

In The Matter Of:
LifeCORE Fitness, Inc. v.
Woodway USA, Inc.

ROBERT GIACHETTI, Ph.D., P.E.
January 10, 2024
Patent No. 10,799,745

NorthStar Deposition Services

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| 15 | P.E., called as a witness herein for examination, | 15 | Word Index Page 113 |
| 16 | taken pursuant to the rules of the United States | 16 | |
| 17 | Patent and Trademark Office before JENNIFER L. | 17 | |
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| 1 | A P P E A R A N C E S | 1 | ROBERT GIACHETTI, Ph.D., P.E. JANUARY 10, 2024 |
| 2 | | 2 | E X H I B I T S |
| 3 | ON BEHALF OF PETITIONER LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS: | 3 | Exhibits 1001 through 1030 were premarked and |
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| 17 | | 17 | |
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1 PROCEEDINGS
2 JANUARY 10, 2024
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4 (Deposition Exhibits 1001 through
5 1030 were premarked for identification.)
6 (Witness sworn.)
7 WHEREUPON:
8 ROBERT S. GIACHETTI, Ph.D., P.E.,
9 called as a witness herein, having been
10 first duly sworn, was examined and
11 testified as follows:
12 EXAMINATION
13 BY MS. RIEGER:
14 Q. Good morning, Dr. Giachetti.
15 A. Good morning.
16 Q. We met yesterday; but for the record,
17 my name is Sarah Rieger and I'm one of the
18 attorneys representing the patent owner in this
19 matter.
20 Since the conclusion of yesterday's
21 deposition, did you speak to Mr. Turner or any of
22 his colleagues about the substance of your
23 testimony?
24 A. Yeah. We spoke about what happened
25 during the day.

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1 Q. So was that a discussion about
2 substance or just general impressions?
3 A. I think general impressions.
4 Q. Okay. Other than talking with
5 Mr. Turner, did you do anything else in
6 anticipation of today's deposition?
7 A. I just reviewed a few documents
8 quickly, just skimming.
9 Q. And that's since yesterday's deposition
10 that you reviewed those documents?
11 A. Yeah.
12 Q. Okay. What documents were those, if
13 you recall?
14 A. I just skimmed through my declarations
15 in the two patents that we didn't discuss
16 yesterday.
17 Q. The '745 and the '580? Does that sound
18 right?
19 A. Correct.
20 Q. Okay. All right. So please turn to
21 Exhibit 1004 in your binder, Volume 1. This is a
22 copy of your CV, correct?
23 A. It looks like it.
24 Q. Is your CV current, the one that was
25 submitted in this matter?

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1 A. Yeah, it looks current.
2 Q. No specific updates since it was
3 submitted, as far as you're aware?
4 A. No, nothing of importance.
5 Q. So where did you go to undergrad,
6 Dr. Giachetti?
7 A. Marquette, in Milwaukee, Wisconsin.
8 Q. When did you attend Marquette?
9 A. In the '90s.
10 Q. Okay. And what was your degree in?
11 A. Mechanical engineering.
12 Q. And you have a master's degree,
13 correct?
14 A. I do.
15 Q. And where did you get your master's
16 degree?
17 A. University of Illinois.
18 Q. And approximately what years were you
19 in that program?
20 A. I would -- estimating, '98 to 2000.
21 Q. Okay. And did you complete a thesis as
22 part of that program?
23 A. I did.
24 Q. What was your thesis related to?
25 A. Loading in the knee joint and also

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1 total knee replacements.
2 Q. You didn't do any research or work
3 related to treadmill design as part of that
4 program, did you?
5 A. No. But that was all about gait and
6 loading resulting from gait.
7 Q. So it was focused more on the
8 physiological aspects of human movement compared to
9 exercise equipment specifically?
10 A. Well, it was the mechanical aspects of
11 gait as far as loading on the foot and the knee and
12 the leg.
13 Q. Okay. You also have a Ph.D., correct?
14 A. That's correct.
15 Q. And where did you earn your Ph.D.?
16 A. University of Wisconsin.
17 Q. In approximately what years were you
18 working on your Ph.D.?
19 A. From 2000 to 2008.
20 Q. Do you recall what the title of your
21 dissertation was?
22 A. I don't actually remember the title of
23 the Ph.D., but it was something about the center of
24 pressure and Newtonian mechanics.
25 Q. Okay. And was your dissertation ever

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1 published, as far as you're aware?
2 A. I don't know.
3 Q. Did you work at all when you were in
4 your graduate or Ph.D. programs?
5 A. Yes.
6 Q. And where did you work?
7 A. So I was a research assistant and a
8 teaching assistant while I was getting my master's.
9 I also started the master's while I had a job in
10 industry. And then when I was a Ph.D. student, I
11 taught a number of courses in departments of
12 mechanical engineering, department of kinesiology;
13 and I also had an internship at BioTechPlex one
14 time.
15 Q. As far as your -- your teaching was
16 concerned, what kinds of topics did you -- did you
17 teach about?
18 A. So I taught engineering economy. I
19 taught general physics 1, 2, 3, and 4. I was the
20 discussion leader for a while. That was as an
21 undergraduate.
22 Then in graduate school, I taught
23 engineering economy, substituted teaching for
24 dynamics. And then as a -- at Wisconsin, I taught
25 vibrations, which they called dynamic systems, so

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1 that encompassed springs-mass dampers, fluid
2 systems, electrical systems, basically anything
3 that oscillated or had some time-dependent
4 transients in there.
5 And I also taught biomechanics in the
6 department of kinesiology --
7 (Reporter clarification.)
8 A. Sorry.
9 Biomechanics in the department of
10 kinesiology, and that was a course geared to
11 physical therapists and other people who were
12 taking kinesiology as a major. So that
13 incorporated a lot of exercise-type applications
14 and discussing the biomechanics related to those --
15 those things.
16 BY MS. RIEGER:
17 Q. You mentioned working in industry for a
18 period of time during your studies. Where exactly
19 did you work?
20 A. So after undergraduate, I then got a
21 job at a place called Alloy Sling Chain. And then
22 after Alloy Sling Chain, I worked for a place
23 called Braner USA.
24 (Reporter clarification.)
25 A. Braner USA.

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1 Q. And what kind of companies are Alloy
2 Sling Chain and Braner USA? What industry are they
3 in?
4 A. So Alloy Sling Chain is an
5 industrial -- you could call it a supply company,
6 but they also do their own fabrication and design
7 work, predominantly large metal structural
8 elements. So most of their work at that time was
9 anything that would hang off the end of a crane.
10 So there was a lot of wire rope,
11 I-beams, trolleys, lifting hooks, all sorts of --
12 you know, lifting tongs, all sorts of stuff. So I
13 did some design work for them and some estimating
14 for jobs.
15 And then Braner USA is the old coiling
16 machinery where that is basically giant rolls of
17 sheet metal and they make the processing lines to
18 trim them and re-roll them into smaller or,
19 basically, custom sizes.
20 Q. So your work for those two companies,
21 did that involve the design of treadmills or other
22 exercise equipment in any way?
23 A. No. But that gave me a lot of
24 experience designing things with the simple
25 mechanical elements that are present in treadmills.

