not what supports the deck versus the cover member supporting the deck? A. The deck would not have the curved shape without without the cover member and without the cover member providing the support for it. Q. The cover member is positioned above the deck, correct? A. That's right. Q. How is the cover member supporting the deck in order to withdrawn. How is something that is positioned above the deck supporting the deck? A. Right. So as I just said, if you don't put it together this way, then the deck would not take the curved shape that it has. And so that's why it's supporting. Q. The deck is a is a single structure, correct? 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Sure. A. Okay. Where were we? Q. Column 8 A. Column 8, okay. Q which is on page 15. In that second that first full paragraph, which starts around line 8, it states: "In a preferred construction, the deck 56 is formed of a substantially sturdy, rigid material to provide sufficient structural integrity to adequately support the weight of a user exercising on the curved deck treadmill 10." Did I read that correctly? A. You did. Q. To your knowledge, did Socwell disclose any deck that is not made of a, quote, sturdy, rigid material? A. Well, it discusses, in other locations, sturdy, rigid materials for the support ribs. And it also mentions that you could also use things like fiberglass and graphite or things like that to use like plastics as well.

Page 13 Page 15 than others. But again, I'll point out that if --1 A. Because it's a force that maintains there is a difference between a sturdy, rigid 2 something's shape or position in that thing. So, 2 material and a sturdy, rigid element of -- of for example, in the '580 patent, it talks about 3 3 supports and support structures and supports all 4 something made out of that material. 4 So piggybacking on what I said over the place; but it doesn't always discuss them 5 5 earlier, if the deck is rigid, then you wouldn't in a vertical meaning. I believe there is a 6 6 7 need anything to support it from underneath 7 support inside the safety device that is not against the load. So the fact that this is 8 vertical at all. 8 talking about a sturdy, rigid material for the Q. So if Object A is holding down 9 9 deck and a sturdy, rigid material for the support Object B, it is your opinion that Object A is 10 10 11 ribs doesn't necessarily mean that the deck, 11 supporting Object B? itself, is rigid or that the -- the support ribs MR. TURNER: Objection. Form. 12 12 are, themselves, rigid as an element, but that Again, I had a nuance in my 13 13 it's a tough material. A rigid and sturdy description of the word support, which was that it 14 14 material is used to construct them. enforces a shape of something or a position of 15 15 Q. Are you aware of anything in Socwell something so that it performs its task. 16 16 that describes the -- either the rollers or cover So the cover member is enforcing the 17 17 members 168 as being the reason that the deck is 18 shape of the belt and the deck along the lines of in an arced or curved shape? my buttress example, which is something coming at 19 19 20 A. Yeah, I don't recall that it mentions a wall from the side. 20 that. (Exit Ms. Jelenchick.) 21 21 MS. RIEGER: Let's go off the record You described previously the rollers 22 22 or the cover members 168 supporting other for just one moment because I think I've 23 23 structures because they held them in a curved misplaced an exhibit. 24 24 25 configuration, correct? 25 THE WITNESS: Okay. Page 14 Page 16 (Recess had.) 1 1 Q. Can you explain to me why holding (Enter Ms. Jelenchick.) 2 2 something in a curved configuration means 3 BY MS. RIEGER: 3 supporting that thing? Q. Sorry about that. I am going to hand 4 4 A. Sure. Because it's a -- it's you what has been previously marked as 5 5 something that applies a force to maintain a shape Exhibit 2008. If you could turn to -- well, first 7 of another element. For example, in structures 7 and foremost, do you recognize this document? there is something called a buttress; and I think 8 It looks like my opening report from 8 A. 9 people would recognize that that is a support, but 9 2017. the buttress comes at something from the side, for Q. If you turn to page 9 starting at 10 10 example, or keeps a wall from falling down. paragraph 21, you offer some opinions on the 11 11 12 But it doesn't necessarily provide meaning of the word support as used "throughout 12 upward force, so -- but it's there to keep that 13 Bayerlein 169 and Bayerlein 580." 13 wall from falling. So it's enforcing the shape of Do you understand Bayerlein 580 to be 14 14 the wall by applying a force to it. So that's the the '580 patent at issue in this litigation -- or 15 15 basis of what I'm considering. 16 inter partes review? 16 So the cover member is applying a 17 17 A. Yes. force to the belt and the deck to maintain it --Q. If you could just look at those 18 18 paragraphs 21, 22, and 23 -- and 24, is there maintain both of those things in a curved shape. 19 19 Q. So is it your opinion that the term anything in these paragraphs related to support, 20 20 support simply refers to the application of force meaning helping to maintain the shape of an 21 21

Q.

"support"?

22

23

24

25

on another object?

A. No. That's not what I said.

Then how would you define the word

22

23

24

25

A. Right. These paragraphs are

describing the inconsistent use of the word

support in the '580 patent, but it does not

Page 19

Page 20

7

11

20

21

23

3

9

10

13

15

20

23

Page 17

mention an alternative construction of the word 2 support.

- Q. How was the use of the word support in 3 4 the '580 patent inconsistent?
- A. So as I outlined here, if you want to 5 use a plain meaning of support for indicating 6
- weight-bearing or vertical force capability, 7
- that's what's stated in this report on -- in 8
- paragraph 21. There is a little bit of a 9
- disparity in terms of common and plain usage. 10
- Again, like I mentioned the word "buttress," which 11
- everyone would understand is support, doesn't 12 necessarily provide vertical force capability; but 13
- nonetheless, it is considered a support. 14

15 However, that notwithstanding, 16

paragraph 22 lays out a number of different places

where the word support is used in an indefinite 17 chain of pieces where one thing could support 18

another through any number of intermediaries. 19 And there are other instances here --20

for example, in the stud 1520 -- which I recall does not provide force at all but keeps things in

23

21

22

8

Q. So it's fair to say that in the prior 24

25 litigation, it was your opinion that as the term suggests that support needs to confer some sort of

2 shape retention?

3 A. I don't recall off the top of my head

4 if that is in there, but it certainly describes

enforcing locations of particular pieces or 5 6 portions of pieces.

Q. If you look at paragraph 23 of this

Exhibit 2008, you state there: "To a POSITA --8

And you understand a POSITA to be the 9 same thing as a POSA? 10

A. Yes.

Q. -- "To a POSITA, support can be 12

achieved by various structural elements. For 13

example, one may support a machine element by

welding it to the side of another element, bolting 15

it to the underside of another machine element, 16 17

laying it on top of a machine element, coupling it to another machine element, placing the machine

element on the floor, and so on." 19

> Did I read that first sentence correctly?

I think that was two sentences, but 22

yeah.

You're right. That is two sentences, 24 Q.

25 but yes.

Page 18

Did you mention anything about

1 retention of shape in that definition of support? 2

A. No. But again, I'm -- the last

sentence in that paragraph, basically I'm using 4

that as a descriptive portion to explain why the 5

6 word support in the '580 is very broad.

7 Q. You said support in the '580 is very

broad, correct? 8

> A. Right.

Okay. Let's shift gears a little bit.

Let's go back to your binder, specifically to

Exhibit 1013. Do you recognize this document? 12

A. Yes, I do.

And this is U.S. Patent No. 3,637,206, 14

which lists Chickering as an inventor; is that

right? 16 17

A. That's right.

Q. If I call this Chickering, will you 18

understand what I'm talking about? 19

Yes. A.

Did you read Chickering in its 21

entirety before your report was drafted? 22

A.

Does Chickering disclose a curved 24 Q. 25

running surface?

support is used in the '580 patent, support did not require any sort of maintenance of shape; is

that right? 3

A. I think the opinions that I just --4

not necessarily the opinion outlined there, but 5

6 what I was pointing out there is the usage of the

word support basically indicated one element 7 applying force to another and -- but I didn't make

9 anything about -- I didn't make any sort of

comments about shape. 10

But certainly in there, it shows that 11 those forces are applied to keep something in 12 place. 13

Q. Is there any reason you can think of 14 of why the definition of support in the '580 15 patent today would be different from the 16

definition of support in the '580 patent in 2017? 17

MR. TURNER: Objection to form. 18 A. Well, I don't recall, in that 19

litigation, if the word support ended up being 20

construed by the Court. However, today, I 21

22 would -- I would make similar arguments that the 23 word support in the '580 does not restrict it to

vertical forces at all. 24

Q. Is there anything in the '580 that

Page 21 Page 23 1 A. Yes. Did I read that correctly? 1 Q. How so? You did. 2 2 A. It depicts it in Figure 3. 3 So Chickering, itself, describes 3 Ο. 4 Q. If we look at Figure 3 -- well, 4 Figure 3 as two sets of rollers, the forward actually no. If we look at Figure 2, you'll agree rollers and the rear rollers, each of which lie in 5 5 with me that Figure 2 shows a device with two sets 6 their own plane; is that right? 6 of rollers that are each arranged in a plane? 7 A. I don't know that I agree with that 7 Does that sound right? here because it calls them a single series of 8 8 A. I don't know that I would agree with rollers. So it's just describing the forward 9 9 that because they're not in the same -- they do section and the rearward section of that single 10 10 not have the same plane. 11 series of rollers. 11 Q. Well, I didn't say in the same plane. 12 12 Q. Does Chickering say the forward I said two sets of rollers, each arranged in a rollers lie approximately in a plane slanting 13 13 downwardly from the front of the base? 14 plane. 14 15 A. Sure, in the -- in their own plane, 15 A. It does. I'll say. 16 Does Chickering say the rear rollers 16 Q. Yeah. And in Figure 3, are there not lie approximately in a plane slanting upward 17 17 also two sets of rollers arranged in two different toward the rear of the base 10? 18 18 planes? A. It does. 19 19 A. Well, I don't know necessarily if just So even if it describes that as a 20 20 Q. looking at that photo, you would -- you could say single series of rollers 29, it is describing two 21 21 that. Because you could split it up and do a subsets of rollers, each lying in different 22 22 number of different -- different sets of rollers planes. Is that accurate? 23 23 A. I think that's -- that is accurate. there. 24 24 25 If you wanted to break it into two It does describe it as a single group of rollers 25 Page 22 Page 24 pieces, you might be able to make that -- that that it then, for descriptive purposes, describes claim. But then again, it depends on what you're as front and rear. 2 looking at. So if you're looking at the center Q. Do two linear or planar sections 3 3 points of those, the front and rear are anchored equate a curve? 4 4 at different locations. And if -- or say you took A. Can you state that again? 5 5 them in pairs of two, you would find three planes 6 Q. Do two linear or planer sections there. So there are a number of different ways to 7 equate to a curve? 7 review Figure 3. A. Can you be more specific with the 8 8 9 Q. If you look at -- I guess it starts at 9 context of what you're asking about? the bottom of column 2 around line 73. And this Q. If you have two intersecting planes, 10 10 does the point where they meet equate to a curve? is going to continue on to the next page, just 11 11 for -- for heads-up purposes. A. So if you're speaking in abstract 12 12 A. Sure. mathematical terms, those planes would meet at a 13 13 Q. Chickering says, quote: An alternate line in the abstract mathematical world. 14 14 form of the exercising device of the present Q. So if we look at your declaration, 15 15 16

invention is shown in Fig 3, wherein a single Exhibit 1003, at paragraph 151, which breaks 16 endless belt 28 forms both the accelerating and 17 across pages 86 and 87, you state, in this decelerating areas. In the device shown in Fig 3, paragraph 151, that Chickering's left front 18 a single series of rollers are provided journaled support arm 14 and left rear support arm 19, as 19 in the sidewalls 22 of the base 10. However, the illustrated in Figure 2, collectively satisfy the 20 rollers are so disposed that the forward rollers first bearing rail plane of the limitation; is 21 lie approximately in a plane slanting downwardly 22 that right? from the front of the base, while the rear rollers 23 A. That's right. lie approximately in a plane slanting upward Okay. And then if you skip ahead to 24

25

(646) 423-8363

toward the rear of the base.

