

UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIFECORE FITNESS, INC. d/b/a

ASSAULT FITNESS,

Petitioner, Case No. IPR2023-00836

US Patent No. 9,039,580 to Bayerlein et al

vs.

WOODWAY USA, INC.,

Patent Owner.

-----/

DEPONENT: DR. KIM B. BLAIR, PH.D.

DATE: Monday, April 8, 2024

TIME: 9:11 a.m.

LOCATION: Zoom Video Conference

REPORTER: Shari J. Pavlovich, CSR-5926

Job No.: 29641

Fortz Legal Support

[www.FortzLegal.com](http://www.FortzLegal.com)

844.730.4066

**FORTZ**  
Legal  
LIFECORE Ex. 1038

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

3  
4 LIFECORE FITNESS, INC. d/b/a

5 ASSAULT FITNESS,

6 Petitioner, Case No. IPR2023-00836

7 US Patent No. 9,039,580 to Bayerlein et al

8 vs.

9 WOODWAY USA, INC.,

10 Patent Owner.

11 \_ \_ \_ \_ \_ /

12  
13 DEPONENT: DR. KIM B. BLAIR, PH.D.

14 DATE: Monday, April 8, 2024

15 TIME: 9:11 a.m.

16 LOCATION: Zoom Video Conference

17 REPORTER: Shari J. Pavlovich, CSR-5926

18 Job No.: 29641

1     **APPEARANCES:**

2  
3     **MR. ANDREW B. TURNER**

4         Brooks Kushman P.C.

5         150 West Second Street, Suite 400N

6         Royal Oak, MI 48067

7         248.358.4400

8         aturner@brookskushman.com

9         Appearing for Petitioner

10    **MS. KADIE M. JELENCHICK**

11         Foley & Lardner LLP

12         777 East Wisconsin Avenue

13         Milwaukee, WI 53202

14         414.319.7324

15         kjelenchick@foley.com

16         Appearing for Patent Owner

17                 - - -

TABLE OF CONTENTS

WITNESS: DR. KIM B. BLAIR, Ph.D. PAGE

Examination By Mr. Turner 4

Examination By Ms. Jelenchick 102

- - -

EXHIBITS

DEPOSITION EXHIBIT PAGE MARKED

(None offered.)

- - -

Monday, April 8, 2024

About 9:11 a.m.

- - -

DR. KIM B. BLAIR, PH.D.,  
having affirmed or been duly sworn, was  
examined and testified as follows:

EXAMINATION

BY MR. TURNER:

Q All right. Good morning, Dr. Blair.

A Good morning.

Q Do you know why you're here today?

A I do.

Q And why is that?

A To provide deposition in relation to the expert  
reports I provided.

Q Okay.

A My work.

Q All right. And so today we're going to start with  
IPR2023-00836, which is an IPR challenging Patent  
Number 9,039,580.

Have you been deposed before?

A Yes.

Q Approximately how many times?

A A dozen or so, maybe.

Q Okay. For -- have you been deposed for IPRs, for

1 an IPR before?

2 A Yes.

3 Q Okay. And how did you prepare for your deposition?

4 A I reviewed the documents that have been provided to  
5 me and listed as references in my report. I  
6 reviewed my report.

7 Q Okay. And who did you meet with to prepare for  
8 your deposition?

9 A The attorney representing Woodway, Ms. Jelenchick.

10 Q Okay. Did you meet with anyone else?

11 A No.

12 Q About how much time did you spend preparing for  
13 your deposition?

14 A I don't know. Double digit hours.

15 Q Okay. Is that for -- now, this is -- you're going  
16 to be deposed on three IPRs.

17 Is that double digit hours for a total?  
18 Or per IPR you spent, double digit hours?

19 A That would be total.

20 Q Total, okay. And what documents did you review in  
21 preparing for your deposition?

22 A Those that would be listed in the references  
23 considered in the various declarations.

24 Q Okay. All right. Did you review any documents  
25 that are not cited in your declarations?

1 A Not that I recall.

2 Q Okay. Now, do you have a book of Exhibits there?

3 A Yes, I do.

4 Q Okay. Do you have the Exhibit that's marked 2018

5 for this IPR, which is IPR2023-00836?

6 A Oh, yes, I do. Sorry.

7 Q Okay. All right. And can you -- let's see, can

8 you turn to the last page of Exhibit 2018?

9 A Okay.

10 Q All right. Is that your signature?

11 A Yes, it is.

12 Q All right. And it's dated January 31, 2024?

13 A Yes.

14 Q All right. Do you recall how much time you spent

15 preparing this declaration?

16 A Not exactly. It's been a few months ago now.

17 Q You think more than 20 hours preparing the

18 declaration?

19 A Yeah, quite likely.

20 Q And who did you work with in preparing your

21 declaration?

22 A Ms. Jelenchick.

23 Q Anyone else?

24 A I'm sure that there were probably some of her

25 colleagues involved on some other level. I

1           wouldn't recall their names off the top of my head,  
2           though.

3   Q       Okay. Did you work with anyone who is not in --  
4           part of the Foley law firm?

5   A       No.

6   Q       Okay. And who drafted your declaration?

7                       MS. JELENCHICK: Objection, form.

8                       THE WITNESS: I did.

9   BY MR. TURNER:

10   Q       Okay. And what did you rely on in preparing your  
11           declaration?

12   A       The references in the "Materials Considered"  
13           section.

14   Q       Okay. Anything that's not listed in the "Materials  
15           Considered" section?

16   A       No.

17   Q       All right. Have you worked with the Foley law firm  
18           before?

19   A       Yes, I have.

20   Q       Okay. Approximately how many matters?

21   A       Four.

22   Q       Okay. Do you remember what matters those were?

23   A       I wouldn't be able to call them out by name. Some  
24           of them also have been associated with the LifeCORE  
25           treadmill subject matter. There was another,



1           hydropacks.

2   Q       Is hydropacks -- is that the name of a party? Or  
3           was that the technology?

4   A       That is the technology. Those are systems that --  
5           it's a backpack the wearer puts on. You connect a  
6           hose from the exhaust of a jet ski to the backpack.

7                   And that pressure coming out of the jet  
8           ski allows you to basically fly around like a jet  
9           pack, while you're connected to the jet ski.

10                   Absolutely frightening.

11   Q       Okay. Do you have Exhibit 1001 in your book?

12   A       Yes, I do.

13   Q       What is Exhibit 1001?

14   A       A copy of U.S. Patent '580.

15   Q       Okay. So that's the patent that's being challenged  
16           in this IPR; correct?

17   A       That's my understanding, yes.

18   Q       Have you read this Patent?

19   A       Yes, I have.

20   Q       The entire Patent?

21   A       Yes.

22   Q       Approximately how many times have you read the  
23           entire Patent?

24   A       Four or five, probably.

25   Q       Do you see the list of inventors on the top left

1           portion of the front page of the Patent?

2    A       Yes.

3    Q       Have you met any of these inventors?

4    A       Yes.

5    Q       Which inventors have you met?

6    A       For certain, Doug Bayerlein, Nick Oblamski, I  
7           visited with at one point to see treadmills and  
8           things like that.

9                       There were a couple other people in those  
10           meetings. I can't remember if it was maybe Vance  
11           or Scott. It was quite a while ago.

12   Q       Okay. So you mentioned Doug. Is that Doug  
13           Bayerlein, first-named inventor?

14   A       Yes.

15   Q       Do you know if Doug has an engineering degree?

16   A       Not off the top of my head.

17   Q       You mentioned -- I think you mentioned Nick,  
18           too; is that correct?

19   A       Yes.

20   Q       Nicholas Oblamski?

21   A       Yes.

22   Q       Do you know if Nicholas has an engineering degree?

23   A       I'm pretty sure he does.

24   Q       Okay. Do you know of any of these inventors who do  
25           not have an engineering degree?

1 A Well, I stated in my report when I was talking  
2 about level of skill in the art that some of the  
3 named inventors did not.

4 I know for a fact that they don't. I  
5 just wouldn't be able to recall which ones for  
6 sure.

7 Q Okay. So you don't know which ones do not have an  
8 engineering degree?

9 A No. Not without going to LinkedIn or some other  
10 third resource. I don't know off the top of my  
11 head.

12 Q Okay. Do you have Exhibit 1013 in your binder?

13 A Yes.

14 Q What is Exhibit 1013?

15 A It's U.S. Patent 3,637,206.

16 Q All right. And the -- who's the inventor of this  
17 Patent?

18 A Kenton Chickering.

19 Q So are you okay if we refer to this reference as  
20 "the Chickering reference"?

21 A Yes.

22 Q Okay. All right. Do you have Exhibit 1011 in your  
23 binder?

24 A Yes.

25 Q All right. And what is Exhibit 1011?

1 A U.S. Patent 5,897,461.

2 Q All right. And the first-named inventor is

3 Socwell; is that correct?

4 A Yes. That's his last name.

5 Q His last name. So you're okay if we refer to this

6 reference as "the Socwell reference" or "the

7 Socwell Patents"?

8 A Yes.

9 Q Do you have Exhibit 1012 in your binder?

10 A Yes.

11 Q What is Exhibit 1012?

12 A U.S. Patent 5,538,489.

13 Q All right. And is the first-named inventor, last

14 name is Magid or Magid?

15 A Yes.

16 Q Okay. Are you okay if we refer to that as "the

17 Magid reference"?

18 A Yes.

19 Q All right. Do you have Exhibit 1017 in your

20 binder?

21 A Yes.

22 Q What is Exhibit 1017?

23 A It's the sections taken from a reference called

24 "Mechanisms and Mechanical Devices Sourcebook Third

25 Edition."

1 Q All right. And is the first-named author or editor  
2 of that Sclater?

3 A Yes.

4 Q All right. Are you okay if we refer to this as  
5 "the Sclater reference", or "Sclater book"?

6 A Yes.

7 Q Were you familiar with the Sclater reference before  
8 this IPR?

9 A No.

10 Q Okay. Do you have Exhibit 2020 in your binder?

11 A Yes.

12 Q What is Exhibit 2020?

13 A Declaration of Eric A. Weber.

14 Q Okay. Can you turn to paragraph 23 of  
15 Exhibit 2020?

16 A Okay.

17 Q Are there any redactions in paragraph 23?

18 A No.

19 Q Okay. Are you aware that some of the documents  
20 filed in this IPR were filed under seal, under  
21 protective order?

22 A I signed a protective order when I became part of  
23 this case. So it indicates to me that potentially  
24 there were, but I wouldn't know which ones were.

25 Q Okay. So you reviewed all of Exhibit 2020; is that

1 correct?

2 A Yes.

3 Q Okay. Did you review all the Exhibits that are  
4 cited in Exhibit 2020?

5 A I did not. Those were not delivered to me.

6 Q Okay. So you only reviewed the Exhibits that are  
7 cited, if they're also listed in your materials  
8 considered in your declaration; is that correct?

9 A Yes.

10 Q Okay. All right. So what other documents are  
11 included in your binder?

12 A Well, starting from the front, we already talked  
13 about the '580 Patent. We have Exhibit 1002, which  
14 is -- appears to be the file history related to  
15 this Patent.

16 Q Okay.

17 A Exhibit 1003, Mr. Giachetti's declaration.

18 Q Okay.

19 A Exhibit Number 1004, which is Mr. Giachetti's CV or  
20 résumé, whatever you want to call it.

21 Exhibit 1007, Product Safety Treadmill  
22 Supplier Guide from Australian Competition and  
23 Consumer Commission.

24 Exhibit Number 1008, it's a Patent, early  
25 Patent number 641424 to Ziebell.

1                   Exhibit Number 1009 is Patent 1,211,765  
2 to Schmidt.

3                   Exhibit 1010, that's Patent  
4 Number 4,614,337 to Schonenberger.

5                   Exhibit 1011, we talked about this one  
6 already. This is the Socwell reference  
7 4,897,461[sic].

8                   And number 12 we talked about already,  
9 that's the Magid Patent.

10                  And 13 is the Chickering Patent that we  
11 talked about, 1013.

12                  1014 is Patent Number 362 -- I'm sorry,  
13 let me start over. 3,642,279 to Cutter.

14                  Exhibit 1015, it's Patent 6,042,514 to  
15 Abelbeck.

16                  Number 1016 is specific copies of a  
17 subset of pages from the "Power Transmission  
18 Handbook".

19                  1017, we spoke about. That was Sclater.

20                  1018 is Browning Morse, "Mechanical  
21 Clutches and Torque Overload Devices". I guess  
22 that's actually from the company called Emerson,  
23 E-M-E-R-S-O-N.

24                  1019 is ASTM F2115-05. "Standard  
25 Specification for Motorized Treadmills."

Exhibit 1020 is ISO 20957-6, "Stationary Training Equipment". Part 6: Treadmills, additional safety requirements and test methods.

1033 is the Claim Construction Order for Woodway V. LifeCORE Fitness.

2018 is my declaration in this matter.

2019 is my CV.

2020 is a declaration of Eric Weber.

2021 is "Mechanisms & Mechanical Devices Sourcebook". Again, subsection of a couple pages in that.

2022 is the transcript of the declaration of Mr. Giachetti, Dr. Giachetti, in this matter.

Wait a minute. Yes, right.

2023 is the declaration of Mr. Giachetti for Patent -- in the matter for Patent Number 10,799,745.

Q Are these his declarations or his deposition transcripts?

A Oh, thank you. Deposition transcript.

Q Okay.

A And then 2024 is, again, the deposition transcript. This is for the -- related to the deposition for Patent Number 10,561,884.

Exhibit 2025 is a claim chart for U.S.



Patent Number 9,039,580.

Exhibit 2028 is the Woodway, call it instruction manual or information manual, for "Non-Motorized Treadmills User Manual, 02/2018 UM-NT-EN-02."

And the last one in the book is number 2029, it's a catalog for Stieber Clutch, that's S-T-I-E-B-E-R, from Altra Industrial Motion, "Overrunning Clutches and Backstops."

Q All right. So through the deposition, we'll be referencing some of these different documents, but this is helpful.

And all the Exhibits that you just went through in your binder, are these all clean Exhibits? Do you have any markings on them, Post-its or comments?

A No, these are all clean.

Q Okay, thank you. All right. Can you turn back to your declaration, which is Exhibit 2018?

A Yes.

Q Can you turn to page 15?

A Yes.

Q Do you see the footnote 1 on the bottom of the page?

A Yes.

1 Q What does that refer to?

2 A It's a reference -- it's an online reference for  
3 the variation of the history of the treadmill.

4 Q All right. Do you know what it says on this web  
5 page?

6 A I'd have to go back and pull that up. I don't  
7 recall. It's been a while since I looked at it.

8 If I recall, there's images and things  
9 like that of the first century AD treadmill.

10 Q Okay. Do you remember the last time that you  
11 accessed this link?

12 A No.

13 Q Do you think it's been within the last few months?

14 A Likely.

15 Q Okay. So you probably reviewed this link before  
16 you filed your declaration?

17 A Well, I'm familiar with this link from other  
18 matters related to Woodway.

19 Q Okay. Do you recall if you accessed it while  
20 preparing this declaration?

21 A I don't recall for sure.

22 Q Okay. Will you turn to paragraph 40 of your  
23 declaration. Can you read paragraph 40 to yourself  
24 and let me know when you're done, please?

25 A (Witness reviewing document.) Okay.

1 Q What is your understanding of the term "safety  
2 device"?

3 A It's a -- you know, in a very generic sense, it's a  
4 device that improves safety.

5 Q What is your understanding of the term "safety  
6 device" as used in the Patent '580?

7 A It's a device that results in preventing the  
8 running belt from moving in unintended directions.

9 Q All right. Is it a specific type of device?

10 MS. JELENCHICK: Objection, form.

11 THE WITNESS: The Claims don't require  
12 it to be a specific device.

13 BY MR. TURNER:

14 Q Can you turn to paragraph 41? Can you read  
15 paragraph 41 of your declaration to yourself and  
16 let me know when you're done.

17 A (Witness reviewing document.) Done.

18 Q All right. What is your understanding of the terms  
19 "intended direction" and "unintended direction"?

20 A Well, that's stated in paragraph 41. The intended  
21 direction means -- sorry, let me start over.

22 "Intended direction means an expected  
23 directional movement of the running  
24 surface of the treadmill belt.

25 "And unintended direction means an

1 unexpected directional movement of the  
2 running surface of the treadmill belt."

3 Q Do you know if the '580 Patent uses this  
4 terminology, "intended direction" and "unintended  
5 direction"?

6 MS. JELENCHICK: Objection, form.

7 THE WITNESS: I'd have to go back and  
8 review, totally review the Patent to verify  
9 whether or not it does.

10 BY MR. TURNER:

11 Q Okay. We don't need to do that now.

12 Can you turn to paragraph 45 of your  
13 declaration?

14 A Okay.

15 Q You include some images of Woodway's curved  
16 treadmills there; is that correct?

17 A Yes.

18 Q Where are these images from?

19 A They were provided by Woodway or by -- more  
20 specifically, provided by Foley.

21 Q Okay. Do you know if these are from one of your  
22 Exhibits?

23 A I wouldn't know specifically.

24 Q Do you know if these are representative of  
25 Woodway's entire CURVE line of treadmills?

1 MS. JELENCHICK: Objection, form.

2 THE WITNESS: No. Because I know  
3 there's others, as well, that were mentioned.

4 For example, we already spoke about  
5 Mr. Weber's declaration earlier today.

6 I know that there are other forms of  
7 curved treadmills mentioned there, other levels,  
8 more specifically.

9 BY MR. TURNER:

10 Q Can you turn to -- let's see, paragraph 76 of your  
11 declaration?

12 A Okay.

13 Q All right. So this is your section under the  
14 heading:

15 "Chickering does not disclose a  
16 'curved running surface'."

17 Do you see that?

18 A Yes.

19 Q Okay. Can you turn to paragraph 90 of your  
20 declaration, please?

21 A Okay.

22 Q Can you read paragraph 90 to yourself and let me  
23 know when you're done?

24 A (Witness reviewing document.) Okay.

25 Q All right. And then under paragraph 90 you have

1 two images. What are these two images?

2 A These are images of two different embodiments from  
3 the Chickering reference.

4 Q Okay. So the image on the left is an annotated  
5 version of Figure 2; is that correct?

6 A Correct.

7 Q All right. How would you describe the space  
8 between the surfaces that you have marked as "first  
9 tread surface 16a", and "second tread surface 25a"?

10 MS. JELENCHICK: Objection, form.

11 THE WITNESS: Yeah. Your question's a  
12 little unclear. Could you ask it, again?

13 BY MR. TURNER:

14 Q How would you describe the space between the  
15 surfaces that you have marked as "first tread  
16 surface 16a", and the "second tread surface 25a"?

17 MS. JELENCHICK: Same objection.

18 THE WITNESS: I guess I call them a  
19 space.

20 BY MR. TURNER:

21 Q Would you refer to that space as a gap or a pinch  
22 point?

23 MS. JELENCHICK: Objection, form.

24 THE WITNESS: There would definitely  
25 have to be a gap between the first tread surface

1 and the second tread surface. Otherwise, they  
2 would connect to each other and cause mechanical  
3 interference.

4 If you pushed your fingers into it, it  
5 would probably be a pinch point.

6 BY MR. TURNER:

7 Q Is a "pinch point" a term of art in the exercise  
8 equipment space?

9 A I think it's a general term of art in any  
10 mechanical system space, any mechanical assembly  
11 space.

12 Q Okay. What is your understanding of the term  
13 "pinch point"?

14 A It's a point where something can be pinched if it  
15 gets in too close.

16 Q Would a runner using this treadmill want to avoid  
17 this space?

18 A Yes.

19 Q And why is that?

20 A It's because of the -- well, for a couple reasons.  
21 But the first reason is just because of the  
22 relative angles of the front and rear of the  
23 treads, the first tread and second tread.

24 It's an awkward transition, as you're  
25 running, to go down into a valley like that. And

Chickering actually suggests that the foot never contacts that space in the middle.

Q When you say "Chickering suggests that the foot never contacts that space", is that the paragraph that you have reproduced in paragraph 88 of your declaration?

A Well, actually, even paragraph 91, right after those two figures:

-- runner's feet are not intended to contact the area where the downwardly slanting plane of the forward rollers intersects the upwardly slanting plane of the rear rollers."

Q Okay. And that was paragraph 91 of your declaration; is that correct?

A Yes.

Q Okay.

A To your point a moment ago, certainly, I'm referencing in paragraph 91 back to paragraph 88 where I have the direct quote from the Chickering Patent in there.

Q All right. So in paragraph 88, your block quote that you have from Chickering, that's with reference to the Figure 1; is that correct?

A Right.



1 Q Okay. If we turn back to your figures that you  
2 have included in paragraph 90, figure on the right  
3 is an annotated version of Figure 3; is that  
4 correct?

5 A Correct.

6 Q And you have two planes annotated there, plane  
7 slanting upward and a plane slanting downwardly?

8 A Correct.

9 Q And your -- okay. Strike that.

10 So how would you describe the space  
11 between the plane slanting downwardly and the plane  
12 slanting upwardly?

13 MS. JELENCHICK: Objection, form.

14 THE WITNESS: Well, in this case, there  
15 is no space between those two. They intersect at  
16 an obtuse angle.

17 I should say meet, not intersect. The  
18 two planes meet at an obtuse angle.

19 BY MR. TURNER:

20 Q Okay. So the planes meet at an obtuse angle. How  
21 would you describe the running belt at that obtuse  
22 angle?

23 A Well, the running belt would be bending in a very,  
24 very small curve at that point to follow those  
25 trajectories, the two planes.

1 Q Now, would this point or this small curve that you  
2 referenced, would that also present a pinch point?

3 A From a mechanical design point, it could be causing  
4 a pinch point in the belt.

5 Q So how could it create a pinch point at the belt?

6 A For the belt to be able to follow those two planes  
7 as indicated, it's going to have to bend to a very  
8 tight -- to catch the apex of the angle there.

9 Q So you say "the belt would have to bend to a very  
10 tight" -- in that section. Does the Figure 3 of  
11 the Chickering reference, does that illustrate a  
12 belt with a tight bend or curve in it?

13 MS. JELENCHICK: Objection, form.

14 THE WITNESS: Well, it would depend on  
15 the belt material and how well -- how resilient  
16 the belt material is to bending; or how flexible,  
17 I guess, would be the right word.

18 BY MR. TURNER:

19 Q Okay. Now, does that small curve in the belt of  
20 the Figure 3 embodiment of Chickering, does that  
21 present a pinch point that the runner would want to  
22 avoid?

23 A Chickering actually talked that the runner wants to  
24 avoid that area.

25 Q Right. And that was the paragraph we just

discussed with respect to your Figure 1 embodiment.

Does Chickering say the runner wants to avoid that, with respect to the single belt in Figure 3 embodiment?

A Right.

Q Okay. Where does Chickering explain that?

A I'm sorry, could you repeat that? I think I misunderstood what you asked.

Q Does Chickering describe or disclose that the runner wants to avoid this curved area between the planes of the Figure 3 embodiment?

MS. JELENCHICK: Objection, form.

THE WITNESS: I don't believe so, specifically. Because the two planar surfaces that the runners are in contact with did not change from Figure 2 to Figure 3.

BY MR. TURNER:

Q But you agree that the space in between the planar surfaces does change between Figure 2 and Figure 3?

MS. JELENCHICK: Objection, form.

THE WITNESS: Yes. Right at the very bend in the corner there, or where the original space was in Figure 2.

BY MR. TURNER:

Q Okay. Dr. Blair, what is your understanding of the

1 term "running surface"?

2 A It's the surface on which the runner's foot would  
3 contact. Or more specifically, the runner's shoe  
4 would contact, if they're in shoes.

5 Q Now, in the images that you show in Figures 2 and 3  
6 of Chickering, where are the running surfaces in  
7 these figures?

8 A They would have been described, again, in the  
9 section I quoted in paragraph 88.

10 So the foot first contacts tread surface  
11 16a. And paraphrasing here, moves downwardly, near  
12 the bottom of the arc -- of the arc of the foot  
13 leaves surface 16a, and may be out of contact with  
14 any surface.

15 Then it moves on to the back part, which  
16 would be 16 -- well, the second tread surface.

17 Q Okay. And that's -- second tread surface is 25a in  
18 your annotated Figure 2?

19 A Yes. Or in Figure 3, the plane slanting upward  
20 would be the second surface.

21 Q All right. Do you consider the -- what you have  
22 highlighted in red, the plane slanting upward, and  
23 the plane slanting downwardly in Figure 3, to be  
24 running surfaces?

25 MS. JELENCHICK: Objection, form.

1 THE WITNESS: Yes, foot contacts those  
2 surfaces.

3 BY MR. TURNER:

4 Q Do you consider the bottom side of the belt, the  
5 opposite side of the belt to be a running surface?

6 MS. JELENCHICK: Objection, form.

7 THE WITNESS: Not the bottom side  
8 because the runner's not contacting it.

9 BY MR. TURNER:

10 Q But once the belt moves so that's on top, then that  
11 portion of the running belt would be considered a  
12 running surface; is that correct?

13 A Yes.

14 Q Okay. Do you consider the space, that small curve  
15 that's between these planes slanting upward and the  
16 planes slanting downwardly, to be a running  
17 surface?

18 A Chickering teaches that the foot does not touch  
19 that area, so no.

20 Q Right. But we're talking about the Figure 3  
21 embodiment.

22 So the Figure 3 embodiment, which is on  
23 the right side here, do you consider that space  
24 between the planes to be a running surface?

25 A No. Because Chickering has already taught that

1 the -- the overall geometry of the Chickering  
2 device does not change.

3 So therefore, the running surfaces are  
4 still going to be the two separate -- the upwardly  
5 slanting in the back, and downwardly slanting in  
6 the front. And won't be contacting the middle in  
7 between the two.

8 Q So is it your position that a runner using the  
9 treadmill on the right, their foot would never  
10 contact that portion of the belt between the  
11 planes?

12 A That's correct. That's not intended to be that  
13 way, according to Chickering.

14 Q Can you turn back to paragraph 76 of your  
15 declaration?

16 A Okay.

17 Q You have excerpts of Claims 1, 11, and 25  
18 reproduced there; correct?

19 A Correct.

20 Q Do these Claims require that the running surface --  
21 it's an intended running surface, so that's where  
22 the runner intends to contact?

23 MS. JELENCHICK: Objection, form.

24 THE WITNESS: I guess I don't understand  
25 your question.

1 BY MR. TURNER:

2 Q Do these Claims require an intended running  
3 surface?

4 MS. JELENCHICK: Objection, form.

5 THE WITNESS: The word "intended" is not  
6 specifically used in the Claim.

7 BY MR. TURNER:

8 Q So if the Chickering reference said, you know, that  
9 section we had before where -- strike that.

10 If Chickering said that a runner may, on  
11 occasion, step in that small curved portion of  
12 Figure 3 embodiment between the two planes -- even  
13 though he didn't intend to but he just happened to  
14 step on that small curve -- would Chickering now  
15 meet these Claim limitations?

16 MS. JELENCHICK: Objection, form.

17 THE WITNESS: No. Because it's two  
18 planes intersecting at a point. It's not a curved  
19 running surface in Chickering.