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1 Q. And did any of your teaching topics
2 while you were in your graduate or Ph.D. programs
3 involve the specific design of treadmills or any
4 exercise equipment?
5 A. Well, we certainly used treadmills as
6 part of teaching, as well as my research assistant
7 positions. Treadmills played a large role in that
8 as far as studying how people walk.
9 Q. So you used treadmills as part of -- as
10 part of those -- as part of that classwork; is that
11 correct?
12 A. As the classwork, we used them as part
13 of a research assistantship that I had. I
14 disassembled a treadmill, reassembled it, and
15 basically made sure that it was running for the
16 purposes that we needed.
17 Q. Were those all motorized treadmills?
18 A. Yes.
19 Q. You mentioned disassembling an existing
20 treadmill. You never personally designed a new
21 treadmill; is that correct?
22 A. That's right.
23 Q. Did you work anywhere else before March
24 of 2009?
25 A. Well, technically I'm the vice

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1 president of Gia Villa, which is a pasta sauce
2 company in Chicago. So you can find that at Whole
3 Foods and Mariano's.
4 But outside of the internship at
5 BioTechPlex, I don't recall having other -- other
6 work outside of research assistantships and
7 teaching assistantships that I -- that I had.
8 Q. What kind of work did you do when you
9 were at BioTechPlex? You were an intern there, you
10 mentioned, correct?
11 A. Correct. So that was a biomedical --
12 small biomedical firm. And while I was there, I
13 was working on finite element analysis for assay
14 trays.
15 Q. So you weren't designing any new
16 exercise equipment or treadmill specifically in
17 that role either, correct?
18 A. That's correct.
19 Q. Okay. You're a licensed professional
20 engineer; is that right?
21 A. That's right.
22 Q. Has your license ever been suspended or
23 revoked?
24 A. No.
25 Q. All right. So let's go to Exhibit 1003

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1 in your binder. Do you recognize this document?
2 A. It's a couple hundred pages. But just
3 flipping through it, it looks like my declaration.
4 And the first page says it's my declaration, and
5 the last page has my signature. So it looks like
6 the declaration for the '849 patent.
7 Q. Or the 849 IPR?
8 A. Yes, that's right. I'm sorry. The
9 '745 patent.
10 Q. Yeah. And if you turn to page 253, the
11 very last page --
12 A. Okay.
13 Q. -- that's your signature, correct?
14 A. That's right.
15 Q. Did you review the declaration for
16 completeness and accuracy before you signed it?
17 A. Yes.
18 Q. And at that time to today, does this
19 declaration reflect all of the opinions that you've
20 reached in connection with the '745 patent matter?
21 A. Yeah. I think it's reflective of my
22 opinions.
23 Q. At the beginning of your declaration,
24 roughly on pages 5 to 6, you provided a list of
25 exhibits.

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1 A. Okay.
2 Q. Apart from the materials listed on that
3 list of exhibits, did you analyze any other
4 publications or materials when forming your
5 opinions in this declaration?
6 A. Well, certainly, when I did a prior art
7 search, I came across a number of other pieces of
8 prior art. But these are the pieces of art and
9 other pieces of information that I used to
10 formulate my opinions in this case.
11 Q. And are any -- all the assumptions that
12 you made in forming your opinions identified in
13 your declaration?
14 A. I believe so.
15 Q. And are you aware of any facts or other
16 materials that are inconsistent with or at least
17 not fully consistent with the opinions in your
18 declaration?
19 A. I'm not sure what you mean by that.
20 Q. I'll repeat the question. Are you
21 aware of any facts or other materials that are
22 inconsistent with your opinions in this case?
23 MR. TURNER: Objection. Form.
24 A. Not outside of -- not within this list
25 here.

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1 Q. Are you aware of anything that's not on
2 that list that would be inconsistent with your
3 opinions?
4 A. No.
5 Q. Okay. So if we turn to paragraph 10 --
6 or sorry -- paragraph 107, at least the section
7 starting at paragraph 107 --
8 A. Okay.
9 Q. -- in this section, you discuss
10 construction of terms --
11 (Reporter clarification.)
12 Q. In this section, you discuss the
13 construction of terms in the challenged claims,
14 right?
15 A. Yes.
16 Q. And the definitions that you applied
17 are specifically provided in paragraphs 109 through
18 111; is that right?
19 A. That's correct.
20 Q. You testified during your deposition
21 yesterday that you applied these claim
22 constructions when forming your opinions in all of
23 the grounds in your declaration related to the '884
24 patent. Am I remembering that correctly?
25 MR. TURNER: Objection. Misstates

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1 testimony.
2 A. I have a little recollection of what I
3 said yesterday; but I think, where appropriate, I
4 applied these -- these constructions.
5 Q. Where did you apply these constructions
6 in this declaration?
7 A. In the claims that are listed here on
8 page 69.
9 Q. In all grounds?
10 A. Grounds 2.
11 Q. Do you identify any other claim
12 constructions in this section?
13 A. No.
14 Q. Do you identify any other claim
15 constructions anywhere else in your declaration?
16 A. I don't believe so. And I used the
17 plain -- plain definitions for any other terms.
18 Q. Did you ever explain what the, to use
19 your words, plain definitions applied are and how
20 they are different from what's in this section?
21 A. Well, there is nothing to differentiate
22 in this section, so I did not do that.
23 Q. What do you mean that there is nothing
24 to differentiate in this section?
25 A. Well, you asked me to define like how

Page 18

1 I -- how I differentiated plain terms throughout
2 the rest. And since the plain terms were used for
3 all the other claim constructions, I didn't need to
4 define what the plain terms were. So they're just
5 understood as -- as plain and ordinary.
6 Q. Did you ever explain what the plain and
7 ordinary meaning of "shaft" is?
8 A. No.
9 Q. Did you ever explain what the plain and
10 ordinary meaning of "safety device" is?
11 A. I don't recall doing that.
12 Q. Did you ever explain what the plain and
13 ordinary meaning of "substantially prevent" is?
14 A. I don't believe I did that.
15 Q. Is the definition of shaft provided in
16 paragraph 109 consistent with your understanding of
17 the plain and ordinary meaning of the word "shaft"?
18 A. Yeah. I think that's essentially the
19 same thing.
20 Q. Is the definition provided in
21 paragraph 110 of safety device consistent with your
22 understanding of the plain and ordinary meaning of
23 the term "safety device"?
24 A. I think it's consistent with the way
25 the '745 patent uses it.

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1 Q. And would that be the plain and
2 ordinary meaning for purposes of the '745 patent,
3 in your opinion?
4 A. Can you repeat that question?
5 Q. You testified that the definition
6 provided for safety device is consistent with the
7 way the '745 patent uses the term safety device.
8 A. Correct.
9 Q. Does that mean that, in your opinion,
10 the plain and ordinary meaning of safety device for
11 purposes of the '745 patent is consistent with the
12 definition provided in paragraph 110?
13 MR. TURNER: Objection. Form.
14 A. No. I think it's the way that it's
15 used in the '745 patent.
16 Q. What is your opinion regarding the
17 plain and ordinary meaning of "safety device"?
18 A. I think a safety device is something
19 that's implemented to provide safety.
20 Q. Is the definition for "substantially
21 prevent" in paragraph 111 consistent with your
22 understanding of the plain and ordinary meaning of
23 substantially prevent?
24 A. It seems reasonable to me.
25 Q. So at least for "shaft" and

Page 20

1 "substantially prevent," your opinions based on the
2 plain and ordinary meaning of the term would be
3 consistent with your opinions using these
4 definitions?
5 A. I think that's reasonable.
6 Q. And would that -- would -- with respect
7 to the '580 declaration, do you recall if you
8 applied any specific claim constructions?
9 A. I don't recall, but I think it would be
10 consistent with what's here on this page.
11 Q. Okay. All right. Let's just quickly,
12 without necessarily losing our place in your
13 declaration, look at Exhibit 1010, just the front
14 page. Do you recognize -- do you recognize this
15 document?
16 A. This looks like the front page of the
17 Schonenberger patent.
18 Q. And that's U.S. Patent No. 4,614,337;
19 is that right?
20 A. That's what it says.
21 Q. Right. And if I refer to this as the
22 Schonenberger, you'll understand what I'm referring
23 to, right?
24 A. Correct.
25 Q. Did you read Schonenberger in its

Page 21

1 entirety?

2 A. Yes.

3 Q. And was that before or after you

4 drafted -- or started drafting your declaration?

5 A. Before.

6 Q. Schonenberger does not disclose a

7 curved running surface, does it?

8 A. I think it -- I think it shows it.

9 Because you can see that they say that the belt

10 follows the path of the smaller rollers, and you

11 can see that that pathway is not flat the entire

12 way across the running surface.

13 Q. Where exactly does it show that?

14 A. In Figure 12.

15 Q. So in your opinion, Figure 12 shows a

16 curved running surface?

17 A. Figure 12, in conjunction with what the

18 words in the patent state, tell me that that is a

19 curved running surface.

20 Q. Where do you say that in your

21 declaration?

22 A. Well, I would say that in my

23 declaration I state that Schonenberger doesn't

24 expressly disclose that. However, I think it

25 implicitly does, and I don't believe that that is

Page 22

1 stated in the -- in the disclosure.

2 Q. So your declaration --

3 A. Or the declaration. Excuse me.

4 Q. So referring to, for example,

5 paragraph 144, which is on page 86, that's -- that

6 paragraph reads: Schonenberger does not expressly

7 disclose that at least a portion of the running

8 belt is curved.

9 Did I read that correctly?

10 A. Right. And that's the portion that I

11 was just describing to you a second ago.