17

18

19

20

21 22

23

24

25

paragraph 158, which is going to break across

Page 25 Page 27 pages 89 and 90, you similarly state that 1 Q. Is the frame curved in any way? Chickering's right front support arm 14 and right A. No. But it provides that connection 2 rear support arm 19 collectively satisfied the that you were asking about. 3 Q. So there is no structure connecting 4 second bearing rail claim limitation; is that 4 the two segments that you say form the second correct? 5 5 bearing rail that is curved. Is that accurate? A. That's correct. 6 6 Q. Are any of the support arms you 7 A. No. I just said the opposite of that. 7 reference in those paragraphs curved? What is curved that connects these two 8 8 A. Well, if we're talking about them bearing rails structurally? 9 9 collectively, we go from one angle to another A. Oh, the second bearing rail limitation 10 10 angle. So there must be a change in angle between that's curved is met by the two of them together, 11 11 which is what I'm saying. And their connection 12 them. 12 O. Does a change in angle equate to a point is via the frame. 13 13 curve? Q. But my question was: There is no --14 14 15 A. I would restate that as a change in 15 can you -inclination. And I think in the context of -- of My question was whether there was any 16 16 Chickering, that it would. structural component that connected these two 17 17 Q. Looking at Figure 1, which you've portions of what you say makes up the bearing 18 18 annotated in paragraph 158, you identify the rail, the second bearing rail --19 19 second bearing rail in blue. Both of those are A. And I --20 20 straight, correct? -- that is, itself, curved. 21 21 O. A. So I'm looking at those collectively. 22 Oh, then I don't --22 A. And together, they're not straight; but 23 23 O. Is there -individually on their own, they would be. -- I don't see one. 24 24 Α. Q. Does any component of what you call a Q. Yeah. 25 25 Page 26 Page 28 second bearing rail actually have a structure that Is the second bearing rail structurally the same as the first bearing rail, is curved? 2 just on the other side of the device? A. Can you repeat that question? 3 3 I'll rephrase. A. For the most part, it's a mirror image 4 4 Is there any structural component of in here. There might be some slight differences 5 5 around 15 and 26; but I think, by and large, 6 the second bearing rail that is curved? 6 7 A. Well, what we're calling as a second 7 they're mirror images of one another. bearing rail is both of those pieces which have Q. You're not aware of anything specific 8 8 9 different inclinations; and I can certainly fit a 9 that would be different between the two, apart polynomial through them, so I would say that they from their being mirrored? 10 10 collectively are curved. A. I don't recall anything outside of 11 11 Q. You say you could fit a polynomial 12 what we've mentioned already. 12 through them. What do you mean by that? Q. So the first bearing rail and the 13 13 second bearing rail have the same shape, A. So I could come up with an equation 14 14 that would generate a line, if you're looking at essentially, correct? 15 15 the side of this, that would pass through line When viewed from the side, yeah. 16 16 both of -- or pass through the plurality of Right. 17 17 bearings and the second bearing rail. All right. Let's look at 18 18 Q. There is no structure here that paragraphs 153 and 154, which 153 starts on 19 19 actually connects the lines between those two page 87. Would you agree with me that in these 20 20

Q.

A.

believe.

21

22

23

24

25

portions of the bearing rail, is there?

22 is the frame of Chickering, I

Yeah. 22.

What's 22?

21

22

23

24

25

two paragraphs, you are arguing in favor of

modifying Chickering's single-belt treadmill

A. Yes. For adjustment of the -- of the

dual-belts embodiment?

embodiment to add the support arms of Chickering's

Page 31

Page 29

curvature.

Q. And why would a POSA think that the 2 existing arrangement of components in Chickering's 3

4 single-belt embodiment wouldn't be sufficient

as-is? 5

6

7

17

18

19

25

8

14

15

16

21

Well, this is if the POSA wants to use A. the single belt.

Q. I understand. I'm asking why a POSA 8

wouldn't find the existing single belt's 9

embodiment disclosed in Chickering to be 10

sufficient as-is. 11

Why would they need to modify it? 12

A. So this is to adjust the curvature 13

relative to gravity to -- so that a user would 14

have more adjustability in terms of their 15

preference for that curvature. 16

Q. Can you please look at column 3 of

Chickering? Again, that's 1013, Exhibit 1013.

Approximately around line 19,

Chickering states, quote: While the present 20

invention can be embodied in an exercise device 21

having either one or two endless belts, the 22

two-belt form may be preferable for several

reasons. 24

And then it provides a few different

that might be, for example, quieter and might

reduce the need for a large flywheel. So... 2

Q. So that line that you just read says 3 4 that the one-belt model requires a fairly heavy

belt, right? 5

> A. That's right.

7 There is nothing in there to say that 8

the two-belt design couldn't use a heavier belt,

9 is there?

A. Well, that would be contrary to why 10 the two-belt has potential -- why it potentially 11

may be preferable to use. And the first thing 12

that they say is that you can use lighter weight 13

belts because you can make it -- you can tension 14

15

16

17

18

19

20

1

2

3

10

13

14

15

16

17

Whereas, the heavy belt, you don't have any gaps between the two belts. And I would say, from a safety perspective, that would also be something that would make me hesitate putting two belts together where you could trap a finger or

something like that in between them. 21

22 So it says: With the two-belt model, the belts may be under tension and a much lighter

23 and less expensive belt may be used with 24

satisfactory results. 25

Page 30

Page 32

reasons why the one belt is different from the 2

two-belt design. Do you see that? 3

A. I see that.

Q. Given Chickering's expressed 4

disclosure of how the two-belt design is superior 5

6 to the one-belt design, why would a POSA be

motivated to use the one-belt design at all? 7

A. Well, it says preferable. But it also

9 describes that you can use a heavier single belt

which might have other benefits to it. Maybe you 10

don't want a large flywheel on the side; so 11

instead, you can reduce the size of a flywheel by 12

making the belt heavier. 13

> Or the belt gives other properties that you're interested in; for example, sound deadening. Those are considerations that you

might want to use a single-belt treadmill for. 17

You're referring to that preceding 18 paragraph in column 3, starting around line 11, 19

20 correct?

A. No. I'm talking about line, roughly,

22 21 where it says: The one-belt model requires a

23 fairly heavy belt since the belt must be in

contact with the rollers due to its weight alone. 24 25

So you're going to have a heavier belt

That doesn't indicate that a lighter belt must be used for a two-belt design, does it?

A. No. But that just explains why you would pick the double belt versus a single belt.

4 Q. Does Chickering include other 5

disclosures about why the two-belt design is 6 preferable to a one-belt design, just overall?

7 A. Yeah. It basically says that you can 8 9 get different speeds between the front belt and

the rear belt.

Those features aren't dependent on the 11 weight of the belt, are they? 12

A. No.

So let's go to paragraph 169 of your declaration. Or actually, before we do that, let's go back to Chickering for a moment. I

apologize.

If we look at column 1 of Chickering, 18

again, Exhibit 1013, in this section, Chickering 19 is discussing Schmidt, a reference called Schmidt. 20

Do you know if that's the same Schmidt that you 21

have referred to previously during your 22

23 deposition?

A. It appears to be the same Schmidt. In 24 the paragraph before, it states it's from January 25

Page 35

Page 33

of 1917; and that's the Schmidt that I'm familiar with.

- Q. All right. In discussing Schmidt,
- 4 starting around line 30, Chickering says: A
- 5 person exercising on this type of treadmill is
- 6 likely to lose his balance because the
- 7 frictionless surface offers no resistance to the
- 8 movement of his feet, and he is therefore unable
- 9 to obtain the leverage necessary for proper
- 10 balance.
- Also, the user is likely to run off
- 12 the lower end of the treadmill because the faster
- 13 he runs, the faster the belt accelerates and moves
- 14 beneath his feet, causing him -- carrying him to
- the rear. Thus, some external support is
- 16 necessary to enable the user of such treadmills to
- maintain his balance, as well as his position on
- 18 the moving belts.
- Do you see that?
- A. I'm sorry. I was still looking for
- 21 where you were reading from.
- Q. Oh, I'm sorry.
- A. I didn't want to interrupt you.
- Q. This is just in -- in column 1,
- starting around line 30 and then just through the

- 1 basically just a ramp with -- with rolling
- 2 elements on it. And the first sentence of that
- 3 paragraph was, Schmidt describes handles because
- 4 Schmidt had too much friction, according to the --
- 5 according to Chickering.

The shape with an incline in the front

7 and an incline in the rear with the center being

8 lower certainly is something that's been

9 established in a lot of art, which is useful for

keeping a person positioned on the treadmill whileusing it.

- Q. What is the title of Chickering?
 - A. Endless belt exerciser with
- 14 accelerating and decelerating tread surfaces.
- Q. If you look at column 2, starting around line 27, Chickering describes the relative inclinations of the first and second series of rollers.

And then starting around line 31, it states: In the operation of the exercising

- device, the first and second series of rollers 13
- and 18, respectively, will be so disposed that
- 23 the first tread surface 16a will provide an
- 24 accelerating area inclined downwardly from the
- 25 front of the base 10, while the second tread

Page 34

Page 36

- 1 end of the paragraph.
- A. Okay. I see where you were reading
- 3 from.

10

- 4 Q. And in the next paragraph starting
- 5 around line 40, it states -- Chickering states:
- 6 It is a principal object of this invention to
- 7 provide a treadmill-type exercising device which
- 8 removes the necessity for external support means
- 9 for the user.
 - Do you see that?
- 11 A. I see that.
- Q. Would you agree with me that
- 13 Chickering -- the invention disclosed in
- 14 Chickering aims to meet that objective by having
- this dual-plane surface where one plane is for
- acceleration and another plane is for
- 17 deceleration?
- 18 A. Well, I think that Chickering wants
- 19 that angled-up rear so that you can push forward.
- 20 The deceleration is helpful; but pushing forward
- 21 is at -- you know, the talking about the
- 22 frictionless rollers and rolling off the back,
- those are in a relationship to Wood and Morairty.
- And I don't recall off the top of my
- 25 head what Wood is, but I believe Morairty is

- surface 25a provides a decelerating area inclined
- 2 upwardly toward the rear base [sic] of base 10.
- 3 The upwardly sloping decelerating area offers
- 4 enough resistance to the user's foot to enable him
- to maintain his balance and position on theexercising device.
- 7 Did I read that
 - Did I read that correctly?
 - A. You did.

- 9 Q. Does that mention anything about
- pushing off of the rear portion of the device?
- A. Well, it does offer enough resistance
- to the user's foot to enable him to maintain hisbalance. So I would interpret that as something
- that allows you to push forward on it, you know.
- And down further in column 2, it
- mentions that when a person uses the exercisedevice, that their foot moves in an approximate
- arc and that they are -- their foot is in contact
- 19 with the rear surface while it's at the back of
- 20 the treadmill --
- 21 Q. In that --
- A. -- and that the upward slope only
- absorbs some of the momentum of the foot and, due
- 24 to the upward inclination, will support -- quote:
- 25 Will support a forward component of force which

8

13

20

25

2

11

17

18

19

Page 39

13

14

15

16

17

18

Page 37

enables the person using the exercise device to,

quote, push off against the surface 25a at the end 2 of each step. 3

4 And that's around line 65.

Q. Further down in that same paragraph in 5

that column 2, specifically at -- starting at 6

7 line 67, it looks like Chickering states: "These

combined decelerating and forward force-supporting 8

characteristics of surface 25a enable a user of 9

the device to both overcome the rearward motion 10

11 and momentum imparted to his body during the first

part of each step, and also to gain enough forward 12

push to maintain his balance and position."

Wouldn't you agree that that indicates that having a decelerating portion is a key component of the Chickering invention?

A. Chickering describes it as

advantageous. The incline there which provides

the ability of the person to push forward 19

perpendicular to the rollers is, I -- as someone 20

who is skilled in the art, I recognize that if you 21

can push forwardly against those rollers and not 22

rely on friction, that that is the key component. 23

Certainly, if your foot is moving a 24

25 little slower than it was, that will help. But I approximate arc.

2 Q. Well, that's referring to the movement

of the user's foot, correct? 3

4 That's absolutely correct.

That doesn't describe any -- anything

unique to a curved treadmill versus a flat 6

7 treadmill, does it?

A. I think that if you take a step on

what's commonly known as a flat treadmill, that 9

you wouldn't find anyone to say that your foot 10

11 takes a path shaped like an arc while the foot is

in contact with the treadmill surface. 12

Well, this doesn't say that a person's

foot moves in an approximate arc while in contact 14

with the tread surface, does it? 15

16 A. Well, the second sentence says the

first foot [sic] contacts the tread surface. So I 17

think that is the context of the sentence,

where it states that the -- during each step, the 19

foot moves in an approximate arc.

Q. You testified earlier about your 21

background and how you've studied things related 22

to, for example, a person's gait, right? 23

A. Right. 24

> Q. In general, when a person is walking,

Page 38

Page 40

interpret those -- the priority of those two

terms opposite from you, whereas the bigger --

the bigger helper is the incline and as well as 3

this -- the beginning of that paragraph describes 4

the foot moving in an arc from step to step. 5

You're not taking the position, are you, that a POSA would disregard the accelerating

and decelerating surface teachings of Chickering, 8

are you? 9

6

7

10

11

12

15

MR. TURNER: Objection. Form.

A. Can you state that again?

Q. Is it your position that a POSA would

disregard the accelerating and decelerating 13

surface teachings of Chickering? 14

A. No. I don't think they would

disregard it. I think that they would notice, 16

though, that the incline of the rear of the 17

Chickering treadmill allows someone to push 18

forward, as well as having their foot slow down. 19

But that is also the nature of every curved 20

treadmill where the rear of it inclines upward. 21

Q. Does Chickering actually describe its 22

23 treadmill as curved?

A. No. But the closest it gets is that 24

during each step, that the foot moves in an 25

does their foot move in an approximate arc? 1

A. I think during swing phase, that that

is accurate. While the foot is in contact with 3

4 the ground and stationary relative to the earth,

5 then it is not.

6 Q. In column 2, about a sentence later,

7 around line 55, Chickering states: Near the

bottom of the arc, the foot leaves surface 16a and

9 may for a brief instant be out of contact with any

surface. 10

Do you see that?