20 BY MR. TURNER:

21 Q Right. Those are your planes. But the belt that  
22 has the small curve between these planes, if the  
23 runner were to touch -- contact that by accident  
24 while running, in Chickering, would that meet these  
25 Claims?

1 MS. JELENCHICK: Objection, form.

2 THE WITNESS: No. Because once they're  
3 running, even if they did have that accidental  
4 contact, it's on a flat surface plane, not a  
5 curved surface.

6 BY MR. TURNER:

7 Q So it's your position that the runner's foot would  
8 never contact that curved portion of the running  
9 belt that's shown in Figure 3?

10 A Chickering did note that -- he did give the example  
11 of Figure 3. But he also pointed out that his  
12 primary embodiment was the one that he spends the  
13 most time talking about.

14 And in that primary embodiment he spoke  
15 to the fact that the runner would not touch the  
16 part between the two surfaces.

17 Q You think a person of ordinary skill in the art  
18 would ignore Chickering's disclosure that's related  
19 to something other than his primary embodiment?

20 MS. JELENCHICK: Objection, form.

21 THE WITNESS: No.

22 BY MR. TURNER:

23 Q Can you turn to paragraph 93 of your declaration?

24 A Okay.

25 Q All right. Do you see above paragraph 93 with that



1 heading, you're analyzing the Claim limitation,  
2 "the first and second bearing rails define a curved  
3 top profile"?

4 A Yes.

5 Q Okay. Can you read paragraph 96 of your  
6 declaration to yourself, and let me know when  
7 you're done?

8 A (Witness reviewing document.) Okay.

9 Q Is it your position that the Claims require the  
10 bearing rails to be perfectly straight?

11 MS. JELENCHICK: Objection, form.

12 THE WITNESS: The Claims of the '580  
13 require a curved bearing rail.

14 BY MR. TURNER:

15 Q Can one or more straight bearing rails provide a  
16 curved top profile?

17 MS. JELENCHICK: Objection, form.

18 THE WITNESS: I would guess  
19 hypothetically if you made, you know, infinitely  
20 small, straight bearing rails, you could end up  
21 with a curved profile.

22 BY MR. TURNER:

23 Q So hypothetically this infinitely small bearing  
24 rails, it's your position that infinitely small  
25 bearing rails could provide a curved profile; is

1           that correct?

2                   MS. JELENCHICK: Objection, form.

3                   THE WITNESS: You asked about a series  
4 of straight bearing rails, if I recall.

5                   And I said they'd have to be infinitely  
6 short to allow it to have a curved running surface.

7                   Chickering's bearing rails are straight  
8 because Chickering requires a planar surface.

9 BY MR. TURNER:

10 Q       Okay. Do you recall any of the references that are  
11 included in your Exhibit book that include -- that  
12 provide a curved running surface with a plurality  
13 of short, straight bearing rails?

14 A       Not as I sit here.

15 Q       What is your understanding of the term  
16 "non-planar"?

17 A       The surface is not a plane.

18 Q       So would that include a curved surface?

19 A       Curved, by definition of geometry, is not a plane.

20 Q       All right. What is your understanding of the term  
21 "linear"?

22 A       Depends on the context. But linear, usually, most  
23 people think of a straight line.

24 Q       Okay. Do you agree that multiple linear portions  
25 could provide a profile of a non-planar surface?

1 A Can you repeat that, please?

2 Q Do you agree that multiple linear portions could  
3 provide a profile of a non-planar surface?

4 MS. JELENCHICK: Objection, form.

5 THE WITNESS: Well, again, this is back  
6 to the same discussion we had a few minutes ago.

7 If those linear portions are incredibly  
8 short and they all connect together, you could make  
9 a connection of linear surfaces that somewhat  
10 assume to be the shape of a curve, but it wouldn't  
11 be a smooth curve.

12 BY MR. TURNER:

13 Q Can you turn to the '580 Patent, which is  
14 Exhibit 1001?

15 A Okay.

16 Q And can you turn to Figures 7a through 7h?

17 A Okay.

18 Q What is shown in these figures?

19 A So we call them three of the '580 patents. They  
20 describe Figure 7a as:

21 "A side schematic view of the profile  
22 of the running surface of the manual  
23 treadmill according to an exemplary  
24 embodiment."

25 And 7b through j, 7b through 7j:

1                    "Are sides of schematic views of  
2                    alternative profiles of the running  
3                    surfaces of manual treadmills according to  
4                    alternative exemplary embodiments."

5    Q    All right. Can you turn to column 9, paragraph  
6           beginning with line 26, and read that paragraph to  
7           yourself and let me know when you're done?

8    A    (Witness reviewing document.) That's the one that  
9           starts with "Figures 7b-7h"?

10   Q    Yes.

11   A    Okay.

12   Q    Did you agree that the '580 Patent discloses with  
13           reference to these figures, 7a through 7h,  
14           non-planar, or curved running surfaces, that are  
15           collectively defined by "concave, convex, or  
16           linear" portions?

17           MS. JELENCHICK: Objection, form.

18           THE WITNESS: Yeah. Column 9, line 30,  
19           starting at 29 states:

20           "Each portion has a particular  
21           geometric configuration that is concave,  
22           convex, or linear; collectively, the  
23           portions define the planar running  
24           surface."  
25

1 BY MR. TURNER:

2 Q And again, as we discussed before, linear could  
3 mean straight; is that correct?

4 A Yes.

5 Q And non-planar could mean curved, like a curved  
6 running surface; is that correct?

7 A Well, it's not a plane. It has to be a curve.

8 Q Okay. Can you turn to column 10, line 17, the  
9 paragraph beginning with "According to one  
10 exemplary embodiment"?

11 A Okay.

12 Q Can you read that paragraph to yourself, and let me  
13 know when you're done?

14 A (Witness reviewing document.) Okay.

15 Q So do you agree that the '580 Patent discloses  
16 that:

17 "A linear portion may replace all or  
18 a portion of the curve" of this profile of  
19 the treadmill?

20 MS. JELENCHICK: Objection, form.

21 THE WITNESS: Column 10, line 33 --  
22 sorry, starts at 32 says:

23 "According to another exemplary  
24 embodiment, a linear portion may replace  
25 all or a portion of the curve."

1 BY MR. TURNER:

2 Q And do you see the -- what does the last sentence  
3 of this paragraph say?

4 A "Alternatively, multiple linear portions may be  
5 included in a profile of a non-planar surface."

6 Q So based on this disclosure in the '580 Patent, is  
7 it still your position that Chickering's straight  
8 bearing rails cannot provide a curved running  
9 surface?

10 MS. JELENCHICK: Objection to form.

11 THE WITNESS: Chickering's bearing rails  
12 make a planar running surface.

13 BY MR. TURNER:

14 Q But collectively, can they provide a curved running  
15 surface?

16 A Chickering explicitly discloses two planar running  
17 surfaces.

18 Q If we return back to your declaration in  
19 paragraph 96 --

20 A Okay.

21 Q -- you have a colorful figure there. And what is  
22 that?

23 A That is Figure 3 from Chickering.

24 Q Okay. And are these your annotations in this  
25 Figure 3?

1 A Above the figure here, it says:

2 "Indeed, the straight, non-curved  
3 nature of Chickering's support arms can be  
4 observed even in the figures provided by  
5 Petitioner and Dr. Giachetti."

6 Q Okay. Sorry, go ahead.

7 A I was going to say:

8 "The modified version of Figure 3,  
9 from the Petition, reproduced below."

10 So this would be -- this would be from  
11 the Petition.

12 Q Okay. And how is this modified?

13 MS. JELENCHICK: Objection, form.

14 THE WITNESS: The additional colors were  
15 added. The lines connecting the rollers appear to  
16 be added compared to what's shown in Figure 3 of  
17 paragraph 90 of my report, my declaration.

18 BY MR. TURNER:

19 Q Do you know what the lines connecting the rollers  
20 represent in this annotated version of Figure 3?

21 A Support arms, according to what's at the start of  
22 paragraph 96 in my declaration.

23 Q Okay. And what are -- on the opposing ends of the  
24 support arms, there are some green circles that are  
25 annotated with "Holes".

1 Do you know what that represents?

2 A I probably want to go back and confirm from the  
3 Petition, itself, to see if those are described.

4 Q Okay. Do you have a copy of the Petition?

5 A I expect I do. Don't recall which number it is,  
6 though.

7 MS. JELENCHICK: I don't believe the  
8 Petition is in the notebook. We can get you a  
9 copy. Or you can show him a copy, but it's not in  
10 the notebook.

11 BY MR. TURNER:

12 Q Let's see. Let me do that. Let me share my screen  
13 here.

14 Can you see my screen?

15 A Yes.

16 Q All right. So that -- would you like me to scroll  
17 through? Do you recall where it's shown in here?

18 A Yeah. I don't recall where it is shown in there.

19 Q All right. Well, I'll scroll and see if we find it  
20 here.

21 So I'm on page 30 of the Petition. Does  
22 this look like the figure we were just looking at?

23 A Yes, it does.

24 Q All right. So would you like me to -- why don't I  
25 start on the page prior.



1                   So this is page 29 of the Petition.

2    A           I think you just passed it, maybe.

3    Q           Do you want -- would you like me to go to the top  
4               of this section?

5    A           Well, no, it says something about holes right there  
6               where you were on.

7    Q           Okay. Do you want me to enlarge, or can you see  
8               this?

9    A           No, I can see it. Thank you. I think you need to  
10              go to the next page, please.

11   Q           Okay. So --

12   A           Yeah. Up at the top of that page it's talking  
13              about:

14                       "Adjusting the inclination of the  
15                       tread surface by moving the pins into the  
16                       holes."

17   Q           Okay. All right. So by adjusting that, what does  
18               this figure -- what does the "pivotal connections"  
19               refer to in the middle of the image?

20   A           That would be the points that are hard connected  
21               for the front planar surface and the rear planar  
22               surface -- this plane slanting downwardly and the  
23               plane slanting upwardly.

24                       So it would be the point around which  
25               those two planes rotate, if you move the supports

1           between holes to the front or the rear.

2   Q       Okay.

3   A       Or in the front or the rear.

4   Q       So do you agree in this proposed modification, that  
5           these support arms would pivot about the pivotal  
6           connections; and then the outer ends of these  
7           support arms that are annotated in blue, would be  
8           connected through these holes by pins through these  
9           holes?

10  A       Yes.

11  Q       Okay. All right. I'll stop sharing here. We can  
12           go back to your declaration. So back to this  
13           annotated Figure 3, in paragraph 96 of your  
14           declaration.

15                        Would these support arms pivot to allow  
16           adjustment of the angle if the inner ends of the  
17           support arms contacted each other?

18  A       If -- not exactly sure what you asked, but let me  
19           try to answer.

20                        If the inner -- if the two support arms  
21           were rigidly connected to one another at the  
22           intersection point of the two planes, then they  
23           would move relative to one another.

24                        So if you dropped the front down, the  
25           back would have to come up. It wouldn't move

1 independently. It would maintain -- the front and  
2 rear planar surfaces would maintain the same obtuse  
3 angle -- would have to maintain the same obtuse  
4 angle.

5 Q Okay. So if you made that connection, would you  
6 still have independent angle adjustment of the  
7 front portion of the treadmill and the rear portion  
8 of the treadmill?

9 A If they were rigidly connected at that point, you  
10 would have two planar surfaces intersecting at that  
11 point.

12 Q All right. So can you scroll down to paragraph 97  
13 of your declaration?

14 A Okay.

15 Q And do you see your annotated Figure 3?

16 A Yes.

17 Q Now, here you're showing that the proposed support  
18 arms meet at an angle; is that correct?

19 A Correct.

20 Q Now, if these support arms met at an angle, as  
21 shown in your annotated Figure 3, would you still  
22 be able to provide independent adjustment of the  
23 front and rear portions of the treadmill?

24 A Well, in that image I said the proposed support  
25 arms meet at an angle.

1 I don't say -- I don't specifically say  
2 that they're connected there. It's an illustration  
3 of the geometry of the two planar sections.

4 Q Okay. So if they met but they weren't physically  
5 connected, would you still be able to adjust the  
6 support arms independently?

7 A Yes. Because back to Figure 3 in paragraph 96, you  
8 have the pivotal connections defined there.

9 So therefore, if you adjusted the end,  
10 either end, say, the upwardly slanting end of  
11 the -- sorry.

12 The downward slanting end, you adjusted  
13 that one up or down, it would pivot about the  
14 pivotal connection in the leftmost red outlined  
15 portion there.

16 Q You think if these support arms contacted each  
17 other, you'd still be able to pivot the rest of the  
18 support arms?

19 A Depends exactly what that contact was.

20 Q Okay. We've been going about an hour and a half.  
21 You guys want to take a break?

22 MS. JELENCHICK: Sure.

23 THE WITNESS: Yes, please.

24 (Short recess taken at 10:34 a.m.)  
25

(Back on the record at 10:47 a.m.)

BY MR. TURNER:

Q Welcome back, Dr. Blair.

A Thank you.

Q Can you turn to paragraph 101 of your declaration?

A Okay.

Q So now we're going to talk about the Socwell reference. And do you see here, you're analyzing the limitations of a plurality of bearings?

A Yes.

Q Okay. Can you turn to paragraph 104 of your declaration and read that paragraph to yourself, and let us know when you're done?

A (Witness reviewing document.) Okay.

Q All right. Now, is it your position that the Claims require that the plurality of bearings must be positioned below and have some kind of weight-bearing relationship?

MS. JELENCHICK: Objection, form.

THE WITNESS: It's stated as such in the specification.

BY MR. TURNER:

Q Is it stated in the Claims that you have reproduced in paragraph 101 of your declaration?

A Not in that little sub piece of the Claim.

1 Q All right. Why don't we -- do you have  
2 Exhibit 1001 with you, which is the '580 Patent?  
3 A Yes.  
4 Q All right. Can you turn to Claim 1, which would be  
5 column 32, starting at lines 47, 48.  
6 A Okay.  
7 Q All right. Now, there's -- so there's the entire  
8 Claim 1. Does Claim 1, anywhere in it, say that  
9 the plurality of bearings must all be positioned  
10 below and have some kind of weight-bearing  
11 relationship with the running belt?  
12 A So the phrase column 32, lines starting at 57:  
13 "A running belt supported by the  
14 first bearing rail and the second bearing  
15 rail and disposed about the front shaft  
16 and the rear shaft, wherein the running  
17 belt follows a curved running surface."  
18 So it states explicitly that the running  
19 belt is supported by the first and second bearing  
20 rail.  
21 Q Okay. But now, for your analysis here, we're  
22 looking at the Claim language, which is plurality  
23 of bearings; right?  
24 So if you scroll up to above the running  
25 belt limitation, we have "a first bearing rail

1           having a plurality of bearings."

2                   Do you see that limitation? So those  
3           lines, what is it --

4   A       Yes.

5   Q       -- 53 and 54. So the bearing rail limitation is --  
6           does the first bearing rail limitation include any  
7           limitations regarding positioning? That it must be  
8           positioned below the running belt, and that it has  
9           some type of weight-bearing relationship with the  
10          running belt?

11                   MS. JELENCHICK: Objection, form.

12                   THE WITNESS: Not specifically in that  
13          line that you mentioned. That is followed below,  
14          starting line 57, as I mentioned a moment ago.

15   BY MR. TURNER:

16   Q       All right. Now, does the second bearing rail  
17          limitation, which starts at line 55, does that  
18          limitation, a bearing rail:

19                   "Having a plurality of bearings. The  
20          second bearing rail attached to a right  
21          side of the frame."

22                   In that limitation, the second bearing  
23          rail limitation, say anything about its positioning  
24          below, and have some kind of weight-bearing  
25          relationship with the running belt?

1 MS. JELENCHICK: Objection, form.

2 THE WITNESS: No, not specifically in  
3 those two lines. But similarly, starting in line  
4 57, it mentions a running belt being supported by  
5 the first and second bearing.

6 BY MR. TURNER:

7 Q So that limitation there:

8 "A running belt supported by the  
9 first bearing rail and the second bearing  
10 rail and disposed about the front shaft  
11 and the rear shaft, wherein the running  
12 belt follows a curved running surface."

13 That's the limitation we're talking  
14 about?

15 A Correct.

16 Q All right. Does that section say anything -- does  
17 it reference the plurality of bearings?

18 A No. The plurality of bearings are referenced in  
19 the two sentences or the two lines previous.

20 Q Are you proposing a construction of the term  
21 "bearings" or "plurality of bearings" to require  
22 this position in weight-bearing limitation?

23 A No.

24 Q Do you know if the District Court construed the  
25 term "bearings" or "plurality of bearings"?



1 A Referencing the Claim construction order,  
2 Exhibit 1033 -- and I looked at this for a little  
3 bit, so I wanted to make sure.

4 Repeat the question. After all my  
5 flipping through the pages, I forgot the exact  
6 detail.

7 Q Did the District Court construe the term "bearing"  
8 or "plurality of bearings"?

9 A No.

10 Q Okay. All right. So if we go back to your  
11 paragraph 104, if this positioning and  
12 weight-bearing relationship is not expressly in the  
13 plurality of bearings Claim limitation, and the  
14 District Court did not provide a construction, and  
15 you're not providing a construction, why would a  
16 POSA understand that:

17 "The plurality of bearings must all  
18 be positioned below and have some kind of  
19 weight-bearing relationship with the  
20 running belt"?

21 MS. JELENCHICK: Objection, form.

22 THE WITNESS: Because of the description  
23 of the specification of '580.

24 BY MR. TURNER:

25 Q And this is the direction that you have reproduced

1 in paragraph 104?

2 A Yes.

3 Q Does this paragraph that you have reproduced in  
4 paragraph 140 of your 1004 -- so this is from '580  
5 Patent at column 11, 58 through 60.

6 Does it reference anything in this block  
7 quote about the positioning of the bearings being  
8 below the running belt?

9 A It doesn't explicitly say the word "below" but it  
10 does say "is supported".

11 Q So it's your position that the term "support" means  
12 this weight-bearing relationship?

13 A A person of ordinary skill in this context would  
14 assume that, yes.

15 Q Now, did you cite to any other references, any  
16 outside of the '580 Patent, for supporting this  
17 position?

18 For example, did you cite to a dictionary  
19 or a textbook?

20 A Flipping through this now, no. And if I would  
21 have, I would have probably added that to my list  
22 of references or -- list of references, yeah.

23 Q All right. So your position is based on the  
24 description in the '580 Patent, itself:

25 "A POSA" -- a person of ordinary

1 skill in the art -- "would understand that  
2 the 'plurality of bearings' must be  
3 positioned below and have some kind of  
4 weight-bearing relationship with the  
5 running belt."

6 Is that correct?

7 A Yes.

8 Q Now, is the '580 Patent consistent on the usage of  
9 the term "bearings"? That a bearing must all be  
10 positioned below whatever reference it's providing  
11 a bearing for, and have some type of weight-bearing  
12 relationship?

13 A Certainly, in the case of the bearing and the  
14 bearing rails.

15 Q Can you turn to figure 36 of the '580 Patent?

16 A 36, yes.

17 Q What is shown in figure 36?

18 A Column 5, line 6:

19 "Figure 36 is perspective view of a  
20 one-way bearing for the manual treadmill  
21 according to the exemplary embodiment  
22 shown in Figure 1."

23 Q All right. And which element in Figure 36 is the  
24 one-way bearing?

25 A So in Column 27, starting at line 18, talks about

1 the one-way bearing assembly 1300 has a housing  
2 1302, inner ring 1304, cooperates with the shaft  
3 68, the outer ring 1306, sprags not shown 1304.

4 So it's a combination of 1304 and 1306.

5 Q So you're saying in this Figure 36 embodiment, the  
6 inner ring 1304 and outer ring 1306 are bearings;  
7 is that correct?

8 A No. What I'm saying is, that if those are  
9 components of the bearings, they're components of  
10 the one-way bearing. In the specification, Column  
11 27, line 16, says "the one way bearing assembly  
12 1300". So various parts of that.

13 Q All right. Is this one-way bearing disposed -- or  
14 I'm sorry, is this one-way bearing positioned below  
15 the running belt?

16 MS. JELENCHICK: Objection, form.

17 THE WITNESS: It is connected to the  
18 rear shaft 68. And the rear shaft is below the  
19 running belt.

20 BY MR. TURNER:

21 Q Okay. Does the one-way bearing have a  
22 weight-bearing relationship with the running belt?

23 MS. JELENCHICK: Objection, form.

24 THE WITNESS: It would be hard to say  
25 without actually taking some measurements or

1           trying to, you know, really look at maybe an  
2           overall structural model of the system.

3                   Because the rear shaft certainly has a  
4           function of carrying some of the weight of the  
5           running belt. And if that weight of the running  
6           belt is transmitted structurally through that  
7           bearing, then there would be some weight-bearing  
8           capacity of that.

9   BY MR. TURNER:

10   Q       Did the one-way bearing assemblies typically  
11           provide a weight-bearing relationship to a shaft  
12           that they're mounted about or disposed about?

13                   I think that's the term they used here,  
14           "disposed about".

15                   MS. JELENCHICK: Objection, form.

16                   THE WITNESS: It totally depends on how  
17           they're built into the overall system.

18   BY MR. TURNER:

19   Q       Does the '580 Patent describe the one-way bearing  
20           assembly as providing a weight-bearing relationship  
21           with the running belt?

22   A       No.

23   Q       Can you turn to paragraph 108 of your declaration,  
24           please?

25   A       Okay.

1 Q Can you read this paragraph to yourself, and let me  
2 know when you're done?

3 A I'm going to back up and read a couple paragraphs  
4 because this one starts by saying:

5 "Notably, the foregoing is true."

6 So I want to get the foregoing parts, as  
7 well.

8 Q That's fine.

9 A Okay.

10 Q Now, let's see, the last sentence of paragraph 108  
11 where you say:

12 "Despite describing the 'rollers' and  
13 'wheels' in significant detail, this  
14 system is never described as incorporating  
15 'bearings'."

16 Do you see that?

17 A Yes.

18 Q So what do you mean by that sentence?

19 A Well, pretty much explicitly what it says. And in  
20 the reference, for example, 22:47 through 23:28,  
21 that bearings are not described as being  
22 incorporated into the rollers and wheels of these  
23 systems.

24 Q So does the '580 Patent, is it very specific on  
25 terminology, and it doesn't mix terminology?

1                   So when it's talking about bearings, it's  
2                   only talking about bearings. And rollers are not  
3                   bearings? Is that your position?

4                   MS. JELENCHICK: Same objection.

5                   THE WITNESS: I'd say my position is to  
6                   one of ordinary skill in the art -- without going  
7                   back through and reading this, again, that it  
8                   would be clear to one of ordinary skill in the  
9                   art, which -- how the '580 is distinguishing  
10                  between those terms.

11 BY MR. TURNER:

12 Q           So how is the '580 Patent distinguishing between  
13           rollers, wheels, and bearings?

14 A           Well, it specifically calls out bearings, for  
15           example, as part of the bearing rail and describes  
16           that structure.

17 Q           So we just talked about the one-way bearing. Is  
18           that a different bearing that we should -- a POSA  
19           would not even look at, would not consider in this  
20           analysis?

21                   MS. JELENCHICK: Objection, form.

22                   THE WITNESS: I didn't understand that  
23                   question. I'm sorry.

24 BY MR. TURNER:

25 Q           All right. So you just -- you mentioned the

1           specificity it uses with the bearing as part of the  
2           bearing rail.

3                       So my question was: Is that specificity  
4           different than the bearing, as used with reference  
5           to the one-way bearing that's illustrated in figure  
6           36?

7   A       Well, a person of ordinary skill would understand  
8           that those are two different bearings or two  
9           different types of bearings.

10   Q       So a POSA would have to look into the context, not  
11           just the word "bearing" to understand its meaning  
12           in the '580 Patent; is that correct?

13   A       Yes, I would say so. And I mean, the example that  
14           you just stated, I mean, they're talking about  
15           one-way bearing. They're talking about one-way  
16           bearing in the specification. They're not just  
17           hanging it out there as bearing alone.

18   Q       So if we go back to Claim 1 of the '580 Patent --  
19           so this is Exhibit 1001, column 32.

20                       So the limitation we were talking about  
21           before the bearing rail limitation:

22                       "A first bearing rail having a  
23           plurality of bearings, the first bearing  
24           rail attached to a left side of the  
25           frame."



1 Correct?

2 A Yes.

3 Q So based on those limitations, would that be met by  
4 a reference that showed a one-way bearing assembly  
5 that includes a plurality of bearings and is  
6 attached to the left side of the frame?

7 MS. JELENCHICK: Objection, form.

8 BY MR. TURNER:

9 Q Such as that illustrated in Figure 36 of the '580  
10 Patent?

11 MS. JELENCHICK: Same objection.

12 THE WITNESS: A person of ordinary  
13 skill, reading through this, would realize that  
14 bearings, you know, with the -- considering the  
15 entire specification, would realize that the  
16 bearings that are mated to the bearing rail  
17 described in Claim 1, are different than the  
18 one-way bearing that's described in later  
19 Claims -- actually, later in this Claim.

20 BY MR. TURNER:

21 Q And where is that described in this Claim?

22 A Well, it's implied in the safety device, the bottom  
23 of the page.

24 Q Okay. Can you read paragraph 113 of your  
25 declaration, and let me know when you're done?

1 A (Witness reviewing document.) Okay.

2 Q Is it your position that Socwell's rollers 98 do  
3 not meet the bearing limitations because they're  
4 referred to as rollers and not bearings?

5 MS. JELENCHICK: Objection, form.

6 THE WITNESS: As I stated in 113 here,  
7 paragraph 113 of my declaration:

8 "A person of ordinary skill,  
9 therefore, would not understand them to  
10 constitute 'bearings' at least because the  
11 '580 Patent's 'roller and wheel  
12 assemblies' and their associated 'rollers'  
13 and 'wheels' are consistently described as  
14 being structurally and functionally  
15 distinct from the plurality of bearings  
16 associated with the '580 Patent's bearing  
17 rails."

18 BY MR. TURNER:

19 Q All right. Can you turn to paragraph 121 of your  
20 declaration?

21 A Okay.

22 Q And you see here, based on the heading, that you're  
23 analyzing the running belt limitation?

24 A "Running belt supported by first bearing rail and  
25 second bearing rail", yes.

1 Q Okay. Can you read paragraph 127 of your  
2 declaration to yourself, and let me know when  
3 you're done?

4 A (Witness reviewing document.) Okay.

5 Q So here you're saying that the term "support"  
6 indicates "some type of weight-bearing  
7 relationship"; is that correct?

8 A Yes. In the context of the '580.

9 Q Is that specific language, the "weight-bearing  
10 relationship", is that included in the Claim?

11 MS. JELENCHICK: Object to form.

12 THE WITNESS: In Claim 1 of the '580?

13 BY MR. TURNER:

14 Q Yes.

15 A No. That was my answer. Not in Claim 1 of the  
16 '580.

17 Q Is it included in any of the Claims of the '580  
18 Patent?

19 A Not, explicitly, no.

20 Q Are you proposing a Claim construction for the term  
21 "support" bringing this weight-bearing  
22 relationship?

23 A No.

24 Q Do you know if the District Court construed the  
25 term "support"?

1 A Reflecting back on me flipping through that  
2 document a few minutes ago, I don't recall that it  
3 was there. I can flip, again, to confirm.