12 Q. Nowhere in your declaration do you

13 explain if or how Schonenberger implicitly or

14 inherently discloses a curved running surface; is

15 that correct?

16 A. That's right.

17 Q. But sitting here today, it is your

18 opinion that Schonenberger inherently discloses a

19 curved running surface?

20 A. I think it's -- I think it's implicit

21 because it describes how the surface goes over

22 rollers 12 and that it needs to follow rollers 12.

23 And you can see that rollers 12 are flat in the

24 middle and then curved downward at the end, and it

25 states that the running surface has to follow

Page 23

1 rollers 12.

2 So there is a little bit of a dip in

3 there, which means that it's not all the way flat.

4 Q. If we look at Figure 12 in

5 Schonenberger, which, again, is Exhibit 1010, you

6 said that that combined with some written

7 disclosure in Schonenberger implicitly discloses a

8 curved running surface; is that right?

9 A. Well, I think it discloses it as far as

10 not a surface that's entirely flat. So maybe it's

11 mostly flat; but in between the pulleys at the end

12 and the first roller 12a that's in there, you can

13 see that if Schonenberger tells us that the running

14 surface has to follow the profile of rollers 12,

15 that there is, in fact, a dip in -- in the profile.

16 So that portion of the running surface

17 would not be considered flat and would be curved.

18 Q. So how do you know that the --

19 A. And I could follow that up by saying

20 that Schonenberger also discloses that the running

21 belt should be a little bit above the rollers. So

22 when you step on the running surface, it has to

23 curve with the front and rear higher than wherever

24 the foot is, just by the nature of the loading.

25 So it gives a gap between rollers 12

Page 24

1 and the running surface before the foot hits it.

2 So once your foot does touch it, then just by

3 definition, the running belt has to take a

4 curvature.

5 Q. Is any of that in your declaration?

6 A. No. And I have that statement in the

7 declaration that says Schonenberger does not

8 expressly disclose it. But certainly, all the

9 description that I've just given you is contained

10 within the specification of Schonenberger.

11 Q. You've referred to Figure 12. Is

12 Figure 12 to scale? Does Schonenberger ever say

13 that?

14 MR. TURNER: Objection.

15 A. No.

16 MR. TURNER: Form.

17 A. No. But it does describe the relative

18 sizing of the rollers 12 in regarding to the

19 pulleys at the end and describes the relative size

20 of rollers 12a, basically saying that those should

21 be about the same size or bigger to provide an easy

22 turnaround for the belt.

23 Q. So you testified earlier that

24 Schonenberger discloses that the running belt

25 should be a little bit above the rollers and that

| Page 25 | Page 27 |
|--|--|
| <p>1 when you step on the running surface, it has to</p> <p>2 curve with the front -- wherever the foot is, just</p> <p>3 by nature of the loading. Does that sound correct?</p> <p>4 A. That's absolutely correct.</p> <p>5 Q. So is it your opinion sitting here</p> <p>6 today that any running belt that has any degree of</p> <p>7 give between it and the rollers underneath it is</p> <p>8 automatically a curved running surface?</p> <p>9 A. No. I don't think that that's</p> <p>10 necessarily true. But in Schonenberger, they</p> <p>11 definitely are making that a specific feature of</p> <p>12 their running belt where they're saying, hey, in</p> <p>13 this invention, you need to put a gap here so that</p> <p>14 the running surface can move downward a measurable</p> <p>15 amount.</p> <p>16 Other inventions just say, oh, this is</p> <p>17 a flexible element or this is that. So in those</p> <p>18 inventions, I wouldn't consider those necessarily</p> <p>19 curved. But in here -- in Schonenberger, that is a</p> <p>20 feature that they are expressly stating in their</p> <p>21 specification, that they do want that movement and</p> <p>22 they do want that curvature.</p> <p>23 Q. Why didn't you mention any of this in</p> <p>24 your declaration?</p> <p>25 A. I believe that what I put in the</p> | <p>1 from a technical perspective in this patent. So</p> <p>2 the bowing is for the slat. And if the slat</p> <p>3 doesn't bow, but you have to have that half a</p> <p>4 centimeter taken up, that means that the belt</p> <p>5 itself has to do the deforming, not the slats.</p> <p>6 So that is a -- not a bowing from right</p> <p>7 to left. That is a bowing from front to back,</p> <p>8 which is the profile on the treadmill. So there is</p> <p>9 your curve right there.</p> <p>10 Q. So the slats do not have any bow or</p> <p>11 curvature to them individually; is that right?</p> <p>12 A. Well, that's what the part of column 2</p> <p>13 that I read to you is telling me.</p> <p>14 Q. So yes, the slats do not have any</p> <p>15 curvature to them on an individual basis?</p> <p>16 A. I mean, you could make it with a curve,</p> <p>17 I suppose, if that's what you're asking.</p> <p>18 Q. No. I'm asking for your understanding</p> <p>19 of what Schonenberger itself explicitly discloses</p> <p>20 with respect to the slats. The slats themselves do</p> <p>21 not deform when a user steps on them; is that</p> <p>22 right?</p> <p>23 A. Well --</p> <p>24 Q. Based on the disclosure you just read</p> <p>25 to me and your interpretation of it.</p> |
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| <p>1 declaration is more compelling as a -- as a case</p> <p>2 for combining the elements, and I didn't rely on</p> <p>3 any of that in -- in adding these -- these pieces</p> <p>4 of art together.</p> <p>5 Q. Can you point me to precisely where in</p> <p>6 Schonenberger, if at all, it describes the running</p> <p>7 surface itself as being curved or nonlinear?</p> <p>8 A. Yeah. So in this one, just in</p> <p>9 column 2, it talks about the slats preferably</p> <p>10 formed with stiffening projections and ribs to</p> <p>11 prevent bowing. And that's around line 20.</p> <p>12 But then down below that, around lines</p> <p>13 30 to 40, it then talks about the distance of being</p> <p>14 half a centimeter between those rigid slats and the</p> <p>15 support rollers underneath it.</p> <p>16 So just those two pieces of information</p> <p>17 tell you that you've got a rigid slat that's not</p> <p>18 giving that then has to lower when the person is</p> <p>19 loading it while using it, causing the running</p> <p>20 surface to curve.</p> <p>21 Q. How does the disclosure that includes</p> <p>22 language talking about specific ways to prevent</p> <p>23 bowing imply that there is curvature when a user</p> <p>24 steps on the treadmill?</p> <p>25 A. Well, those two things are disconnected</p> | <p>1 A. Well, everything, to a certain degree,</p> <p>2 deflects when a load is placed on it. That's just</p> <p>3 the nature of everything, every material.</p> <p>4 But I think, in the context of this</p> <p>5 patent, in this Section 2 where it describes</p> <p>6 resilient slats that are -- have stiffeners on them</p> <p>7 and it states -- where is that? -- so it has a</p> <p>8 stiffening projection, and it has transverse ribs</p> <p>9 to prevent their bowing through.</p> <p>10 So if I am reading that, this</p> <p>11 specification is telling me that I -- I don't want</p> <p>12 the bending where the gap is taken up to come from</p> <p>13 the slats. It needs to come from the belt. So</p> <p>14 that's what that tells me, as a technical person.</p> <p>15 Q. Let's go back to your declaration,</p> <p>16 specifically page 83. In kind of the lower third</p> <p>17 of this page, you discuss what you've designated</p> <p>18 element 1.5. Do you see that?</p> <p>19 A. On page 83?</p> <p>20 Q. Yes, 83 of your declaration, the bottom</p> <p>21 of page 83. There is 1.5, a running belt at least</p> <p>22 partially supported by -- et cetera, et cetera. Do</p> <p>23 you see that in bold?</p> <p>24 A. Oh, I see it, yes. Sorry.</p> <p>25 Q. That element reads, as I was saying</p> |

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1 before: "A running belt at least partially
2 supported by at least one of the front running belt
3 pulley and the rear running belt pulley, wherein
4 the running belt includes a running surface, at
5 least a portion of which is curved."
6 Did I read that correctly?
7 A. That's what the boldfaced text there
8 reads, yes.
9 Q. The wherein clause at the end of that
10 phrase, where it says "wherein the running belt
11 includes a running surface, at least a portion of
12 which is curved," do you understand that to mean
13 that the running belt needs to be curved or that
14 the running surface needs to be curved?
15 A. So I think that that could be one or
16 the other or both connected. Because sometimes the
17 running belt and running surface are the same
18 thing.
19 And, for example, in Schonenberger,
20 which is where we were just discussing, if your
21 right foot is standing in the middle of it and
22 causing that curvature, which we just discussed is
23 inherent to Schonenberger, and you place your other
24 foot forward of it, the running belt and running
25 surface will definitely not be flat there and will