12 A. I see that.

13 Q. Does that indicate to you that

Chickering is likely referring to a general 14

approximate arc of a user's step as opposed to an 15

arc solely while in contact with a surface of the 16

treadmill?

Can you read that question again? A.

Does that sentence which states that 20 near the bottom of the arc, the foot may leave the 21 surface 16 -- or the foot leaves surface 16a and 22

23 may for a brief instant be out of contact with any

surface suggest that when Chickering refers to a 24 25

user having a step that moves in an approximate

13

25

Page 43

Page 44

Page 41

- 1 arc -- actually, let me -- let me start over. I'm
- 2 starting to confuse myself. I apologize.
- 3 A. Okay.
- 4 Q. So Chickering states that when a
- 5 person is using the exercise device, during each
- 6 step, his foot moves in an approximate arc,
- 7 correct?
- 8 A. That's right.
- 9 Q. Later in that same paragraph,
- 10 Chickering also states that near the bottom of the
- arc, the foot leaves surface 16a and may for a
- brief instant be out of contact with any surface,
- 13 right?

21

1

- 14 A. That's right.
- Q. Do those sentences, in combination
- with each other, suggest to you that the
- 17 approximate arc referred to in Chickering refers
- more generally to a person's gait, rather than to
- what motion the foot makes when it's in contact
- 20 with the -- with the running belt, in Chickering?
 - A. I will say that everything that we've
- 22 discussed, from line 50 onward, I believe
- 23 indicates that the approximate arc of each step
- 24 indicates how the user's foot follows the path of
- 25 the running belt while the user is attempting to

- treadmill is just 16a, then with a backstop right
- 2 behind 15 and 26 there, then I would probably say
- 3 that this would be considered a flat treadmill.
- 4 Because you wouldn't expect any part
- 5 of the foot to contact the rear curvature during
- 6 normal usage. But because this is a double belt,
- 7 I would expect portions of the foot to hit the
 - curvage -- curved portions of the belt.
- 9 Q. Well, Chickering at column 2 states,
- starting at line 54, like you said before, that
- 11 near the bottom of the arc, the foot leaves
- surface 16a, correct?
 - A. That's right.
- Q. With that in mind, is it still your
- opinion that, as designed, Chickering is intended
- 16 for a user's foot to make contact with that curved
- **17** end of 16a?
- A. I think that it's really likely that
- portions of the foot will contact 16a to the left
- 20 of 15 in -- in Figure 1 as a regular occurrence
- 21 while using this.
- I believe, though, what that portion
- 23 is referring to is that for your foot to go from
- 16a to 25a, it must cease contacting 16a.
 - Q. Well, the second part of that sentence

Page 42

weight-bear on that foot.

- 2 Q. If we look at Figure 2 -- or actually,
- 3 Figure 1 of Chickering, you'll see the two
- 4 surfaces labeled 16a and 25a. Is 16a, on its own,
- 5 flat?
- 6 A. Well, in this one, it's a little
- 7 trickier than the others; because typically
- 8 speaking, you don't want to have your foot contact
- 9 the forward or rearward part of the belt as it
- wraps around either the front or rear of the
- 11 treadmill.

12

But because this one is in the

- middle -- or ends in the middle, it's likely --
- 14 it's likely that the foot, probably the toes on
- 15 16a and the heels on 25a, would touch the curved
- portion of that running belt. And so I think I
- would have to say that 16a is not entirely a flat
- plane, but rather, at the ends of it, it is
- 19 curved.
- Q. If you took 25a out of the device and you only had surface 16a, would you consider that
- to be a flat running surface, just at an incline?
- A. Going with the hypothetical that the
- back of that frame that's I think labeled 23 here
- is close to the back there and that the entire

- says "and may for a brief instant be out of
- 2 contact with any surface," doesn't it?
- A. It does. I guess that would mean that
- 4 the user may -- not necessarily does, but they
- 5 could -- pick their foot up and then basically
- 6 kick back onto 25a to push themselves forward if
- 7 they chose to.
- 8 Q. Is it fair to say that Chickering does
- 9 not intend for a user to place their foot on that
- 10 curved end of 16a?
- 11 A. I don't think we can say what
- 12 Chickering intends.
- Q. Let's go back to your declaration,
- paragraph 169, which is on page 96.
 - A. Got it.
- Q. In this paragraph, you state, quote:
- 17 As explained in paragraphs 230 to 243, it would
- 18 have been obvious to a POSA to combine
- 19 Chickering's treadmill with Magid's control means
- 20 to permit only unidirectional movement of the
- 21 running belts to reduce the risk of the user
- stepping onto the running belts of the treadmill
- and losing their balance when the belt moves in a
- 24 forward direction.
 - Did I read that correctly?

25

Page 45

Page 47

1 A. I think you did. principal object of this invention to provide a Q. Where, if anywhere, does Chickering treadmill-type exercising device which removes the 2 note a concern about the belt moving in the necessity for external support means for the user. 3 3 4 forward direction? 4 You see that, right? A. I don't believe that it's a -- it A. I see that. And that's -- that is 5 5 makes that -- that reference. true, that's -- that's what it states there. But 6 6 Q. Is it fair to say that Chickering's 7 in the context of the previous paragraph, it's 7 main or only concern is with a user falling off discussing Wood and Morairty where people just 8 8 the end of a treadmill or losing their balance roll off the back of it because it's using rollers 9 9 while using the treadmill? and there is no -- nothing on the back of it. 10 10 A. Yeah. I think that -- I don't recall 11 Q. If the principal object of Chickering 11 Chickering describing getting on and getting off is to provide a device that removes the necessity 12 12 the treadmill as part of what they were -- their for external support means, why would a POSA then 13 13 look to a reference like Magid that consistently invention. 14 discloses embodiments that only use support 15 Q. Go to paragraph 232 on page 127. 15 means -- or only include support means such as A. Okay. 16 16 You state in the first sentence here: railings or chairs? 17 17 It has long been recognized that users may be 18 A. Well, Magid is a -- an exercise device 18 injured by falling off of a treadmill while for simulating gait, which is the same as 19 19 mounting or dismounting it or while using it. Chickering. Handrails are required by industry 20 20 Did I read that right? standards. So whether or not something says you 21 21 need them or not to exercise, the device still 22 22 needs to have handrails. 23 O. And later in this paragraph, you 23 include some block quotes from both Chickering and But these are -- these statements by 24 24 Socwell, correct? Chickering is in relationship to the paragraph Page 46 Page 48 Yes. before, where it describes that without a rear end Α. 1 that's inclined upward, that there is nothing to Didn't Chickering and Socwell each 2 2 purport to solve the problem of people falling off push off of and people just roll off the back. So 3 the treadmill without including a safety device? 4 they have to be basically held in place. 4 Yes, while using it. And that previously, Schmidt, which 5 A. 5 6 Q. Go back to Chickering, and it's one of 6 has the curve, had too much friction for -- for the sections we were talking about previously in 7 their -- their taste. And you needed something to 7 column 1. In that line right after numeral 40, it hold yourself in place, but not from falling off 8 8 9 states: It is a principal object of this 9 but from being propelled forward. invention to provide a treadmill-type exercising 10 Q. Doesn't Chickering's description of 10 device which removes the necessity for external Schmidt suggest that it had too little friction, 11 11 support means for the user. not too much friction? 12 12 Did I read that right? A. I think that in line 21 through about 13 13 A. I'm sorry. I was looking in column 1 24, it's stating the opposite of that. 14 14 where you were reading, but is that --Q. Can you tell me exactly what you're 15 15 Q. Yes. referring to when you say that? 16 16 A. So it says: In Schmidt, the handles -- is that in column 1? 17 A. 17 Q. Yeah, that is in column 1, right after are necessitated by the fact that the tread 18 18 No. 40, line 40. It's that very short paragraph surface is frictionally mounted so that the user 19 19 right in the middle. must have some support to push against in order to 20 20 A. Oh, yes. I see that. I see that now. move the tread with his feet. 21 21 22 Thank you. 22 So basically, they're saying if you

Yeah, it's short and easy to skip.

That paragraph says: It is a

That's the perils of drafting.

23

24

25

23

24

25

didn't have that support and you tried to run or

walk, that you would just walk off the front end

because the tread wouldn't move, you would. And

7

8

9

10

11

12

13

14

15

16

17

19

20

21

22

Page 51

Page 49

the idea of the treadmill is that you want to stay 2 in one place.

And their invention is that you can 3 4 stay in one place without these restraints on your person while you're actually exercising, not that you have a handlebar for safety. 6

7 Q. With respect to Wood and Morairty that are also discussed in that paragraph, wouldn't you 8 agree that the problem identified in those references is too little friction, not too much 10 11 friction?

12 That's right. And the user would slide off the back while using them, which is what 13 Chickering describes here. 14

Q. So in both cases where there is either

too much friction or too little friction, 16 Chickering's object is to remove the necessity for 17 external support means for the user; is that 18 right? 19

A. While they are exercising on it.

Would a device that doesn't have any 21 external support means be suitable for therapeutic 22 uses or for use by small children? 23 A. Can you read that question again? 24

25 Would a device that does not have any coordination or balance capabilities?

2 A. If it were up to date with all of the standards for treadmill safety, then probably. 3

4 Q. What do you mean by up to date with standards for treadmill safety? 5

A. Well, if you just had this frame on the floor and someone just got on it, I don't know that I would recommend that. But if it had side rails that protected all the pinch points and in-running nip points on it, so I would not recommend using the double-belt embodiment here because that seems like a dangerous feature to me.

But I would say, if you had all the covers that the treadmill standards require and that the belt is covered up so that there aren't exposed pinch and nip points and that it had handle -- handle -- handrails, I should say, then it would probably be okay to use by someone with coordination issues.

Q. So Chickering would have to be modified, in your view, in order to meet modern safety standards; is that correct?

A. If I were to put this into the stream 23 of commerce, yes. 24 25

Chickering, if you go to the first

Page 50

Page 52

- external support means be suitable for therapeutic uses or for use by small children?
- 2
- A. It could. 3
- Q. You mentioned earlier that there are 4
- standards requiring external support means, 5
- 6 correct?

15

20

- 7 Handrails are required by the A.
- international standards and the ASTM standards 8
- 9 with -- although those are also international, but yes. 10
- Wouldn't those kinds of features be 11 more or less essential if the -- if the device is 12
- intended to be used for therapeutic purposes or 13
- for use by small children? 14
- A. Not in the context of Chickering. But 15 in the general context of safety, you need to have 16 handrails. 17
- Q. Chickering doesn't describe any 18 therapeutic uses, does it? 19
- A. No. But it describes the arrangement 20 and geometry of the device so that you can walk 21
- and run on it without a restraint holding you in 22
- 23 place on the treadmill.
- Q. Would Chickering be suitable for 24
- someone who is -- for someone who has limited 25

- page, was filed on March 16th, 1970. Why are
- today's safety standards at all relevant to
- Chickering's disclosures? 3
- 4 A. Well, I was only mentioning those
- because you were asking about usage today. And if 5
- I were working on this and someone said we're
- going to build this and sell it, then you would --
- it would not be wise to put this into the stream
- 9 of commerce without -- without providing those
- minimal safety things which I stated already, just 10
- on surface. What else is in there, I'm not sure 11 12 about.
- Q. I don't believe I did ask about 13 putting it into use today in general. I
- specifically asked about whether it would be 15
- suitable for use by people with uncoordinated foot 16 movements or balance problems or coordination 17
- problems. 18

Do you have any knowledge of what the considerations of those issues would have been in 1970?

A. I imagine that if you had someone with 22 23 balance issues and you wanted them to exercise and regain some ability to walk, then I think that 24

Chickering would have been fine. I'm sure that 25

19

20

Page 55

Page 53

- the therapists guiding the person would be justfine.
- Q. What do you mean by a therapist guiding a person?
- 5 A. So if someone has a balance deficit
- 6 and a coordination deficit, for example, someone
- 7 who has had a stroke and they're trying to use
- 8 this for therapeutic reasons, I think that this
- 9 would have been acceptable in 1970, provided that
- there is a therapist with them or some sort of
- spotter for them while they used this invention.
- Q. And that therapist would provide some form of external support to the user to ensure
- 14 they don't fall; is that correct?
- A. That's right. And again, that's not
- what the supports are talking about in column 1
- 17 there.
- MS. RIEGER: Why don't we take a
- short five-, ten-minute break and then come back?
- THE WITNESS: Sure.
- 21 (Recess had.)
- 22 BY MS. RIEGER:
- Q. So, Dr. Giachetti, we've been talking
- 24 about Chickering. Are you aware that Chickering
- 25 was before the examiner during prosecution of the

- 1 Q. What, if anything, do you believe the
- 2 examiner missed or did not understand about
- 3 Socwell during prosecution?
- 4 A. Basically, the same answer. I didn't
- 5 review what the examiner stated in -- during the
- 6 prosecution history. And in my declaration, I
- 7 note that the examiner relied on Schmidt and
- 8 Magid.
- 9 Q. So you are aware that the examiner
- 10 also considered Magid during prosecution of the
- 11 '580 patent, correct?
- 12 A. Yes.
- Q. What, if anything, do you believe the
- 14 examiner missed or did not understand about Magid
- 15 during prosecution?
- A. Well, I think that -- let's see. You
- 17 know, I didn't review what the examiner said in
- advance of the deposition. So outside of what's
- in my declaration, I don't have anything to add to
- 20 it, to those pages.
- Q. So again, sitting here today, you
- 22 can't identify anything that you specifically
- think the examiner misunderstood or didn't
- 24 appreciate about either Socwell or Magid; is that
- 25 correct?