4 Q Okay.

5 A Did not.

6 Q And the document you were just referencing, that  
7 was Exhibit 1033, the District Court's Claim  
8 construction order; correct?

9 A Yes.

10 Q Okay. Can you turn to paragraph 133 of your  
11 declaration, please?

12 A Okay.

13 Q All right. Do you see from the header here, you're  
14 analyzing the Claim term "disposing a running belt  
15 on the plurality of bearings" as used in Claim 25?

16 A I thought you suggested paragraph 133.

17 Q I'm sorry. 134.

18 A Oh, okay. That makes sense, then.

19 Q Okay. All right. Can you turn to paragraph 139,  
20 please.

21 A Okay.

22 Q All right. Can you read that to yourself, and let  
23 me know when you're done?

24 A (Witness reviewing document.) Okay.

25 Q So here is it your position that the term "disposed

1           on" means:

2                       "It must be positioned below the  
3           running belt such that the structure  
4           supports and/or bears at least some of the  
5           weight of the running belt."

6                       Is that correct?

7   A       Yes. That's what my declaration says there in  
8           paragraph 139.

9   Q       Okay. Is this position language and weight --  
10          weight support terminology, is that included in the  
11          Claim language, itself?

12                      MS. JELENCHICK: Objection, form.

13   BY MR. TURNER:

14   Q       Again, we're talking about Claim 25. So the full  
15          Claim is in column 36 of the '580 Patent if you'd  
16          like to reference that.

17   A       Thank you. That Claim says:

18                      "Disposing a running belt on the  
19          plurality of bearings of the first bearing  
20          rail and the second bearing rail, such  
21          that the running belt follows a top curved  
22          running surface corresponding to the" --  
23          sorry, "corresponding to the curved top  
24          profile of the first and second bearing  
25          rails."

1 Q So is it your position that that Claim limitation  
2 requires a specific position of the bearings  
3 relative to the belt?

4 A Well, that Claim says:

5 "Disposing a running belt on the  
6 plurality of bearings of the first bearing  
7 rail and second bearing rail."

8 Q So by "disposed on" does that mean on a specific  
9 position of the bearing rails -- or sorry, excuse  
10 me of the bearings?

11 A Well, the follow-on sentence states:

12 "Such that the running belt follows a  
13 top curved running surface corresponding  
14 to the curved top profile of the first and  
15 second bearing rails."

16 So reading all that together, a person of  
17 ordinary skill would understand that the running  
18 belt is on top of the bearings on the bearing  
19 rails.

20 Q Okay. Now, does that Claim include any type of  
21 specific weight-bearing relationship?

22 A Nothing specific in the wording of the Claim,  
23 itself.

24 Q Okay. Are you proposing a Claim construction for  
25 the term "disposing", "disposed on"?

1 A No.

2 Q Did the District Court construe the term "disposed"  
3 or "disposing" to include a weight-bearing  
4 relationship?

5 A No. From reviewing Exhibit 1033.

6 Q Okay. Can you turn to paragraph 142 of your  
7 declaration? Do you see here that you're analyzing  
8 the motivation "to combine Magid with Socwell or  
9 Chickering"?

10 A Yes.

11 Q All right. Can you read paragraph 143 to yourself,  
12 and let me know when you're done?

13 A (Witness reviewing document.) Okay.

14 Q What do you mean by the Magid having a  
15 "therapeutic" purpose?

16 A If I look at paragraph 58 of my declaration:

17 "Magid discloses that, unlike the  
18 prior art, its design is intended to be  
19 used by" quote -- or "used 'by people with  
20 uncoordinated feet movements, such as  
21 small children, physically handicapped  
22 people, and old people'."

23 It also teaches that -- skipping ahead a  
24 bit, same paragraph:

25 "[A]lso teaches that each of its

embodiments is to be used either 'in  
hospitals or retirement homes' or as a  
'baby stroller' or a 'baby chair'."

Q So you're saying a therapeutic purpose is based on  
who uses the treadmill and where they use the  
treadmill; is that correct?

MS. JELENCHICK: Objection, form.

THE WITNESS: I'm sorry, can you remind  
me where I stated -- what stated "therapeutic"?

BY MR. TURNER:

Q So we were -- we were -- we started with  
paragraph 143 of your declaration. And then I  
think you went back to the overview of Magid in  
paragraphs 57, 58 of your declaration.

A Okay. Yeah, okay. Now that I've got my bearings  
in here again, can you re-ask the question, please?

Q Sure. Are you saying that a therapeutic purpose  
for a treadmill is based on who uses the treadmill  
and where they use the treadmill?

A No. I think in this paragraph what I did was  
basically summarize in a very short single word,  
"therapeutic". The longer description that Magid  
gave in his use cases that I just read back from  
the earlier section of my report.

Q So if the Chickering reference described that its



1 treadmill could be used by a child, would it now  
2 have a therapeutic purpose?

3 MS. JELENCHICK: Objection, form.

4 THE WITNESS: In the way I've used the  
5 word in here to describe the cases that Magid has  
6 in there, yes, that would be the case.

7 But that's not what Chickering described  
8 the use of it for. Chickering described it as an  
9 exercise device.

10 BY MR. TURNER:

11 Q So are you distinguishing between an exercise  
12 device and a therapy device, as far as treadmills?

13 A The disclosures -- the differences and references  
14 of disclosures by the various patentees here, in  
15 particular, Magid, was very focused on the list of  
16 the class of applications that I stated earlier in  
17 my report.

18 Q So is it your position that Magid is directed to a  
19 therapy or therapeutic treadmill; whereas,  
20 Chickering and Socwell are directed to exercise  
21 treadmills?

22 A Well, I would say that Magid is directed toward the  
23 use cases I gave before. And Socwell and  
24 Chickering are directed toward exercise, as noted  
25 in their specification.

1 Q Would a person of ordinary skill in the art have  
2 known that they could use the Chickering treadmill  
3 for therapy?

4 MS. JELENCHICK: Object to form.

5 THE WITNESS: I would think a person of  
6 ordinary skill would look at Chickering and think  
7 that is probably not the best use of that device.

8 BY MR. TURNER:

9 Q How would you describe using a treadmill for  
10 therapy?

11 MS. JELENCHICK: Form.

12 THE WITNESS: I guess it depends on --  
13 it depends on what the therapy case is.

14 BY MR. TURNER:

15 Q So if I walked on a treadmill, would that be  
16 therapeutic?

17 A I mean, it's certainly better than sitting on the  
18 couch, from that aspect and getting exercise.

19 Q Okay. Can a treadmill be used for both exercise  
20 and therapy?

21 A Yes. If the treadmill is designed as such.

22 Q So how could the Chickering treadmill be designed  
23 for therapy?

24 MS. JELENCHICK: Objection, form, scope.

25 THE WITNESS: I would probably do a

1 fairly serious redesign of the Chickering and not  
2 have the two planar surfaces and take that to a  
3 single planar surface. You'd want to add safety  
4 things.

5 The Magid has some nice applications and  
6 clear description of handrails. And even of feet  
7 in some cases. So it largely depends on what the  
8 end use application is.

9 BY MR. TURNER:

10 Q So are you saying a flat treadmill with handrails  
11 is better suited for therapeutic use, than a curved  
12 treadmill without handrails?

13 MS. JELENCHICK: Same objection.

14 THE WITNESS: Again, it totally depends  
15 on what the therapy actually is that's prescribed  
16 in the use case.

17 BY MR. TURNER:

18 Q Can you turn to the Socwell reference?

19 A The Patent?

20 Q Yes, the Patent. I forget which Exhibit Number  
21 that is.

22 A Me, too.

23 Q I think it's Exhibit 1011.

24 A Okay.

25 Q Can you look at Figure 1 of Socwell?

1 A Yes.

2 Q Does Socwell include handrails?

3 A The figure 1 shows cross bar 130. And it says,  
4 "Preferably crossbar" -- I'm sorry, reading from  
5 column 5, line starting roughly 46 of the Socwell  
6 Patent. It says that:

7 "The crossbar 130 functionally  
8 supports a console substantially above the  
9 upper surface of the support frame."

10 Also says further the:

11 "Crossbar 130 may comprise a pivotal  
12 engagement 140 which provides a meeting  
13 which provides a means for pivotally  
14 engaging one or more handles, 134, 144 in  
15 relation to the crossbar 130 at the  
16 opposing sides thereof."

17 Q All right. So since Socwell has these handles 134  
18 and 144, would a person of ordinary skill in the  
19 art understand that they could use this treadmill  
20 for therapy?

21 MS. JELENCHICK: Objection, form.

22 THE WITNESS: If we go to column 12 of  
23 Socwell, line 55, it describes how these handles  
24 are pivotally connected to the crossbars, so that  
25 they would move if you handled them.

1                   And that the user would -- I'm on column  
2                   13, top of column 13, the users grab, holding them  
3                   while exercising:

4                   "And, accordingly, pivot the handles  
5                   back and forth in correspondence to the  
6                   user's stride, whereby potentially  
7                   invoking an aerobic workout."

8 BY MR. TURNER:

9 Q           So are you saying because they're pivotal, they  
10           don't provide support for therapeutic use?

11 A           Here they're described as being used for exercise.  
12           So if you consider exercise as a type of  
13           therapeutic use, then Socwell is describing them  
14           for exercise.

15 Q           I'm sorry, if you consider exercise as a type of  
16           therapeutic use, Socwell is describing them for  
17           exercise?

18 A           Yes.

19 Q           Is he describing them for therapy, also?

20 A           He does not use the word "therapy".

21 Q           Okay. Can you turn to column one of Socwell, the  
22           first paragraph under the "Background of the  
23           Invention" section.

24 A           Okay.

25 Q           Can you read that paragraph to yourself, please?

1 A (Witness reviewing document.) Okay.

2 Q So here Socwell's describing walking on the  
3 treadmill. Would this walking be a type of  
4 therapeutic use?

5 A Socwell doesn't use the term "therapy",  
6 "therapeutic".

7 Q Okay. So is it your position that if a reference  
8 doesn't use the term "therapy" or "therapeutic  
9 use", then that treadmill cannot be used for  
10 therapeutic use?

11 A No. I was using -- as I mentioned earlier, I was  
12 using the word "therapeutic" to describe the class  
13 of users particularly described by Magid. So the  
14 use cases that he described.

15 Q So if Chickering -- or sorry, excuse me.

16 So if Socwell described its use as  
17 therapeutic, but it didn't expressly say that the  
18 treadmill could be used by young children and old  
19 people in hospitals and retirement homes, then it  
20 would not be therapeutic, as used in Magid? Is  
21 that your position?

22 A My position is that the Magid device, as designed,  
23 is designed for a very specific class of users.

24 And Socwell is designed and more focused  
25 on an exercise device, without being prescriptive

1 about the types of users.

2 Q All right. Do you have the Schonenberger  
3 reference, which is Exhibit 1010?

4 A Yes.

5 Q Exhibit 1010 -- and this is the Schonenberger  
6 Patent that ends in '337.

7 Those are the last three digits of the  
8 Patent; is that correct?

9 A Yes.

10 Q Okay. Can you turn to column 1, the paragraph  
11 starting with line 10, please?

12 A Yes.

13 Q Can you read that paragraph to yourself, and let me  
14 know when you're done?

15 A Okay. (Witness reviewing document.) Okay.

16 Q So Schonenberger here describes that the present  
17 invention can be used for "physical exercise" and  
18 "walking therapy for handicapped people".

19 Now, does this type of therapy that's  
20 described for the Schonenberger Patent, is that the  
21 same type of therapy that Magid describes as its  
22 therapeutic purpose?

23 MS. JELENCHICK: Objection, form, scope.

24 Mr. Turner, I understand that

25 Schonenberger is a reference used in the other IPR

1 proceedings. If I could just understand, is it  
2 your intention to be asking questions about this  
3 reference and relevance to those proceedings?

4 Or is this limited to the application of  
5 this reference, vis-a-vis the '580 Patent?

6 MR. TURNER: This is one of your  
7 Exhibits in your Exhibit book for this IPR; is  
8 that correct?

9 MS. JELENCHICK: Well, it's actually  
10 your Exhibit.

11 MR. TURNER: Okay.

12 MS. JELENCHICK: It's Exhibit 1010,  
13 which is an Exhibit that, yes, Dr. Blair did  
14 consider.

15 I just want to be clear, that if you're  
16 going to ask questions about Schonenberger, in view  
17 of Counsels' agreement to try and be judicious  
18 about the use of Dr. Blair's time, I'd like to make  
19 his other declaration available to him that  
20 discusses this reference as the bases of  
21 Petitioner's challenge.

22 MR. TURNER: I'm just trying to  
23 understand if there's any other Patent reference  
24 that would qualify as a therapeutic use.

25 But we can hold off. Let's hold off on



1           Schonenberger. We'll be back this afternoon to  
2           talk about that. We can hold for that. That's  
3           fine.

4                   MS. JELENCHICK: To be clear,  
5           Mr. Turner, you can ask that line of questions.  
6           But to the extent that you're going to ask him  
7           about Schonenberger in combination with any other  
8           references, I think, to be equitable here, we  
9           should make clear and -- that that combination is  
10          proffered by Petitioner in a separate proceeding.

11                   MR. TURNER: Okay. We can move on.

12 BY MR. TURNER:

13 Q       Can you turn to paragraph 159 of your declaration,  
14       please.

15 A       Okay.

16 Q       All right. Can you read that paragraph to  
17       yourself, and let me know when you're done?

18 A       (Witness reviewing document.) Okay.

19 Q       Is it your position that "people with uncoordinated  
20       feet movements such as small children, physically  
21       handicapped people, and old people" could not use  
22       curved manual treadmills?

23 A       In this paragraph I state, paragraph 159, that:

24                   "A curved running surface, like that  
25           in Socwell or multi-planar running surface

1           like that in Chickering would be  
2           difficult, if not practically impossible,  
3           to adapt for use by 'people with  
4           uncoordinated feet movements.'"

5   Q       And you consider "small children, handicapped  
6           people, and old people" to be people with  
7           uncoordinated feet movements; is that correct?

8   A       I believe that quote is directly from Magid. He  
9           taught that.

10   Q       Okay. Can you turn to paragraph 166 of your  
11           declaration, please.

12   A       Okay.

13   Q       Can you read that paragraph, and let me know when  
14           you're done?

15   A       (Witness reviewing document.) Okay.

16   Q       Now, your sentence here:

17                 "When a user steps onto the rear of  
18           the treadmill having a curved running  
19           surface, the user's weight may cause the  
20           treadmill belt to move in an unintended  
21           rotational direction, particularly if the  
22           user inadvertently mounts the device from  
23           or towards the rear."

24                 Do you see that sentence?

25   A       Yes.

1 Q Are you identifying a problem with the treadmill as  
2 described in Socwell?

3 A No. I'm just noting that the way the Socwell was  
4 designed, as I state in the statement -- the  
5 sentence before:

6 "The treadmill belt of Socwell is  
7 free to move in both a forward direction  
8 and a rearward direction."

9 So I'm just adding to that what that --  
10 adding to the description how the Socwell treadmill  
11 worked.

12 Q Okay. So are you identifying a potential problem  
13 or issue with the Socwell treadmill?

14 A Socwell has already addressed that issue. He  
15 doesn't recognize the problem.

16 He explains that the curved running  
17 surface -- that's "fall off the back" part.

18 But Socwell talks about having adequate  
19 friction during rotation, so that doesn't become a  
20 problem.

21 Q Do you think a person of ordinary skill in the art  
22 reading Socwell would not see this additional  
23 problem like you identified here when a user steps  
24 onto the rear of the treadmill?

25 A Well, as I stated, a person of ordinary skill would

1 not modify Socwell to include unidirectional  
2 control because of the teachings of Socwell.

3 And then to the later end of that same  
4 paragraph on the top of page 91, Socwell discloses  
5 the need for "adequate friction during rotation at  
6 all". He:

7 "Advocates for sufficient friction in  
8 any direction of belt motion, not just the  
9 unidirectional movement."

10 Not unidirectional movement.

11 Q So is it your position that a person of ordinary  
12 skill in the art would not identify this problem in  
13 Socwell and try to modify Socwell to solve that  
14 problem?

15 A Well, Socwell taught that he already solved that  
16 problem by the friction.

17 Q So if a person of ordinary skill in the art thought  
18 Socwell's solution was insufficient, would they be  
19 motivated to further modify Socwell to address the  
20 problem that you addressed here about when a user  
21 steps onto the treadmill?

22 MS. JELENCHICK: Objection, form.

23 THE WITNESS: I think that's somewhat  
24 the root of all invention, right, is someone looks  
25 at something and says, We can do it better or

1 different.

2 BY MR. TURNER:

3 Q So the reference, itself, doesn't need to identify  
4 the solution. A person of ordinary skill in the  
5 art could review a reference and contemplate  
6 additional solutions that are not described in it;  
7 is that correct?

8 MS. JELENCHICK: Objection, form.

9 THE WITNESS: Can you say that, again,  
10 please?

11 BY MR. TURNER:

12 Q So you mentioned the root of all invention. By  
13 "root of all invention", do you mean that a  
14 inventor would consider or reference and maybe  
15 identify additional improvements to the reference?

16 Is that what you consider to be the "root  
17 of all invention"?

18 A Usually an invention is trying to solve a  
19 particular problem that a inventor identifies. How  
20 they identify that problem, there's a number of  
21 ways to do that.

22 They could just be users struggling to do  
23 something. Say, Hey, there's got to be a better  
24 way to do this. So let's invent a solution to that  
25 problem.

1 Q So could a person of ordinary skill in the art have  
2 read Socwell and identified a problem that is not  
3 addressed in Socwell, or not potentially solved,  
4 and come up with a new solution, even though  
5 Socwell didn't describe the same solution?

6 MS. JELENCHICK: Objection, form.

7 THE WITNESS: Can you repeat that? I'm  
8 just having trouble following that question there.

9 BY MR. TURNER:

10 Q Let me rephrase that. Could a person of ordinary  
11 skill in the art have read Socwell and come up with  
12 a different solution to the problems identified in  
13 Socwell, than Socwell, itself?

14 A So Socwell, as described in the Socwell Patent  
15 is -- you know, the Socwell system, he's addressed  
16 that problem.

17 So a person of ordinary skill in the art  
18 wouldn't look to the Socwell invention and say, I  
19 need to modify Socwell, because Socwell already  
20 has, for his configuration and his design of the  
21 treadmill.

22 The Socwell, as it's described in the  
23 specification, has already addressed the concern.

24 Q So it's your position that if Socwell provides a  
25 solution, a person of ordinary skill in the art

1 would not try to provide a different or improved  
2 solution; is that correct?

3 MS. JELENCHICK: Objection, form.

4 THE WITNESS: It would depend on what  
5 the person of ordinary skills intentions are.

6 MR. TURNER: So it's about noon now. Do  
7 you guys want to break for lunch or keep going?

8 MS. JELENCHICK: Break for lunch.

9 MR. TURNER: How long do you want to  
10 break?

11 MS. JELENCHICK: Our lunch is here. So  
12 however long Dr. Blair would like.

13 THE WITNESS: Half-hour is good.

14 MS. JELENCHICK: 30 minutes.

15 MR. TURNER: So it's 12:09. So we'll  
16 target coming back 12:40. Does that sound good?

17 MS. JELENCHICK: Sounds good.

18 (Short recess taken at 12:09 p.m.)

19 (Back on the record at 12:56 p.m.)

20 BY MR. TURNER:

21 Q Welcome back, Dr. Blair.

22 A Thank you.

23 Q So if you recall, before the break we were talking  
24 about rationale to combine Magid with Chickering or  
25 Socwell.

1 Do you recall that?

2 A Yes.

3 Q Okay. And now, can you turn back to your  
4 declaration, paragraph 167, please.

5 A Okay.

6 Q And can you read 167 to yourself, and let me know  
7 when you're done?

8 A (Witness reviewing document.) Okay.

9 Q All right. So again, you have a sentence in the  
10 middle of this paragraph regarding:

11 "If a user were to mount the device  
12 from the rear and step only on the upward  
13 angled plane, the user's weight may cause  
14 the treadmill belt to move in an  
15 unintended rotational direction."

16 Do you see that?

17 A I do.

18 Q Now, is that a problem with the Chickering device?

19 A It is a reality with the Chickering device.

20 Q Okay. Does Chickering identify this problem or  
21 reality?

22 A I'd have to go back and read the whole  
23 specification, which is actually kind of short.  
24 But I don't -- I don't recall that he pointed it  
25 out as being a problem.



1 Q Okay. But as -- you mentioned it being a reality.

2 So does that mean a person of ordinary  
3 skill in the art would have understood this problem  
4 when reading Chickering?

5 A A person would -- yeah, a person of ordinary skill  
6 in the art would recognize that's a possibility for  
7 the belt to go the other direction. Or if you  
8 stepped on the high end of the belt, it would go  
9 downward.

10 Q Okay. So is it your position that a person of  
11 ordinary skill in the art would not have been  
12 motivated to combine Chickering with another  
13 reference, if Chickering, itself, does not describe  
14 a solution to this reality or problem?

15 A Yeah. The last sentence of paragraph 167 I state:

16 "However, despite teaching a  
17 multi-planar running surface, Chickering  
18 does not recognize any potentially  
19 unwanted characteristics from its  
20 multi-planar design."

21 Q But if a person of ordinary skill in the art does  
22 recognize unwanted characteristics, would they be  
23 motivated to modify Chickering?

24 A Somewhat as we talked about before, if a person  
25 saw -- you know, saw a particular need to solve a

1 particular problem, they would -- you know, that's  
2 when the process of invention starts coming into  
3 place.

4 And whether they would modify Chickering  
5 directly or start a whole anew, you know, one  
6 doesn't necessarily know. But Chickering doesn't  
7 teach the need for it.

8 Q Can you read paragraph 168 of your declaration, and  
9 let me know when you're done?

10 A (Witness reviewing document.) Okay.

11 Q Is it your position that this safety concern of the  
12 belt moving in an unintended direction -- or I'm  
13 sorry. This potential safety hazard of the belt  
14 moving in an unintended direction is not present on  
15 a flat treadmill?

16 A My position is that -- yeah. It's stated here in  
17 168:

18 "... such a safety hazard is not  
19 present in treadmills having flat or  
20 planar running surfaces because mounting  
21 the device from or towards the rear is no  
22 different from mounting it from any other  
23 point."

24 Q When you say "not different", do you mean because  
25 the treadmill is flat? So it's not curved?

1 A Correct. Right. Then I was going to state that if  
2 the treadmill is curved or has a slope to it, for  
3 example in Chickering, where it's not a planar flat  
4 surface, then you're going to have the effect of  
5 gravity pulling whatever setting -- whatever's  
6 stepping onto the surface in the direction, the  
7 gravity would act on that person.

8 Q So the safety hazard of unintended belt motion is  
9 not present on a flat treadmill; correct?

10 A Correct.

11 Q Now, what if the flat treadmill is left in an  
12 incline or a decline position? Then would there be  
13 a potential safety hazard?

14 A With the treadmill being inclined or declined  
15 position, a flat treadmill, just an ordinary  
16 user -- not even talking a person of ordinary skill  
17 in the art -- would expect that there would be a  
18 possibility if you step on a treadmill, you know,  
19 on the elevated side of it or up higher on it, that  
20 there would be a chance it would move in the  
21 direction.

22 So it wouldn't necessarily be moving in  
23 an unanticipated direction; but it would be moving  
24 in a direction you'd expect it to.

25 Q However, a flat treadmill that's mounted, that's

1 not inclined, that's generally horizontal, would  
2 not move in an unintended direction; is that  
3 correct?

4 A If you step squarely down on it, there would be no  
5 force to make it move either direction.

6 Q Can you turn to paragraph 57 of your declaration?

7 A Okay.

8 Q You see here you're describing the Magid or Magid  
9 reference?

10 A Yes.

11 Q Can you turn to paragraph 60 and read paragraph 60,  
12 and let me know when you're done?

13 A (Witness reviewing document.) Okay.

14 Q Can you see here where you're describing Magid as  
15 having "a unidirectional control means", and that  
16 they are "a pair of ratchet gears."

17 Do you see that?

18 A Yes.

19 Q What is a ratchet gear?

20 A It's, I think, probably the most common use of a  
21 ratchet gear is in a socket wrench where there's a  
22 little tooth that connects a particular piece with  
23 other matching teeth on it.

24 And if it rolls one direction, it's  
25 allowed to -- the connector tooth is allowed to

1 roll over the little notches on the wheel.

2 And if it goes the other direction, it  
3 actually digs in and catches in one of those places  
4 and restricts motion to only one direction.

5 Q Does the ratchet gear disclosed in Magid have these  
6 teeth?

7 A It describes it in my declaration on page 28, it  
8 says:

9 "Has a pair of pawls 62 secured to  
10 the base and engaging one of the ratchet  
11 gears 61 to permit only unidirectional  
12 rotation of the front rollers 41."

13 Q Are these ratchet gears shown in Figures 2 and 5 of  
14 Magid, which is under paragraph 62 of your  
15 declaration?

16 A Yes.

17 Q And which element is the ratchet gear?

18 A Pull up in particular so -- make sure I get the  
19 numbers aligned as to what Magid's are.

20 So from Column 4, line 58 of the '489  
21 Patent. Let's see:

22 "In this embodiment control means 6,  
23 6'." Includes a pair of ratchet gears 61  
24 ... and a pair of pawls 62 secured to the  
25 base."

1 Q All right. Are these ratchet gears and pawls  
2 illustrated in Figures 2 and 5 of Magid?

3 A Although he doesn't have them numbered here, they  
4 appear to be in Figure 5, pretty clear.

5 Q Okay.

6 A I guess he has number 62 labeled on Figure 2.

7 Q Okay. So in the Figure 5 embodiment this is  
8 this -- it's about the wheel on the left side -- or  
9 the roller on the left side of the treadmill; is  
10 that correct?

11 A Yes.

12 Q Okay. And so does this ratchet gear have teeth?  
13 The ratchet gear that's described in Magid, does it  
14 have teeth?

15 A It certainly does in the illustration.

16 Q Okay. Does Magid describe any ratchet gears that  
17 do not have teeth?

18 A After scanning the specification again, I don't see  
19 that it does.

20 Q Okay. Can you turn to paragraph 172 of your  
21 declaration?

22 A Okay.

23 Q Do you see here, this is your analysis of the  
24 rationale to replace Magid with the Sclater  
25 reference?

1 A Okay.

2 Q All right. Now, can you turn to paragraph 173?

3 A Okay.

4 Q Do you see the image that's included at the bottom  
5 of paragraph 173?

6 A Yes.

7 Q What is that image?

8 A Right above the image it states:

9 "This device is a 'sprag-type clutch'  
10 depicted below."

11 Q Is that an image from the Sclater reference?

12 A I think this image is actually a replication.  
13 Because below the image it says Exhibit 1003 at  
14 paragraph 251, with the annotations from  
15 Dr. Giachetti's declaration.

16 Q Okay.

17 A And then Dr. Giachetti's declaration in  
18 paragraph 251, he references the basis of if they  
19 are coming from Sclater.