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1 be curved.
2 But I think the running surface is part
3 of the running belt, if I remember correctly that
4 the running belt is -- forms that.
5 Q. So is it possible for the running belts
6 to be curved, but the running surface not to be
7 curved, hypothetically speaking?
8 A. Well, I think, for example, in
9 Schonenberger when it's not being used, the running
10 surface is possibly not curved. But once you start
11 using it, then it becomes curved.
12 So I suppose if you're going to specify
13 during use, then probably the belt and the surface
14 are going to both take the same profile.
15 Q. That wasn't quite what I was asking.
16 My question was whether, hypothetically
17 speaking, it would be possible to have a running
18 belt that is curved that simultaneously has a
19 running surface that is not curved.
20 A. Right. Well, the running belt and the
21 running surface aren't the same throughout the
22 entirety of the treadmill. So most of the running
23 belts are curved because they go around pulleys or
24 they're a hamster wheel.
25 So the running surface and the running

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1 belt aren't the same at all points on the
2 treadmill. So they could be the same, and they
3 could be different.
4 Q. Please look at paragraph 141.
5 Actually, before that, do I understand
6 your testimony correctly in thinking that it is
7 your opinion that any deflection because of a
8 footfall constitutes a curve?
9 A. I don't think that accurately
10 represents what I was just describing.
11 Q. And what were you just describing?
12 A. So I was discussing the curvature from
13 front to back of the Schonenberger treadmill. And
14 if we're going to talk about bending of slats, that
15 would be a transverse or a left-to-right bending.
16 Q. Well, I'm not referring to bending of
17 slats. I'm referring to your testimony earlier
18 about that supposed curvature. That curvature is
19 the results solely of the -- of a foot strike,
20 correct?
21 A. You're talking about the curvature of a
22 slat? Is that --
23 Q. No. I am talking about what you
24 testified earlier about the running belt in
25 Schonenberger, in your opinion, being curved

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1 because when a user runs on it, it depresses where
2 the user's foot strikes.
3 In your opinion, does that depression
4 or deflection necessarily mean that the belt is
5 curved?
6 A. So a couple of things with that
7 question. One, the running belt and the running
8 surface are -- are not always the same thing.
9 Second of all, it's not just the foot
10 strike. So while the user is applying force to the
11 treadmill running surface, there will be a
12 curvature imparted front to back. And that is
13 something that is explicitly built into
14 Schonenberger. And the entire time that the user
15 is exerting forces on that running surface,
16 Schonenberger will have a curvature from front to
17 back.
18 And that necessitates that when they
19 place their second foot on the running surface,
20 that that portion will be curved while they are
21 using it.
22 Q. So let's look at paragraph 141 of your
23 declaration, which is on page 84. In that
24 beginning of that sentence, you say: Each of the
25 slats 4 is covered with a cushioning material or

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1 cover 16 that forms the running surface.
2 A. Okay.
3 Q. Am I correct in understanding that in
4 this paragraph, it's your opinion that the covering
5 of the slats is what constitutes the running
6 surface?
7 A. I think that that is the material that
8 forms the running surface. The running surface is,
9 generally speaking, the top of the treadmill where
10 the user is expected to place their feet.
11 Q. You never say that in this paragraph or
12 anywhere else in describing Schonenberger, do you?
13 A. It's certainly not in this paragraph.
14 I don't recall if that is in my description of
15 Schonenberger here, but certainly running surface
16 is defined in some of those treadmill standards
17 that we discussed yesterday. And I'm not sure
18 where else we might find it.
19 Q. If you look at paragraph 142, that
20 paragraph right after paragraph 141 that we were
21 just talking about --
22 A. Paragraph 142, okay.
23 Q. -- you state there that -- that: The
24 movable surface 1 ("running belt") is supported by
25 the pulleys 10.

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1 Did I read that correctly?
2 A. Yes.
3 Q. Is it -- does this paragraph indicate
4 that it is your opinion that the entire movable
5 surface 1 is equivalent to the running belt?
6 A. I think in the portion that that's
7 referring to, in the graphic below that's
8 annotated, the movable surface 1, basically the top
9 there where the user's feet would be expected to
10 contact the treadmill, is -- wait, please strike
11 that.
12 So the running belt is the thing that
13 wraps around all the way. And we've illustrated
14 that there with the highlighting.
15 Q. And is that movable surface 1?
16 A. That's what Schonenberger labels as
17 movable surface 1.
18 Q. Right.
19 So we talked about paragraph 144
20 before, where you said Schonenberger does not
21 expressly disclose that at least a portion of the
22 running belt is curved. The claim requires that
23 the running surface be curved; is that right?
24 A. So which claim are you talking about?
25 Q. This is specifically in your discussion

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1 of claim 1 of the '745 patent. So if you want to
2 look at Exhibit 1001, you're more than welcome to.
3 That would be at the very bottom of
4 column 32 on page 43 of Exhibit 1001, is where that
5 claim starts.
6 A. So I'm just going to read it out of my
7 report on page 75.
8 Q. Okay.
9 A. Can you repeat the question, just so I
10 make sure I'm clear on it?
11 Q. Sure.
12 You would agree that the claim requires
13 that the running surface be curved, correct?
14 A. So in claim 1, it states: Wherein the
15 running belt includes a running surface, at least a
16 portion of which is curved.
17 Q. Right. And you talked about that
18 wherein clause earlier. Just one moment.
19 You testified earlier, when discussing
20 that wherein clause, that: "I think the running
21 surface is part of the running belt." Is that
22 right?
23 A. I may have said that. I know that I
24 definitely stated afterwards that the running
25 surface is a portion of the running belt where the

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1 user places their feet -- or is expected to place
2 their feet.
3 Q. Right. So just turning back to that
4 wherein clause where it says at least a portion of
5 which is curved, is that referring to the running
6 surface or the running belt as a whole?
7 A. Well, if it refers to the running belt,
8 then basically every treadmill is a curved
9 treadmill. So I don't think that that would be a
10 reasonable reading.
11 So I believe that running -- the
12 running surface has a portion which is curved.
13 Q. All right. And if we looked at
14 paragraph 144 in your declaration on page 86, you
15 only mention the running belt in that paragraph; is
16 that right?
17 A. Yes. I must have made an error in
18 stating that. But you can see in the paragraph
19 following, at 145, talking about a running surface.
20 So...
21 Q. A running surface in Socwell, not in
22 Schonenberger, correct?
23 A. That's right. But if you read sentence
24 144 and go to the next sentence, you know, we're
25 talking about the running belt is curved; and then

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1 the next sentence is like, oh, but hey, Socwell
2 does disclose a manual treadmill with a curved
3 running surface.
4 So paragraph 144 I believe probably
5 should have stated a curved running surface.
6 Q. So at a minimum, that's an error in
7 your declaration; is that right?
8 A. I would say that that is a typo.
9 Q. Do you ever comment on whether the --
10 using the actual words "running surface," whether
11 the running -- what you identify as the running
12 surface in Schonenberger is or is not curved, in
13 your declaration?
14 A. Can you repeat that question?
15 Q. Sure. I stopped myself partway
16 through. I apologize.
17 Are there any paragraphs in your
18 declaration where you used the actual words
19 "running surface" and state one way or the other
20 whether the running surface in Schonenberger is or
21 is not curved?
22 A. I don't recall specifically, through
23 all 253 pages, if that's something that I state. I
24 know we've talked about paragraph 144, where I
25 state that Schonenberger doesn't expressly state

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1 that it's got a curved running surface, to correct
2 that running belt statement there.
3 So without having read it, I read
4 the -- re-read the whole 253 pages right here, I
5 don't -- I can't point to a spot in the disclosure
6 where I state that.
7 Q. So even though -- so setting aside the
8 terminology issue in paragraph 144, you'll agree
9 with me that your declaration never says that
10 Schonenberger discloses a curved running surface of
11 any sort, correct?
12 A. I can't agree that it never says that.
13 I just don't recall where that would have been
14 without re-reading the whole 253 pages. But I
15 don't believe that I relied on that as part of any
16 of the combinations or opinions in the declaration.
17 Q. All right. So if you go to
18 paragraph 146, you state in that paragraph: "As
19 explained in paragraphs 148 to 159, it would have
20 been obvious to a POSA to modify Schonenberger's
21 brackets 19 and rollers 12, 12' ("bearings") to
22 provide a curved support surface such that the
23 movable surface 1 ("running surface") has a curved
24 portion."
25 Did I read that correctly?