Page 54

Page 56

- 1 '580 patent?
- A. Yes, I believe I was.
- Q. What, if anything, do you believe the
- 4 examiner missed or did not understand about
- 5 Chickering during examination?
- 6 A. Well, I noticed that the -- well,
- 7 particularly, in my review of the file history and
- 8 my declaration, that the examiner considered
- 9 Schmidt to be the closest in the prior art to --
- to the patent application.
- 11 Q. Okay.
- A. And I don't remember noting anything
- that they said about Chickering.
- Q. So sitting here today, you can't
- 15 identify anything for me that you specifically
- think the examiner misunderstood or didn't
- 17 appreciate about Chickering?
- A. Yeah. I don't recall seeing something
- 19 that the examiner flagged regarding Chickering,
- but I did not review the examiner's notes
- 21 regarding Chickering in advance of today.
- Q. Are you aware that Socwell was before the examiner during prosecution of the '580'
- 24 patent?
- 25 A. Yes.

- 1 A. I don't recall anything as I sit here
- 2 that's not contained in my declaration
- 3 regarding -- regarding those patents, I believe.
- 4 Q. Is there anything in your declaration
- 5 that discusses what the examiner may or may not
- 6 have misunderstood about those references, to your
- 7 knowledge?
- 8 A. Not as I -- not as I sit here.
- **9** Q. Do either of your other declarations
- 10 discuss what the examiner may or may not have
- 11 appreciated about the prior art before him during
- **12** prosecution?
- A. I have a section in all the reports
- 14 describing the file history, and so I discussed in
- 15 those sections the -- the pertinent aspects of the
- 16 file history. But I didn't review the file
- 17 histories in advance of the deposition, so I would
- have to rely on what's contained in my
- 19 declarations.
- Q. So to the extent that you have any opinions on that matter, it would be contained in
- your declarations; is that correct?
 - A. As I sit here.
- MS. RIEGER: All right. I believe
- 25 that concludes the questions that I have for

	Page 57		Page 59
1	now.	1	Q. All right. And can you read
2	Andy, do you have any redirect that	2	paragraph 190?
3	you would like to do?	3	A. Sure.
4	MR. TURNER: Let me see.	4	Chickering discloses that its
5	Yes, I do have a couple of	5	treadmill may be provided with handles, railings,
6	questions. Do you want to go now or do you want	6	and the like.
7	to take a break?	7	And then there is a quote underneath
8	MS. RIEGER: We can go now if you'd	8	it: While the exercising device is usable without
9	like.	9	external supports such as handles, railings, and
10	MR. TURNER: Okay.	10	the like, such supports may be provided if desired
11	EXAMINATION	11	without departing from the spirit of the
12	BY MR. TURNER:	12	invention. Chickering 3, lines 38 to 41.
13	Q. All right. Dr. Giachetti, can you	13	Q. So what does Chickering describe in
14	turn to the Chickering Exhibit 1013, the	14	this block quote?
15	Chickering reference?	15	A. So basically, that the device itself
16	A. Okay.	16	can be used for exercise without handles and
17	Q. Okay. Do you recall discussing	17	railings, but it can also be used with those.
18	Chickering during your cross-examination?	18	MR. TURNER: Okay. No further
19	A. Yes.	19	questions.
20	Q. Okay. Can you turn to Figures 1 and	20	MS. RIEGER: Nothing from me.
21	2?	21	(Deposition concluded at 3:57 p.m.)
22	A. Okay.	22	(Deposition concluded at 515 / pinn)
23	Q. And do you recall discussing the	23	
24	one-belt embodiment and the two-belt embodiment	24	
25	here?	25	
	Page 58		Page 60
		1	Page 60 ACKNOWLEDGEMENT
1	A. Yes.	1 2	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE
2	A. Yes.Q. Okay. With reference to the two-belt		ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD
2	A. Yes.Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing	2	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner,
2 3 4	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts	2	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC.
2 3 4 5	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. 	2 3 4	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, v. WOODWAY USA, INC. Patent Owner.
2 3 4 5 6	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? 	2 3 4 5	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836
2 3 4 5 6 7	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. 	2 3 4 5	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, v. WOODWAY USA, INC. Patent Owner.
2 3 4 5 6 7 8	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? 	2 3 4 5 6 7	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, v. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580
2 3 4 5 6 7 8 9	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving 	2 3 4 5 6 7 8	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E.,
2 3 4 5 6 7 8 9	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running 	2 3 4 5 6 7 8 9	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript
2 3 4 5 6 7 8 9 10	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing 	2 3 4 5 6 7 8 9	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E.,
2 3 4 5 6 7 8 9 10 11	 A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and 	2 3 4 5 6 7 8 9 10	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition
2 3 4 5 6 7 8 9 10 11 12	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured.	2 3 4 5 6 7 8 9 10 11 12 13	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the
2 3 4 5 6 7 8 9 10 11 12 13 14	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a	2 3 4 5 6 7 8 9 10 11	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition
2 3 4 5 6 7 8 9 10 11 12 13 14 15	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern?	2 3 4 5 6 7 8 9 10 11 12 13 14	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support structure during your cross-examination?	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata sheets provided herein. ROBERT GIACHETTI, Ph.D., P.E.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support structure during your cross-examination? A. Yes.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata sheets provided herein. ROBERT GIACHETTI, Ph.D., P.E.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support structure during your cross-examination? A. Yes. Q. All right. Can you turn to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata sheets provided herein. ROBERT GIACHETTI, Ph.D., P.E.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support structure during your cross-examination? A. Yes. Q. All right. Can you turn to paragraph 190 of your declaration?	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata sheets provided herein. ROBERT GIACHETTI, Ph.D., P.E.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support structure during your cross-examination? A. Yes. Q. All right. Can you turn to paragraph 190 of your declaration? A. Paragraph 190?	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata sheets provided herein. ROBERT GIACHETTI, Ph.D., P.E.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	A. Yes. Q. Okay. With reference to the two-belt embodiment of Figure 1, do you recall describing pinch point between the belts A. Yes. Q in your cross-examination? A. Yes. Q. What do you mean by pinch point? A. So that is a point where two moving surfaces, which would be considered in-running or could be in-running, where a piece of clothing or small limbs or fingers could get caught and pulled in and injured. Q. Would you consider the pinch point a safety concern? A. Yes. Q. Now, do you also recall discussing Chickering's lack of handrails or support structure during your cross-examination? A. Yes. Q. All right. Can you turn to paragraph 190 of your declaration?	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	ACKNOWLEDGEMENT UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS, Petitioner, V. WOODWAY USA, INC. Patent Owner. IPR023-00836 U.S. Patent No. 9,039,580 I, ROBERT GIACHETTI, Ph.D., P.E., state that I have read the foregoing transcript of the testimony given by me at my deposition on January 10, 2024, and that said transcript constitutes a true and correct record of the testimony given by me at the said deposition except as I have so indicated on the errata sheets provided herein. ROBERT GIACHETTI, Ph.D., P.E. SUBSCRIBED AND SWORN to before me thisday of, 2024.

	Page	
1	CERTIFICATE OF SHORTHAND REPORTER	
2	I, JENNIFER L. BERNIER, Certified	
3	Reporter and within and for the State of Illinois	
4	do hereby certify:	
5	That ROBERT GIACHETTI, Ph.D., P.E.,	
6	the witness whose deposition is hereinbefore	
7	set forth, was duly sworn by me before the	
8	commencement of such deposition and that such	
9	deposition was taken before me and is a true	
10	record of the testimony given by such witness.	
11	I further certify that the deposition	
12	of ROBERT GIACHETTI, Ph.D., P.E., occurred at	
13	the offices of Foley & Larnder LLP on Tuesday,	
14	January 10, 2024 commencing at 2:04 to 3:57 p.m.	
15	I further certify that I am not related	
16	to any of the parties to this action by blood or	
17	marriage, I am not employed by or an attorney to $% \left\{ 1\right\} =\left\{ 1\right\} =\left$	
18	any of the parties to this action, and that ${\tt I}$ am	
19	in no way interested, financially or otherwise,	
20	in the outcome of this matter.	
21	IN WITNESS WHEREOF, I have hereunto set	
22	my hand this 15th of January, 2024.	
23		
24	JENNIFER L. BERNIER. CSR. PMP. CPR	
24 25	JENNIFER L. BERNIER, CSR, RMR, CRR CSR No. 084-004190	
	CSR No. 084-004190	
25	CSR No. 084-004190 Page	
25	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF:	
25 1 2	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC.	
1 2 3	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC. DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E.	
1 2 3 4	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580	
1 2 3 4 5	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC. JANUARY 10, 2024 ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS:	
1 2 3 4 5 6	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580	
1 2 3 4 5 6 7	CSR No. 084-004190 Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC. DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC. DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC. DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC. DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason Should Read Reason Signature of Deponent	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Page ERRATA SHEET FOR THE TRANSCRIPT OF: CASE NAME: LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS v. WOODWAY USA, INC DEP. DATE: JANUARY 10, 2024 DEPONENT: ROBERT GLACHETTI, Ph.D., P.E. U.S. Patent No. 9,039,580 CORRECTIONS: Pg. Ln. Now Reads Should Read Reason By Ln. Now Reads Should Read Reason Signature of Deponent SUBSCRIBED AND SWORN BEFORE ME THIS DAY OF , 2024.	