20 Q Okay. So how does this sprag-type clutch work?

21 A The reading from Exhibit 1017, this is the Sclater  
22 reference, the top of 318 in there. That's just  
23 the photocopy page number. That's not the page  
24 number of the reference. Says:

25 "Precision sprags act as wedges and

1 are made of hardened alloy steel. In the  
2 formsprag clutch, torque is transmitted  
3 from one race to another by the wedging  
4 action of the sprags between the races in  
5 one direction; in the other direction the  
6 clutch freewheels."

7 Q So what does this mean by "the wedging action of  
8 the sprags between the races"?

9 A So there are -- sprags are metallic elements that  
10 are oddly-shaped. In other words, not round and  
11 not rectangle. They've got, at least on the image,  
12 kind of rounded with the peak on top.

13 What happens is, as the inner and outer  
14 shell move one direction, the shape of the sprags  
15 allow them just to slide between or to rotate so  
16 that the two inner and outer rings rotate freely.

17 If you try to rotate it the other  
18 direction, then what ends up happening is because  
19 of the shape of the sprags, they basically wedge in  
20 between the inner and outer ring, and that causes  
21 the motion to stop.

22 Q Okay. And the image, the annotated image from your  
23 declaration, paragraph 173, it has some elements  
24 that are colored in red and identified as "rolling  
25 elements".



1 Do you see that?

2 A Yes.

3 Q Are those rolling elements, bearings?

4 A The annotations are from Giachetti.

5 Q Okay.

6 A So I did not specifically call those out as rolling  
7 elements, but he did.

8 Q Does the Sclater reference, itself, explain what  
9 those elements are?

10 A They're not labeled on the diagram that is in -- on  
11 page 318.

12 Q Okay. So based on your understanding of these type  
13 of clutches, do you understand those to be  
14 bearings?

15 A I mean, just based looking at the way the  
16 cross-section is built up, it would appear they're  
17 spherical balls in that spot.

18 Well, wait a minute. I can't tell  
19 exactly from this image if they're actually an end  
20 view of the sprags, or if they're actually end view  
21 of the spherical metal piece.

22 Q Okay. Do you know if such sprag-type one-way  
23 bearings were commonly used in exercise equipment  
24 at this time? The relevant time being the priority  
25 date of the '580 Patent.

1 MS. JELENCHICK: Form.

2 THE WITNESS: To my knowledge, no. At  
3 least I'd never seen any.

4 BY MR. TURNER:

5 Q Do you have a copy of Exhibit 1018?

6 A Yes.

7 Q What is Exhibit 1018?

8 A It's a catalog by a company called Emerson  
9 Industrial Automation. That includes -- at least  
10 this section of it that's included here, includes  
11 mechanical clutches and torque overload devices.

12 Q All right. So how would a person of ordinary skill  
13 in the art use a catalog like this?

14 A Well, it depends on where they are in their  
15 process.

16 Like, for example, on page 8, there's  
17 some general description about how these systems  
18 work. So they may use it to educate themselves on  
19 principles of operations on how they work.

20 If they've identified a particular  
21 problem they're trying to solve, they would go into  
22 the more detailed sections, like in -- starting on  
23 pages 34 that has the specifications.

24 And use their calculations or their  
25 understanding of the problem they're trying to

1 solve. And use this as a collection tool to go  
2 through and pick up potential -- pick out potential  
3 products in this catalog that might serve their  
4 purpose.

5 Oftentimes, in reality, what they do,  
6 they get that far and then they call up the tech  
7 support line at the company and have a detailed  
8 conversation with somebody on the company side that  
9 can really help them dial in their needs.

10 Q Help them pick out the specific clutch or bearing  
11 for their application?

12 A Yes.

13 Q Do you have experience, in your technical  
14 experience, of using catalogs like these to help  
15 select components?

16 A Oh, yes.

17 Q That's -- so your reference to picking out a  
18 component, but calling up the line, is that from  
19 personal experience?

20 You've done that before and called up for  
21 more guided selection, I guess, of a component?

22 A Yeah. And candidly, I would think it was much more  
23 helpful earlier in my career, when they actually  
24 had broader tech support staff online, than they do  
25 today, where everybody seems to have minimized that

1 support. But in principle, earlier in my career,  
2 yes, it was useful then.

3 Q So maybe an AI help desk is not that useful for  
4 you, or non-human system?

5 A That's probably the topic for after hours.

6 Q Yes, yes. All right.

7 Can you turn to page 48 of the -- of this  
8 catalog, please.

9 A Okay.

10 Q All right. Do you see up on the top left where it  
11 describes the industries served?

12 A Yes.

13 Q All right. And do you see how it's -- fitness is  
14 one of the industries served?

15 A Yeah. It says "exercise equipment", yes.

16 Q Okay.

17 A Oh, I see.

18 Q Exercise equipment is one of the field  
19 applications?

20 A Yes.

21 Q Okay. So would a person of ordinary skill in the  
22 art have considered some of these bearings, as  
23 described in the catalog, for exercise equipment or  
24 fitness -- for the fitness industry?

25 MS. JELENCHICK: Form.

1 THE WITNESS: I'm not sure what the  
2 question was on that, sorry.

3 BY MR. TURNER:

4 Q So based on the description on page 48 that this is  
5 serving the fitness industry and exercise equipment  
6 field applications, would a person of ordinary  
7 skill in the art have considered these one-way  
8 bearings for treadmills?

9 A If they -- if the person of ordinary skill in the  
10 art had already identified the need that a one-way  
11 bearing fulfills, then they would potentially --  
12 they'd be drawn to -- they would certainly be drawn  
13 to this -- or this particular product because it  
14 calls it out as an application for it.

15 Q Can you turn to paragraph 183 of your declaration,  
16 please?

17 A Okay.

18 Q Can you read that paragraph, and let me know when  
19 you're done?

20 A (Witness reviewing document.) Okay.

21 Q So if you're discussing the overall cost -- and  
22 this is with reference to replacing a ratchet  
23 clutch with a sprag-type clutch; is that correct?

24 A Well, actually, paragraph 183 is general in  
25 principle to any product or component selection.

1 But yeah, we're focused on that part of it in this  
2 section, yes.

3 Q So in your opinion would the cost of a sprag-type  
4 bearing be more or less than the cost of a ratchet  
5 type one-way bearing?

6 MS. JELENCHICK: Form.

7 THE WITNESS: I don't have an opinion as  
8 to one way or the other because I didn't cost  
9 either one out as part of this effort.

10 BY MR. TURNER:

11 Q Can you turn to paragraph 185 of your declaration?

12 A Okay.

13 Q Now, here do you see you're discussing the  
14 "Secondary Considerations"?

15 A Yes.

16 Q Okay. And if you can turn to 189 you start  
17 discussing the -- Woodway's product offerings.

18 Do you see that?

19 A Yes.

20 Q And you include an image of a treadmill at the  
21 bottom of paragraph 190.

22 Do you see that?

23 A I do.

24 Q Which treadmill is that?

25 A Well, since it's referencing Exhibit 2025, which is

1 the Claim chart, the Claim chart says it's  
2 represented a Woodway CURVE Treadmill from 2010.

3 Q Okay. Now, you list a number of different CURVE  
4 treadmills in paragraph 191.

5 Do you see that?

6 A Yes.

7 Q Do you know if any of these are the CURVE that's  
8 shown in that image, in paragraph 190?

9 A I'd have to go back and reference where that exact  
10 figure came from to know that, exactly which one  
11 that is.

12 Q Okay. Do you know -- so you list a number of CURVE  
13 treadmills here, such as a CURVE XL, CURVE LTG,  
14 et cetera.

15 Do you know if Woodway currently sells  
16 all these CURVE models?

17 A Yeah. I'm not that close to the commercial  
18 operation to know that right off the top of my  
19 head.

20 Q Okay. Do you have Exhibit 2039 in your book?

21 A I do not.

22 Q All right. I'm going to share my screen. So this  
23 is an Exhibit -- I think this is one of the  
24 Exhibits that Mr. Blair referenced.

25 A You mean --

1 Q Sorry, not Mr. Blair. Mr. Weber, sorry.

2 Okay. Do you see my screen?

3 A I do.

4 Q All right. So this Exhibit 2039, this was  
5 submitted as an excerpt from the Woodway web page.  
6 Looks like it's woodway.com/shop.

7 Do you see that?

8 A I do.

9 Q Okay. So this is dated January 23, 2024, and it  
10 lists a number of different Woodway treadmills.

11 Do you see that?

12 A Yes.

13 Q All right. So you in your declaration in  
14 paragraph 191, you reference a CURVE XL; is that  
15 correct?

16 A Yes.

17 Q Is the CURVE XL shown on this Exhibit 2039 that  
18 represents their Woodway treadmills on their --  
19 offered for sale on their web page?

20 MS. JELENCHICK: Objection, form.

21 THE WITNESS: Can you scroll so that I  
22 can see the far right side?

23 BY MR. TURNER:

24 Q Sure. Here's the full screen or the full image. I  
25 can zoom in. I think it's just one page.



1 A Yeah, that's fine. It's just the way -- that's  
2 perfect.

3 Now, can you ask the question, again?  
4 Sorry. It's just the way the video's laid out on  
5 my screen here.

6 Q Oh, no problem. I can enlarge a little more if  
7 that helps.

8 A No. I can see it now.

9 Q So does this -- you referenced a CURVE XL in  
10 paragraph 191. Is the CURVE XL shown on this  
11 image?

12 A No.

13 Q Do you know if Woodway currently is still selling  
14 the XL?

15 A No. As I noted before, I'm not that close to their  
16 commercial side. So I don't know what's still in  
17 market or what's maybe no longer in market.

18 Q In your declaration you reference a CURVE LTG. Is  
19 the CURVE LTG shown on their web page?

20 A No.

21 Q Okay. You also reference a CURVE 3.0. Is that  
22 shown on their web page?

23 A Nope.

24 Q All right. Next up, you have a CURVE Trainer in  
25 your declaration. Is a CURVE Trainer shown on

1           their web page?

2    A       Yeah.

3    Q       Okay. Is that the --

4    A       It's the third one from the left.

5    Q       This one right here, if you can see my cursor

6           moving?

7    A       Yeah. I mean --

8    Q       CURVE Trainer?

9    A       Yes.

10   Q       Okay. Next in your declaration you reference an

11           EcoMill and EcoMill Legacy. Is that shown in this

12           image?

13   A       I do not see them listed here.

14   Q       Okay. There's a treadmill here that is called a

15           TrueForm Trainer Powered by Woodway.

16                   Do you see that?

17   A       I do.

18   Q       What is a TrueForm Trainer Powered by Woodway. Do

19           you know what that means?

20   A       No, I don't.

21   Q       Have you ever heard of a TrueForm Trainer

22           treadmill?

23   A       I have.

24   Q       And what is that?

25   A       I don't remember the details of it, but I have

1 heard of it before.

2 Q All right. Is that a Woodway treadmill?

3 MS. JELENCHICK: Objection, form, scope.

4 THE WITNESS: I have no idea what that  
5 means by -- all I know about it is I've heard -- I  
6 know two things.

7 I've heard of TrueForm Trainers before.  
8 I've heard the description of TrueForm Trainer  
9 Powered by Woodway. I can't make any inferences  
10 beyond that.

11 BY MR. TURNER:

12 Q In your experience, where have you heard "TrueForm  
13 Trainer" before?

14 A In other discussions around treadmills.

15 Q Can you be more specific what those discussions  
16 were?

17 A I can't remember off the top of my head.

18 Q Okay. Do you still have a copy of Mr. Weber's  
19 declaration that we talked about before? It was  
20 Exhibit 2020.

21 A Yes.

22 Q All right. Can you go to -- well, let's see, can  
23 you go to paragraph 23 of Exhibit 2020?

24 A Okay.

25 Q All right. So can you read paragraph 23 to

1           yourself?

2    A       (Witness reviewing document.)

3    Q       So now does this refresh your recollection on what  
4           a TrueForm Treadmill is?

5    A       Yes, it does.

6    Q       What is a TrueForm Treadmill?

7                   MS. JELENCHICK: Objection, form.

8                   THE WITNESS: Well, just reading from  
9           Mr. Weber's declaration here:

10                    "In or around 2014, Samsara Fitness  
11           introduced the TrueForm Runner at a  
12           discounted price, which infringed  
13           Woodway's patents directed to curved,  
14           manual treadmills, including the '580  
15           Patent. I am aware of multiple instances  
16           in which Woodway lost sales to Samsara  
17           Fitness."

18 BY MR. TURNER:

19    Q       You don't need to read any more on the record.

20                    So you referenced "Samsara Fitness". So  
21           if the TrueForm is a Samsara treadmill, why is it  
22           being sold on the Woodway web page?

23                   MS. JELENCHICK: Objection, form, scope.

24                   THE WITNESS: I would have no idea. I'm  
25           not familiar with Woodway's retail operations.

1 BY MR. TURNER:

2 Q But so based on that image we showed before, that  
3 TrueForm Trainer that's on the web page, is that  
4 your understanding that that would be a Samsara  
5 treadmill?

6 MS. JELENCHICK: Form, scope.

7 THE WITNESS: I have no idea. If I made  
8 any kind of connection, just be connecting what we  
9 just read in paragraph 23 to the image that's on  
10 the page. But I don't know what the official  
11 relationship there is.

12 BY MR. TURNER:

13 Q Okay. So that paragraph was referencing litigation  
14 between Samsara and Woodway; is that correct?

15 A Yes.

16 Q So Samsara would be a competitor of Woodway?

17 MS. JELENCHICK: Objection, form, scope.

18 THE WITNESS: Yes. It would have been  
19 or is. It would have been a different company  
20 besides Woodway that had a product that infringed  
21 Woodway's patents for curved manual treadmills.

22 BY MR. TURNER:

23 Q Can you turn to paragraph 192 of your declaration?

24 A Okay.

25 Q So here you reference Mr. Weber's declaration. Do

1           you see that?

2    A       Yes.

3    Q       Have you met Mr. Weber before?

4    A       As I mentioned earlier today, there are -- were a  
5           few people I met when I visited Woodway a number of  
6           years ago. I don't recall exactly who all I met  
7           while I was there.

8    Q       Do you know if Mr. Weber is an employee of Woodway?

9    A       According to his declaration, Exhibit 2020, he's a  
10           director of sales and marketing for Woodway.

11   Q       Do you know if Mr. Weber has an engineering  
12           background?

13   A       I don't recall one way or the other.

14               MR. TURNER: So I have no more questions  
15           on this IPR, Kadie. Do you want to separate these  
16           or keep rolling into the next one?

17               MS. JELENCHICK: You can keep rolling.

18               MR. TURNER: Okay.

19               MS. JELENCHICK: Dr. Blair, do you want  
20           to take a couple-minute break?

21               MR. TURNER: We can take a break. And  
22           then Kadie, if you want to stop and do any  
23           redirect now, we could.

24               Or we can just wait and do it at the end.  
25           I guess it's up to you.

1 MS. JELENCHICK: Well, I have no  
2 redirect on this proceeding.

3 MR. TURNER: Well, then, we'll just take  
4 a five-minute break, and we can proceed to the  
5 next one.

6 THE WITNESS: Just keep going.

7 MS. JELENCHICK: Okay, good.

8 (Short recess taken at 1:50 p.m.)

9 (Back on the record at 2:02 p.m.)

10 - - -

11 EXAMINATION

12 BY MS. JELENCHICK:

13 Q Dr. Blair, you recall Mr. Turner asking you  
14 questions about Petitioner's Exhibit 1018; right?

15 A Yes.

16 Q Do you have a copy of Exhibit 1018 in front of you?

17 A Yeah.

18 Q If you look at the last page of this Exhibit,  
19 you'll see at the top -- right near the top, it  
20 says "standard terms and conditions of sale  
21 (August 15, 2001)"?

22 A Yes.

23 Q As of August 15, 2001, were you aware of any  
24 treadmill that utilized any of the bearings that  
25 were incorporated or discussed in Exhibit 1018?

1 A No.

2 Q Specifically, if you look at page 46 of  
3 Exhibit 1018, which talks about Morse brand KK  
4 clutches.

5 As of August of 2001, were you aware of  
6 any prior art that was presented to you in your  
7 evaluation of this case, that incorporated the type  
8 of clutch depicted in Exhibit 1018?

9 A No.

10 Q Mr. Turner directed you to page 48 of Exhibit 1018,  
11 which identified that one particular field  
12 application for utilization of the Morse KK clutch  
13 was within exercise equipment.

14 Do you recall that testimony?

15 A Yes.

16 Q How do you know that the reference to exercise  
17 equipment is -- I'll withdraw that.

18 Is there any information within  
19 Exhibit 1018 that tells you what constitutes  
20 exercise equipment?

21 A Not on this page.

22 Q As of August of 2001, were you aware of Morse KK  
23 clutches or similar-type clutches utilized in  
24 bicycles, for example?

25 A Yeah. That would be a potential application for



1           those.

2       Q       For a bicycle, a piece of exercise equipment?

3       A       Yes.

4       Q       Do you know where the utilization of Morse KK  
5               clutches or comparable clutches utilized in other  
6               types of fitness applications as of 2001?

7       A       Not that I'm aware of.

8       Q       Can you describe for me how the Morse KK clutch or  
9               a comparable clutch would be utilized in bicycle  
10              application?

11      A       It's very similar to an outdoor bike. You only  
12              want the power transmission going one way, and you  
13              want it to freewheel the other.

14                      So as you're pedaling, it actually, the  
15              clutch locks so that you're actually transmitting  
16              power to wherever it's going to go.

17                      And then if you want to coast, it's just  
18              a lot of freewheel. So it's not suddenly jerking  
19              your legs around like if you are affixed to your  
20              bike.

21      Q       In a different application, then, how the Morse KK  
22              clutch would be utilized in a curved manual  
23              treadmill?

24      A       It's the same physical principle, but it's a  
25              different application. You need different reasons

1           you're putting it there.

2   Q       What's the reason of including the Morse KK clutch,  
3           or something like the Morse KK clutch, in the  
4           bicycle?

5   A       So you don't -- so what ends up happening is if you  
6           want to slow down or you want to coast, your legs  
7           aren't forced to keep going at the speed you were.

8   Q       What's the reason for including the Morris KK  
9           clutch or something like the Morse KK clutch in a  
10          curved manual treadmill?

11   A       The direction. Preventing motion in the unintended  
12          direction.

13   Q       If I asked you whether Exhibit 1018 described what  
14          type of exercise equipment it was referring to in  
15          the field applications, and you testified, "Not on  
16          this page."

17                   Is there any information within  
18          Exhibit 1018 that gives any context for the type of  
19          exercise equipment that this manual is reportedly  
20          referring to?

21   A       I'm not seeing any reference in here. I think  
22          about one other application for an item like that  
23          would be a rowing machine.

24                   So again, it's -- similar in the way a  
25          bike works in that you really only want to have it

1 lock up in one direction, when you're actually  
2 applying resistance in the rowing machine.

3 But once you get to the end of it, as you  
4 recoil back, you want it to be able to float so  
5 it's not jerking you back or allows you to actually  
6 recoil.

7 Q And in your review there were rowing machines as of  
8 2001 that included a Morse KK clutch or something  
9 comparable?

10 A It would be something that would function  
11 similarly. I don't know if it would be that exact.

12 Q Have you ever heard the phrase "coaster bike"?

13 A Yes.

14 Q What is a coaster bike?

15 A It's a old school, one-speed bike that most of our  
16 parents had when we were kids.

17 Q Would a coaster bike have a Morse KK clutch or  
18 something comparable?

19 A It would have something. Most any multi-speed  
20 bikes still have it, too. You still have the idea  
21 if you have a free wheel in the back that locks up  
22 as you're putting pressure on the pedals; but the  
23 minute you take the pressure off the pedals, the  
24 free wheel allows the bike to just keep going  
25 forward.

1 Q And the function of the clutch-type component in  
2 the rowing machine, that function is different than  
3 the function it would have in a curved manual  
4 treadmill; is that correct?

5 A Yes.

6 Q Would a person of ordinary skill in the art  
7 consider a rowing machine to be a piece of exercise  
8 equipment?

9 A Yes.

10 MS. JELENCHICK: Pass the witness.

11 MR. TURNER: No further questions.

12 (Deposition concluded at 2:13 p.m.)

13 - - -  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

CERTIFICATE

STATE OF MICHIGAN

COUNTY OF WAYNE

I do hereby certify the witness, whose attached testimony was taken in the above matter, was first duly sworn to tell the truth; the testimony contained herein was reduced to writing in the presence of the witness, by means of stenography; afterwards transcribed; and is a true and complete transcript of the testimony given. I further certify that I am not connected by blood or marriage with any of the parties, their attorneys or agents, and that I am not interested directly, indirectly or financially in the matter of controversy. In witness whereof, I have hereunto set my hand at Westland, Michigan, April 15, 2024.

*Shari J. Pavlovich*

Shari J. Pavlovich, CSR-5926

Notary Public, Wayne County, Michigan

My commission expires 4/14/2025

|   |                             |  |
|---|-----------------------------|--|
| <hr/> <b>0</b> <hr/>  | <b>11</b> 29:17 49:5        | <b>191</b> 94:4 95:14 96:10                            |
| <b>02/2018</b> 16:4   | <b>113</b> 56:24 57:6,7     | <b>192</b> 100:23                                      |
| <hr/> <b>1</b> <hr/>  | <b>12</b> 14:8 67:22        | <b>1:50</b> 102:8                                      |
| <b>1</b> 16:23 23:24 26:1 29:17 45:4,<br>8 50:22 55:18 56:17 58:12,15<br>66:25 67:3 70:10 | <b>121</b> 57:19            | <hr/> <b>2</b> <hr/>                                   |
| <b>1,211,765</b> 14:1   | <b>127</b> 58:1             | <b>2</b> 21:5 26:16,19,23 27:5,18<br>84:13 85:2,6      |
| <b>10</b> 36:8,21 70:11   | <b>12:09</b> 78:15,18       | <b>20</b> 6:17   |
| <b>10,561,884</b> 15:24   | <b>12:40</b> 78:16          | <b>2001</b> 102:21,23 103:5,22<br>104:6 106:8          |
| <b>10,799,745</b> 15:17   | <b>12:56</b> 78:19          | <b>2010</b> 94:2                                       |
| <b>1001</b> 8:11,13 34:14 45:2 55:19  | <b>13</b> 14:10 68:2        | <b>2014</b> 99:10                                      |
| <b>1002</b> 13:13   | <b>130</b> 67:3,7,11,15     | <b>2018</b> 6:4,8 15:6 16:19                           |
| <b>1003</b> 13:17 86:13   | <b>1300</b> 51:1,12         | <b>2019</b> 15:7                                       |
| <b>1004</b> 13:19 49:4  | <b>1302</b> 51:2            | <b>2020</b> 12:10,12,15,25 13:4 15:8<br>98:20,23 101:9 |
| <b>1007</b> 13:21   | <b>1304</b> 51:2,3,4,6      | <b>2021</b> 15:9                                       |
| <b>1008</b> 13:24   | <b>1306</b> 51:3,4,6        | <b>2022</b> 15:12                                      |
| <b>1009</b> 14:1  | <b>133</b> 59:10,16         | <b>2023</b> 15:15                                      |
| <b>101</b> 44:5,24  | <b>134</b> 59:17 67:14,17   | <b>2024</b> 4:1 6:12 15:22 95:9                        |
| <b>1010</b> 14:3 70:3,5 71:12   | <b>139</b> 59:19 60:8       | <b>2025</b> 15:25 93:25                                |
| <b>1011</b> 10:22,25 14:5 66:23   | <b>140</b> 49:4 67:12       | <b>2028</b> 16:2                                       |
| <b>1012</b> 11:9,11   | <b>142</b> 62:6             | <b>2029</b> 16:7                                       |
| <b>1013</b> 10:12,14 14:11  | <b>143</b> 62:11 63:12      | <b>2039</b> 94:20 95:4,17                              |
| <b>1014</b> 14:12   | <b>144</b> 67:14,18         | <b>20957-6</b> 15:1                                    |
| <b>1015</b> 14:14   | <b>15</b> 16:21 102:21,23   | <b>22:47</b> 53:20                                     |
| <b>1016</b> 14:16   | <b>159</b> 72:13,23         | <b>23</b> 12:14,17 95:9 98:23,25<br>100:9              |
| <b>1017</b> 11:19,22 14:19 86:21  | <b>16</b> 27:16 51:11       | <b>23:28</b> 53:20                                     |
| <b>1018</b> 14:20 89:5,7 102:14,16,<br>25 103:3,8,10,19 105:13,18                         | <b>166</b> 73:10            | <b>25</b> 29:17 59:15 60:14                            |
| <b>1019</b> 14:24   | <b>167</b> 79:4,6 80:15     | <b>251</b> 86:14,18                                    |
| <b>1020</b> 15:1  | <b>168</b> 81:8,17          | <b>25a</b> 21:9,16 27:17                               |
| <b>1033</b> 15:4 48:2 59:7 62:5   | <b>16a</b> 21:9,16 27:11,13 | <b>26</b> 35:6   |
| <b>104</b> 44:11 48:11 49:1   | <b>17</b> 36:8              | <b>27</b> 50:25 51:11                                  |
| <b>108</b> 52:23 53:10  | <b>172</b> 85:20            | <b>28</b> 84:7   |
| <b>10:34</b> 43:24  | <b>173</b> 86:2,5 87:23     | <b>29</b> 35:19 40:1                                   |
| <b>10:47</b> 44:1   | <b>18</b> 50:25             | <b>2:02</b> 102:9                                      |
|   | <b>183</b> 92:15,24         | <b>2:13</b> 107:12                                     |
|   | <b>185</b> 93:11            |  |
|   | <b>189</b> 93:16            |  |
|   | <b>190</b> 93:21 94:8       |  |

|   |  |   |
|---|--|---|
| <hr/> <b>3</b> <hr/>  | <b>54</b> 46:5   | <b>93</b> 31:23,25  |
| <b>3</b> 24:3 25:10,20 26:4,11,16,19<br>27:5,19,23 28:20,22 30:12<br>31:9,11 37:23,25 38:8,16,20<br>41:13 42:15,21 43:7 | <b>55</b> 46:17 67:23  | <b>96</b> 32:5 37:19 38:22 41:13 43:7   |
| <b>3,637,206</b> 10:15  | <b>57</b> 45:12 46:14 47:4 63:14 83:6  | <b>97</b> 42:12   |
| <b>3,642,279</b> 14:13  | <b>58</b> 49:5 62:16 63:14 84:20   | <b>98</b> 57:2  |
| <b>3.0</b> 96:21  | <b>580</b> 8:14 13:13 18:6 19:3 32:12<br>34:13,19 35:12 36:15 37:6<br>45:2 48:23 49:4,16,24 50:8,15<br>52:19 53:24 54:9,12 55:12,18<br>56:9 57:11,16 58:8,12,16,17<br>60:15 71:5 88:25 99:14 | <b>9:11</b> 4:2   |
| <b>30</b> 35:18 39:21 78:14   | <hr/> <b>6</b> <hr/>   | <hr/> <b>A</b> <hr/>  |
| <b>31</b> 6:12  | <b>6</b> 15:2 50:18 84:22  | <b>a.m.</b> 4:2 43:24 44:1  |
| <b>318</b> 86:22 88:11  | <b>6'</b> 84:23  | <b>A]Iso</b> 62:25  |
| <b>32</b> 36:22 45:5,12 55:19   | <b>6,042,514</b> 14:14   | <b>Abelbeck</b> 14:15   |
| <b>33</b> 36:21   | <b>60</b> 49:5 83:11   | <b>able</b> 7:23 10:5 25:6 42:22<br>43:5,17 106:4   |
| <b>337</b> 70:6   | <b>61</b> 84:11,23   | <b>about</b> 4:2 5:12 10:2 13:13<br>14:5,8,11,19 20:4 28:20 31:13<br>33:3 40:5,13 41:5 43:13,20<br>44:7 45:15 46:23 47:10,14<br>49:7 50:25 52:12,14 54:1,2,17<br>55:14,15,20 60:14 70:1 71:2,<br>16,18 72:2,7 74:18 75:20 78:6,<br>24 80:24 85:8 89:17 98:5,19<br>102:14 103:3 105:22 |
| <b>34</b> 89:23   | <b>62</b> 84:9,14,24 85:6  | <b>above</b> 31:25 38:1 45:24 67:8<br>86:8  |
| <b>36</b> 50:15,16,17,19,23 51:5 55:6<br>56:9 60:15   | <b>641424</b> 13:25  | <b>Absolutely</b> 8:10  |
| <b>362</b> 14:12  | <b>68</b> 51:3,18  | <b>accessed</b> 17:11,19  |
| <hr/> <b>4</b> <hr/>  | <hr/> <b>7</b> <hr/>   | <b>accident</b> 30:23   |
| <b>4</b> 84:20  | <b>76</b> 20:10 29:14  | <b>accidental</b> 31:3  |
| <b>4,614,337</b> 14:4   | <b>7a</b> 34:16,20 35:13   | <b>according</b> 29:13 34:23 35:3<br>36:9,23 38:21 50:21 101:9  |
| <b>4,897,461[sic</b> 14:7   | <b>7b</b> 34:25  | <b>accordingly</b> 68:4   |
| <b>40</b> 17:22,23  | <b>7b-7h</b> 35:9  | <b>act</b> 82:7 86:25   |
| <b>41</b> 18:14,15,20 84:12   | <b>7h</b> 34:16 35:13  | <b>action</b> 87:4,7  |
| <b>45</b> 19:12   | <b>7j</b> 34:25  | <b>actually</b> 14:22 23:1,7 25:23<br>51:25 56:19 66:15 71:9 79:23<br>84:3 86:12 88:19,20 90:23<br>92:24 104:14,15 106:1,5  |
| <b>46</b> 67:5 103:2  | <hr/> <b>8</b> <hr/>   | <b>AD</b> 17:9  |
| <b>47</b> 45:5  | <b>8</b> 4:1 89:16   | <b>adapt</b> 73:3   |
| <b>48</b> 45:5 91:7 92:4 103:10   | <b>88</b> 23:5,19,22 27:9  | <b>add</b> 66:3   |
| <b>489</b> 84:20  | <hr/> <b>9</b> <hr/>   | <b>added</b> 38:15,16 49:21   |
| <hr/> <b>5</b> <hr/>  | <b>9</b> 35:5,18   | <b>adding</b> 74:9,10   |
| <b>5</b> 50:18 67:5 84:13 85:2,4,7  | <b>9,039,580</b> 4:20 16:1   |   |
| <b>5,538,489</b> 11:12  | <b>90</b> 20:19,22,25 24:2 38:17   |   |
| <b>5,897,461</b> 11:1   | <b>91</b> 23:7,14,19 75:4  |   |
| <b>53</b> 46:5  |  |   |