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1 A. Yes.
2 Q. What exactly would those modifications
3 to Schonenberger's brackets and rollers have
4 entailed?
5 A. So that is basically shown graphically
6 on page 93. And in essence, the idea is that
7 you've got a set of the support rollers that are --
8 that are set in the shape that we see in
9 Schonenberger, Figure 12. And the modification is
10 basically, instead of having the rollers 12 be
11 above the centerline of 12a, that they would then
12 be below it. And that's a straightforward and
13 simple modification.
14 Q. So you're referring to paragraph 155;
15 is that correct?
16 A. Oh, I was just looking at the pictures.
17 But yeah, paragraph 155 basically states that.
18 Q. Well, I -- yes, I was referring to that
19 figure as being included in paragraph 155. Does
20 that make sense to you?
21 A. Yes. That's absolutely correct.
22 Q. All right. So if I'm understanding you
23 correctly, your testimony is that that figure in
24 paragraph 155 depicts the modified version of
25 Schonenberger that you've proposed and relied on in

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1 your declaration; is that right?
2 A. Can you re-read that?
3 Q. The figure -- am I correct in thinking
4 that the figure in paragraph 155 depicts the
5 modified version of Schonenberger that you've
6 proposed and relied on in your declaration?
7 A. I think that's reasonable.
8 THE WITNESS: We've been going about
9 an hour. Do you mind if we take a five-minute
10 break?
11 MS. RIEGER: Let me just ask one more
12 question and then -- if that's okay with you.
13 THE WITNESS: Yeah, that's fine.
14 BY MS. RIEGER:
15 Q. I just wanted to ask about the
16 structure of the device here. The five rollers --
17 or what you refer to as bearings in that figure in
18 paragraph 155, would you agree with me that those
19 are arranged in parallel, in a straight line?
20 A. Which rollers are you -- or bearings
21 are you --
22 Q. The center rollers, the ones that do
23 not contact the pulleys.
24 A. I would say that all those red ones
25 in -- that are colored in red are not in a straight

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1 line.
2 Q. I'm referring specifically only to the
3 five in the middle, so excluding the ones that are
4 touching the pulleys. Are those five rollers in a
5 straight line?
6 A. Yeah. The five center ones are shown
7 in a -- arranged in a straight line.
8 MS. RIEGER: All right. We can take
9 a five-minute break now if you'd like.
10 THE WITNESS: Great. Thank you.
11 (Recess had.)
12 BY MS. RIEGER:
13 Q. Welcome back. Let's shift gears a
14 little bit and go to page 98 of your declaration,
15 the full text right at the top of the page. I
16 won't read out this entire thing.
17 But at the very beginning of that term,
18 it refers to: "A safety device coupled to the
19 running belt." Did I read that correctly?
20 A. That's what it states.
21 Q. Does Schonenberger disclose a safety
22 device, according to this term?
23 A. I don't recall if it specifically does,
24 but I relied on Magid for that unidirectional
25 safety device.

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1 Q. Okay. So you'd agree with me that you
2 don't -- at the very least, you don't mention
3 Schonenberger as disclosing a safety device in
4 these -- in this section, correct?
5 A. Correct.
6 Q. And you mentioned that you rely on
7 Magid -- Magid, however we want to pronounce it.
8 A. Correct.
9 Q. You also rely on Sclater in this
10 section; is that right?
11 A. That's right.
12 Q. All right. Let's shift gears again.
13 Can you quickly turn to Exhibit 1011 in your
14 binder? We'll be going back to your declaration
15 shortly, but do you recognize this document?
16 A. This looks like the Socwell patent.
17 Q. And that's U.S. Patent No. 5,897,461;
18 is that right?
19 A. That's what it says.
20 Q. And if I refer to this as Socwell,
21 you'll understand what I'm referring to, right?
22 A. Correct.
23 Q. Did you read Socwell in its entirety
24 before drafting your report?
25 A. I did.

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1 Q. All right. So in your declaration, we
2 go to page 179, the paragraph -- starting at
3 paragraph 301.
4 A. Okay.
5 Q. The header of this section is referred
6 to as Ground 3, and you appear to be arguing that
7 the claims listed here are obvious over Socwell, in
8 combination with Magid and Sclater; is that
9 correct?
10 A. That's right.
11 Q. All right. So if we go to page 187
12 within the same section, at paragraph 310, that
13 bold header right before paragraph 310 refers to
14 what you call element 1.4, which recites: "A
15 plurality of bearings coupled to the frame." Did I
16 read that, right?
17 A. You did.
18 Q. So in this section, specifically at
19 paragraph 312, you state that: Socwell discloses a
20 plurality of belt securing assemblies 94 disclosed
21 along the right and left sides of the frame 12. As
22 I explained in the state-of-the-art section,
23 rollers, such as the rollers 98 are "bearings."
24 Therefore, the rollers 98 disclose a "plurality of
25 bearings."

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1 Did I read that correctly?
2 A. That was on page 187?
3 Q. Oh, apologies. Yeah. This is
4 paragraph 312, which starts on page 188.
5 A. That looks like what you read, yeah.
6 Q. Just to clarify, what are the bearings
7 described in this paragraph? Are you referring
8 only to the rollers 98, or are you referring to the
9 full belt securing assemblies 94?
10 Do you need me to repeat the question?
11 A. That would be fine.
12 Q. Okay. I was just asking if by
13 bearings, specifically, as you're using that term
14 in 312, paragraph 312, are you referring only to
15 the rollers 98, or are you referring to the
16 complete belt securing assemblies 94?
17 A. Can you read that one more time?
18 Q. As you were using the term bearings in
19 paragraph 312, are you referring only to rollers
20 98, or are you referring to the complete belt
21 securing assemblies 94?
22 A. I think in paragraph 312, I'm
23 highlighting rollers 98 as an example of bearings
24 because, for plurality, you need more than one. So
25 I'm establishing that there is more than one here,