	agree (7)	13:19	18:7;20:4;32:8;35:1;44:5;
r	21:5,9;23:7;28:20;34:12;	area (3)	48:4,22;55:4;59:15
L			
-	37:14;49:9	35:24;36:1,3	basis (1)
[sic] (2)	ahead (2)	areas (1)	14:16
36:2;39:17	6:23;24:24	22:18	Bayerlein (3)
50.2,57.17	aims (1)	arguing (1)	16:13,13,14
A	34:14	28:21	bearing (27)
${f A}$			
-	allows (2)	arguments (1)	6:16,17,18,19,25;7:7,9,11,
ability (2)	36:14;38:18	18:22	13,22;24:21;25:4,20;26:1,6,8,
37:19;52:24	alone (1)	arm (4)	18,21;27:6,9,10,18,19;28:1,2,
able (1)	30:24	24:19,19;25:2,3	13,14
	along (1)	arms (2)	bearings (6)
22:1	15:18	25:7;28:23	
above (3)			6:16,19;7:1,11;8:11;26:18
10:10,16;11:12	alternate (1)	around (13)	beginning (1)
absolutely (1)	22:14	12:7;22:10;28:6;29:19;	38:4
39:4	alternative (1)	30:19;33:4,25;34:5;35:16,19;	behind (1)
	17:1	37:4;40:7;42:10	43:2
absorbs (1)	Alternatively (1)	arranged (3)	belt (36)
36:23	Alternatively (1)		
abstract (2)	9:20	21:7,13,18	6:25;11:9,14,18;14:18;
24:12,14	although (1)	arrangement (2)	15:18;22:17;29:7;30:1,9,13,
accelerates (1)	50:9	29:3;50:20	14,23,23,25;31:5,8,16,24;
33:13	always (1)	art (4)	32:2,4,4,9,10,12;33:13;35:13;
	15:5	35:9;37:21;54:9;56:11	41:20,25;42:9,16;43:6,8;
accelerating (5)	anchored (1)		44:23;45:3;51:15
22:17;35:14,24;38:7,13		as-is (2)	
acceleration (1)	22:4	29:5,11	belts (9)
34:16	Andy (1)	aspects (1)	29:22;31:14,17,20,23;
acceptable (1)	57:2	56:15	33:18;44:21,22;58:4
	angle (4)	assemblies (1)	belt's (1)
53:9	25:10,11,11,13	7:1	29:9
according (2)			
35:4,5	angled-up (1)	assembly (1)	beneath (1)
accuracy (1)	34:19	9:16	33:14
6:2	annotated (1)	ASTM (1)	benefits (1)
	25:19	50:8	30:10
accurate (4)	apart (1)	attach (1)	bigger (2)
23:23,24;27:6;40:3	28:9	8:15	38:2,3
achieved (1)			
19:13	aperture (1)	attached (2)	Binder (3)
across (2)	9:21	6:17,20	5:19,20;20:11
24:17,25	apologize (2)	attaches (1)	binders (1)
	32:17;41:2	7:2	5:18
action (1)	appears (1)	attempting (1)	bit (2)
8:8			
actually (8)	32:24	41:25	17:9;20:10
21:5;26:1,20;32:15;38:22;	application (2)	aware (5)	block (2)
41:1;42:2;49:5	14:21;54:10	13:16;28:8;53:24;54:22;	45:24;59:14
add (2)	applied (1)	55:9	blue (1)
	18:12		25:20
28:23;55:19	applies (1)	В	body (1)
adequately (1)		Ъ	
12.10			37:11
12:10	14:6		
	applying (3)	back (15)	bold (1)
adjust (1)		back (15) 5:14;20:11;32:16;34:22;	
adjust (1) 29:13	applying (3) 14:15,17;18:8	5:14;20:11;32:16;34:22;	bold (1) 6:10
adjust (1) 29:13 adjustability (1)	applying (3) 14:15,17;18:8 appreciate (2)	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6;	bold (1) 6:10 bolt (4)
adjust (1) 29:13 adjustability (1) 29:15	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14
adjust (1) 29:13 adjustability (1)	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1)	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1)	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1)
adjust (1) 29:13 adjustability (1) 29:15	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1)	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1)	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1)
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3)	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10)	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15,	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1)	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12)	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8)
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5)	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13;	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17;
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1)	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23;	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18 again (13)	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19 arc (17)	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23; 53:5	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15 bottom (5)
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18 again (13) 13:1;15:13;17:11;20:3;	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23;	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18 again (13) 13:1;15:13;17:11;20:3; 22:2;24:5;29:18;32:19;38:11;	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19 arc (17) 36:18;38:5;39:1,11,14,20;	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23; 53:5 base (8)	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15 bottom (5) 22:10;40:8,21;41:10;43:11
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18 again (13) 13:1;15:13;17:11;20:3; 22:2;24:5;29:18;32:19;38:11; 40:18;49:24;53:15;55:21	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19 arc (17) 36:18;38:5;39:1,11,14,20; 40:1,8,15,16,21;41:1,6,11,17,	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23; 53:5 base (8) 22:20,23,25;23:14,18;	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15 bottom (5) 22:10;40:8,21;41:10;43:11 break (5)
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18 again (13) 13:1;15:13;17:11;20:3; 22:2;24:5;29:18;32:19;38:11; 40:18;49:24;53:15;55:21 against (4)	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19 arc (17) 36:18;38:5;39:1,11,14,20; 40:1,8,15,16,21;41:1,6,11,17, 23;43:11	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23; 53:5 base (8) 22:20,23,25;23:14,18; 35:25;36:2,2	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15 bottom (5) 22:10;40:8,21;41:10;43:11 break (5) 5:15;21:25;24:25;53:19;
adjust (1) 29:13 adjustability (1) 29:15 adjustment (1) 28:25 advance (3) 54:21;55:18;56:17 advantageous (1) 37:18 again (13) 13:1;15:13;17:11;20:3; 22:2;24:5;29:18;32:19;38:11; 40:18;49:24;53:15;55:21	applying (3) 14:15,17;18:8 appreciate (2) 54:17;55:24 appreciated (1) 56:11 approximate (10) 36:17;39:1,14,20;40:1,15, 25;41:6,17,23 approximately (5) 22:22,24;23:13,17;29:19 arc (17) 36:18;38:5;39:1,11,14,20; 40:1,8,15,16,21;41:1,6,11,17,	5:14;20:11;32:16;34:22; 36:19;42:24,25;44:6,13;46:6; 47:9,10;48:3;49:13;53:19 background (1) 39:22 backstop (1) 43:1 balance (12) 33:6,10,17;36:5,13;37:13; 44:23;45:9;51:1;52:17,23; 53:5 base (8) 22:20,23,25;23:14,18;	bold (1) 6:10 bolt (4) 8:20,23;9:20;11:14 bolting (1) 19:15 bolts (2) 7:2;8:21 both (8) 14:19;22:17;25:20;26:8,17; 37:10;45:24;49:15 bottom (5) 22:10;40:8,21;41:10;43:11 break (5)

breaks (1)	41:4,10,17,20;42:3;43:9,15;	56:25	18:21
24:16	44:8,12;45:2,12,24;46:2,6;	confer (1)	cover (27)
brief (4)	47:11,20,25;49:14;50:15,18,	19:1	6:24;7:7,10,12,21;8:6,7,13,
40:9,23;41:12;44:1	24;51:20,25;52:25;53:24,24;	configuration (2)	14,17,24;9:2,3,6,11,13;10:5,7,
broad (2)	54:5,13,17,19,21;57:14,15,18;	13:25;14:3	8,10,13;11:7,13;13:17,23;
20:6,8	59:4,12,13	confuse (1)	14:17;15:17
build (1)	Chickering's (12)	41:2	covered (2)
52:7	24:18;25:2;28:22,23;29:3;	connect (1)	7:10;51:15
buttress (4)	30:4;44:19;45:7;48:10;49:17;	8:21	covers (1)
14:8,10;15:19;17:11	52:3;58:18	connected (2)	51:14
	children (3)	9:2;27:17	cross-examination (3)
\mathbf{C}	49:23;50:2,14	connecting (1)	57:18;58:6,19
	chose (1)	27:4	crossmember (1)
call (3)	44:7	connection (3)	11:16
6:11;20:18;25:25	cite (1)	6:7;27:2,12	crossmembers (2)
called (3)	11:12	connects (2)	11:3,4
5:9;14:8;32:20	cited (1)	26:20;27:8	curvage (1)
calling (1)	9:17	consider (2)	43:8
26:7	claim (2)	42:21;58:14	curvature (5)
calls (1)	22:2;25:4	considerations (2)	11:17;29:1,13,16;43:5
23:8	claims (1)	30:16;52:20	curve (5)
can (34)	7:21	considered (5)	24:4,7,11;25:14;48:6
8:5;11:11;14:2;18:14;	close (1)	17:14;43:3;54:8;55:10;	curved (26)
19:12;24:5,8;26:3,9;27:15;	42:25	58:10	10:6,19;11:8;12:12;13:19,
29:17,21;30:9,12;31:13,14,	closest (2)	considering (1)	24;14:3,19;20:24;25:8;26:2,6,
14;32:8;34:19;37:22;38:11;	38:24;54:9	14:16	11;27:1,6,8,11,21;38:20,23;
40:18;44:11;48:15;49:3,24;	clothing (1)	consistently (1)	39:6;42:15,19;43:8,16;44:10
50:21;57:8,13,20;58:21;59:1,	58:11	47:14	
16,17	collectively (5)	construct (1)	D
capabilities (1)	24:20;25:3,10,22;26:11	13:15	
51:1	column (18)	construction (2)	dangerous (1)
capability (2)	11:20;12:3,4;22:10;29:17;	12:8;17:1	51:12
17:7,13	30:19;32:18;33:24;35:15;	construed (1)	date (2)
carrying (1)	36:15;37:6;40:6;43:9;46:8,14,	18:21	51:2,4
33:14	17,18;53:16	contact (15)	deadening (1)
case (2)	combination (1)	30:24;36:18;39:12,14;40:3,	30:16
8:22;10:3	41:15	9,16,23;41:12,19;42:8;43:5,	decelerating (8)
cases (1)	combine (1)	16,19;44:2	22:18;35:14;36:1,3;37:8,
49:15	44:18	contacting (1)	15;38:8,13
	combined (1)	43:24	
caught (1)			deceleration (2)
58:12	37:8	contacts (1)	34:17,20
causing (1)	coming (1)	39:17	deck (34)
33:14	15:19	contained (3)	7:11,13,23;8:6,10,13,16,21;
cease (1)	comments (1)	56:2,18,21	9:11,12,15;10:4,5,6,11,14,16,
43:24	18:10	context (6)	16,18,21;11:1,8,15,16,17;
center (2)			
	commerce (2)	24:9;25:16;39:18;47:7;	12:8,12,16;13:6,10,11,18;
22:3;35:7	commerce (2) 51:24;52:9	50:15,16	14:18;15:18
22:3;35:7 certainly (5)	commerce (2) 51:24;52:9 common (1)	50:15,16 continue (1)	14:18;15:18 declaration (13)
22:3;35:7	commerce (2) 51:24;52:9	50:15,16	14:18;15:18
22:3;35:7 certainly (5)	commerce (2) 51:24;52:9 common (1)	50:15,16 continue (1)	14:18;15:18 declaration (13)
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24	commerce (2) 51:24;52:9 common (1) 17:10	50:15,16 continue (1) 22:11	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15;
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9	50:15,16 continue (1) 22:11 contrary (1) 31:10	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1)	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1)	50:15,16 continue (1) 22:11 contrary (1)	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4)
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3)	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6)	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4)	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2)
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25;	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1)	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6)	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1)
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1) 37:9	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23 components (1)	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6) 6:21;12:13;19:21;23:1;	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1) 14:24
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1) 37:9 Chickering (72)	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23 components (1) 29:3	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6) 6:21;12:13;19:21;23:1; 36:7;44:25	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1) 14:24 definition (3)
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1) 37:9 Chickering (72) 20:15,18,21,24;22:14;23:3,	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23 components (1) 29:3 concern (3)	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6) 6:21;12:13;19:21;23:1; 36:7;44:25 couple (1)	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1) 14:24 definition (3) 18:15,17;20:2
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1) 37:9 Chickering (72) 20:15,18,21,24;22:14;23:3, 12,16;25:17;26:24;29:10,18,	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23 components (1) 29:3 concern (3) 45:3,8;58:15	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6) 6:21;12:13;19:21;23:1; 36:7;44:25 couple (1) 57:5	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1) 14:24 definition (3) 18:15,17;20:2 departing (1)
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1) 37:9 Chickering (72) 20:15,18,21,24;22:14;23:3, 12,16;25:17;26:24;29:10,18, 20;32:5,16,18,19;33:4;34:5,	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23 components (1) 29:3 concern (3) 45:3,8;58:15 concluded (1)	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6) 6:21;12:13;19:21;23:1; 36:7;44:25 couple (1) 57:5 coupling (1)	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1) 14:24 definition (3) 18:15,17;20:2 departing (1) 59:11
22:3;35:7 certainly (5) 18:11;19:4;26:9;35:8;37:24 chain (1) 17:18 chairs (1) 47:17 change (3) 25:11,13,15 characteristics (1) 37:9 Chickering (72) 20:15,18,21,24;22:14;23:3, 12,16;25:17;26:24;29:10,18,	commerce (2) 51:24;52:9 common (1) 17:10 commonly (1) 39:9 completeness (1) 6:2 component (6) 25:25;26:5;27:17;36:25; 37:16,23 components (1) 29:3 concern (3) 45:3,8;58:15	50:15,16 continue (1) 22:11 contrary (1) 31:10 control (1) 44:19 coordination (4) 51:1,19;52:17;53:6 correctly (6) 6:21;12:13;19:21;23:1; 36:7;44:25 couple (1) 57:5	14:18;15:18 declaration (13) 5:23;6:1,5,9;24:15;32:15; 44:13;54:8;55:6,19;56:2,4; 58:22 declarations (4) 6:4;56:9,19,22 deficit (2) 53:5,6 define (1) 14:24 definition (3) 18:15,17;20:2 departing (1)