**additional** 15:3 38:14 74:22  
76:6,15  
**address** 75:19  
**addressed** 74:14 75:20 77:3,  
15,23  
**adequate** 74:18 75:5  
**adjust** 43:5  
**adjusted** 43:9,12  
**adjusting** 40:14,17  
**adjustment** 41:16 42:6,22  
**Advocates** 75:7  
**aerobic** 68:7  
**affirmed** 4:5  
**affixed** 104:19  
**after** 23:7 48:4 85:18 91:5  
**afternoon** 72:1  
**again** 15:10,22 21:12 27:8  
34:5 36:2 54:7 59:3 60:14  
63:16 66:14 76:9 79:9 85:18  
96:3 105:24  
**ago** 6:16 9:11 23:18 34:6  
46:14 59:2 101:6  
**agree** 26:18 33:24 34:2 35:12  
36:15 41:4  
**agreement** 71:17  
**ahead** 38:6 62:23  
**AI** 91:3  
**aligned** 84:19  
**allow** 33:6 41:15 87:15  
**allowed** 83:25  
**allows** 8:8 106:5,24  
**alloy** 87:1  
**alone** 55:17  
**already** 13:12 14:6,8 20:4  
28:25 74:14 75:15 77:19,23  
92:10  
**also** 7:24 13:7 25:2 31:11  
62:23 67:10 68:19 96:21  
**alternative** 35:2,4  
**Alternatively** 37:4

**Although** 85:3  
**Altra** 16:8  
**am** 99:15  
**analysis** 45:21 54:20 85:23  
**analyzing** 32:1 44:8 57:23  
59:14 62:7  
**and/or** 60:4  
**anew** 81:5  
**angle** 24:16,18,20,22 25:8  
41:16 42:3,4,6,18,20,25  
**angled** 79:13  
**angles** 22:22  
**annotated** 21:4 24:3,6 27:18  
38:20,25 41:7,13 42:15,21  
87:22  
**annotations** 37:24 86:14 88:4  
**another** 7:25 36:23 41:21,23  
80:12 87:3  
**answer** 41:19 58:15  
**any** 5:24 9:3,24 12:17 16:15  
22:9,10 27:14 33:10 46:6  
49:15 58:17 61:20 71:23 72:7  
75:8 80:18 81:22 85:16 89:3  
92:25 94:7 98:9 99:19 100:8  
101:22 102:23,24 103:6,18  
105:17,18,21 106:19  
**anyone** 5:10 6:23 7:3  
**anything** 7:14 46:23 47:16  
49:6  
**anywhere** 45:8  
**apex** 25:8  
**appear** 38:15 85:4 88:16  
**appears** 13:14  
**application** 66:8 71:4 90:11  
92:14 103:12,25 104:10,21,25  
105:22  
**applications** 64:16 66:5  
91:19 92:6 104:6 105:15  
**applying** 106:2  
**Approximately** 4:23 7:20  
8:22  
**April** 4:1

**arc** 27:12  
**area** 23:10 25:24 26:10 28:19  
**aren't** 105:7  
**arms** 38:3,21,24 41:5,7,15,17,  
20 42:18,20,25 43:6,16,18  
**around** 8:8 40:24 98:14 99:10  
104:19  
**art** 10:2 22:7,9 31:17 50:1  
54:6,9 62:18 65:1 67:19 74:21  
75:12,17 76:5 77:1,11,17,25  
80:3,6,11,21 82:17 89:13  
91:22 92:7,10 103:6 107:6  
**ask** 21:12 71:16 72:5,6 96:3  
**asked** 26:8 33:3 41:18 105:13  
**asking** 71:2 102:13  
**aspect** 65:18  
**assemblies** 52:10  
**assemblies'** 57:12  
**assembly** 22:10 51:1,11  
52:20 56:4  
**associated** 7:24 57:12,16  
**assume** 34:10 49:14  
**ASTM** 14:24  
**attached** 46:20 55:24 56:6  
**attorney** 5:9  
**august** 102:21,23 103:5,22  
**Australian** 13:22  
**author** 12:1  
**Automation** 89:9  
**available** 71:19  
**avoid** 22:16 25:22,24 26:3,10  
**aware** 12:19 99:15 102:23  
103:5,22 104:7  
**awkward** 22:24

---

**B**

---

**baby** 63:3  
**back** 16:18 17:6 19:7 23:19  
24:1 27:15 29:5,14 34:5 37:18  
39:2 41:12,25 43:7 44:1,3



48:10 53:3 54:7 55:18 59:1  
63:13,23 68:5 72:1 74:17  
78:16,19,21 79:3,22 94:9  
102:9 106:4,5,21

**background** 68:22 101:12

**backpack** 8:5,6

**Backstops** 16:9

**balls** 88:17

**bar** 67:3

**base** 84:10,25

**based** 37:6 49:23 56:3 57:22  
63:4,18 88:12,15 92:4 100:2

**bases** 71:20

**basically** 8:8 63:21 87:19

**basis** 86:18

**Bayerlein** 9:6,13

**bearing** 32:2,10,13,15,20,23,  
25 33:4,7,13 37:8,11 45:14,19,  
25 46:5,6,16,18,20,22 47:5,9  
48:7 50:9,11,13,14,20,24 51:1,  
10,11,13,14,21 52:7,10,19  
54:15,17,18 55:1,2,4,5,11,15,  
16,17,21,22,23 56:4,16,18  
57:3,16,24,25 60:19,20,24  
61:6,7,9,15,18 90:10 92:11  
93:4,5

**bearings** 44:9,16 45:9,23  
46:1,19 47:17,18,21,25 48:8,  
13,17 49:7 50:2,9 51:6,9 53:21  
54:1,2,3,13,14 55:8,9,23 56:5,  
14,16 57:4,10,15 59:15 60:19  
61:2,6,10,18 63:15 88:3,14,23  
91:22 92:8 102:24

**bearings'** 53:15

**bears** 60:4

**became** 12:22

**because** 20:2 22:20,21 26:14  
28:8,25 30:17 31:2 33:8 43:7  
48:22 52:3 53:4 57:3,10 68:9  
75:2 77:19 81:20,24 86:13  
87:18 92:13 93:8

**become** 74:19

**been** 4:5,21,25 5:4 6:16 7:24  
17:7,13 27:8 43:20 80:11  
100:18,19

**before** 4:21 5:1 7:18 12:7  
17:15 30:9 36:2 55:21 64:23  
74:5 78:23 80:24 90:20 96:15  
98:1,7,13,19 100:2 101:3

**beginning** 35:6 36:9

**being** 8:15 47:4 49:7 53:21  
57:14 68:11 69:25 79:25 80:1  
82:14 88:24 99:22

**believe** 26:13 39:7 73:8

**below** 38:9 44:17 45:10 46:8,  
13,24 48:18 49:8,9 50:3,10  
51:14,18 60:2 86:10,13

**belt** 18:8,24 19:2 24:21,23  
25:4,5,6,9,12,15,16,19 26:3  
28:4,5,10,11 29:10 30:21 31:9  
45:11,13,17,19,25 46:8,10,25  
47:4,8,12 48:20 49:8 50:5  
51:15,19,22 52:5,6,21 57:23,  
24 59:14 60:3,5,18,21 61:3,5,  
12,18 73:20 74:6 75:8 79:14  
80:7,8 81:12,13 82:8

**bend** 25:7,9,12 26:22

**bending** 24:23 25:16

**besides** 100:20

**best** 65:7

**better** 65:17 66:11 75:25  
76:23

**between** 21:8,14,25 24:11,15  
26:10,18,19 28:15,24 29:7,10  
30:12,22 31:16 41:1 54:10,12  
64:11 87:4,8,15,20 100:14

**beyond** 98:10

**bicycle** 104:2,9 105:4

**bicycles** 103:24

**bike** 104:11,20 105:25 106:12,  
14,15,17,24

**bikes** 106:20

**binder** 10:12,23 11:9,20 12:10  
13:11 16:14

**bit** 48:3 62:24

**Blair** 4:4,9 26:25 44:3 71:13  
78:12,21 94:24 95:1 101:19  
102:13

**Blair's** 71:18

**block** 23:22 49:6

**blue** 41:7

**book** 6:2 8:11 12:5 16:6 33:11  
71:7 94:20

**both** 65:19 74:7

**bottom** 16:23 27:12 28:4,7  
56:22 86:4 93:21

**brand** 103:3

**break** 43:21 78:7,8,10,23  
101:20,21 102:4

**bringing** 58:21

**broader** 90:24

**Browning** 14:20

**built** 52:17 88:16

---

## C

---

**calculations** 89:24

**call** 7:23 13:20 16:2 21:18  
34:19 88:6 90:6

**called** 11:23 14:22 89:8 90:20  
97:14

**calling** 90:18

**calls** 54:14 92:14

**came** 94:10

**can** 6:7 12:14 16:18,21 17:23  
18:14 19:12 20:10,19,22 22:14  
29:14 31:23 32:5,15 34:1,13,  
16 35:5 36:8,12 37:14 38:3  
39:8,9,14 40:7,9 41:11 42:12  
44:5,11 45:4 50:15 52:23 53:1  
56:24 57:19 58:1 59:3,10,19,  
22 62:6,11 63:8,16 65:19  
66:18,25 68:21,25 70:10,13,17  
71:25 72:2,5,11,13,16 73:10,  
13 75:25 76:9 77:7 79:3,6 81:8  
83:6,11,14 85:20 86:2 90:9  
91:7 92:15,18 93:11,16 95:21,  
22,25 96:3,6,8 97:5 98:15,22,  
25 100:23 101:17,21,24 102:4  
104:8

**can't** 9:10 88:18 98:9,17

**candidly** 90:22

**cannot** 37:8 69:9

|   |   |   |
|---|---|---|
| <b>capacity</b> 52:8  | <b>circles</b> 38:24  | <b>common</b> 83:20   |
| <b>career</b> 90:23 91:1  | <b>cite</b> 49:15,18  | <b>commonly</b> 88:23   |
| <b>carrying</b> 52:4  | <b>cited</b> 5:25 13:4,7  | <b>company</b> 14:22 89:8 90:7,8 100:19                                   |
| <b>case</b> 12:23 24:14 50:13 64:6 65:13 66:16 103:7  | <b>claim</b> 15:4,25 30:6,15 32:1 44:25 45:4,8,22 48:1,13 55:18 56:17,19,21 58:10,12,15,20 59:7,14,15 60:11,14,15,17 61:1,4,20,22,24 94:1 | <b>comparable</b> 104:5,9 106:9,18  |
| <b>cases</b> 63:23 64:5,23 66:7 69:14   | <b>Claims</b> 18:11 29:17,20 30:2, 25 32:9,12 44:16,23 56:19 58:17  | <b>compared</b> 38:16   |
| <b>catalog</b> 16:7 89:8,13 90:3 91:8,23  | <b>class</b> 64:16 69:12,23   | <b>Competition</b> 13:22  |
| <b>catalogs</b> 90:14   | <b>clean</b> 16:14,17   | <b>competitor</b> 100:16  |
| <b>catch</b> 25:8   | <b>clear</b> 54:8 66:6 71:15 72:4,9 85:4  | <b>component</b> 90:18,21 92:25 107:1                                     |
| <b>catches</b> 84:3   | <b>close</b> 22:15 94:17 96:15  | <b>components</b> 51:9 90:15  |
| <b>cause</b> 22:2 73:19 79:13   | <b>clutch</b> 16:7 86:9,20 87:2,6 90:10 92:23 103:8,12 104:8,9, 15,22 105:2,3,9 106:8,17  | <b>comprise</b> 67:11   |
| <b>causes</b> 87:20   | <b>clutch-type</b> 107:1  | <b>concave</b> 35:15,21   |
| <b>causing</b> 25:3   | <b>clutches</b> 14:21 16:9 88:13 89:11 103:4,23 104:5   | <b>concern</b> 77:23 81:11  |
| <b>century</b> 17:9   | <b>coast</b> 104:17 105:6   | <b>concluded</b> 107:12   |
| <b>certain</b> 9:6  | <b>coaster</b> 106:12,14,17   | <b>conditions</b> 102:20  |
| <b>certainly</b> 23:18 50:13 52:3 65:17 85:15 92:12   | <b>colleagues</b> 6:25  | <b>configuration</b> 35:21 77:20  |
| <b>cetera</b> 94:14   | <b>collection</b> 90:1  | <b>confirm</b> 39:2 59:3  |
| <b>chair'</b> 63:3  | <b>collectively</b> 35:15,22 37:14  | <b>connect</b> 8:5 22:2 34:8  |
| <b>challenge</b> 71:21  | <b>colored</b> 87:24  | <b>connected</b> 8:9 40:20 41:8,21 42:9 43:2,5 51:17 67:24                |
| <b>challenged</b> 8:15  | <b>colorful</b> 37:21   | <b>connecting</b> 38:15,19 100:8  |
| <b>challenging</b> 4:19   | <b>colors</b> 38:14   | <b>connection</b> 34:9 42:5 43:14 100:8                                   |
| <b>chance</b> 82:20   | <b>column</b> 35:5,18 36:8,21 45:5, 12 49:5 50:18,25 51:10 55:19 60:15 67:5,22 68:1,2,21 70:10 84:20                                      | <b>connections</b> 40:18 41:6 43:8  |
| <b>change</b> 26:16,19 29:2   | <b>combination</b> 51:4 72:7,9  | <b>connector</b> 83:25  |
| <b>characteristics</b> 80:19,22   | <b>combine</b> 62:8 78:24 80:12   | <b>connects</b> 83:22   |
| <b>chart</b> 15:25 94:1   | <b>come</b> 41:25 77:4,11   | <b>consider</b> 27:21 28:4,14,23 54:19 68:12,15 71:14 73:5 76:14,16 107:7 |
| <b>Chickering</b> 10:18,20 14:10 20:15 21:3 23:1,3,20,23 25:11, 20,23 26:2,6,9 27:6 28:18,25 29:1,13 30:8,10,14,19,24 31:10 33:8 37:16,23 62:9 63:25 64:7,8,20,24 65:2,6,22 66:1 69:15 73:1 78:24 79:18, 19,20 80:4,12,13,17,23 81:4,6 82:3 | <b>coming</b> 8:7 78:16 81:2 86:19  | <b>Considerations</b> 93:14   |
| <b>Chickering's</b> 31:18 33:7 37:7,11 38:3   | <b>comments</b> 16:16   | <b>considered</b> 5:23 7:12,15 13:8 28:11 91:22 92:7                      |
| <b>child</b> 64:1   | <b>commercial</b> 94:17 96:16   | <b>considering</b> 56:14  |
| <b>children</b> 62:21 69:18 72:20 73:5  | <b>Commission</b> 13:23   | <b>consistent</b> 50:8  |
|   |   | <b>consistently</b> 57:13   |
|   |   | <b>console</b> 67:8   |
|   |   | <b>constitute</b> 57:10   |
|   |   | <b>constitutes</b> 103:19   |

**construction** 15:4 47:20  
48:1,14,15 58:20 59:8 61:24

**construe** 48:7 62:2

**construed** 47:24 58:24

**Consumer** 13:23

**contact** 23:10 26:15 27:3,4,13  
29:10,22 30:23 31:4,8 43:19

**contacted** 41:17 43:16

**contacting** 28:8 29:6

**contacts** 23:2,4 27:10 28:1

**contemplate** 76:5

**context** 33:22 49:13 55:10  
58:8 105:18

**control** 75:2 83:15 84:22

**conversation** 90:8

**convex** 35:15,22

**cooperates** 51:2

**copies** 14:16

**copy** 8:14 39:4,9 89:5 98:18  
102:16

**corner** 26:22

**correct** 8:16 9:18 11:3 13:1,8  
19:16 21:5,6 23:15,24 24:4,5,8  
28:12 29:12,18,19 33:1 36:3,6  
42:18,19 47:15 50:6 51:7  
55:12 56:1 58:7 59:8 60:6 63:6  
70:8 71:8 73:7 76:7 78:2 82:1,  
9,10 83:3 85:10 92:23 95:15  
100:14 107:4

**correspondence** 68:5

**corresponding** 60:22,23  
61:13

**cost** 92:21 93:3,4,8

**couch** 65:18

**could** 21:12 25:3,5 26:7 32:20,  
25 33:25 34:2,8 36:2,5 64:1  
65:2,22 67:19 69:18 71:1  
72:21 76:5,22 77:1,10 101:23

**Counsels'** 71:17

**couple** 9:9 15:10 22:20 53:3

**couple-minute** 101:20

**Court** 47:24 48:7,14 58:24

62:2

**Court's** 59:7

**create** 25:5

**cross** 67:3

**cross-section** 88:16

**crossbar** 67:4,7,11,15

**crossbars** 67:24

**currently** 94:15 96:13

**cursor** 97:5

**curve** 19:25 24:24 25:1,12,19  
28:14 30:14,22 34:10,11 36:7,  
18,25 94:2,3,7,12,13,16 95:14,  
17 96:9,10,18,19,21,24,25  
97:8

**curved** 19:15 20:7,16 26:10  
30:11,18 31:5,8 32:2,13,16,21,  
25 33:6,12,18,19 35:14 36:5  
37:8,14 45:17 47:12 60:21,23  
61:13,14 66:11 72:22,24 73:18  
74:16 81:25 82:2 99:13 100:21  
104:22 105:10 107:3

**Cutter** 14:13

**CV** 13:19 15:7

---

## D

---

**date** 88:25

**dated** 6:12 95:9

**declaration** 6:15,18,21 7:6,11  
12:13 13:8,17 15:6,8,12,15  
16:19 17:16,20,23 18:15 19:13  
20:5,11,20 23:6,15 29:15  
31:23 32:6 37:18 38:17,22  
41:12,14 42:13 44:5,12,24  
52:23 56:25 57:7,20 58:2  
59:11 60:7 62:7,16 63:12,14  
71:19 72:13 73:11 79:4 81:8  
83:6 84:7,15 85:21 86:15,17  
87:23 92:15 93:11 95:13  
96:18,25 97:10 98:19 99:9  
100:23,25 101:9

**declarations** 5:23,25 15:18

**decline** 82:12

**declined** 82:14

**define** 32:2 35:23

**defined** 35:15 43:8

**definitely** 21:24

**definition** 33:19

**degree** 9:15,22,25 10:8

**delivered** 13:5

**depend** 25:14 78:4

**depends** 33:22 43:19 52:16  
65:12,13 66:7,14 89:14

**depicted** 86:10 103:8

**deposed** 4:21,25 5:16

**deposition** 4:14 5:3,8,13,21  
15:18,20,22,23 16:10 107:12

**describe** 21:7,14 24:10,21  
26:9 34:20 52:19 64:5 65:9  
69:12 77:5 80:13 85:16 104:8

**described** 27:8 39:3 53:14,21  
56:17,18,21 57:13 63:25 64:7,  
8 68:11 69:13,14,16 70:20  
74:2 76:6 77:14,22 85:13  
91:23 105:13

**describes** 54:15 67:23 70:16,  
21 84:7 91:11

**describing** 53:12 68:13,16,19  
69:2 83:8,14

**description** 48:22 49:24  
63:22 66:6 74:10 89:17 92:4  
98:8

**design** 25:3 62:18 77:20  
80:20

**designed** 65:21,22 69:22,23,  
24 74:4

**desk** 91:3

**despite** 53:12 80:16

**detail** 48:6 53:13

**detailed** 89:22 90:7

**details** 97:25

**device** 18:2,4,6,7,9,12 29:2  
56:22 64:9,12 65:7 69:22,25  
73:22 79:11,18,19 81:21 86:9

**devices** 11:24 14:21 15:9  
89:11

**diagram** 88:10

**dial** 90:9  
**dictionary** 49:18  
**did** 5:3,7,10,12,20,24 6:20 7:3,  
8,10 10:3 13:3,5 26:15 31:3,10  
35:12 48:7,14 49:15,18 52:10  
59:5 62:2 63:20 71:13 88:6,7  
**didn't** 30:13 54:22 69:17 77:5  
93:8  
**differences** 64:13  
**different** 16:11 21:2 54:18  
55:4,8,9 56:17 76:1 77:12 78:1  
81:22,24 94:3 95:10 100:19  
104:21,25 107:2  
**difficult** 73:2  
**digit** 5:14,17,18  
**digits** 70:7  
**digs** 84:3  
**direct** 23:20  
**directed** 64:18,20,22,24 99:13  
103:10  
**direction** 18:19,21,22,25  
19:4,5 48:25 73:21 74:7,8 75:8  
79:15 80:7 81:12,14 82:6,21,  
23,24 83:2,5,24 84:2,4 87:5,  
14,18 105:11,12 106:1  
**directional** 18:23 19:1  
**directions** 18:8  
**directly** 73:8 81:5  
**director** 101:10  
**disclose** 20:15 26:9  
**disclosed** 84:5  
**discloses** 35:12 36:15 37:16  
62:17 75:4  
**disclosure** 31:18 37:6  
**disclosures** 64:13,14  
**discounted** 99:12  
**discussed** 26:1 36:2 102:25  
**discusses** 71:20  
**discussing** 92:21 93:13,17  
**discussion** 34:6  
**discussions** 98:14,15

**disposed** 45:15 47:10 51:13  
52:12,14 59:25 61:8,25 62:2  
**disposing** 59:14 60:18 61:5,  
25 62:3  
**distinct** 57:15  
**distinguishing** 54:9,12 64:11  
**District** 47:24 48:7,14 58:24  
59:7 62:2  
**document** 17:25 18:17 20:24  
32:8 35:8 36:14 44:14 57:1  
58:4 59:2,6,24 62:13 69:1  
70:15 72:18 73:15 79:8 81:10  
83:13 92:20 99:2  
**documents** 5:4,20,24 12:19  
13:10 16:11  
**does** 9:23 17:1 19:9 20:15  
25:10,11,19,20 26:2,6,9,19  
28:18 29:2 37:2 39:21,23  
40:17,18 45:8 46:6,16,17  
47:16 49:3,6,10 51:21 52:19  
53:24 61:8,20 67:2 68:20  
70:19 78:16 79:20 80:2,13,18,  
21 84:5 85:12,13,15,16,19  
86:20 87:7 88:8 96:9 99:3,5  
**doesn't** 49:9 53:25 69:5,8  
74:15,19 76:3 81:6 85:3  
**don't** 5:14 10:4,7,10 17:6,21  
18:11 19:11 26:13 29:24 39:5,  
7,18,24 43:1 45:1 59:2 68:10  
79:24 85:18 93:7 96:16 97:20,  
25 99:19 100:10 101:6,13  
105:5 106:11  
**done** 17:24 18:16,17 20:23  
32:7 35:7 36:13 44:13 53:2  
56:25 58:3 59:23 62:12 70:14  
72:17 73:14 79:7 81:9 83:12  
90:20 92:19  
**double** 5:14,17,18  
**Doug** 9:6,12,15  
**down** 22:25 41:24 42:12 43:13  
83:4 105:6  
**downward** 43:12 80:9  
**downwardly** 23:10 24:7,11  
27:11,23 28:16 29:5 40:22  
**dozen** 4:24  
**Dr** 4:4,9 15:13 26:25 38:5 44:3  
71:13,18 78:12,21 86:15,17

101:19 102:13  
**drafted** 7:6  
**drawn** 92:12  
**dropped** 41:24  
**duly** 4:5  
**during** 74:19 75:5

---

## E

---

**E-M-E-R-S-O-N** 14:23  
**each** 22:2 35:20 41:17 43:16  
62:25  
**earlier** 20:5 63:24 64:16 69:11  
90:23 91:1 101:4  
**early** 13:24  
**Ecomill** 97:11  
**Edition** 11:25  
**editor** 12:1  
**educate** 89:18  
**effect** 82:4  
**effort** 93:9  
**either** 43:10 63:1 83:5 93:9  
**element** 50:23 84:17  
**elements** 87:9,23,25 88:3,7,9  
**elevated** 82:19  
**else** 5:10 6:23  
**embodiment** 25:20 26:1,4,11  
28:21,22 30:12 31:12,14,19  
34:24 36:10,24 50:21 51:5  
84:22 85:7  
**embodiments** 21:2 35:4 63:1  
**Emerson** 14:22 89:8  
**employee** 101:8  
**end** 32:20 43:9,10,12 66:8  
75:3 80:8 88:19,20 101:24  
106:3  
**ends** 38:23 41:6,16 70:6 87:18  
105:5  
**engagement** 67:12  
**engaging** 67:14 84:10