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|--|--|
| <p>1 and I'm using those as an example.</p> <p>2 Q. But you're referring to the plurality</p> <p>3 of rollers 98, not necessarily to the complete belt</p> <p>4 securing assembly 94; is that right?</p> <p>5 A. Well, the belt securing assembly isn't</p> <p>6 a bearing, but it includes bearings.</p> <p>7 Q. Okay. That was just a point of</p> <p>8 clarification I wanted to --</p> <p>9 A. Sure. Got it.</p> <p>10 Q. So to your understanding, what is a</p> <p>11 bearing as that term is used in the '745 patent?</p> <p>12 A. Well, a bearing is a mechanical element</p> <p>13 that allows for objects to move across or along one</p> <p>14 another.</p> <p>15 I think I define that in my</p> <p>16 declaration. Let me see if I can pull that out.</p> <p>17 Yeah. So on page 35, I define that a</p> <p>18 bearing is a general term for a mechanical element</p> <p>19 that provides a means for low friction movement</p> <p>20 between two surfaces. And that motion could be</p> <p>21 rotary or "linear."</p> <p>22 Q. And it looks like you cited the</p> <p>23 PT Handbook, Exhibit 1016, for both of those</p> <p>24 principles; is that right?</p> <p>25 A. That's right. And that's consistent</p> | <p>1 Q. If you go down a little bit further to</p> <p>2 line 39, the specification goes on to say: "The</p> <p>3 running belt 16 contacts and is supported in part</p> <p>4 by the bearings 208 of the bearing rails and</p> <p>5 bearing 208 are configured to rotate, thereby</p> <p>6 decreasing the friction experienced by the running</p> <p>7 belt 16 as belt moves along the top profile 210."</p> <p>8 (Reporter clarification.)</p> <p>9 Q. The top profile 210, end quote.</p> <p>10 Did I also read that correctly?</p> <p>11 A. That's right.</p> <p>12 Q. Are you aware of any sections of the</p> <p>13 '745 patent specification that describe a different</p> <p>14 orientation for the "plurality of bearings"</p> <p>15 vis-à-vis the running belt?</p> <p>16 A. Well, I know that in their embodiments,</p> <p>17 they have a number of different embodiments where</p> <p>18 the bearing is -- the rotary bearing is attached to</p> <p>19 the belt, which then rides inside of a channel.</p> <p>20 And then there is one where there is</p> <p>21 basically a track that is clamped by rotary</p> <p>22 bearings, and those bearings are attached to the</p> <p>23 running belt.</p> <p>24 So from that perspective, yeah, there</p> <p>25 are a number of different embodiments in the '745.</p> |
| Page 46 | Page 48 |
| <p>1 with my understanding based on my experience,</p> <p>2 training, and education.</p> <p>3 Q. Did you look at the '745 specification</p> <p>4 and specifically how it uses the term "bearings" to</p> <p>5 determine whether a bearing might have a different</p> <p>6 or narrower meaning for purposes of the '745</p> <p>7 patent?</p> <p>8 A. Well, I certainly read the '745 when</p> <p>9 forming my opinions. And I think that this is</p> <p>10 consistent with the way bearings are used in that</p> <p>11 patent.</p> <p>12 Q. So the '745 patent specification uses</p> <p>13 the term plurality of bearings, right?</p> <p>14 A. Right.</p> <p>15 Q. So let's look at the '745 patent.</p> <p>16 That's going to be Exhibit 1001. I'm going to</p> <p>17 direct you to column 11.</p> <p>18 So starting at line 20 of column 11,</p> <p>19 the '745 patent states: Referring to Figs 6 and 8</p> <p>20 through 9, in particular, the bearing rails 200 are</p> <p>21 shown including a plurality of bearings 208 and an</p> <p>22 upper or top profile 210, shown shaped as a complex</p> <p>23 curve, according to an exemplary embodiment.</p> <p>24 Did I read that correctly?</p> <p>25 A. I believe so.</p> | <p>1 Q. You're referring, I believe, to</p> <p>2 portions of the specification that discuss a belt</p> <p>3 retention system; is that right?</p> <p>4 A. I don't recall, but you can see it in</p> <p>5 Figures 18 and 19 and 23 and 22.</p> <p>6 Q. Well, let's look at paragraph 22 --</p> <p>7 or not -- not paragraph 22, column 22 of the</p> <p>8 specification.</p> <p>9 A. Okay.</p> <p>10 Q. At lines -- starting at line 8, it</p> <p>11 reads: Referring to Figs 18 to 21, an embodiment</p> <p>12 of a running belt retention system including a</p> <p>13 track system 700 and configured to help induce and</p> <p>14 maintain the running belt in a desired nonplanar</p> <p>15 shape to define the running surface according to an</p> <p>16 exemplary embodiment.</p> <p>17 Did I read that right?</p> <p>18 A. You did.</p> <p>19 Q. Is that one of the systems that you</p> <p>20 were referring to with respect to the track</p> <p>21 structures?</p> <p>22 A. Let's see.</p> <p>23 So yeah, that calls out Figure 18</p> <p>24 through 21. And that's one of the ones that I was</p> <p>25 indicating.</p> |

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1 But you can also see Figure 22 and 23
2 has an alternate -- alternate embodiment where the
3 rotary bearing is captured in a channel and,
4 basically, the stud bearing is attached to the
5 running surface -- or running belt, I should say.
6 Q. So looking at that description of this
7 particular track system 700 belt retention system,
8 does the '745 specifications discussion of that
9 system ever refer to those structures that you were
10 referring to as bearings as bearings?
11 A. I don't think that it would -- I don't
12 know where those are in -- in this specification,
13 but it wouldn't make sense to call a channel or
14 a -- like a -- like the surface, like a cam
15 surface, it wouldn't make sense to call those
16 bearings. Because they are capturing the bearings,
17 or the bearings are capturing the cam surface
18 there.
19 Q. Well, let's look at --
20 A. But they would constitute a bearing
21 rail, I think.
22 Q. Well, let's look at -- that's not quite
23 what I was asking. But just for some context to
24 hopefully make the conversation a little bit
25 clearer, please look down to line 32 in column 22.

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1 You'll see there that the '745
2 specification refers to: "A plurality of roller or
3 wheel assemblies 716 are connected with, preferably
4 mounted to or integral with, each of a plurality of
5 slats 228 of the running belt 16."
6 That plurality of roller or wheel
7 assembly 716, is that what you are referring to as
8 bearings in this system?
9 A. Yes. And I think those would be
10 considered bearings by any sort of POSA.
11 Q. Does the '745 patent ever describe
12 those structures as bearings?
13 A. Yeah. I mean, without going through
14 the whole specification here, it calls them
15 rollers. And --
16 Q. But as far as you're aware, based on
17 your review of the patent before today and during
18 this deposition, the specification never refers to
19 those rollers as bearings; is that right?
20 A. I'm not sure if that is true. But the
21 state of the art, a roller and a bearing are
22 equivalent and can be one and the same, depending
23 on how they're configured.
24 Q. Does the way a patent specification
25 uses particular terms matter for purposes of

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1 determining how the claims should be interpreted?
2 A. It can.
3 Q. When wouldn't it?
4 A. I think that if a term was used in a
5 nonstandard way that would be contrary to what the
6 POSA would understand, then you would likely need
7 to narrow your view of what that term might mean or
8 change what it might mean in terms of the patent
9 author's meaning of it.
10 But here, rollers, wheels, bearings are
11 all used in their ordinary and plain usage. So we
12 could just -- they are just equivalent. And that
13 is what the POSA would understand.
14 Q. Have you ever heard of the term
15 "lexicographer"?
16 A. I have.
17 Q. What does that term mean to you?
18 A. It means that the patent authors can
19 make up their own meanings for the terms in -- in
20 the patent that they have authored.
21 Q. If a -- if the patent author, as just
22 to use your terminology, does not include an
23 explicit definition for a particular term, in your
24 view, does that mean that the way they have used
25 that term is no longer relevant to determining how

Page 52

1 that term should be interpreted in a claim?
2 MR. TURNER: Objection. Form.
3 A. Can you read that again?
4 Q. Sure. I'll rephrase.
5 You defined lexicographer to mean that
6 patent authors can make up their own meanings for
7 the terms in the patent. Does that -- does that
8 sound correct?
9 A. I think that a patent author can
10 establish their own definitions for words that
11 might differ from what the ordinary meaning is.
12 Q. Is it your position that the only way a
13 patent author can establish a different meaning for
14 a term, compared to what would otherwise be
15 considered the plain and ordinary meaning in the
16 art, would be by expressly stating a different
17 definition in the specification?
18 A. I don't believe that that's the case.
19 And in this patent, I believe that those terms,
20 wheels, rollers, and bearings, are used in their
21 plain and ordinary meaning.
22 Q. But you'll agree with me that at least
23 based on what you've reviewed today and in the
24 lead-up to this deposition, that the '745
25 specification never describes rollers used as part

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1 of a belt retention system as bearings; is that
2 right?

3 A. I don't recall every word of -- of the
4 specification, but a roller and a bearing are one
5 and the same thing or a roller can incorporate
6 bearings in it. And I believe I discuss that in my
7 declaration.

8 Q. I'm specifically asking about what the
9 '745 specification says and how it uses those
10 terms. To your knowledge, are the rollers that are
11 included in part of any belt retention system ever
12 described as bearings?

13 MR. TURNER: Objection. Form.

14 Q. Is the term "bearings" ever used to
15 describe those structures?

16 MR. TURNER: Objection. Form.

17 A. Well, I would say that it establishes
18 that they're equivalent whether or not it's
19 explicit. But it definitely establishes it; for
20 example, at the bottom of column 21.

21 Q. How so?

22 A. It states: Collectively, the rollers
23 600 define a top profile 608 similar to the top
24 profile 210 --
25 (Reporter clarification.)

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1 A. Sorry.

2 Collectively, the rollers 600 define a
3 top profile 608 similar to the top profile 210
4 defined by the bearing rails 200, discussed above,
5 and provide for a running belt to move therealong.

6 Q. Are the bearing rails bearings?

7 A. The bearing rails constitute an
8 assembly that includes bearing elements.

9 Q. The rollers 600, in that paragraph you
10 just mentioned, are never called bearings; is that
11 correct?

12 A. I'm not sure. But that paragraph
13 certainly establishes that they're equivalent,
14 outside of the plain and ordinary understanding
15 that a POSA would have that they are essentially
16 the same thing.