depends (1)	58:17	embodiments (1)	exercise (8)
22:2	dismounting (1)	47:15	29:21;36:16;37:1;41:5;
depicts (1)	45:20	enable (4)	47:18,22;52:23;59:16
21:3	disparity (1)	33:16;36:4,12;37:9	exerciser (1)
Deposition (5)	17:10	enables (1)	35:13
5:4;32:23;55:18;56:17;	disposed (3)	37:1	exercising (11)
59:21	9:20;22:21;35:22	End (9)	12:11;22:15;33:5;34:7;
describe (6)	disregard (3)	6:20;33:12;34:1;37:2;	35:20;36:6;46:10;47:2;49:5,
8:9;23:25;38:22;39:5;	38:7,13,16	43:17;44:10;45:9;48:1,24	20;59:8
50:18;59:13	document (3)	ended (1)	Exhibit (11)
described (1)	5:22;16:7;20:12	18:20	5:19,20;11:20;15:24;16:6;
13:22	double (2)	endless (3)	19:8;20:12;24:16;29:18;
describes (13)	32:4;43:6	22:17;29:22;35:13	32:19;57:14
13:17;19:4;23:3,20;24:1;	double-belt (1)	ends (2)	Exhibits (1)
30:9;35:3,16;37:17;38:4;	51:11	42:13,18	5:4
48:1;49:14;50:20	down (8)	enforce (1)	existing (2)
describing (6)	9:14;11:14,15;14:11;15:9;	11:17	29:3,9
16:24;23:9,21;45:12;56:14;	36:15;37:5;38:19	enforces (1)	Exit (1)
58:3	downwardly (3)	15:15	15:21
description (2)	22:22;23:14;35:24	enforcing (3)	expect (2)
15:14;48:10	Dr (3)	14:14;15:17;19:5	43:4,7
descriptive (2)	5:14;53:23;57:13	enough (3)	expensive (1)
20:5;24:1	drafted (1)	36:4,11;37:12	31:24
design (8)	20:22	ensure (1)	explain (3)
30:2,5,6,7;31:8;32:2,6,7	drafting (1)	53:13	8:5;14:2;20:5
designed (2)	46:24	Enter (1)	explained (2)
11:9;43:15	dual-belts (1)	16:2	7:21;44:17
desired (1)	28:24	entire (1)	explains (1)
59:10	dual-plane (1)	42:25	32:3
device (28)	34:15	entirely (1)	exposed (1)
9:9;15:7;21:6;22:15,18;	due (2)	42:17	51:16
28:3;29:21;34:7;35:21;36:6,	30:24;36:23	entirety (1)	expressed (1)
26.5,29.21,34.7,35.21,30.0, 10,17;37:1,10;41:5;42:20;	duly (1)	20:22	30:4
	5:10		
46:4,11;47:2,12,18,22;49:21,		equate (4)	extent (1) 56:20
25;50:12,21;59:8,15	During (18) 5:15;32:22;37:11;38:25;	24:4,7,11;25:13	
difference (1)		equation (1) 26:14	external (11)
13:2	39:19;40:2;41:5;43:5;53:25;		33:15;34:8;46:11;47:3,13;
differences (1) 28:5	54:5,23;55:3,5,10,15;56:11; 57:18;58:19	essential (1) 50:12	49:18,22;50:1,5;53:13;59:9
	37.10,30.19		F
different (13)	${f E}$	essentially (1) 28:15	Г
17:16;18:16;21:18,23,23;	IL.		Fo at (2)
22:5,7;23:22;26:9;28:9;	andian (2)	established (1) 35:9	fact (2)
29:25;30:1;32:9	earlier (3)		13:8;48:18
direction (2)	13:6;39:21;50:4	even (1)	fair (3)
44:24;45:4	earth (1)	23:20	17:24;44:8;45:7
disclose (2)	40:4	everyone (1)	fairly (2)
12:16;20:24	easy (1) 46:23	17:12	30:23;31:4
disclosed (2)	101-0	exactly (2)	fall (1)
29:10;34:13	either (6)	8:5;48:15	53:14
discloses (3)	13:17;29:22;42:10;49:15;	EXAMINATION (3) 5:12;54:5;57:11	falling (6)
6:24;47:15;59:4	55:24;56:9		14:11,14;45:8,19;46:3;48:8
disclosure (1)	element (10)	examined (1)	familiar (1)
30:5	13:3,13;14:7;18:7;19:14,15,	5:10	33:1
disclosures (2)	16,17,18,19	examiner (15)	fastened (2)
32:6;52:3	elements (6)	53:25;54:4,8,16,19,23;55:2,	8:7,12
discuss (5)	6:11,11,15;7:8;19:13;35:2	5,7,9,14,17,23;56:5,10	fastener (1)
5:15;6:11;8:1;15:5;56:10	else (1)	examiner's (1)	8:9
discussed (3)	52:11	54:20	fastening (1)
41:22;49:8;56:14	embodied (1)	example (10)	8:8
discusses (2)	29:21	14:7,11;15:3,19;17:21;	faster (2)
12:18;56:5	embodiment (8)	19:14;30:15;31:1;39:23;53:6	33:12,13
discussing (6)	28:23,24;29:4,10;51:11;	excerpt (1)	favor (1)
32:20;33:3;47:8;57:17,23;	57:24,24;58:3	9:18	28:21

feature (1)	37:8	30:14	hold (4)
51:12	foremost (1)	goes (1)	9:13;11:8,9;48:8
features (2)	16:7	8:9	holding (3)
32:11;50:11	Form (7)	graphic (2)	14:2;15:9;50:22
feet (3)	15:12;18:18;22:15;27:5;	8:1,4	holds (3)
			, ,
33:8,14;48:21	29:23;38:10;53:13	graphite (1)	7:11,13;8:24
few (1)	formation (1)	12:21	hypothetical (1)
29:25	11:8	gravity (1)	42:23
fiberglass (1)	formed (2)	29:14	_
12:21	9:21;12:8	ground (1)	I
Fig (2)	forms (1)	40:4	
22:16,18	22:17	group (1)	idea (1)
Figure (14)	forward (17)	23:25	49:1
11:11;21:3,4,5,6,17;22:8;	22:21;23:4,9,12;34:19,20;	guess (2)	identification (1)
23:4;24:20;25:18;42:2,3;	36:14,25;37:8,12,19;38:19;	22:9;44:3	5:5
43:20;58:3			
	42:9;44:6,24;45:4;48:9	guiding (2)	identified (1)
Figures (1)	forwardly (1)	53:1,4	49:9
57:20	37:22	gun (1)	identify (3)
file (4)	frame (16)	11:24	25:19;54:15;55:22
54:7;56:14,16,16	6:18,20;7:2,22;8:8,16,22;		identifying (1)
filed (1)	9:6,8,10,23;26:24;27:1,13;	H	7:6
52:1	42:24;51:6		illustrated (1)
find (4)	friction (9)	hand (1)	24:20
9:14;22:6;29:9;39:10	35:4;37:23;48:6,11,12;	16:4	image (1)
fine (2)	49:10,11,16,16	handle (2)	28:4
52:25;53:2	frictionally (1)	51:17,17	
		*	images (1)
finger (1)	48:19	handlebar (1)	28:7
31:20	frictionless (2)	49:6	imagine (1)
fingers (1)	33:7;34:22	handles (5)	52:22
58:12	front (12)	35:3;48:17;59:5,9,16	imparted (1)
first (18)	5:18;22:4,23;23:14;24:2,	Handrails (6)	37:11
5:10;6:15,17;12:6;16:6;	18;25:2;32:9;35:6,25;42:10;	47:20,23;50:7,17;51:17;	inclination (2)
19:20;24:21;28:2,13;31:12;	48:24	58:18	25:16;36:24
35:2,17,21,23;37:11;39:17;	full (1)	head (2)	inclinations (2)
45:17;51:25	12:6	19:3;34:25	26:9;35:17
fit (2)	further (4)	heads-up (1)	incline (6)
26:9,12	9:22;36:15;37:5;59:18	22:12	35:6,7;37:18;38:3,17;42:22
	9.22,30.13,37.3,39.16		
five- (1)	C	heavier (4)	inclined (3)
53:19	\mathbf{G}	30:9,13,25;31:8	35:24;36:1;48:2
flagged (1)		heavy (3)	inclines (1)
54:19	gain (1)	30:23;31:4,16	38:21
flat (6)	37:12	heels (1)	include (3)
39:6,9;42:5,17,22;43:3	gait (3)	42:15	32:5;45:24;47:16
flexible (3)	39:23;41:18;47:19	held (2)	including (2)
10:24,25;11:1	gaps (1)	13:24;48:4	7:1;46:4
floor (2)	31:17	help (1)	inconsistent (2)
19:19;51:7	gears (1)	37:25	16:24;17:4
flywheel (3)	20:10	helper (1)	indefinite (1)
30:11,12;31:2	general (4)	38:3	17:17
follows (2)	39:25;40:14;50:16;52:14	helpful (1)	indicate (2)
5:11;41:24	generally (1)	34:20	32:1;40:13
foot (36)	41:18	helping (1)	indicated (1)
36:4,12,17,18,23;37:24;	generate (1)	16:21	18:7
38:5,19,25;39:3,10,11,14,17,	26:15	herein (1)	indicates (3)
20;40:1,3,8,21,22;41:6,11,19,	geometry (1)	5:9	37:14;41:23,24
24;42:1,8,14;43:5,7,11,16,19,	50:21	hesitate (1)	indicating (1)
23;44:5,9;52:16	gets (1)	31:19	17:6
force (11)	38:24	histories (1)	individually (1)
14:6,13,15,18,21;15:1;17:7,	GIACHETTI (4)	56:17	25:24
13,22;18:8;36:25	5:8,14;53:23;57:13	history (4)	industry (1)
forces (2)	Given (1)	54:7;55:6;56:14,16	47:20
18:12,24	30:4	hit (1)	injured (2)
		, ,	
force-supporting (1)	gives (1)	43:7	45:19;58:13

			,
in-running (3)	14:13;18:12	linear (2)	12:9,17;13:3,4,9,10,14,15
51:10;58:10,11	keeping (2)	24:3,6	materials (2)
inside (1)	9:15;35:10	lines (3)	12:19,24
15:7	keeps (2)	15:18;26:20;59:12	mathematical (2)
instances (1)	14:11;17:22	lists (1)	24:13,14
17:20	key (2)	20:15	matter (2)
instant (4)	37:15,23	litigation (3)	5:24;56:21
40:9,23;41:12;44:1	kick (1)	16:15;17:25;18:20	matters (1)
instead (1)	44:6	little (7)	6:5
30:12	kinds (1)	17:9;20:10;37:25;42:6;	may (20)
integrity (1)	50:11	48:11;49:10,16	9:20,22;19:14;29:23;31:12,
12:10	knowledge (3)	load (1)	23,24;40:9,21,23;41:11;44:1,
intend (1)	12:15;52:19;56:7	13:8	4;45:18;56:5,5,10,10;59:5,10
44:9	known (1)	locations (3)	Maybe (1)
intended (2)	39:9	12:19;19:5;22:5	30:10
43:15;50:13		long (1)	mean (8)
intends (1)	\mathbf{L}	45:18	7:6;8:13;13:11;26:13;44:3;
44:12		look (14)	51:4;53:3;58:8
inter (1)	labeled (2)	7:17;9:17;16:18;19:7;21:4,	meaning (4)
16:16	42:4,24	5;22:9;24:15;28:18;29:17;	15:6;16:12,21;17:6
interested (1)	lack (1)	32:18;35:15;42:2;47:14	means (12)
30:15	58:18	looking (10)	14:3;34:8;44:19;46:12;
intermediaries (1)	large (3)	8:3;11:22;21:21;22:3,3;	47:3,13,16,16;49:18,22;50:1,5
17:19	28:6;30:11;31:2	25:18,22;26:15;33:20;46:14	meet (4)
international (2)	last (2)	looks (5)	24:11,13;34:14;51:21
50:8,9	5:25;20:3	5:23,24;11:22;16:8;37:7	meeting (1)
interpret (2)	later (3)	lose (1)	7:7
36:13;38:1	40:6;41:9;45:23	33:6	member (22)
interpreting (1)	laying (1)	losing (2)	6:24;7:10,13;8:6,7,13,14,
7:5	19:17	44:23;45:9	17,24;9:2,3,7,11,13;10:5,7,8,
interrupt (1)	lays (1)	lot (1)	10,13;11:13;14:17;15:17
33:23	17:16	35:9	members (5)
intersecting (1)	leave (1)	lower (2)	7:7,22;11:7;13:18,23
24:10	40:21	33:12;35:8	mention (3)
into (5)	leaves (4)	lying (1)	17:1;20:1;36:9
11:16;21:25;51:23;52:8,14	40:8,22;41:11;43:11	23:22	mentioned (3)
invention (11)	left (4)	3.4	17:11;28:12;50:4
22:16;29:21;34:6,13;37:16;	6:17;24:18,19;43:19	M	mentioning (1)
45:14;46:10;47:1;49:3;53:11;	less (2)		52:4
59:12	31:24;50:12	machine (5)	mentions (3)
inventor (1)	leverage (1)	19:14,16,17,18,18	12:20;13:20;36:16
20:15	33:9	Magid (6)	met (1) 27:11
IPR (1)	lie (5)	47:14,18;55:8,10,14,24	
6:7	22:22,24;23:5,13,17	Magid's (1) 44:19	middle (3) 42:13,13;46:20
issue (1) 16:15	lighter (3) 31:13,23;32:1	44:19 main (1)	42:13,13;40:20 might (6)
issues (3)	likely (6)	45:8	22:1;28:5;30:10,17;31:1,1
51:19;52:20,23	33:6,11;40:14;42:13,14;	maintain (8)	mind (1)
51.17,52.20,23	43:18	14:6,18,19;16:21;33:17;	43:14
J	limbs (1)	36:5,12;37:13	minimal (1)
	58:12	maintains (1)	52:10
JANUARY (2)	limitation (4)	15:1	mirror (2)
5:2;32:25	7:9;24:21;25:4;27:10	maintenance (1)	28:4,7
Jelenchick (2)	limitations (1)	18:2	mirrored (1)
15:21;16:2	7:8	makes (3)	28:10
journaled (1)	limited (1)	27:18;41:19;45:6	misplaced (1)
22:19	50:25	making (1)	15:24
jump (1)	line (23)	30:13	missed (3)
11:24	11:22;12:7;22:10;24:14;	March (1)	54:4;55:2,14
	26:15,16;29:19;30:19,21;	52:1	misunderstood (3)
K	31:3;33:4,25;34:5;35:16,19;	marked (1)	54:16;55:23;56:6
	37:4,7;40:7;41:22;43:10;46:8,	16:5	model (3)
keep (2)	19;48:13	material (8)	30:22;31:4,22
- F × 7	<u> </u>		, , ,