**engineering** 9:15,22,25 10:8  
101:11

**enlarge** 40:7 96:6

**entire** 8:20,23 19:25 45:7  
56:15

**equipment** 15:2 22:8 88:23  
91:15,18,23 92:5 103:13,17,20  
104:2 105:14,19 107:8

**equitable** 72:8

**Eric** 12:13 15:8

**et** 94:14

**evaluation** 103:7

**even** 23:7 30:12 31:3 38:4  
54:19 66:6 77:4 82:16

**ever** 97:21 106:12

**everybody** 90:25

**exact** 48:5 94:9 106:11

**exactly** 6:16 41:18 43:19  
88:19 94:10 101:6

**EXAMINATION** 4:7 102:11

**examined** 4:6

**example** 20:4 31:10 49:18  
53:20 54:15 55:13 82:3 89:16  
103:24

**excerpt** 95:5

**excerpts** 29:17

**excuse** 61:9 69:15

**exemplary** 34:23 35:4 36:10,  
23 50:21

**exercise** 22:7 64:9,11,20,24  
65:18,19 68:11,12,14,15,17  
69:25 70:17 88:23 91:15,18,23  
92:5 103:13,16,20 104:2  
105:14,19 107:7

**exercising** 68:3

**exhaust** 8:6

**Exhibit** 6:4,8 8:11,13 10:12,  
14,22,25 11:9,11,19,22 12:10,  
12,15,25 13:4,13,17,19,21,24  
14:1,3,5,14 15:1,25 16:2,19  
33:11 34:14 45:2 48:2 55:19  
59:7 62:5 66:20,23 70:3,5  
71:7,10,12,13 86:13,21 89:5,7  
93:25 94:20,23 95:4,17 98:20,

23 101:9 102:14,16,18,25  
103:3,8,10,19 105:13,18

**Exhibits** 6:2 13:3,6 16:13,15  
19:22 71:7 94:24

**expect** 39:5 82:17,24

**expected** 18:22

**experience** 90:13,14,19  
98:12

**expert** 4:14

**explain** 26:6 88:8

**explains** 74:16

**explicitly** 37:16 45:18 49:9  
53:19 58:19

**expressly** 48:12 69:17

**extent** 72:6

---

## F

---

**F2115-05** 14:24

**fact** 10:4 31:15

**fairly** 66:1

**fall** 74:17

**familiar** 12:7 17:17 99:25

**far** 64:12 90:6 95:22

**feet** 23:9 62:20 66:6 72:20  
73:4,7

**few** 6:16 17:13 34:6 59:2 101:5

**field** 91:18 92:6 103:11 105:15

**figure** 21:5 23:24 24:2,3  
25:10,20 26:1,4,11,16,19,23  
27:18,19,23 28:20,22 30:12  
31:9,11 34:20 37:21,23,25  
38:1,8,16,20 39:22 40:18  
41:13 42:15,21 43:7 50:15,17,  
19,22,23 51:5 55:5 56:9 66:25  
67:3 85:4,6,7 94:10

**figures** 23:8 24:1 27:5,7  
34:16,18 35:9,13 38:4 84:13  
85:2

**file** 13:14

**filed** 12:20 17:16

**find** 39:19

**fine** 53:8 72:3 96:1

**fingers** 22:4

**firm** 7:4,17

**first** 17:9 21:8,15,25 22:21,23  
27:10 32:2 45:14,19,25 46:6  
47:5,9 55:22,23 57:24 60:19,  
24 61:6,14 68:22

**first-named** 9:13 11:2,13  
12:1

**fitness** 15:5 91:13,24 92:5  
99:10,17,20 104:6

**five** 8:24

**five-minute** 102:4

**flat** 31:4 66:10 81:15,19,25  
82:3,9,11,15,25

**flexible** 25:16

**flip** 59:3

**flipping** 48:5 49:20 59:1

**float** 106:4

**fly** 8:8

**focused** 64:15 69:24 93:1

**Foley** 7:4,17 19:20

**follow** 24:24 25:6

**follow-on** 61:11

**followed** 46:13

**following** 77:8

**follows** 4:6 45:17 47:12 60:21  
61:12

**foot** 23:1,3 27:2,10,12 28:1,18  
29:9 31:7

**footnote** 16:23

**force** 83:5

**forced** 105:7

**foregoing** 53:5,6

**forget** 66:20

**forgot** 48:5

**form** 7:7 18:10 19:6 20:1  
21:10,23 24:13 25:13 26:12,20  
27:25 28:6 29:23 30:4,16 31:1,  
20 32:11,17 33:2 34:4 35:17  
36:20 37:10 38:13 44:19 46:11

47:1 48:21 51:16,23 52:15  
54:21 56:7 57:5 58:11 60:12  
63:7 64:3 65:4,11,24 67:21  
70:23 75:22 76:8 77:6 78:3  
89:1 91:25 93:6 95:20 98:3  
99:7,23 100:6,17

**forms** 20:6

**formsprag** 87:2

**forth** 68:5

**forward** 23:11 74:7 106:25

**Four** 7:21 8:24

**frame** 46:21 55:25 56:6 67:9

**free** 74:7 106:21,24

**freely** 87:16

**freewheel** 104:13,18

**freewheels** 87:6

**friction** 74:19 75:5,7,16

**frightening** 8:10

**from** 8:6 11:23 13:12,22  
14:17,22 16:8 17:17 18:8  
19:18,21 21:2 23:20,23 25:3  
26:16 37:23 38:9,10 39:2 49:4  
57:15 59:13 62:5 63:23 65:18  
67:4 73:8,22 79:12 80:19  
81:21,22 84:20 86:11,14,19,21  
87:3,22 88:4,19 90:18 94:2,10  
95:5 97:4 99:8

**front** 9:1 13:12 22:22 29:6  
40:21 41:1,3,24 42:1,7,23  
45:15 47:10 84:12 102:16

**fulfills** 92:11

**full** 60:14 95:24

**function** 52:4 106:10 107:1,2,  
3

**functionally** 57:14 67:7

**further** 67:10 75:19 107:11

---

**G**

---

**gap** 21:21,25

**gave** 63:23 64:23

**gear** 83:19,21 84:5,17 85:12,  
13

**gears** 83:16 84:11,13,23 85:1,  
16

**general** 22:9 89:17 92:24

**generally** 83:1

**generic** 18:3

**geometric** 35:21

**geometry** 29:1 33:19 43:3

**gets** 22:15

**getting** 65:18

**Giachetti** 15:13,15 38:5 88:4

**Giachetti's** 13:17,19 86:15,17

**give** 31:10

**gives** 105:18

**go** 17:6 19:7 22:25 38:6 39:2  
40:3,10 41:12 48:10 55:18  
67:22 79:22 80:7,8 89:21 90:1  
94:9 98:22,23 104:16

**goes** 84:2

**going** 4:18 5:15 10:9 25:7  
29:4 38:7 43:20 44:7 53:3 54:6  
71:16 72:6 78:7 82:1,4 94:22  
102:6 104:12,16 105:7 106:24

**good** 4:9,10 78:13,16,17  
102:7

**got** 63:15 76:23 87:11

**grab** 68:2

**gravity** 82:5,7

**green** 38:24

**guess** 14:21 21:18 25:17  
29:24 32:18 65:12 85:6 90:21  
101:25

**Guide** 13:22

**guided** 90:21

**guys** 43:21 78:7

---

**H**

---

**had** 30:9 34:6 90:24 92:10  
100:20 106:16

**half** 43:20

**Half-hour** 78:13

**Handbook** 14:18

**handicapped** 62:21 70:18  
72:21 73:5

**handled** 67:25

**handles** 67:14,17,23 68:4

**handrails** 66:6,10,12 67:2

**hanging** 55:17

**happened** 30:13

**happening** 87:18 105:5

**happens** 87:13

**hard** 40:20 51:24

**hardened** 87:1

**has** 9:15,22 28:25 30:22 35:20  
36:7 46:8 51:1 52:3 64:5 66:5  
67:17 74:14 77:20,23 82:2  
84:9 85:6 87:23 89:23 101:11

**have** 4:21,25 5:4 6:2,4 7:17,  
19,24 8:11,18,19,22 9:3,5,25  
10:7,12,22 11:9,19 12:10  
13:13 16:15 17:6 19:7 20:25  
21:8,15,25 23:5,20,23 24:2,6  
25:7,9 27:8,21 29:17 31:3  
33:5,6 37:21 39:4 41:25 42:3,  
6,10 43:8 44:17,23 45:1,10,25  
46:24 48:18,25 49:3,21 50:3,  
11 51:21 55:10 64:2 65:1 66:2  
70:2 77:1,11 79:9,22 80:3,11  
82:4 84:5 85:3,12,14,17 89:5  
90:7,13,25 91:22 92:7 93:7  
94:9,20 96:24 97:21,23,25  
98:4,12,18 99:24 100:7,18,19  
101:3,14 102:1,16 105:25  
106:12,17,19,20,21 107:3

**having** 4:5 46:1,19 55:22  
62:14 73:18 74:18 77:8 81:19  
83:15

**hazard** 81:13,18 82:8,13

**he's** 77:15 101:9

**head** 7:1 9:16 10:11 94:19  
98:17

**header** 59:13

**heading** 20:14 32:1 57:22

**heard** 97:21 98:1,5,7,8,12  
106:12

**help** 90:9,10,14 91:3

**helpful** 16:12 90:23

**helps** 96:7

**here** 4:11 27:11 28:23 33:14  
38:1 39:13,17,20 41:11 42:17  
44:8 45:21 52:13 57:6,22 58:5  
59:13,25 62:7 63:16 64:5,14  
68:11 69:2 70:16 72:8 73:16  
74:23 75:20 78:11 81:16 83:8,  
14 85:3,23 89:10 93:13 94:13  
96:5 97:5,13,14 99:9 100:25  
105:21

**Here's** 95:24

**Hey** 76:23

**high** 80:8

**higher** 82:19

**highlighted** 27:22

**history** 13:14 17:3

**hold** 71:25 72:2

**holding** 68:2

**holes** 38:25 40:5,16 41:1,8,9

**homes** 69:19

**homes'** 63:2

**horizontal** 83:1

**hose** 8:6

**hospitals** 63:2 69:19

**hour** 43:20

**hours** 5:14,17,18 6:17 91:5

**housing** 51:1

**how** 4:23 5:3,12 6:14 7:20  
8:22 21:7,14 24:10,20 25:5,15,  
16 38:12 52:16 54:9,12 65:9,  
22 67:23 74:10 76:19 78:9  
86:20 89:12,17,19 91:13  
103:16 104:8,21

**however** 78:12 80:16 82:25

**hydropacks** 8:1,2

**hypothetically** 32:19,23

---

## I

---

**I'D** 17:6 19:7 54:5 71:18 79:22  
89:3 94:9

**I'LL** 39:19 41:11 103:17

**I'M** 6:24 9:23 14:12 17:17  
23:18 26:7 39:21 51:8,14 53:3  
54:23 59:17 63:8 67:4 68:1,15  
71:22 74:3,9 77:7 81:12 92:1  
94:17,22 96:15 99:24 104:7  
105:21

**I'VE** 63:15 64:4 98:5,7,8

**idea** 98:4 99:24 100:7 106:20

**identified** 74:23 77:2,12  
87:24 89:20 92:10 103:11

**identifies** 76:19

**identify** 75:12 76:3,15,20  
79:20

**identifying** 74:1,12

**ignore** 31:18

**illustrate** 25:11

**illustrated** 55:5 56:9 85:2

**illustration** 43:2 85:15

**image** 21:4 40:19 42:24 86:4,  
7,8,11,12,13 87:11,22 88:19  
93:20 94:8 95:24 96:11 97:12  
100:2,9

**images** 17:8 19:15,18 21:1,2  
27:5

**implied** 56:22

**impossible** 73:2

**improved** 78:1

**improvements** 76:15

**improves** 18:4

**inadvertently** 73:22

**inclination** 40:14

**incline** 82:12

**inclined** 82:14 83:1

**include** 19:15 33:11,18 46:6  
61:20 62:3 67:2 75:1 93:20

**included** 13:11 24:2 33:11  
37:5 58:10,17 60:10 86:4  
89:10 106:8

**includes** 56:5 84:23 89:9,10

**including** 99:14 105:2,8

**incorporated** 53:22 102:25  
103:7

**incorporating** 53:14

**incredibly** 34:7

**Indeed** 38:2

**independent** 42:6,22

**independently** 42:1 43:6

**indicated** 25:7

**indicates** 12:23 58:6

**Industrial** 16:8 89:9

**industries** 91:11,14

**industry** 91:24 92:5

**inferences** 98:9

**infinitely** 32:19,23,24 33:5

**information** 16:3 103:18  
105:17

**infringed** 99:12 100:20

**inner** 41:16,20 51:2,6 87:13,  
16,20

**instances** 99:15

**instruction** 16:3

**insufficient** 75:18

**intend** 30:13

**intended** 18:19,20,22 19:4  
23:9 29:12,21 30:2,5 62:18

**intends** 29:22

**intention** 71:2

**intentions** 78:5

**interference** 22:3

**intersect** 24:15,17

**intersecting** 30:18 42:10

**intersection** 41:22

**intersects** 23:12

**introduced** 99:11

**invent** 76:24

**invention** 68:23 70:17 75:24  
76:12,13,17,18 77:18 81:2

**inventor** 9:13 10:16 11:2,13  
76:14,19

**inventors** 8:25 9:3,5,24 10:3

**invoking** 68:7

**involved** 6:25

**IPR** 4:19 5:1,18 6:5 8:16 12:8,  
20 70:25 71:7 101:15

**IPR2023-00836** 4:19 6:5

**IPRS** 4:25 5:16

**ISO** 15:1

**issue** 74:13,14

**it's** 6:12,16 8:5 10:15 11:23  
13:24 14:14 16:7 17:2,7,13  
18:3,7 22:9,14,20,24 25:7 27:2  
29:21 30:17,18 31:4,7 32:24  
36:7 39:9,17 40:12 43:2 44:20  
49:11 50:10 51:4 54:1 56:22  
65:17 66:23 71:9,12 77:22,24  
78:6,15 81:16,25 82:3 83:20,  
24 85:8 89:8 91:13 93:25 94:1  
95:6,25 96:1,4 97:4 101:25  
104:11,16,17,18,24 105:24  
106:5,15

**item** 105:22

**itself** 39:3 49:24 60:11 61:23  
76:3 77:13 80:13 88:8

---

## J

---

**January** 6:12 95:9

**Jelenchick** 5:9 6:22 7:7 18:10  
19:6 20:1 21:10,17,23 24:13  
25:13 26:12,20 27:25 28:6  
29:23 30:4,16 31:1,20 32:11,  
17 33:2 34:4 35:17 36:20  
37:10 38:13 39:7 43:22 44:19  
46:11 47:1 48:21 51:16,23  
52:15 54:4,21 56:7,11 57:5  
58:11 60:12 63:7 64:3 65:4,11,  
24 66:13 67:21 70:23 71:9,12  
72:4 75:22 76:8 77:6 78:3,8,  
11,14,17 89:1 91:25 93:6  
95:20 98:3 99:7,23 100:6,17  
101:17,19 102:1,7,12 107:10

**jerking** 104:18 106:5

**jet** 8:6,7,8,9

**judicious** 71:17

**just** 10:5 16:13 22:21 25:25  
30:13 39:22 40:2 54:17,25

55:11,14,16 59:6 63:23 71:1,  
15,22 74:3,9 75:8 76:22 77:8  
82:15 86:22 87:15 88:15 95:25  
96:1,4 99:8 100:8,9 101:24  
102:3,6 104:17 106:24

---

## K

---

**Kadie** 101:15,22

**keep** 78:7 101:16,17 102:6  
105:7 106:24

**Kenton** 10:18

**kids** 106:16

**KIM** 4:4

**kind** 44:17 45:10 46:24 48:18  
50:3 79:23 87:12 100:8

**KK** 103:3,12,22 104:4,8,21  
105:2,3,8,9 106:8,17

**know** 4:11 5:14 9:15,22,24  
10:4,7,10 12:24 17:4,24 18:3,  
16 19:3,21,23,24 20:2,6,23  
30:8 32:6,19 35:7 36:13 38:19  
39:1 44:13 47:24 52:1 53:2  
56:14,25 58:2,24 59:23 62:12  
70:14 72:17 73:13 77:15 79:6  
80:25 81:1,5,6,9 82:18 83:12  
88:22 92:18 94:7,10,12,15,18  
96:13,16 97:19 98:5,6 100:10  
101:8,11 103:16 104:4 106:11

**knowledge** 89:2

**known** 65:2

---

## L

---

**labeled** 85:6 88:10

**laid** 96:4

**language** 45:22 58:9 60:9,11

**largely** 66:7

**last** 6:8 11:4,5,13 16:6 17:10,  
13 37:2 53:10 70:7 80:15  
102:18

**later** 56:18,19 75:3

**law** 7:4,17

**least** 57:10 60:4 87:11 89:3,9

**leaves** 27:13

**left** 8:25 21:4 55:24 56:6 82:11  
85:8,9 91:10 97:4

**leftmost** 43:14

**Legacy** 97:11

**legs** 104:19 105:6

**less** 93:4

**let** 14:13 17:24 18:16,21 20:22  
32:6 35:7 36:12 39:12 41:18  
44:13 53:1 56:25 58:2 59:22  
62:12 70:13 72:17 73:13 77:10  
79:6 81:9 83:12 92:18

**let's** 6:7 20:10 39:12 53:10  
71:25 76:24 84:21 98:22

**level** 6:25 10:2

**levels** 20:7

**Lifecore** 7:24 15:5

**like** 8:8 9:8 17:9 22:25 36:5  
39:16,22,24 40:3 60:16 71:18  
72:24 73:1 74:23 78:12 89:13,  
16,22 90:14 95:6 104:19  
105:3,9,22

**likely** 6:19 17:14

**limitation** 32:1 45:25 46:2,5,  
6,17,18,22,23 47:7,13,22  
48:13 55:20,21 57:23 61:1

**limitations** 30:15 44:9 46:7  
56:3 57:3

**limited** 71:4

**line** 19:25 33:23 35:6,18 36:8,  
21 46:13,14,17 47:3 50:18,25  
51:11 67:5,23 70:11 72:5  
84:20 90:7,18

**linear** 33:21,22,24 34:2,7,9  
35:16,22 36:2,17,24 37:4

**lines** 38:15,19 45:5,12 46:3  
47:3,19

**link** 17:11,15,17

**Linkedin** 10:9

**list** 8:25 49:21,22 64:15 94:3,  
12

**listed** 5:5,22 7:14 13:7 97:13

**lists** 95:10

**litigation** 100:13



**little** 21:12 44:25 48:2 83:22  
84:1 96:6

**lock** 106:1

**locks** 104:15 106:21

**long** 78:9,12

**longer** 63:22 96:17

**look** 39:22 52:1 54:19 55:10  
62:16 65:6 66:25 77:18 102:18  
103:2

**looked** 17:7 48:2

**looking** 39:22 45:22 88:15

**looks** 75:24 95:6

**lost** 99:16

**lot** 104:18

**LTG** 94:13 96:18,19

**lunch** 78:7,8,11

---

## M

---

**machine** 105:23 106:2 107:2,  
7

**machines** 106:7

**made** 32:19 42:5 87:1 100:7

**Magid** 11:14,17 14:9 62:8,14,  
17 63:13,22 64:5,15,18,22  
66:5 69:13,20,22 70:21 73:8  
78:24 83:8,14 84:5,14 85:2,13,  
16,24

**Magid's** 84:19

**maintain** 42:1,2,3

**make** 34:8 37:12 48:3 71:18  
72:9 83:5 84:18 98:9

**makes** 59:18

**manual** 16:3,4 34:22 35:3  
50:20 72:22 99:14 100:21  
104:22 105:10,19 107:3

**many** 4:23 7:20 8:22

**marked** 6:4 21:8,15

**market** 96:17

**marketing** 101:10

**markings** 16:15

**matching** 83:23

**mated** 56:16

**material** 25:15,16

**materials** 7:12,14 13:7

**matter** 7:25 15:6,13,16

**matters** 7:20,22 17:18

**may** 27:13 30:10 36:17,24  
37:4 67:11 73:19 79:13 89:18

**maybe** 4:24 9:10 40:2 52:1  
76:14 91:3 96:17

**mean** 36:3,5 53:18 55:13,14  
61:8 62:14 65:17 76:13 80:2  
81:24 87:7 88:15 94:25 97:7

**meaning** 55:11

**means** 18:21,22,25 49:11 60:1  
67:13 83:15 84:22 97:19 98:5

**measurements** 51:25

**mechanical** 11:24 14:20 15:9  
22:2,10 25:3 89:11

**Mechanisms** 11:24 15:9

**meet** 5:7,10 24:17,18,20  
30:15,24 42:18,25 57:3

**meeting** 67:12

**meetings** 9:10

**mentioned** 9:12,17 20:3,7  
46:13,14 54:25 69:11 76:12  
80:1 101:4

**mentions** 47:4

**met** 9:3,5 42:20 43:4 56:3  
101:3,5,6

**metal** 88:21

**metallic** 87:9

**methods** 15:3

**middle** 23:2 29:6 40:19 79:10

**might** 90:3

**minimized** 90:25

**minute** 15:14 88:18 106:23

**minutes** 34:6 59:2 78:14

**misunderstood** 26:8

**mix** 53:25

**model** 52:2

**models** 94:16

**modification** 41:4

**modified** 38:8,12

**modify** 75:1,13,19 77:19  
80:23 81:4

**moment** 23:18 46:14

**Monday** 4:1

**months** 6:16 17:13

**more** 6:17 19:19 20:8 27:3  
32:15 67:14 69:24 89:22  
90:21,22 93:4 96:6 98:15  
99:19 101:14

**morning** 4:9,10

**Morris** 105:8

**Morse** 14:20 103:3,12,22  
104:4,8,21 105:2,3,9 106:8,17

**most** 31:13 33:22 83:20  
106:15,19

**motion** 16:8 75:8 82:8 84:4  
87:21 105:11

**motivated** 75:19 80:12,23

**motivation** 62:8

**Motorized** 14:25

**mount** 79:11

**mounted** 52:12 82:25

**mounting** 81:20,22

**mounts** 73:22

**move** 40:25 41:23,25 67:25  
72:11 73:20 74:7 79:14 82:20  
83:2,5 87:14

**movement** 18:23 19:1 75:9,  
10

**movements** 62:20 72:20 73:7

**movements.'** 73:4

**moves** 27:11,15 28:10

**moving** 18:8 40:15 81:12,14  
82:22,23 97:6

**Mr** 4:8 7:9 13:17,19 15:13,15  
18:13 19:10 20:5,9 21:13,20  
22:6 24:19 25:18 26:17,24  
28:3,9 30:1,7,20 31:6,22

32:14,22 33:9 34:12 36:1 37:1,  
13 38:18 39:11 44:2,22 46:15  
47:6 48:24 51:20 52:9,18  
54:11,24 56:8,20 57:18 58:13  
60:13 63:10 64:10 65:8,14  
66:9,17 68:8 70:24 71:6,11,22  
72:5,11,12 76:2,11 77:9 78:6,  
9,15,20 89:4 92:3 93:10 94:24  
95:1,23 98:11,18 99:9,18  
100:1,12,22,25 101:3,8,11,14,  
18,21 102:3,13 103:10 107:11

**Ms** 5:9 6:22 7:7 18:10 19:6  
20:1 21:10,17,23 24:13 25:13  
26:12,20 27:25 28:6 29:23  
30:4,16 31:1,20 32:11,17 33:2  
34:4 35:17 36:20 37:10 38:13  
39:7 43:22 44:19 46:11 47:1  
48:21 51:16,23 52:15 54:4,21  
56:7,11 57:5 58:11 60:12 63:7  
64:3 65:4,11,24 66:13 67:21  
70:23 71:9,12 72:4 75:22 76:8  
77:6 78:3,8,11,14,17 89:1  
91:25 93:6 95:20 98:3 99:7,23  
100:6,17 101:17,19 102:1,7,12  
107:10

**much** 5:12 6:14 53:19 90:22

**multi-planar** 72:25 80:17,20

**multi-speed** 106:19

**multiple** 33:24 34:2 37:4  
99:15

**must** 44:16 45:9 46:7 48:17  
50:2,9 60:2

**my** 4:17 5:5,6 7:1 8:17 9:16  
10:1,10 15:6,7 38:17,22 39:12,  
14 48:4 49:21 54:5 55:3 57:7  
58:15 60:7 62:16 63:15,24  
64:17 69:22 81:16 84:7 89:2  
90:23 91:1 94:18,22 95:2 96:5  
97:5 98:17

---

## N

---

**name** 7:23 8:2 11:4,5,14

**named** 10:3

**names** 7:1

**nature** 38:3

**near** 27:11 102:19

**necessarily** 81:6 82:22

**need** 19:11 40:9 75:5 76:3  
77:19 80:25 81:7 92:10 99:19  
104:25

**needs** 90:9

**never** 23:1,4 29:9 31:8 53:14  
89:3

**new** 77:4

**next** 40:10 96:24 97:10 101:16  
102:5

**nice** 66:5

**Nicholas** 9:20,22

**Nick** 9:6,17

**no** 5:11 7:5,16 10:9 12:9,18  
16:17 17:12 20:2 24:15 28:19,  
25 30:17 31:2,21 40:5,9 47:2,  
18,23 48:9 49:20 51:8 52:22  
58:15,19,23 62:1,5 63:20  
69:11 74:3 81:21 83:4 89:2  
96:6,8,12,15,17,20 97:20 98:4  
99:24 100:7 101:14 102:1  
103:1,9 107:11

**non-curved** 38:2

**non-human** 91:4

**Non-motorized** 16:4

**non-planar** 33:16,25 34:3  
35:14 36:5 37:5

**noon** 78:6

**Nope** 96:23

**Notably** 53:5

**notches** 84:1

**note** 31:10

**notebook** 39:8,10

**noted** 64:24 96:15

**Nothing** 61:22

**noting** 74:3

**number** 4:20 13:19,24,25  
14:1,4,8,12,16 15:17,24 16:1,7  
39:5 66:20 76:20 85:6 86:23,  
24 94:3,12 95:10 101:5

**numbered** 85:3

**numbers** 84:19

---

## O

---

**Object** 58:11 65:4

**objection** 7:7 18:10 19:6 20:1  
21:10,17,23 24:13 25:13  
26:12,20 27:25 28:6 29:23  
30:4,16 31:1,20 32:11,17 33:2  
34:4 35:17 36:20 37:10 38:13  
44:19 46:11 47:1 48:21 51:16,  
23 52:15 54:4,21 56:7,11 57:5  
60:12 63:7 64:3 65:24 66:13  
67:21 70:23 75:22 76:8 77:6  
78:3 95:20 98:3 99:7,23  
100:17