17 Q. Are you aware of any instance in which
18 those rollers are referred to as bearings?

19 A. Not as I sit here.

20 Q. Let's look at paragraph 338 of your
21 declaration.

22 A. Okay.

23 Q. You state, at the beginning of this
24 paragraph: "It has long been recognized that users
25 may be injured by falling off of a treadmill while

Page 55

1 mounting or dismounting it or while using it. This
2 may be due to the treadmill belts moving in an
3 unexpected direction or in such a way that the user
4 cannot regain their equilibrium. It could also be
5 due to the incline of the surface causing the
6 position of user to drift rearwards, and off, over
7 time."

8 Did I read that right?

9 A. I think you did.

10 Q. If you look at the end of this
11 paragraph, you include a couple block quotes from
12 Socwell, Exhibit 1011.

13 In that second block quote, you quote
14 Socwell as saying: Another meaningful disadvantage
15 of exercise treadmills of the prior art is the
16 inherent danger associated with users tending to
17 fall off the back end of the treadmill and become
18 injured.

19 Is that -- is that accurate?

20 A. That's reflective of that caption.

21 Q. Didn't Socwell conclude that it was
22 sufficient to curve the running surface to address
23 this inherent danger?

24 A. Yeah. So they state that that is for
25 safety while the user is exercising on the

Page 56

1 treadmill.

2 Q. Socwell doesn't disclose any other sort
3 of safety device besides the curved shape of the
4 treadmill, does it?

5 A. Not while for -- not for getting on and
6 off of it, no. But it discloses the curve for
7 safety while actually performing exercise.

8 Q. Are you aware of any structure in
9 Socwell that you would characterize as a safety
10 device, as that term is used in the '745 patent?

11 A. Not as I -- not as I sit here. I don't
12 believe so.

13 Q. Are you aware of any devices -- any
14 structures in Socwell that would constitute a
15 safety device, as that term is used in any of the
16 other patents such as the '580 or the '884?

17 A. I'm not sure if it does, but definitely
18 I relied on the Magid reference for a safety
19 device.

20 Q. You didn't identify a safety device in
21 Socwell in any of your declarations, did you?

22 A. I -- I did not explicitly disclose one,
23 no.

24 Q. Is it your position that you inherently
25 disclosed one?

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1 A. No. I did not do that either.
2 Q. Socwell doesn't specifically mention
3 any concerns about a user mounting or dismounting a
4 treadmill, does it?
5 A. Well, I didn't identify any of those
6 things in my disclosure that I recall. But my
7 recollection is that Socwell is mainly focused on
8 safety while using the treadmill, not while
9 mounting and dismounting.
10 Q. So you're not aware of anything in
11 Socwell related to concerns about a user mounting
12 or dismounting a treadmill. Is that accurate?
13 I'm just asking about your general
14 awareness.
15 A. My general awareness is -- is no, I
16 don't recall that.
17 Q. Okay. If you look back to your
18 declaration at paragraphs 341 and 342, which are on
19 pages 204 and 205, in paragraph 341, you say:
20 "Rather than relying on a motor, Socwell discloses
21 to calibrate the rollers and deck to provide
22 optimal frictional resistance of the belt to ensure
23 safety while providing proper resistance for
24 exercising." Then you quote to Socwell at
25 column 11, lines 56 to 61.

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1 And you go on to say: "Socwell
2 explains that the curved running surface prevents a
3 user from falling off the back." And for that, you
4 quote Socwell -- or cite Socwell column 3, lines 40
5 to 45.
6 Is that accurate?
7 A. That's accurate.
8 Q. In the very next paragraph, that first
9 sentence, you then state: "Socwell's curved
10 running surface does not fully address the safety
11 issue of the running belt moving in a forward
12 direction when a user steps onto the treadmill."
13 Did I read that right?
14 A. I think so.
15 Q. Okay. If Socwell discloses providing
16 optimal frictional resistance of the belt to ensure
17 safety, as you said in paragraph 341, how can it be
18 the case that it does not address any safety issues
19 related to the running belt moving in a forward
20 direction?
21 A. Well, the safety thing isn't safety by
22 itself. It's safety while providing the proper
23 resistance for exercising. So it's not simply a
24 high friction, slow-moving surface. It's a surface
25 that's tuned for -- for running or walking or

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1 exercising in general.
2 So from that perspective, you can't say
3 that it has plenty of friction to keep someone from
4 experiencing an unexpected movement of the -- of
5 the running surface.
6 Q. So when you said in paragraph 341 that
7 Socwell's design ensures safety, that was --
8 withdrawn.
9 So when you refer to ensuring safety in
10 paragraph 341, there -- at least in your view as
11 you sit here today -- are limits to what safety is
12 being ensured by Socwell's design?
13 A. Well, Socwell discloses that they are
14 ensuring safety while providing proper resistance
15 for exercising.
16 So they are not talking about providing
17 safety while mounting or dismounting or for
18 stepping on a place with unexpected motion that
19 could occur. It's specifically talking about
20 safety while exercising.
21 Q. And am I to understand that your view
22 is that mounting or dismounting a treadmill is not
23 part of exercising?
24 A. I suppose that you could split the
25 hairs and say that it is, since you have to exert

Page 60

1 effort to mount a treadmill. But I think
2 exercising on a treadmill, people consider using
3 the running surface for simulating walking,
4 jogging, or running and that that would be what the
5 exercise is referring to.
6 Q. All right. If we go back a bit earlier
7 in your declaration -- oh, apologies.
8 Before we do that, if you look at
9 paragraph 344, you state: "It would have been
10 obvious to a POSA to combine Socwell's treadmill
11 with Magid's control means to permit only
12 unidirectional movement of the running belt to
13 reduce the risk of a user stepping onto the running
14 belt of the treadmill and losing their balance when
15 the belt moves in the forward direction."
16 Why would a POSA be motivated to add
17 Magid to Socwell if Socwell, by its own terms, had
18 already solved the falling problem?
19 A. It's the same answer as before. So
20 the -- falling off the back end is a different
21 scenario because that's during use of the treadmill
22 as exercise. And the other safety concern is that
23 when you step on a curved treadmill, on the back
24 end, you might not expect your foot to move
25 downward unexpectedly, which could cause a fall

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1 while not using the treadmill for exercise.
2 And so that is what this is addressing,
3 and that is what I stated in paragraph 342 just
4 before this.
5 Q. Socwell doesn't describe any sort of
6 concern about a user mounting the treadmill, right?
7 A. That's correct.
8 Q. So let's go a bit earlier in your
9 declaration to paragraph 97, which is going to
10 start on page 64.
11 A. You said paragraph 67?
12 Q. Paragraph 97 --
13 A. 97.
14 Q. -- on page 64.
15 A. Okay.
16 Q. So the first sentence of this paragraph
17 says: "The need to limit the motion of the
18 treadmill belt motion for user stability and safety
19 was also well known."
20 And one of the references you cite for
21 that is Socwell. Do you see that?
22 A. I see that.
23 Q. And you specifically cite Socwell at
24 column 1, lines 28 to 41; is that correct?
25 A. Yes.