modern (1)	47:22;50:16	42:6,12;46:6;49:2,4	paragraphs (8)
51:21	needed (1)	one-belt (6)	7:16;16:19,20,23;25:8;
modified (1)	48:7	30:6,7,22;31:4;32:7;57:24	28:19,21;44:17
51:21	needs (2)	only (7)	part (6)
modify (1)	19:1;47:23	36:22;42:21;44:20;45:8;	28:4;37:12;42:9;43:4,25;
29:12	new (1)		45:13
		47:15,16;52:4	
modifying (1)	5:18	onto (2)	partes (1)
28:22	next (2)	44:6,22	16:16
moment (2)	22:11;34:4	onward (1)	particular (2)
15:23;32:16	nip (2)	41:22	11:10;19:5
momentum (2)	51:10,16	open (1)	particularly (1)
36:23;37:11	nonetheless (1)	5:19	54:7
Morairty (4)	17:14	opening (1)	pass (2)
34:23,25;47:8;49:7	normal (1)	16:8	26:16,17
more (4)	43:6	operation (1)	patent (13)
24:8;29:15;41:18;50:12	note (2)	35:20	5:24;15:3;16:15,25;17:4;
most (1)	45:3;55:7	opinion (7)	18:1,16,17;20:14;54:1,10,24;
28:4	notes (1)	9:1,4;14:20;15:10;17:25;	55:11
motion (2)	54:20	18:5;43:15	patents (1)
37:10;41:19	notice (1)	opinions (4)	56:3
motivated (1)	38:16	6:6;16:11;18:4;56:21	path (2)
30:7	noticed (1)	opposed (1)	39:11;41:24
mounted (2)	54:6	40:15	PE (1)
7:22;48:19	noting (1)	opposite (3)	5:8
mounting (1)	54:12	27:7;38:2;48:14	people (5)
45:20	notwithstanding (1)	order (3)	14:9;46:3;47:8;48:3;52:16
move (3)	17:15	10:14;48:20;51:21	performs (1)
40:1;48:21,25	nuance (1)	others (2)	15:16
movement (3)	15:13	13:1;42:7	perils (1)
33:8;39:2;44:20	number (4)	out (9)	46:24
movements (1)	17:16,19;21:23;22:7	13:1,4;17:16;18:6;40:9,23;	permit (1)
52:17	numeral (1)	41:12;42:20;44:1	44:20
moves (8)	46:8	outlined (2)	perpendicular (1)
33:13;36:17;38:25;39:14,	40.8	17:5;18:5	37:20
20;40:25;41:6;44:23	O	outside (2)	person (10)
moving (5)	U	28:11;55:18	33:5;35:10;36:16;37:1,19;
	a0a (1)	· ·	39:25;41:5;49:5;53:1,4
33:18;37:24;38:5;45:3;58:9	o0o (1) 5:3	over (2)	
much (6)		15:5;41:1	person's (3)
31:23;35:4;48:6,12;49:10,	object (11)	overall (1)	39:13,23;41:18
16	14:22;15:9,10,10,11;16:22;	32:7	perspective (1)
must (5)	34:6;46:9;47:1,11;49:17	overcome (1)	31:18
25:11;30:23;32:2;43:24;	Objection (3)	37:10	pertinent (1)
48:20	15:12;18:18;38:10	own (4)	56:15
myself (1)	objective (1)	21:15;23:6;25:24;42:4	phase (1)
41:2	34:14	D	40:2
	obtain (1)	P	PhD (1)
N	33:9		5:8
	obvious (1)	page (15)	photo (1)
nature (1)	44:18	5:25;6:10,10;7:18;8:1,4;	21:21
38:20	occurrence (1)	9:25;12:5;16:10;22:11;28:20;	pick (2)
Near (4)	43:20	44:14;45:15;52:1;58:25	32:4;44:5
40:7,21;41:10;43:11	off (17)	pages (3)	piece (2)
necessarily (6)	15:22;19:3;33:11;34:22,24;	24:17;25:1;55:20	10:23;58:11
13:11;14:12;17:13;18:5;	36:10;37:2;45:8,12,19;46:3;	pairs (1)	pieces (5)
21:20;44:4	47:9;48:3,3,8,24;49:13	22:6	17:18;19:5,6;22:1;26:8
necessary (2)	offer (2)	paragraph (42)	piggybacking (1)
33:9,16	16:11;36:11	6:23;7:5,14,17,18,20;8:2,5;	13:5
necessitated (1)	offers (2)	9:17,18;11:12;12:6;16:11;	pinch (5)
48:18	33:7;36:3	17:9,16;19:7;20:4;24:16,18,	51:9,16;58:4,8,14
	22.1,20.2	25:25:19:30:19:32:14 25:	nlace (10)

necessity (5)

need (6)

34:8;46:11;47:3,12;49:17

11:2;13:7;29:12;31:2;

one (18)

7:15;9:16;11:25;15:23;

17:18;18:7;19:14;25:10;

27:24;28:7;29:22;30:1;34:15;

25;25:19;30:19;32:14,25;

34:1,4;35:3;37:5;38:4;41:9;

47:7,25;49:8;58:22,23;59:2

44:14,16;45:15,23;46:19,25;

9:15;15:5;17:23;18:13;

44:9;48:4,8;49:2,4;50:23

place (10)

places (1)

17:16	previous (1)		49:10;56:6
placing (1)	47:7	D	referred (2)
19:18	previously (5)	R	32:22;41:17
plain (2)	13:22;16:5;32:22;46:7;48:5	9 (22)	referring (6)
17:6,10	principal (4)	rail (23)	11:4;30:18;39:2;40:14;
planar (1)	34:6;46:9;47:1,11	6:16,17,18,19,25;7:7,9; 24:21;25:4,20;26:1,6,8,18,21;	43:23;48:16
24:3	prior (3)	27:6,10,19,19;28:1,2,13,14	refers (3)
plane (14)	17:24;54:9;56:11	railings (4)	14:21;40:24;41:17
21:7,11,12,14,15;22:22,24;	priority (1)	47:17;59:5,9,17	reflect (1)
23:6,13,17;24:21;34:15,16;	38:1	rails (3)	6:6
42:18	probably (4)	7:22;27:9;51:9	regain (1)
planer (1)	42:14;43:2;51:3,18	ramp (1)	52:24
24:6	problem (2)	35:1	regarding (4)
planes (5)	46:3;49:9	rather (2)	54:19,21;56:3,3
21:19;22:6;23:23;24:10,13	problems (2)	41:18;42:18	regular (1)
plastics (2)	52:17,18	reached (1)	43:20
12:22,25	propelled (1)	6:6	related (2)
Please (2)	48:9	read (14)	16:20;39:22
11:19;29:17	proper (1)	6:21;9:24;12:13;19:20;	relationship (2)
plurality (4)	33:9	20:21;23:1;31:3;36:7;40:18;	34:23;47:25
6:16,19;8:11;26:17	properties (1)	44:25;45:21;46:13;49:24;	relative (3)
pm (1) 59:21	30:14	59:1	29:14;35:16;40:4 relevant (1)
	prosecution (7) 53:25;54:23;55:3,6,10,15;	reading (3)	52:2
point (7) 13:1;24:11;27:13;58:4,8,9,	56:12	33:21;34:2;46:15	relied (1)
14.11,27.13,36.4,6,9,	protected (1)	really (1)	55:7
pointing (1)	51:9	43:18	rely (2)
18:6	provide (10)	rear (21)	37:23;56:18
points (4)	12:9;14:12;17:13,22;34:7;	22:4,23,25;23:5,16,18;24:2, 19;25:3;32:10;33:15;34:19;	remember (1)
22:4;51:9,10,16	35:23;46:10;47:1,12;53:12	35:7;36:2,10,19;38:17,21;	54:12
polynomial (2)	provided (4)	42:10;43:5;48:1	remove (1)
26:10,12	22:19;53:9;59:5,10	rearward (3)	49:17
portion (5)	provides (4)	23:10;37:10;42:9	removes (4)
20:5;36:10;37:15;42:16;	27:2;29:25;36:1;37:18	reason (2)	34:8;46:11;47:2,12
43:22	providing (3)	13:18;18:14	repeat (1)
portions (6)	9:9;10:8;52:9	reasons (3)	26:3
19:6;26:21;27:18;43:7,8,19	pulled (1)	29:24;30:1;53:8	rephrase (1)
POSA (9)	58:13	recall (13)	26:4
19:10;29:2,6,8;30:6;38:7,	purport (1)	13:20;17:21;18:19;19:3;	report (3)
12;44:18;47:13	46:3	28:11;34:24;45:11;54:18;	16:8;17:8;20:22
POSITA (3) 19:8,9,12	purposes (3) 22:12;24:1;50:13	56:1;57:17,23;58:3,17	reports (1) 56:13
position (7)	push (10)	Recess (2)	require (2)
15:2,15;33:17;36:5;37:13;	34:19;36:14;37:2,13,19,22;	16:1;53:21	18:2;51:14
38:6,12	38:18;44:6;48:3,20	recite (1) 6:15	required (2)
positioned (3)	pushing (2)	recognize (5)	47:20;50:7
10:10,15;35:10	34:20;36:10	5:22;14:9;16:7;20:12;37:21	requires (2)
potential (1)	put (3)	recognized (1)	30:22;31:4
31:11	10:18;51:23;52:8	45:18	requiring (1)
potentially (1)	putting (2)	recommend (2)	50:5
31:11	31:19;52:14	51:8,11	resistance (3)
preceding (1)		record (1)	33:7;36:4,11
30:18	Q	15:22	respect (1)
preferable (4)		redirect (1)	49:7
29:23;30:8;31:12;32:7	quieter (1)	57:2	respectively (1)
preference (1)	31:1	reduce (3)	35:22
29:16	quote (10)	30:12;31:2;44:21	restate (1) 25:15
preferred (1) 12:7	6:20;9:19;12:16;22:14;	reference (6)	25:15 restraint (1)
premarked (1)	29:20;36:24;37:2;44:16;59:7, 14	25:8;32:20;45:6;47:14;	50:22
5:5	quotes (1)	57:15;58:2	restraints (1)
present (2)	45:24	referenced (1) 7:14	49:4
22:15;29:20		references (2)	restrict (1)
,		references (2)	

19.22	0.22	22.16.19	zamacza (10)
18:23	8:23	22:16,18	someone (10)
results (1)	sandwiched (1)	shows (2)	37:20;38:18;50:25,25;51:7,
31:25	11:13	18:11;21:6	18;52:6,22;53:5,6
retention (2)	satisfactory (1)	side (10)	something's (1)
19:2;20:2	31:25	6:17,20;14:10;15:20;19:15;	15:2
review (8)	satisfied (1)	26:16;28:3,16;30:11;51:8	sorry (6)
6:1;16:16;22:8;54:7,20;	25:3	sidewalls (1)	5:20;16:4;33:20,22;46:14;
55:5,17;56:16	satisfy (1)	22:20	58:24
rib (4)	24:20	signature (1)	sort (4)
9:21,22;10:4;11:6	saying (3)	5:25	18:2,9;19:1;53:10
ribs (3)	9:19;27:12;48:22	signed (1)	sound (2)
12:20;13:11,12	Schmidt (13)	6:2	21:8;30:15
RIEGER (8)	32:20,20,21,24;33:1,3;35:3,	similar (2)	sounds (1)
5:13;15:22;16:3;53:18,22;	4;48:5,11,17;54:9;55:7	6:4;18:22	10:2
56:24;57:8;59:20	second (20)	similarly (1)	speaking (2)
right (45)	6:18,19;11:25;12:6;25:4,	25:1	24:12;42:8
6:20;7:14;8:3,15;9:24;10:2,	20;26:1,6,7,18;27:5,10,19;	simply (2)	specific (3)
12,17;16:23;18:3;19:24;20:9,	28:1,14;35:17,21,25;39:16;	8:12;14:21	7:14;24:8;28:8
16,17;21:8;23:6;24:22,23;	43:25	simulating (1)	specifically (6)
25:2,2;28:17,18;31:5,6;33:3;	section (4)	47:19	11:19;20:11;37:6;52:15;
39:23,24;41:8,13,14;43:1,13;	23:10,10;32:19;56:13	single (12) 10:21,23;22:16,19;23:8,10,	54:15;55:22
45:21;46:8,13,18,20;47:4; 49:12,19;53:15;56:24;57:13;	sections (4) 24:3,6;46:7;56:15	21,25;29:7,9;30:9;32:4	speeds (1) 32:9
49.12,19,33.13,30.24,37.13, 58:21;59:1		single-belt (3)	
78:21;39:1 rigid (13)	secure (1) 9:22	28:22;29:4;30:17	spirit (1) 59:11
10:24;12:9,17,19,23;13:2,3,	securing (1)	sit (3)	split (1)
6,9,10,12,13,14	6:25	56:1,8,23	21:22
risk (1)	seeing (1)	sitting (2)	spotter (1)
44:21	54:18	54:14;55:21	53:11
ROBERT (1)	seems (1)	size (1)	standards (9)
5:8	51:12	30:12	47:21;50:5,8,8;51:3,5,14,
roll (2)	segments (1)	skilled (1)	22;52:2
47:9;48:3	27:5	37:21	start (1)
roller (1)	sell (1)	skip (2)	41:1
7:11	52:7	24:24;46:23	starting (11)
rollers (29)	sentence (9)	slanting (4)	6:10;16:10;30:19;33:4,25;
7:1,23;13:17,22;21:7,13,18,	19:20;20:4;35:2;39:16,18;	22:22,24;23:13,17	34:4;35:15,19;37:6;41:2;
23;22:19,21,21,23;23:4,5,5,9,	40:6,20;43:25;45:17	slide (1)	43:10
11,13,16,21,22,25;30:24;	sentences (3)	49:13	starts (3)
34:22;35:18,21;37:20,22;47:9	19:22,24;41:15	slight (1)	12:6;22:9;28:19
rolling (2)	series (6)	28:5	state (10)
34:22;35:1	22:19;23:8,11,21;35:17,21	slope (1)	6:24;7:18,20;19:8;24:5,17;
roughly (1)	serve (1)	36:22	25:1;38:11;44:16;45:17
30:21	9:22	sloping (1)	stated (3)
run (3)	set (1)	36:3	17:8;52:10;55:5
33:11;48:23;50:22	5:18	slow (1)	statements (1)
running (8)	sets (5)	38:19	47:24
11:14;20:25;41:20,25;	21:6,13,18,23;23:4	slower (1)	states (15)
42:16,22;44:21,22	several (1)	37:25	12:7;29:20;32:25;34:5,5;
runs (1)	29:23	small (4)	35:20;37:7;39:19;40:7,20;
33:13	shape (17)	49:23;50:2,14;58:12	41:4,10;43:9;46:9;47:6
S	10:7,19;11:10;13:19;14:6,	smash (2)	stating (1)
<u></u>	14,19;15:2,15,18;16:21;18:2,	11:14,16	48:14
gofoty (11)	10;19:2;20:2;28:14;35:6	Socwell (12)	stationary (1)
safety (11)	shaped (1)	6:24;9:19,19;11:19,20;	40:4
15:7;31:18;46:4;49:6;	39:11	12:15;13:16;45:25;46:2;	stay (2)
50:16;51:3,5,22;52:2,10;	shift (1)	54:22;55:3,24 Socwell's (1)	49:1,4
58:15	20:10 short (3)	7:6	step (11) 37:3,12;38:5,5,25;39:8,19;
same (13) 11:18;19:10;21:10,11,12;	46:19,23;53:19	solely (1)	40:15,25;41:6,23
28:2,14;32:21,24;37:5;41:9;	show (1)	40:16	stepping (1)
28:2,14;32:21,24;37:3;41:9; 47:19;55:4	7:25	solve (1)	44:22
sandwich (1)	shown (2)	46:3	still (3)
Santa wich (1)	SHOWH (2)	70.3	Sun (3)