**Oblamski** 9:6,20

**observed** 38:4

**obtuse** 24:16,18,20,21 42:2,3

**occasion** 30:11

**oddly-shaped** 87:10

**off** 7:1 9:16 10:10 71:25 74:17  
94:18 98:17 106:23

**offered** 95:19

**offerings** 93:17

**official** 100:10

**Oftentimes** 90:5

**Oh** 6:6 15:20 59:18 90:16  
91:17 96:6

**okay** 4:16,25 5:3,7,10,15,20,  
24 6:2,4,7,9 7:3,6,10,14,20,22  
8:11,15 9:12,24 10:7,12,19,22  
11:5,16 12:4,10,14,16,19,25  
13:3,6,10,16,18 15:21 16:18  
17:10,15,19,22,25 19:11,14,21  
20:12,19,21,24 21:4 22:12  
23:14,17 24:1,9,20 25:19 26:6,  
25 27:17 28:14 29:16 31:24  
32:5,8 33:10,24 34:15,17  
35:11 36:8,11,14 37:20,24  
38:6,12,23 39:4 40:7,11,17  
41:2,11 42:5,14 43:4,20 44:6,  
11,14 45:6,21 48:10 51:21  
52:25 53:9 56:24 57:1,21 58:1,  
4 59:4,10,12,18,19,21,24 60:9  
61:20,24 62:6,13 63:15 65:19  
66:24 68:21,24 69:1,7 70:10,  
15 71:11 72:11,15,18 73:10,  
12,15 74:12 79:3,5,8,20 80:1,  
10 81:10 83:7,13 85:5,7,12,16,

20,22 86:1,3,16,20 87:22 88:5,  
12,22 91:9,16,21 92:17,20  
93:12,16 94:3,12,20 95:2,9  
96:21 97:3,10,14 98:18,24  
100:13,24 101:18 102:7  
**old** 62:22 69:18 72:21 73:6  
106:15  
**once** 28:10 31:2 106:3  
**one** 9:7 14:5 16:6 19:21 31:12  
32:15 35:8 36:9 41:21,23  
43:13 51:11 53:4 54:6,8 67:14  
68:21 71:6 81:5 83:24 84:3,4,  
10 87:3,5,14 91:14,18 93:8,9  
94:10,23 95:25 97:4,5 101:13,  
16 102:5 103:11 104:12  
105:22 106:1  
**one-speed** 106:15  
**one-way** 50:20,24 51:1,10,13,  
14,21 52:10,19 54:17 55:5,15  
56:4,18 88:22 92:7,10 93:5  
**ones** 10:5,7 12:24  
**online** 17:2 90:24  
**only** 13:6 54:2 79:12 84:4,11  
104:11 105:25  
**onto** 73:17 74:24 75:21 82:6  
**operation** 94:18  
**operations** 89:19 99:25  
**opinion** 93:3,7  
**opposing** 38:23 67:16  
**opposite** 28:5  
**order** 12:21,22 15:4 48:1 59:8  
**ordinary** 31:17 49:13,25 54:6,  
8 55:7 56:12 57:8 61:17 65:1,6  
67:18 74:21,25 75:11,17 76:4  
77:1,10,17,25 78:5 80:2,5,11,  
21 82:15,16 89:12 91:21 92:6,  
9 107:6  
**original** 26:22  
**other** 6:25 9:9 10:9 13:10  
17:17 20:6,7 22:2 31:19 41:17  
43:17 49:15 70:25 71:19,23  
72:7 80:7 81:22 83:23 84:2  
87:5,10,17 93:8 98:14 101:13  
104:5,13 105:22  
**others** 20:3

**Otherwise** 22:1  
**outdoor** 104:11  
**outer** 41:6 51:3,6 87:13,16,20  
**outlined** 43:14  
**outside** 49:16  
**over** 14:13 18:21 84:1  
**overall** 29:1 52:2,17 92:21  
**overload** 14:21 89:11  
**Overrunning** 16:9  
**overview** 63:13

---

**P**

---

**p.m.** 78:18,19 102:8,9 107:12  
**pack** 8:9  
**page** 6:8 9:1 16:21,24 17:5  
39:21,25 40:1,10,12 56:23  
75:4 84:7 86:23 88:11 89:16  
91:7 92:4 95:5,19,25 96:19,22  
97:1 99:22 100:3,10 102:18  
103:2,10,21 105:16  
**pages** 14:17 15:10 48:5 89:23  
**pair** 83:16 84:9,23,24  
**paragraph** 12:14,17 17:22,23  
18:14,15,20 19:12 20:10,19,  
22,25 23:4,5,7,14,19,22 24:2  
25:25 27:9 29:14 31:23,25  
32:5 35:5,6 36:9,12 37:3,19  
38:17,22 41:13 42:12 43:7  
44:5,11,12,24 48:11 49:1,3,4  
52:23 53:1,10 56:24 57:7,19  
58:1 59:10,16,19 60:8 62:6,11,  
16,24 63:12,20 68:22,25  
70:10,13 72:13,16,23 73:10,13  
75:4 79:4,10 80:15 81:8 83:6,  
11 84:14 85:20 86:2,5,14,18  
87:23 92:15,18,24 93:11,21  
94:4,8 95:14 96:10 98:23,25  
100:9,13,23  
**paragraphs** 53:3 63:14  
**paraphrasing** 27:11  
**parents** 106:16  
**part** 7:4 12:22 15:2 27:15  
31:16 54:15 55:1 74:17 93:1,9

**particular** 35:20 64:15 76:19  
80:25 81:1 83:22 84:18 89:20  
92:13 103:11  
**particularly** 69:13 73:21  
**parts** 51:12 53:6  
**party** 8:2  
**Pass** 107:10  
**passed** 40:2  
**patent** 4:19 8:14,15,18,20,23  
9:1 10:15,17 11:1,12 13:13,15,  
24,25 14:1,3,9,10,12,14 15:16,  
24 16:1 18:6 19:3,8 23:21  
34:13 35:12 36:15 37:6 45:2  
49:5,16,24 50:8,15 52:19  
53:24 54:12 55:12,18 56:10  
58:18 60:15 66:19,20 67:6  
70:6,8,20 71:5,23 77:14 84:21  
88:25 99:15  
**Patent's** 57:11,16  
**patentees** 64:14  
**patents** 11:7 34:19 99:13  
100:21  
**pawls** 84:9,24 85:1  
**peak** 87:12  
**pedaling** 104:14  
**pedals** 106:22,23  
**people** 9:9 33:23 62:19,22  
69:19 70:18 72:19,21 73:3,6  
101:5  
**people'** 62:22  
**per** 5:18  
**perfect** 96:2  
**perfectly** 32:10  
**permit** 84:11  
**person** 31:17 49:13,25 55:7  
56:12 57:8 61:16 65:1,5 67:18  
74:21,25 75:11,17 76:4 77:1,  
10,17,25 78:5 80:2,5,10,21,24  
82:7,16 89:12 91:21 92:6,9  
107:6  
**personal** 90:19  
**perspective** 50:19  
**Petition** 38:9,11 39:3,4,8,21  
40:1

**Petitioner** 38:5 72:10

**Petitioner's** 71:21 102:14

**PH.D.** 4:4

**photocopy** 86:23

**phrase** 45:12 106:12

**physical** 70:17 104:24

**physically** 43:4 62:21 72:20

**pick** 90:2,10

**picking** 90:17

**piece** 44:25 83:22 88:21 104:2  
107:7

**pinch** 21:21 22:5,7,13 25:2,4,  
5,21

**pinched** 22:14

**pins** 40:15 41:8

**pivot** 41:5,15 43:13,17 68:4

**pivotal** 40:18 41:5 43:8,14  
67:11 68:9

**pivotaly** 67:13,24

**place** 81:3

**places** 84:3

**planar** 26:14,18 33:8 35:23  
37:12,16 40:21 42:2,10 43:3  
66:2,3 81:20 82:3

**plane** 23:11,12 24:6,7,11  
27:19,22,23 31:4 33:17,19  
36:7 40:22,23 79:13

**planes** 24:6,18,20,25 25:6  
26:11 28:15,16,24 29:11  
30:12,18,21,22 40:25 41:22

**please** 17:24 20:20 34:1 40:10  
43:23 52:24 59:11,20 63:16  
68:25 70:11 72:14 73:11 76:10  
79:4 91:8 92:16

**plurality** 33:12 44:9,16 45:9,  
22 46:1,19 47:17,18,21,25  
48:8,13,17 50:2 55:23 56:5  
57:15 59:15 60:19 61:6

**point** 9:7 21:22 22:5,7,13,14  
23:18 24:24 25:1,2,3,4,5,21  
30:18 40:24 41:22 42:9,11  
81:23

**pointed** 31:11 79:24

**points** 40:20

**portion** 9:1 28:11 29:10 30:11  
31:8 35:20 36:17,18,24,25  
42:7 43:15

**portions** 33:24 34:2,7 35:16,  
23 37:4 42:23

**POSA** 48:16 49:25 54:18  
55:10

**position** 29:8 31:7 32:9,24  
37:7 44:15 47:22 49:11,17,23  
54:3,5 57:2 59:25 60:9 61:1,2,  
9 64:18 69:7,21,22 72:19  
75:11 77:24 80:10 81:11,16  
82:12,15

**positioned** 44:17 45:9 46:8  
48:18 50:3,10 51:14 60:2

**positioning** 46:7,23 48:11  
49:7

**possibility** 80:6 82:18

**Post-its** 16:16

**potential** 74:12 81:13 82:13  
90:2 103:25

**potentially** 12:23 68:6 77:3  
80:18 92:11

**power** 14:17 104:12,16

**Powered** 97:15,18 98:9

**practically** 73:2

**Precision** 86:25

**Preferably** 67:4

**prepare** 5:3,7

**preparing** 5:12,21 6:15,17,20  
7:10 17:20

**prescribed** 66:15

**prescriptive** 69:25

**present** 25:2,21 70:16 81:14,  
19 82:9

**presented** 103:6

**pressure** 8:7 106:22,23

**pretty** 9:23 53:19 85:4

**preventing** 18:7 105:11

**previous** 47:19

**price** 99:12

**primary** 31:12,14,19

**principle** 91:1 92:25 104:24

**principles** 89:19

**prior** 39:25 62:18 103:6

**priority** 88:24

**probably** 6:24 8:24 17:15  
22:5 39:2 49:21 65:7,25 83:20  
91:5

**problem** 74:1,12,15,20,23  
75:12,14,16,20 76:19,20,25  
77:2,16 79:18,20,25 80:3,14  
81:1 89:21,25 96:6

**problems** 77:12

**proceed** 102:4

**proceeding** 72:10 102:2

**proceedings** 71:1,3

**process** 81:2 89:15

**product** 13:21 92:13,25 93:17  
100:20

**products** 90:3

**proffered** 72:10

**profile** 32:3,16,21,25 33:25  
34:3,21 36:18 37:5 60:24  
61:14

**profiles** 35:2

**proposed** 41:4 42:17,24

**proposing** 47:20 58:20 61:24

**protective** 12:21,22

**provide** 4:14 32:15,25 33:12,  
25 34:3 37:8,14 42:22 48:14  
52:11 68:10 78:1

**provided** 4:15 5:4 19:19,20  
38:4

**provides** 67:12,13 77:24

**providing** 48:15 50:10 52:20

**pull** 17:6 84:18

**pulling** 82:5

**purpose** 62:15 63:4,17 64:2  
70:22 90:4

**pushed** 22:4

**puts** 8:5

**putting** 105:1 106:22

---

**Q**

---

**qualify** 71:24

**question** 29:25 48:4 54:23  
55:3 63:16 77:8 92:2 96:3

**question's** 21:11

**questions** 71:2,16 72:5  
101:14 102:14 107:11

**quite** 6:19 9:11

**quote** 23:20,22 49:7 62:19  
73:8

**quoted** 27:9

---

**R**

---

**race** 87:3

**races** 87:4,8

**rail** 32:13 45:14,15,20,25 46:5,  
6,16,18,20,23 47:9,10 54:15  
55:2,21,22,24 56:16 57:24,25  
60:20 61:7

**rails** 32:2,10,15,20,24,25 33:4,  
7,13 37:8,11 50:14 57:17  
60:25 61:9,15,19

**ratchet** 83:16,19,21 84:5,10,  
13,17,23 85:1,12,13,16 92:22  
93:4

**rationale** 78:24 85:24

**re-ask** 63:16

**read** 8:18,22 17:23 18:14  
20:22 32:5 35:6 36:12 44:12  
53:1,3 56:24 58:1 59:22 62:11  
63:23 68:25 70:13 72:16 73:13  
77:2,11 79:6,22 81:8 83:11  
92:18 98:25 99:19 100:9

**reading** 54:7 56:13 61:16 67:4  
74:22 80:4 86:21 99:8

**reality** 79:19,21 80:1,14 90:5

**realize** 56:13,15

**really** 52:1 90:9 105:25

**rear** 22:22 23:13 40:21 41:1,3  
42:2,7,23 45:16 47:11 51:18  
52:3 73:17,23 74:24 79:12

81:21

**rearward** 74:8

**reason** 22:21 105:2,8

**reasons** 22:20 104:25

**recall** 6:1,14 7:1 10:5 17:7,8,  
19,21 33:4,10 39:5,17,18 59:2  
78:23 79:1,24 101:6,13 102:13  
103:14

**recess** 43:24 78:18 102:8

**recognize** 74:15 80:6,18,22

**recoil** 106:4,6

**recollection** 99:3

**record** 44:1 78:19 99:19 102:9

**rectangle** 87:11

**red** 27:22 43:14 87:24

**redactions** 12:17

**redesign** 66:1

**redirect** 101:23 102:2

**refer** 10:19 11:5,16 12:4 17:1  
21:21 40:19

**reference** 10:19,20 11:6,17,  
23 12:5,7 14:6 17:2 21:3 23:24  
25:11 30:8 35:13 44:8 47:17  
49:6 50:10 53:20 55:4 56:4  
60:16 63:25 66:18 69:7 70:3,  
25 71:3,5,20,23 76:3,5,14,15  
80:13 83:9 85:25 86:11,22,24  
88:8 90:17 92:22 94:9 95:14  
96:18,21 97:10 100:25 103:16  
105:21

**referenced** 25:2 47:18 94:24  
96:9 99:20

**references** 5:5,22 7:12 33:10  
49:15,22 64:13 72:8 86:18

**referencing** 16:11 23:19 48:1  
59:6 93:25 100:13

**referred** 57:4

**referring** 105:14,20

**Reflecting** 59:1

**refresh** 99:3

**regarding** 46:7 79:10

**related** 13:14 15:23 17:18  
31:18

**relation** 4:14 67:15

**relationship** 44:18 45:11  
46:9,25 48:12,19 49:12 50:4,  
12 51:22 52:11,20 58:7,10,22  
61:21 62:4 100:11

**relative** 22:22 41:23 61:3

**relevance** 71:3

**relevant** 88:24

**rely** 7:10

**remember** 7:22 9:10 17:10  
97:25 98:17

**remind** 63:8

**repeat** 26:7 34:1 48:4 77:7

**rephrase** 77:10

**replace** 36:17,24 85:24

**replacing** 92:22

**replication** 86:12

**report** 5:5,6 10:1 38:17 63:24  
64:17

**reportedly** 105:19

**reports** 4:15

**represent** 38:20

**representative** 19:24

**represented** 94:2

**representing** 5:9

**represents** 39:1 95:18

**reproduced** 23:5 29:18 38:9  
44:23 48:25 49:3

**require** 18:11 29:20 30:2 32:9,  
13 44:16 47:21

**requirements** 15:3

**requires** 33:8 61:2

**resilient** 25:15

**resistance** 106:2

**resource** 10:10

**respect** 26:1,3

**rest** 43:17

**restricts** 84:4

**results** 18:7

**retail** 99:25  
**retirement** 63:2 69:19  
**return** 37:18  
**review** 5:20,24 13:3 19:8 76:5 106:7  
**reviewed** 5:4,6 12:25 13:6 17:15  
**reviewing** 17:25 18:17 20:24 32:8 35:8 36:14 44:14 57:1 58:4 59:24 62:5,13 69:1 70:15 72:18 73:15 79:8 81:10 83:13 92:20 99:2  
**right** 4:9,18 5:24 6:7,10,12,14 7:17 10:16,22,25 11:2,13,19 12:1,4 13:10 15:14 16:10,18 17:4 18:9,18 20:13,25 21:7 23:7,22,25 24:2 25:17,25 26:5, 21 27:21 28:20,23 29:9 30:21 31:25 33:20 35:5 39:16,19,24 40:5,17 41:11 42:12 44:15 45:1,4,7,23 46:16,20 47:16 48:10 49:23 50:23 51:13 54:25 57:19 59:13,19,22 62:11 67:17 70:2 72:16 75:24 79:9 82:1 85:1 86:2,8 89:12 91:6,10,13 94:18,22 95:4,13,22 96:24 97:5 98:2,22,25 102:14,19  
**rigidly** 41:21 42:9  
**ring** 51:2,3,6 87:20  
**rings** 87:16  
**roll** 84:1  
**roller** 57:11 85:9  
**rollers** 23:11,13 38:15,19 53:12,22 54:2,13 57:2,4,12 84:12  
**rolling** 87:24 88:3,6 101:16,17  
**rolls** 83:24  
**root** 75:24 76:12,13,16  
**rotate** 40:25 87:15,16,17  
**rotation** 74:19 75:5 84:12  
**rotational** 73:21 79:15  
**roughly** 67:5  
**round** 87:10  
**rounded** 87:12

**rowing** 105:23 106:2,7 107:2, 7  
**runner** 22:16 25:21,23 26:2,10 29:8,22 30:10,23 31:15 99:11  
**runner's** 23:9 27:2,3 28:8 31:7  
**runners** 26:15  
**running** 18:8,23 19:2 20:16 22:25 24:21,23 27:1,6,24 28:5, 11,12,16,24 29:3,20,21 30:2, 19,24 31:3,8 33:6,12 34:22 35:2,14,23 36:6 37:8,12,14,16 45:11,13,16,17,18,24 46:8,10, 25 47:4,8,11,12 48:20 49:8 50:5 51:15,19,22 52:5,21 57:23,24 59:14 60:3,5,18,21, 22 61:5,12,13,17 72:24,25 73:18 74:16 80:17 81:20

**résumé** 13:20

---

## S

---

**S-T-I-E-B-E-R** 16:8  
**safety** 13:21 15:3 18:1,4,5 56:22 66:3 81:11,13,18 82:8, 13  
**said** 30:8,10 33:5 42:24  
**sale** 95:19 102:20  
**sales** 99:16 101:10  
**same** 21:17 34:6 42:2,3 54:4 56:11 62:24 66:13 70:21 75:3 77:5 104:24  
**Samsara** 99:10,16,20,21 100:4,14,16  
**saw** 80:25  
**say** 23:3 24:17 25:9 26:2 37:3 38:7 43:1,10 45:8 46:23 47:16 49:9,10 51:24 53:11 54:5 55:13 64:22 69:17 76:9,23 77:18 81:24  
**saying** 51:5,8 53:4 58:5 63:4, 17 66:10 68:9  
**says** 17:4 36:22 38:1 40:5 51:11 53:19 60:7,17 61:4 67:3, 6,10 75:25 84:8 86:13,24 91:15 94:1 102:20

**scanning** 85:18  
**schematic** 34:21 35:1  
**Schmidt** 14:2  
**Schonenberger** 14:4 70:2,5, 16,20,25 71:16 72:1,7  
**school** 106:15  
**Sclater** 12:2,5,7 14:19 85:24 86:11,19,21 88:8  
**scope** 65:24 70:23 98:3 99:23 100:6,17  
**Scott** 9:11  
**screen** 39:12,14 94:22 95:2, 24 96:5  
**scroll** 39:16,19 42:12 45:24 95:21  
**seal** 12:20  
**second** 21:9,16 22:1,23 27:16,17,20 32:2 45:14,19 46:16,20,22 47:5,9 57:25 60:20,24 61:7,15  
**Secondary** 93:14  
**section** 7:13,15 20:13 25:10 27:9 30:9 40:4 47:16 63:24 68:23 89:10 93:2  
**sections** 11:23 43:3 89:22  
**secured** 84:9,24  
**see** 6:7 8:25 9:7 16:23 20:10, 17 31:25 37:2 39:3,12,14,19 40:7,9 42:15 44:8 46:2 53:10, 16 57:22 59:13 62:7 73:24 74:22 79:16 83:8,14,17 84:21 85:18,23 86:4 88:1 91:10,13, 17 93:13,18,22 94:5 95:2,7,11, 22 96:8 97:5,13,16 98:22 101:1 102:19  
**seeing** 105:21  
**seems** 90:25  
**seen** 89:3  
**select** 90:15  
**selection** 90:21 92:25  
**selling** 96:13  
**sells** 94:15  
**sense** 18:3 59:18

**sentence** 37:2 53:10,18 61:11  
73:16,24 74:5 79:9 80:15

**sentences** 47:19

**separate** 29:4 72:10 101:15

**series** 33:3

**serious** 66:1

**serve** 90:3

**served** 91:11,14

**serving** 92:5

**setting** 82:5

**shaft** 45:15,16 47:10,11 51:2,  
18 52:3,11

**shape** 34:10 87:14,19

**share** 39:12 94:22

**sharing** 41:11

**shell** 87:14

**shoe** 27:3

**shoes** 27:4

**short** 33:6,13 34:8 43:24  
63:21 78:18 79:23 102:8

**should** 24:17 54:18 72:9

**show** 27:5 39:9

**showed** 56:4 100:2

**showing** 42:17

**shown** 31:9 34:18 38:16  
39:17,18 42:21 50:17,22 51:3  
84:13 94:8 95:17 96:10,19,22,  
25 97:11

**shows** 67:3

**side** 28:4,5,7,23 34:21 46:21  
55:24 56:6 82:19 85:8,9 90:8  
95:22 96:16

**sides** 35:1 67:16

**signature** 6:10

**signed** 12:22

**significant** 53:13

**similar** 104:11 105:24

**similar-type** 103:23

**similarly** 47:3 106:11

**since** 17:7 67:17 93:25

**single** 26:3 63:21 66:3

**sit** 33:14

**sitting** 65:17

**ski** 8:6,8,9

**skill** 10:2 31:17 49:13 50:1  
54:6,8 55:7 56:13 57:8 61:17  
65:1,6 67:18 74:21,25 75:12,  
17 76:4 77:1,11,17,25 80:3,5,  
11,21 82:16 89:12 91:21 92:7,  
9 107:6

**skills** 78:5

**skipping** 62:23

**slanting** 23:11,12 24:7,11,12  
27:19,22,23 28:15,16 29:5  
40:22,23 43:10,12

**slide** 87:15

**slope** 82:2

**slow** 105:6

**small** 24:24 25:1,19 28:14  
30:11,14,22 32:20,23,24 62:21  
72:20 73:5

**smooth** 34:11

**so** 4:18,24 8:15 9:12 10:7,19  
11:5 12:23,25 13:6,10 16:10  
17:15 20:13 21:4 23:22 24:10,  
20 25:5,9 26:13 27:10 28:10,  
19,22 29:3,8,21 30:8 31:7  
32:23 33:18 34:19 36:15 37:6  
38:10 39:16,21,24 40:1,11,17,  
24 41:4,12,24 42:5,12 43:4,9  
44:7 45:7,12,18,24 46:2,5 47:7  
48:3,10 49:4,11,23 50:25 51:4,  
5,12 53:6,18,24 54:1,12,17,25  
55:3,10,13,18,19,20 56:3 58:5  
59:25 60:14 61:1,8,16 63:4,11,  
25 64:11,18 65:15,22 66:7,10  
67:17,24 68:9,12 69:2,7,13,15,  
16 70:16 74:9,12,19 75:11,17  
76:3,12,24 77:1,14,17,24 78:6,  
11,15,23 79:9 80:2,10 81:25  
82:8,22 84:18,20 85:7,12  
86:20 87:7,9,15 88:6,12 89:12,  
18 90:17 91:3,21 92:4,21 93:3  
94:12,22 95:4,9,13,21 96:9,16  
98:25 99:3,20 100:2,13,16,25  
101:14 104:14,15,18 105:5,24  
106:4

**socket** 83:21

**Socwell** 11:3,6,7 14:6 44:7  
62:8 64:20,23 66:18,25 67:2,5,  
17,23 68:13,16,21 69:5,16,24  
72:25 74:2,3,6,10,13,14,18,22  
75:1,2,4,13,15,19 77:2,3,5,11,  
13,14,15,18,19,22,24 78:25

**Socwell's** 57:2 69:2 75:18

**sold** 99:22

**solution** 75:18 76:4,24 77:4,5,  
12,25 78:2 80:14

**solutions** 76:6

**solve** 75:13 76:18 80:25 89:21  
90:1

**solved** 75:15 77:3

**some** 6:24,25 7:23 10:2,9  
12:19 16:11 19:15 38:24 44:17  
45:10 46:9,24 48:18 50:3,11  
51:25 52:4,7 58:6 60:4 66:5,7  
87:23 89:17 91:22

**somebody** 90:8

**someone** 75:24

**something** 22:14 31:19 40:5  
75:25 76:23 105:3,9 106:8,10,  
18,19

**somewhat** 34:9 75:23 80:24

**sorry** 6:6 14:12 18:21 26:7  
36:22 38:6 43:11 51:14 54:23  
59:17 60:23 61:9 63:8 67:4  
68:15 69:15 81:13 92:2 95:1  
96:4