33:20;43:14;47:22	20:25;33:7;34:15;35:23;	52:2	uncoordinated (1)
straight (2)	36:1,19;37:2,9;38:8,14;39:12,	toes (1)	52:16
25:21,23	15,17;40:8,10,16,22,22,24;	42:14	under (2)
			8:4;31:23
stream (2)	41:11,12;42:21,22;43:12;	together (7)	
51:23;52:8	44:2;48:19;52:11	8:10,25;10:18;11:13;25:23;	underneath (3)
stroke (1)	surfaces (3)	27:11;31:20	11:3;13:7;59:7
53:7	35:14;42:4;58:10	took (2)	underside (1)
structural (4)	swing (1)	22:5;42:20	19:16
12:10;19:13;26:5;27:17	40:2	top (3)	unidirectional (1)
structurally (2)	sworn (2)	19:3,17;34:24	44:20
27:9;28:2	5:6,10	touch (1)	unique (1)
structure (5)		42:15	39:6
10:22;26:1,19;27:4;58:19	T	tough (1)	up (8)
structures (3)	1	13:14	18:20;21:22;26:14;27:18;
	4all-in a (9)		
13:24;14:7;15:4	talking (8)	toward (3)	44:5;51:2,4,15
stud (1)	13:9;20:19;25:9;30:21;	22:25;23:18;36:2	upward (7)
17:21	34:21;46:7;53:16,23	trap (1)	14:13;22:24;23:17;36:22,
studied (1)	talks (1)	31:20	24;38:21;48:2
39:22	15:3	tread (8)	upwardly (2)
sturdier (1)	task (1)	35:14,23,25;39:15,17;	36:2,3
12:25	15:16	48:18,21,25	usable (1)
sturdy (9)	taste (1)	treadmill (31)	59:8
12:9,17,19,23;13:2,3,9,10,	48:7	12:12;28:22;30:17;33:5,12;	usage (4)
14	teachings (2)	35:10;36:20;38:18,21,23;	17:10;18:6;43:6;52:5
	38:8,14		use (20)
subsequent (1)		39:6,7,9,12;40:17;42:11;43:1,	
7:16	ten-minute (1)	3;44:19,22;45:9,10,13,19;	12:21,22;16:24;17:3,6;
subsets (1)	53:19	46:4;49:1;50:23;51:3,5,14;	29:6;30:7,9,17;31:8,12,13;
23:22	tension (2)	59:5	47:15;49:23;50:2,14;51:18;
substantially (1)	31:14,23	treadmills (1)	52:14,16;53:7
12:9	term (2)	33:16	used (11)
sufficient (3)	14:20;17:25	treadmill-type (3)	8:15;13:15;16:12;17:17;
12:10;29:4,11	terms (4)	34:7;46:10;47:2	18:1;31:24;32:2;50:13;53:11;
suggest (3)	17:10;24:13;29:15;38:2	trickier (1)	59:16,17
40:24;41:16;48:11	testified (3)	42:7	useful (1)
suggests (1)	5:11;11:7;39:21	tried (1)	35:9
19:1		48:23	user (18)
	testimony (1)		
suitable (4)	5:16	true (1)	12:11;29:14;33:11,16;34:9;
49:22;50:1,24;52:16	therapeutic (5)	47:6	37:9;40:25;41:25;44:4,9,21;
superior (1)	49:22;50:1,13,19;53:8	trying (1)	45:8;46:12;47:3;48:19;49:12,
30:5	therapist (3)	53:7	18;53:13
support (65)	53:3,10,12	turn (5)	users (1)
7:23;9:9,21,22,23;10:3,8;	therapists (1)	16:6,10;57:14,20;58:21	45:18
11:6;12:11,19;13:7,10,12;	53:1	Turner (8)	user's (6)
14:9,21,25;15:4,7,14;16:12,	therefore (1)	5:16;15:12;18:18;38:10;	36:4,12;39:3;40:15;41:24;
20,25;17:2,3,6,12,14,17,18;	33:8	57:4,10,12;59:18	43:16
18:1,1,7,15,17,20,23;19:1,12,	thinking (1)	two (28)	uses (4)
14;20:2,6,7;24:19,19;25:2,3,	7:24	6:11:8:10:19:22,24:21:6,13,	36:16;49:23;50:2,19
7;28:23;33:15;34:8;36:24,25;	though (2)	18,18,25;22:6;23:4,21;24:3,6,	using (12)
	38:17:43:22	10;26:20;27:5,8,11,17;28:9,	7:2;20:4;35:11;37:1;41:5;
46:12;47:3,13,15,16;48:20,	· ·		
23;49:18,22;50:1,5;53:13;	three (1)	21;29:22;31:17,19;38:1;42:3;	43:21;45:10,20;46:5;47:9;
58:18	22:6	58:9	49:13;51:11
supported (3)	throughout (1)	two-belt (10)	**
8:13;9:2,6	16:12	29:23;30:2,5;31:8,11,22;	\mathbf{V}
supporting (9)	Thus (1)	32:2,6;57:24;58:2	
9:10,11;10:5,13,16,20;	33:15	type (1)	various (1)
13:23;14:4;15:11	tighten (1)	33:5	19:13
supports (8)	11:15	typically (1)	versus (4)
6:25;8:6;10:4;15:4,4;53:16;	title (1)	42:7	9:11;10:4;32:4;39:6
		,	
59.9.10			
59:9,10 Sura (0)	35:12	T T	vertical (5)
Sure (9)	35:12 today (7)	U	15:6,8;17:7,13;18:24
Sure (9) 12:1;14:5;21:15;22:13;	35:12 today (7) 18:16,21;52:5,14;54:14,21;		15:6,8;17:7,13;18:24 via (1)
Sure (9)	35:12 today (7)	U unable (1) 33:8	15:6,8;17:7,13;18:24

Woodway USA, Inc.			January 10, 202
51:21	5:20;25:18;32:18;33:24;	180 (1)	3:57 (1)
		6:10	59:21
viewed (1)	42:3;43:20;46:8,14,17,18;		
28:16	53:16;57:20;58:3	187 (2)	30 (2)
\mathbf{W}	1.4 (3)	8:1,4	33:4,25
VV	6:12;7:8,21	188 (1)	31 (1)
11 (4)	1.5 (3)	9:25	35:19
walk (4)	6:12;7:8,21	19 (3)	350 (3)
48:24,24;50:21;52:24	10 (6)	24:19;25:3;29:19	6:23;7:6;8:5
walking (1)	5:2;12:12;22:20;23:18;	190 (3)	351 (4)
39:25	35:25;36:2	58:22,23;59:2	8:2,9;9:18;11:12
wall (4)	1001 (1)	1917 (1)	356 (1)
14:11,14,15;15:20	5:4	33:1	7:17
wants (2)	1003 (3)	192 (1)	38 (1)
29:6;34:18	5:20,20;24:16	7:18	59:12
way (3)	1011 (1)	1970 (3)	4
9:15;10:18;27:1	11:21	52:1,21;53:9	4
ways (1)	1013 (5)	2	40 (4)
22:7	20:12;29:18,18;32:19;	2	40 (4)
weight (4)	57:14	2 (12)	34:5;46:8,19,19
12:11;30:24;31:13;32:12	1030 (1)	2 (12)	41 (1)
weight-bear (1)	5:5	5:19;21:5,6;22:10;24:20;	59:12
42:1	107 (1)	35:15;36:15;37:6;40:6;42:2;	
weight-bearing (1)	58:25	43:9;57:21	5
17:7	11 (1)	2008 (2)	F (1)
Welcome (1)	30:19	16:6;19:8	5 (1)
5:14	116 (1)	2017 (2)	11:11
welding (1)	9:21	16:9;18:17	50 (1)
19:15	118 (2)	2024 (1)	41:22
what's (5)	7:2;9:20	5:2	54 (5)
17:8;26:23;39:9;55:18;	12 (1)	21 (5)	9:21,23;10:4;11:6;43:10
56:18	7:2	16:11,19;17:9;30:22;48:13	55 (1)
Whereas (2)	127 (1)	22 (6)	40:7
31:16;38:2	45:15	16:19;17:16;22:20;26:22,	56 (3)
wherein (1)	13 (1)	23,24	7:23;8:6;12:8
22:16	35:21	23 (3)	580 (18)
WHEREUPON (1)	14 (2)	16:19;19:7;42:24	5:24;6:7;15:3;16:13,14,15,
5:7	24:19;25:2	230 (1)	25;17:4;18:1,15,17,23,25;
whole (1)	15 (4)	44:17	20:6,7;54:1,23;55:11
11:12	12:5;28:6;43:2,20	232 (1)	
wise (1)	151 (2)	45:15	6
52:8	24:16,18	24 (2)	(A)
withdrawn (1)	1520 (1)	16:19;48:14	65 (1)
10:14	17:21	243 (1)	37:4
without (13)	153 (2)	44:17	67 (1)
9:13;10:7,7,8;46:4;48:1;	28:19,19	25a (8)	37:7
49:4;50:22;52:9,9;59:8,11,16	154 (1) 28:19	36:1;37:2,9;42:4,15,20;	7
Witness (4)		43:24;44:6	/
5:6,9;15:25;53:20	158 (2)	26 (2)	72 (1)
Wood (4)	24:25;25:19	28:6;43:2	73 (1)
34:23,25;47:8;49:7	16 (1) 40:22	27 (1)	22:10
word (12)	168 (7)	35:16 28 (1)	8
14:24;15:14;16:12,24;17:1,		28 (1)	ō
3,11,17;18:7,20,23;20:6	6:24;7:7,13,22;8:6;13:18,23 169 (3)	22:17	9 (5)
working (1) 52:6	16:13;32:14;44:14	29 (1) 23:21	8 (5)
	16:13;32:14;44:14 16a (16)	23.21	11:20,22;12:3,4,7
world (1) 24:14		3	86 (1)
	35:23;40:8,22;41:11;42:4,4,	3	24:17
wraps (1)	15,17,21;43:1,12,17,19,24,24;	2 (10)	87 (2)
42:10	44:10	3 (10)	24:17;28:20
	16th (1)	21:3,4,17;22:8,16,18;23:4;	89 (1)
1	52.1	20.17.20.10.50.12	
1	52:1	29:17;30:19;59:12	25:1
1 (13)	52:1 18 (1) 35:22	29:17;30:19;59:12 3,637,206 (1) 20:14	25:1

woodway USA, Inc.	 	January 10, 2022
9		
9 (1) 16:10 90 (1) 25:1 94 (1) 7:1		
90 (1) 25:1		
94 (1) 7·1		
96 (1) 44:14		
96 (1) 44:14 98 (2) 7:1,23		
7:1,23		