**sound** 78:16

**Sounds** 78:17

**Sourcebook** 11:24 15:10

**space** 21:7,14,19,21 22:8,10,  
11,17 23:2,4 24:10,15 26:18,  
23 28:14,23

**specific** 14:16 18:9,12 53:24  
58:9 61:2,8,21,22 69:23 90:10  
98:15

**specifically** 19:20,23 20:8  
26:14 27:3 30:6 43:1 46:12  
47:2 54:14 88:6 103:2

**specification** 14:25 44:21  
48:23 51:10 55:16 56:15 64:25

77:23 79:23 85:18

**specifications** 89:23

**specificity** 55:1,3

**speed** 105:7

**spend** 5:12

**spends** 31:12

**spent** 5:18 6:14

**spherical** 88:17,21

**spoke** 14:19 20:4 31:14

**spot** 88:17

**sprag-type** 86:9,20 88:22  
92:23 93:3

**sprags** 51:3 86:25 87:4,8,9,  
14,19 88:20

**squarely** 83:4

**staff** 90:24

**standard** 14:24 102:20

**start** 4:18 14:13 18:21 38:21  
39:25 81:5 93:16

**started** 63:11

**starting** 13:12 35:19 45:5,12  
46:14 47:3 50:25 67:5 70:11  
89:22

**starts** 35:9 36:22 46:17 53:4  
81:2

**state** 72:23 74:4 80:15 82:1

**stated** 10:1 18:20 44:20,23  
55:14 57:6 63:9 64:16 74:25  
81:16

**statement** 74:4

**states** 35:19 45:18 61:11 86:8

**Stationary** 15:1

**steel** 87:1

**step** 30:11,14 79:12 82:18  
83:4

**stepped** 80:8

**stepping** 82:6

**steps** 73:17 74:23 75:21

**Stieber** 16:7

**still** 29:4 37:7 42:6,21 43:5,17  
96:13,16 98:18 106:20

**stop** 41:11 87:21 101:22

**straight** 32:10,15,20 33:4,7,  
13,23 36:3 37:7 38:2

**stride** 68:6

**strike** 24:9 30:9

**stroller** 63:3

**structural** 52:2

**structurally** 52:6 57:14

**structure** 54:16 60:3

**struggling** 76:22

**sub** 44:25

**subject** 7:25

**submitted** 95:5

**subsection** 15:10

**subset** 14:17

**substantially** 67:8

**such** 44:20 56:9 60:3,20 61:12  
62:20 65:21 72:20 81:18 88:22  
94:13

**suddenly** 104:18

**sufficient** 75:7

**suggested** 59:16

**suggests** 23:1,3

**suited** 66:11

**summarize** 63:21

**Supplier** 13:22

**support** 38:3,21,24 41:5,7,15,  
17,20 42:17,20,24 43:6,16,18  
49:11 58:5,21,25 60:10 67:9  
68:10 90:7,24 91:1

**supported** 45:13,19 47:4,8  
49:10 57:24

**supporting** 49:16

**supports** 40:25 60:4 67:8

**sure** 6:24 9:23 10:6 17:21  
41:18 43:22 48:3 63:17 84:18  
92:1 95:24

**surface** 18:24 19:2 21:9,16,25

22:1 27:1,2,10,13,14,16,17,20  
28:5,12,17,24 29:20,21 30:3,  
19 31:4,5 33:6,8,12,17,18,25  
34:3,22 35:24 36:6 37:5,9,12,  
15 40:15,21,22 45:17 47:12  
60:22 61:13 66:3 67:9 72:24,  
25 73:19 74:17 80:17 82:4,6

**surface'** 20:16

**surfaces** 21:8,15 26:14,19  
27:6,24 28:2 29:3 31:16 34:9  
35:3,14 37:17 42:2,10 66:2  
81:20

**sworn** 4:5

**system** 22:10 52:2,17 53:14  
77:15 91:4

**systems** 8:4 53:23 89:17

---

## T

---

**take** 43:21 66:2 101:20,21  
102:3 106:23

**taken** 11:23 43:24 78:18 102:8

**taking** 51:25

**talk** 44:7 72:2

**talked** 13:12 14:5,8,11 25:23  
54:17 80:24 98:19

**talking** 10:1 28:20 31:13  
40:12 47:13 54:1,2 55:14,15,  
20 60:14 78:23 82:16

**talks** 50:25 74:18 103:3

**target** 78:16

**taught** 28:25 73:9 75:15

**teach** 81:7

**teaches** 28:18 62:23,25

**teaching** 80:16

**teachings** 75:2

**tech** 90:6,24

**technical** 90:13

**technology** 8:3,4

**teeth** 83:23 84:6 85:12,14,17

**tell** 88:18

**tells** 103:19



**term** 18:1,5 22:7,9,12 27:1  
33:15,20 47:20,25 48:7 49:11  
50:9 52:13 58:5,20,25 59:14,  
25 61:25 62:2 69:5,8

**terminology** 19:4 53:25  
60:10

**terms** 18:18 54:10 102:20

**test** 15:3

**testified** 4:6 105:15

**testimony** 103:14

**textbook** 49:19

**than** 6:17 31:19 55:4 56:17  
65:17 66:11 77:13 90:24 93:4  
107:2

**thank** 15:20 16:18 40:9 44:4  
60:17 78:22

**that** 4:13 5:4,15,17,19,22,25  
6:1,10,24 8:2,3,4,7 9:8,12,18  
10:2,4 11:3,16 12:2,19,23,25  
13:3,6,8 14:10,19 15:11 16:13  
17:1,6,9,10 18:4,7 19:11,16  
20:3,6,17 21:5,8,15,21 22:19,  
25 23:1,2,3,4,5,14,15,23,24  
24:1,3,9,21,24 25:1,2,10,11,  
19,20,21,23,24,25 26:3,6,7,9,  
15,18 27:5 28:10,12,14,18,19,  
23,25 29:8,10,12,20 30:8,9,10,  
11,14,21,23,24 31:3,7,8,10,11,  
12,14,15,25 32:9,24 33:1,10,  
11,18,24 34:1,2,9 35:6,8,12,  
14,21 36:3,6,12,15,16 37:7,22,  
23 38:24 39:1,12,16 40:12,17,  
20 41:4,7 42:5,9,10,17,18,24  
43:2,13,19 44:12,15,16,23,25  
45:8,18 46:2,7,8,12,13,17,22  
47:7,16 48:16,25 49:3,11,14,  
21 50:1,6,9 51:7,8,12 52:5,6,8,  
12 53:16,18,21 54:3,7,16,18,  
22 55:3,8,12,13 56:3,4,5,9,13,  
15,16,21 57:2,22 58:5,7,9,10,  
15 59:1,2,6,18,22,25 60:3,6,  
10,16,17,21 61:1,4,8,12,16,17,  
20 62:7,17,23,25 63:6,15,17,  
22,23,25 64:5,6,16,18,22 65:2,  
7,15,18 66:2,21 67:6,19,24  
68:1,25 69:7,9,14,17,21,22  
70:6,8,13,16,20,21,24 71:8,13,  
15,19,24 72:2,5,6,9,16,19,23,  
24 73:1,7,8,9,13,24 74:3,9,14,  
16,19 75:3,11,13,15,20 76:6,7,  
9,13,16,19,20,21,24 77:2,7,8,

10,16,24 78:2,16 79:1,16,18,  
24 80:2,10 81:11,16 82:1,7,17,  
19 83:2,15,17,22 85:10,16,19  
86:7,11 87:9,16,20,24 88:1,10,  
17 89:9,23 90:3,6,8,18,20,25  
91:3 92:2,4,10,18,23 93:1,18,  
22,24 94:5,8,9,10,11,17,18,24  
95:7,11,14,17,21 96:7,15,21  
97:3,11,14,16,19,24 98:2,4,10,  
19 100:2,3,4,13,14,20 101:1  
102:24 103:6,7,11,14,16,17,  
19,25 104:7,15 105:18,19,22,  
25 106:8,10,11,15,21 107:2,4

**that's** 6:4 7:14 8:15,17 11:4  
14:3,9,22 16:8 18:20 23:23  
27:17 28:10,15 29:12,21 31:9,  
18 35:8 47:13 52:13 53:8 55:5  
56:18 60:7 64:7 66:15 70:19  
72:2 74:17 75:23 80:6 81:1  
82:25 83:1 85:13 86:4,22,23  
89:10 90:17 91:5 94:7 96:1  
100:3,9

**their** 7:1 29:9 57:12 64:25  
89:14,24 90:3,9,11 95:18,19  
96:15,19,22 97:1

**them** 7:23,24 16:15 21:18  
34:19 57:9 67:25 68:2,13,16,  
19 85:3 87:15 90:9,10 97:13

**themselves** 89:18

**then** 15:22 20:25 27:15 28:10  
41:6,22 52:7 59:18 63:12  
68:13 69:9,19 75:3 82:1,4,12  
86:17 87:18 90:6 91:2 92:11  
101:22 102:3 104:17,21

**therapeutic** 62:15 63:4,9,17,  
22 64:2,19 65:16 66:11 68:10,  
13,16 69:4,6,8,10,12,17,20  
70:22 71:24

**therapy** 64:12,19 65:3,10,13,  
20,23 66:15 67:20 68:19,20  
69:5,8 70:18,19,21

**there** 6:2,24 7:25 9:9 12:17,24  
19:16 20:6,7 21:24 23:21 24:6,  
14 25:8 26:22 29:18 37:21  
38:24 39:18 40:5 43:2,8,15  
47:7 52:7 55:17 59:3 60:7 64:6  
77:8 82:12,17,20 83:4 86:22  
87:9 100:11 101:4,7 103:18  
105:1,17 106:7

**there's** 17:8 20:3 45:7 71:23  
76:20,23 83:21 89:16 97:14

**therefore** 29:3 43:9 57:9

**thereof** 67:16

**these** 9:3,24 15:18 16:11,14,  
17 19:18,21,24 21:1,2 27:7  
28:15 29:20 30:2,15,22,24  
34:18 35:13 37:24 41:5,6,8,15  
42:20 43:16 53:22 67:17,23  
84:5,13 85:1 88:12 89:17  
90:14 91:22 92:7 94:7,16  
101:15

**they** 10:4 19:19 22:1 24:15  
27:8 31:3 34:8,19 37:14 41:22  
42:9 43:4 52:13 63:5,19 65:2  
67:19,25 68:9 75:18 76:20,22  
80:22 81:1,4 83:16 85:3 86:18  
87:19 89:14,18,19,21 90:5,6,  
23,24 92:9,11,12

**they'd** 33:5 92:12

**they're** 13:7 27:4 31:2 43:2  
51:9 52:12,17 55:14,15,16  
57:3 68:9,11 88:10,16,19,20  
89:21,25

**they've** 87:11 89:20

**things** 9:8 17:8 66:4 98:6

**think** 6:17 9:17 17:13 22:9  
26:7 31:17 33:23 40:2,9 43:16  
52:13 63:13,20 65:5,6 66:23  
72:8 74:21 75:23 83:20 86:12  
90:22 94:23 95:25 105:21

**third** 10:10 11:24 97:4

**this** 5:15 6:5,15 8:16,18 10:16,  
19 11:5 12:4,8,20,23 13:15  
14:5,6 15:6,13,23 16:12 17:4,  
11,15,17,20 19:3 20:13 22:16,  
17 24:14 25:1 26:10 32:23  
34:5 36:18 37:3,6,24 38:10,12,  
20 39:22 40:1,4,8,18,22 41:4,  
12 47:22 48:2,11,25 49:3,4,6,  
12,13,16,20 51:5,13,14 53:1,4,  
13 54:7,19 55:19 56:13,19,21  
58:21 60:9 63:20 67:19 69:3  
70:5,19 71:2,4,5,6,7,20 72:1,  
23 74:22 75:12 76:24 79:10,20  
80:3,14 81:11,13 84:22 85:7,8,  
12,23 86:9,12,20,21 87:7  
88:19,24 89:10,13 90:1,3 91:7  
92:4,13,22 93:1,9 94:22,23  
95:4,9,17 96:9,10 97:5,11 99:3  
101:15 102:2,18 103:7,21  
105:16,19

**those** 5:22 7:22 8:4 9:9 13:5  
23:8 24:15,24 25:6 28:1 30:21  
34:7 39:3 40:25 46:2 47:3 51:8  
54:10 55:8 56:3 70:7 71:3 84:3  
88:3,6,9,13 98:15 104:1

**though** 7:2 30:13 39:6 77:4

**thought** 59:16 75:17

**three** 5:16 34:19 70:7

**through** 16:10,14 34:16,25  
35:13 39:17 41:8 48:5 49:5,20  
52:6 53:20 54:7 56:13 59:1  
90:2

**tight** 25:8,10,12

**time** 5:12 6:14 17:10 31:13  
71:18 88:24

**times** 4:23 8:22

**today** 4:11,18 20:5 90:25  
101:4

**together** 34:8 61:16

**tool** 90:1

**tooth** 83:22,25

**top** 7:1 8:25 9:16 10:10 28:10  
32:3,16 40:3,12 60:21,23  
61:13,14,18 68:2 75:4 86:22  
87:12 91:10 94:18 98:17  
102:19

**topic** 91:5

**torque** 14:21 87:2 89:11

**total** 5:17,19,20

**totally** 19:8 52:16 66:14

**touch** 28:18 30:23 31:15

**toward** 64:22,24

**towards** 73:23 81:21

**Trainer** 96:24,25 97:8,15,18,  
21 98:8,13 100:3

**Trainers** 98:7

**Training** 15:2

**trajectories** 24:25

**transcript** 15:12,20,22

**transcripts** 15:19

**transition** 22:24

**transmission** 14:17 104:12

**transmitted** 52:6 87:2

**transmitting** 104:15

**tread** 21:9,15,16,25 22:1,23  
27:10,16,17 40:15

**treadmill** 7:25 13:21 17:3,9  
18:24 19:2 22:16 29:9 34:23  
36:19 42:7,8,23 50:20 63:5,6,  
18,19 64:1,19 65:2,9,15,19,21,  
22 66:10,12 67:19 69:3,9,18  
73:18,20 74:1,6,10,13,24  
75:21 77:21 79:14 81:15,25  
82:2,9,11,14,15,18,25 85:9  
93:20,24 94:2 97:14,22 98:2  
99:4,6,21 100:5 102:24 104:23  
105:10 107:4

**treadmills** 9:7 14:25 15:2  
16:4 19:16,25 20:7 35:3 64:12,  
21 72:22 81:19 92:8 94:4,13  
95:10,18 98:14 99:14 100:21

**treads** 22:23

**trouble** 77:8

**true** 53:5

**Trueform** 97:15,18,21 98:7,8,  
12 99:4,6,11,21 100:3

**try** 41:19 71:17 75:13 78:1  
87:17

**trying** 52:1 71:22 76:18 89:21,  
25

**turn** 6:8 12:14 16:18,21 17:22  
18:14 19:12 20:10,19 24:1  
29:14 31:23 34:13,16 35:5  
36:8 44:5,11 45:4 50:15 52:23  
57:19 59:10,19 62:6 66:18  
68:21 70:10 72:13 73:10 79:3  
83:6,11 85:20 86:2 91:7 92:15  
93:11,16 100:23

**Turner** 4:8 7:9 18:13 19:10  
20:9 21:13,20 22:6 24:19  
25:18 26:17,24 28:3,9 30:1,7,  
20 31:6,22 32:14,22 33:9  
34:12 36:1 37:1,13 38:18  
39:11 44:2,22 46:15 47:6  
48:24 51:20 52:9,18 54:11,24  
56:8,20 57:18 58:13 60:13  
63:10 64:10 65:8,14 66:9,17  
68:8 70:24 71:6,11,22 72:5,11,  
12 76:2,11 77:9 78:6,9,15,20  
89:4 92:3 93:10 95:23 98:11

99:18 100:1,12,22 101:14,18,  
21 102:3,13 103:10 107:11

**two** 21:1,2 23:8 24:6,15,18,25  
25:6 26:14 29:4,7 30:12,17  
31:16 37:16 40:25 41:20,22  
42:10 43:3 47:3,19 55:8 66:2  
87:16 98:6

**type** 18:9 46:9 50:11 58:6  
61:20 68:12,15 69:3 70:19,21  
88:12 93:5 103:7 105:14,18

**types** 55:9 70:1 104:6

**typically** 52:10

---

## U

---

**U.S.** 8:14 10:15 11:1,12 15:25

**UM-NT-EN-02** 16:5

**unanticipated** 82:23

**unclear** 21:12

**uncoordinated** 62:20 72:19  
73:4,7

**under** 12:20 20:13,25 68:22  
84:14

**understand** 29:24 48:16 50:1  
54:22 55:7,11 57:9 61:17  
67:19 70:24 71:1,23 88:13

**understanding** 8:17 18:1,5,  
18 22:12 26:25 33:15,20 88:12  
89:25 100:4

**understood** 80:3

**unexpected** 19:1

**unidirectional** 75:1,9,10  
83:15 84:11

**unintended** 18:8,19,25 19:4  
73:20 79:15 81:12,14 82:8  
83:2 105:11

**unlike** 62:17

**unwanted** 80:19,22

**up** 17:6 32:20 40:12 41:25  
43:13 45:24 53:3 77:4,11  
82:19 84:18 87:18 88:16 90:2,  
6,18,20 91:10 96:24 101:25  
105:5 106:1,21

**upper** 67:9

**upward** 24:7 27:19,22 28:15  
79:12

**upwardly** 23:12 24:12 29:4  
40:23 43:10

**us** 44:13

**usage** 50:8

**use** 63:5,19,23 64:8,23 65:2,7  
66:8,11,16 67:19 68:10,13,16,  
20 69:4,5,8,9,10,14,16 71:18,  
24 72:21 73:3 83:20 89:13,18,  
24 90:1

**used** 18:6 30:6 52:13 55:4  
59:15 62:19 63:1 64:1,4 65:19  
68:11 69:9,18,20 70:17,25  
88:23

**useful** 91:2,3

**user** 16:4 68:1 73:17,22 74:23  
75:20 79:11 82:16

**user's** 68:6 73:19 79:13

**users** 68:2 69:13,23 70:1  
76:22

**uses** 19:3 55:1 63:5,18

**using** 22:16 29:8 65:9 69:11,  
12 90:14

**usually** 33:22 76:18

**utilization** 103:12 104:4

**utilized** 102:24 103:23 104:5,  
9,22

---

## V

---

**valley** 22:25

**Vance** 9:10

**variation** 17:3

**various** 5:23 51:12 64:14

**verify** 19:8

**version** 21:5 24:3 38:8,20

**very** 18:3 24:23,24 25:7,9  
26:21 53:24 63:21 64:15 69:23  
104:11

**video's** 96:4

**view** 34:21 50:19 71:16 88:20

**views** 35:1

**vis-a-vis** 71:5

**visited** 9:7 101:5

---

## W

---

**wait** 15:14 88:18 101:24

**walked** 65:15

**walking** 69:2,3 70:18

**want** 13:20 22:16 25:21 39:2  
40:3,7 43:21 53:6 66:3 71:15  
78:7,9 101:15,19,22 104:12,  
13,17 105:6,25 106:4

**wanted** 48:3

**wants** 25:23 26:2,10

**was** 4:5 7:25 8:3 9:10,11 10:1  
14:19 23:14 25:25 26:23 31:12  
38:7 43:19 55:3 58:15 59:3,7  
63:20 64:15 69:11 74:3 75:18  
82:1 90:22 91:2 92:2 95:4  
98:19 100:13 101:7 103:6,13  
105:14

**way** 29:13 51:11 64:4 74:3  
76:24 88:15 93:8 96:1,4  
101:13 104:12 105:24

**ways** 76:21

**we'll** 16:10 72:1 78:15 102:3

**we're** 4:18 28:20 44:7 45:21  
47:13 60:14 93:1

**We've** 43:20

**wearer** 8:5

**web** 17:4 95:5,19 96:19,22  
97:1 99:22 100:3

**Weber** 12:13 15:8 95:1 101:3,  
8,11

**Weber's** 20:5 98:18 99:9  
100:25

**wedge** 87:19

**wedges** 86:25

**wedging** 87:3,7

**weight** 52:4,5 60:5,9,10 73:19  
79:13

**weight-bearing** 44:18 45:10

46:9,24 47:22 48:12,19 49:12  
50:4,11 51:22 52:7,11,20 58:6,  
9,21 61:21 62:3

**Welcome** 44:3 78:21

**well** 10:1 13:12 17:17 18:20  
20:3 22:20 23:7 24:14,23  
25:14,15 27:16 34:5 36:7  
39:19 40:5 42:24 53:7,19  
54:14 55:7 56:22 61:4,11  
64:22 71:9 74:25 75:15 88:18  
89:14 92:24 93:25 98:22 99:8  
102:1,3

**went** 16:13 63:13

**were** 6:24 7:22 9:9 12:7,20,24  
13:5 19:19 20:3 30:23 38:14  
39:22 40:6 41:21 42:9 55:20  
59:6 63:11 78:23 79:11 88:23  
98:16 101:4 102:23,25 103:5,  
22 105:7 106:7,16

**weren't** 43:4

**what** 5:20 7:10,22 8:13 10:14,  
25 11:11,22 12:12 13:10 17:1,  
4 18:1,5,18 21:1 22:12 26:8,25  
27:21 33:15,20 34:18 37:2,21  
38:19,23 39:1 40:17,18 41:18  
43:19 46:3 50:17 51:8 53:18,  
19 60:7 62:14 63:9,20 64:7  
65:13 66:7,15 74:9 76:16 78:4  
82:11 83:19 84:19 86:7 87:7,  
13,18 88:8 89:7 90:5 92:1  
97:18,19,24 98:4,15 99:3,6  
100:8,10 103:19 105:5,13  
106:14

**what's** 38:16,21 96:16,17  
105:2,8

**whatever** 13:20 50:10 82:5

**whatever's** 82:5

**wheel** 57:11 84:1 85:8 106:21,  
24

**wheels** 53:13,22 54:13 57:13

**when** 10:1 12:22 17:24 18:16  
20:23 23:3 32:6 35:7 36:13  
44:13 53:2 54:1 56:25 58:2  
59:23 62:12 70:14 72:17  
73:13,17 74:23 75:20 79:7  
80:4 81:2,9,24 83:12 90:23  
92:18 101:5 106:1,16

**where** 19:18 22:14 23:10,20  
26:6,22 27:6 29:21 30:9 39:17,

18 40:6 53:11 56:21 63:5,9,19  
82:3 83:14,21 89:14 90:25  
91:10 94:9 98:12 104:4

**whereas** 64:19

**whereby** 68:6

**wherein** 45:16 47:11

**wherever** 104:16

**whether** 19:9 81:4 105:13

**which** 4:19 6:5 9:5 10:5,7  
12:24 13:13,19 16:19 27:2,15  
28:22 34:13 39:5 40:24 45:2,4,  
22 46:17 50:23 54:9 66:20  
67:12,13 70:3 71:13 79:23  
84:14,17 93:24,25 94:10  
99:12,16 103:3,11

**while** 8:9 9:11 17:7,19 30:24  
68:3 101:7

**who** 5:7 6:20 7:3,6 9:24 63:5,  
18 101:6

**who's** 10:16

**whole** 79:22 81:5

**why** 4:11,13 22:19 39:24 45:1  
48:15 99:21

**withdraw** 103:17

**within** 17:13 103:13,18 105:17

**without** 10:9 51:25 54:6 66:12  
69:25

**witness** 7:8 17:25 18:11,17  
19:7 20:2,24 21:11,18,24  
24:14 25:14 26:13,21 28:1,7  
29:24 30:5,17 31:2,21 32:8,12,  
18 33:3 34:5 35:8,18 36:14,21  
37:11 38:14 43:23 44:14,20  
46:12 47:2 48:22 51:17,24  
52:16 54:5,22 56:12 57:1,6  
58:4,12 59:24 62:13 63:8 64:4  
65:5,12,25 66:14 67:22 69:1  
70:15 72:18 73:15 75:23 76:9  
77:7 78:4,13 79:8 81:10 83:13  
89:2 92:1,20 93:7 95:21 98:4  
99:2,8,24 100:7,18 102:6  
107:10

**won't** 29:6

**Woodway** 5:9 15:5 16:2 17:18  
19:19 94:2,15 95:5,10,18  
96:13 97:15,18 98:2,9 99:16,  
22 100:14,16,20 101:5,8,10

**Woodway's** 19:15,25 93:17  
99:13,25 100:21

**woodway.com/shop.** 95:6

**word** 25:17 30:5 49:9 55:11  
63:21 64:5 68:20 69:12

**wording** 61:22

**words** 87:10

**work** 4:17 6:20 7:3 86:20  
89:18,19

**worked** 7:17 74:11

**workout** 68:7

**works** 105:25

**would** 5:19,22 21:7,14,21,24  
22:2,5,16 24:10,21,23 25:1,2,  
9,14,17,21 27:2,4,8,16,20  
28:11 29:9 30:14,24 31:7,15,  
18 32:18 33:18 38:10 39:16,24  
40:3,20,24 41:5,7,15,23,25  
42:1,2,3,5,10,21 43:5,13 45:4  
48:15 49:13,20,21 50:1 51:24  
52:7 54:8,19 55:7,10,13 56:3,  
13,15 57:9 61:17 64:1,6,22  
65:1,5,6,9,15,25 67:18,25 68:1  
69:3,20 71:24 73:1 74:22,25  
75:12,18 76:14 78:1,4,12 80:3,  
5,6,8,11,22 81:1,4 82:7,12,17,  
20,23 83:1,4 88:16 89:12,21  
90:22 91:21 92:6,11,12 93:3  
99:24 100:4,16,18,19 103:25  
104:9,22 105:23 106:10,11,17,  
19 107:3,6

**wouldn't** 7:1,23 10:5 12:24  
19:23 34:10 41:25 77:18 82:22

**wrench** 83:21

---

**X**

---

**XL** 94:13 95:14,17 96:9,10,14

---

**Y**

---

**yeah** 6:19 21:11 35:18 39:18  
40:12 49:22 63:15 80:5,15  
81:16 90:22 91:15 93:1 94:17  
96:1 97:2,7 102:17 103:25

**years** 101:6

**yes** 4:22 5:2 6:3,6,11,13 7:19

8:12,17,19,21 9:2,4,14,19,21  
10:13,21,24 11:4,8,10,15,18,  
21 12:3,6,11 13:2,9 15:14  
16:20,22,25 19:17 20:18 22:18  
23:16 26:21 27:19 28:1,13  
32:4 35:10 36:4 39:15,23  
41:10 42:16 43:7,23 44:10  
45:3 46:4 49:2,14 50:7,16  
53:17 55:13 56:2 57:25 58:8,  
14 59:9 60:7 62:10 64:6 65:21  
66:20 67:1 68:18 70:4,9,12  
71:13 73:25 79:2 83:10,18  
84:16 85:11 86:6 88:2 89:6  
90:12,16 91:2,6,12,15,20 93:2,  
15,19 94:6 95:12,16 97:9  
98:21 99:5 100:15,18 101:2  
102:15,22 103:15 104:3  
106:13 107:5,9

**you'd** 43:17 60:15 66:3 82:24

**you'll** 102:19

**you're** 4:11 5:15 8:9 11:5  
17:24 18:16 20:23 22:24 32:1,  
7 35:7 36:13 42:17 44:8,13  
48:15 51:5 53:2 56:25 57:22  
58:3,5 59:13,23 62:7,12 63:4  
70:14 71:15 72:6,17 73:14  
79:7 81:9 82:4 83:8,12,14  
92:19,21 93:13 104:14,15  
105:1 106:1,22

**You've** 90:20

**young** 69:18

**your** 5:3,8,13,21,25 6:10,20  
7:6,10 8:11 10:12,22 11:9,19  
12:10 13:7,8,11 16:14,19  
17:16,22 18:1,5,15,18 19:12,  
21 20:10,13,19 21:11 22:4,12  
23:5,14,18,22 24:1,9 26:1,25  
27:18 29:8,14,25 30:21 31:7,  
23 32:5,9,24 33:11,15,20 37:7,  
18,24 41:12,13 42:13,15,21  
44:5,11,15,24 45:21 48:10  
49:4,11,23 52:23 54:3 56:24  
57:2,19 58:1 59:10,25 61:1  
62:6 63:12,14 64:18 69:7,21  
71:2,6,7,10 72:13,19 73:10,16  
75:11 77:24 79:3 80:10 81:8,  
11 83:6 84:14 85:20,23 87:22  
88:12 90:13,17 92:15 93:3,11  
94:20 95:13 96:18,25 97:10  
98:12 99:3 100:4,23 103:6  
104:19 105:6 106:7

**yourself** 17:23 18:15 20:22

32:6 35:7 36:12 44:12 53:1  
58:2 59:22 62:11 68:25 70:13  
72:17 79:6 99:1

---

**Z**

---

**Ziebell** 13:25

**zoom** 95:25