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1 Q. Okay. If you read that section of
2 Socwell, doesn't that section discuss sufficient
3 friction in any direction that the belt moves, not
4 necessarily for unidirectional movement?
5 A. Yes. But that's not what I stated in
6 paragraph 97. I just made a general statement
7 about limiting the motion, so I didn't specify
8 directionality to that.
9 Q. Well, if we look at the rest of
10 paragraph 97, you follow that up -- that sentence
11 up immediately with: "Further, using one-way
12 clutches to limit treadmill belt motion to one
13 direction --
14 (Reporter clarification.)
15 Q. I'll restart.
16 "Further, using one-way clutches to
17 limit treadmill belt motion to one direction dates
18 back to at least 1996." And then you go on to
19 discuss sprag-type one-way bearings; is that right?
20 A. That's right.
21 Q. Wouldn't that suggest that, in that
22 first sentence of paragraph 97, you were referring
23 to some sort of known desire for unidirectional
24 movement?
25 A. I think that I was just speaking

Page 63

1 generally about limiting motion, which could mean
2 movement in either a forward or rearward direction.
3 Q. You'll agree with me that the
4 disclosure that you cited from Socwell doesn't have
5 anything to do with unidirectional movement, right?
6 A. That's right. It's talking about
7 dangers of just unfettered motion.
8 Q. Keeping a pin in your declaration but
9 looking briefly at Exhibit 1012 in your binder, do
10 you recognize this document?
11 A. Yes.
12 Q. This is U.S. Patent No. 5,538,489,
13 which lists Sidney Magid as an inventor, right?
14 A. That's what it appears to be.
15 Q. And if I refer to this document as
16 Magid -- Magid or any of the plethora of
17 pronunciations that we've all used for reference,
18 you will understand what I'm referring to, won't
19 you?
20 A. I think I will.
21 Q. Did you read Magid in its entirety
22 before drafting your report?
23 A. Yes.
24 Q. And if we look at your declaration in
25 this matter, it appears that you rely on Magid to

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1 modify the primary references in all of the grounds
2 presented. Does that sound correct?
3 A. Yeah, I think that's reasonable.
4 Q. So if you go to page 104 of your
5 declaration, specifically to the second paragraph
6 there, paragraph 176 -- I guess it's on page 105.
7 Apologies.
8 A. Okay.
9 Q. In that paragraph, you state that:
10 Schonenberger, Socwell, and Magid are from the same
11 field - exercise equipment, more specifically,
12 treadmills for home exercise use.
13 Did I read that right?
14 A. You did.
15 Q. So in this paragraph, with respect to
16 Magid, you cited to column 1, lines 53 to 56, and
17 column 3, lines 23 to 27, as support for that
18 statement. Do you see that?
19 A. So you -- I'm sorry. I didn't hear
20 what you said. You said 1012, column 1, 53 to 56?
21 Is that --
22 Q. Yeah. But I'm just asking what you --
23 what you cited to in paragraph 176. It's for
24 Exhibit 1012, which is Magid, you cited to
25 column 1, lines 53 to 56, and column 3, lines 23 to

Page 65

1 27; is that right?

2 A. That's right.

3 Q. Okay. So let's turn to Magid,

4 specifically to those sections that you cited.

5 That first one, column 1, lines 53 to

6 59, which includes the section that you cited plus

7 the remainder of that paragraph, reads: "Another

8 objective of the present invention is to provide a

9 walker apparatus which may be used with the

10 functional supporting frame of an exercise walker,

11 the latter having an adjustable hand bar for use by

12 small children, physically handicapped people, old

13 people, and by those who feel more confident

14 holding onto something while exercising."

15 Did I read that right?

16 A. You did.

17 Q. Does that paragraph mention anything

18 about home exercise use?

19 A. That paragraph doesn't explicitly state

20 anything about home use. It doesn't say anything

21 about the location.

22 Q. You would agree that this paragraph

23 actually refers to exercise equipment for people

24 with physical limitations? Does that sound right?

25 A. I don't know. It does mention

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1 physically handicapped people, but it doesn't

2 mention anything about limitations of the other

3 populations that it describes.

4 Q. Would you consider small children,

5 physically handicapped people, and old people to

6 have physical limitations relative to the general

7 population?

8 A. They are the general population --

9 they're part of the general population.

10 Q. Relative to the -- relative to the

11 average able-bodied person, would those people have

12 physical limitations? Or be expected to have

13 certain physical limitations?

14 A. They could, but this is for exercising.

15 So they could, yeah. Small children would be

16 expected to be shorter than the average person.

17 And an older person might be expected to have a

18 different maximum strength as an average

19 35-year-old, say.

20 Q. Would you expect people with those

21 kinds of physical limitations to feel more

22 confident holding onto something while exercising?

23 A. Well, that's what this paragraph

24 states.

25 Q. Do you agree with that?

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1 A. Well, actually, I need to walk that

2 back a little bit because it doesn't say those who

3 feel more confident holding onto something, meaning

4 those people. It defines those who feel more

5 confident holding onto something as a different

6 group of people altogether.

7 Q. Would you expect people with physical

8 limitations to be more confident holding onto

9 something while exercising?

10 MR. TURNER: Objection. Asked and

11 answered.

12 A. Yes. But able-bodied people also do.

13 I do. I hold onto the handlebars when I use a

14 treadmill.

15 Q. Turning to the next page of Magid,

16 column 3, lines 23 to 31 -- which, again, includes

17 the section that you cited previously in your

18 paragraph 176 -- that section reads: "Any one of

19 the different embodiments of the walker apparatus

20 of the present invention may further comprise the

21 functional supporting frame of an exercise walker,

22 a baby chair, or a baby stroller. When used as an

23 exercise walker, the walker apparatus is an ideal

24 way of losing weight and keeping fit. When used as

25 a baby chair or baby stroller, the walker apparatus

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1 provides a safe and effective way for exercising a

2 baby and for teaching the baby to stand and walk.

3 Did I read that correctly?

4 A. I think you did.

5 Q. Does anything in that paragraph refer

6 to home exercise use?

7 A. I don't think it explicitly states

8 that. But I think anybody reading this and saying,

9 oh, this is going to be used on a baby chair or a

10 baby stroller, that that would be something you

11 would do in the home and not necessarily at some

12 sort of commercial location.

13 Q. Can you look at column 5, lines 56 to

14 59? Those sentence -- that sentence says: "This

15 form of an exercise walker belongs in hospitals and

16 in retirement homes and is ideal for those who wish

17 to keep fit and lose weight."

18 Does that suggest that this -- that the

19 device disclosed in Magid was intended for home

20 exercise use?

21 A. Well, it says retirement homes. So

22 that is a home.

23 Q. You consider a retirement home a home

24 as you used that term in paragraph 176, which

25 states that Schonenberger, Socwell, and Magid are

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1 all from the same field?

2 A. So I think that column 5 is

3 referring -- that portion that you just read is

4 specifically referring to Figure 2 and is an

5 embodiment and not limited to -- not -- does not

6 limit -- this is a selling point. And obviously,

7 you can see from the pictures that this is a small,

8 compact device.

9 And in terms of for home use versus a

10 commercial setting like a gym or something, the

11 fitness standards basically differentiate by the

12 frequency of the loading on -- on the devices. So

13 I don't see any difference here that would -- that

14 would deter me from believing that this is for a

15 home -- for home use, particularly what we read

16 already about putting it on a baby chair or a baby

17 stroller.

18 Q. So my question was specifically whether

19 you consider a retirement home a home as you use

20 that term in paragraph 176, which states that

21 Schonenberger, Socwell, and Magid are all from the

22 same field.

23 Is a retirement home a home such that

24 Magid, Schonenberger, and Socwell disclose

25 comparable exercise equipment, based on that

Page 70

1 disclosure?

2 A. Yeah. The statement of a retirement

3 home does not -- does not fall outside of that

4 home. I mean, people -- what my idea of a home is,

5 people live there. It's like if they had said,

6 this is perfect for use in an apartment building,

7 like that doesn't mean that it's in a gym in an

8 apartment building. It could be in any of the

9 units within it.

10 Q. Would the devices disclosed in

11 Schonenberger or Socwell meet that criteria, being

12 ideal for use in a hospital or retirement home?

13 A. I'm sure that devices just like them

14 are used in hospitals and retirement homes.

15 Whether or not they're ideal for it, I don't know.

16 This is -- this is the inventor tooting his own

17 horn about his invention here -- or her invention,

18 I'm not sure. Their invention, let's say. So they

19 believe that it's ideal for use in those locations.

20 The other ones, I don't recall if they

21 state anywhere about what the ideal use is, but

22 these can all be used in the home and in a

23 commercial setting.

24 Q. Would you use devices such as

25 Schonenberger and Socwell for therapeutic purposes?

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1 A. Yeah.

2 Q. Are they intended for therapeutic

3 purposes?

4 A. Treadmills are used all across the

5 world for therapeutic purposes. So whether or not

6 you intentionally put that into your treadmill or

7 not, they're -- physical therapists and trainers

8 across the world use them for therapeutic reasons.

9 Q. Specifically referring to the

10 treadmills in Schonenberger and Socwell, are those

11 intended for therapeutic uses?

12 MR. TURNER: Objection. Asked and

13 answered.

14 A. So whether or not they're intended in

15 their explicit design, they are intended to -- for

16 exercise. I don't recall right now if it says

17 therapy or therapeutic uses, but they -- they will

18 be used for that.

19 And treadmills across the world are

20 used for those purposes. That's part of what

21 treadmills are for.

22 Q. Are either Schonenberger or Socwell

23 intended to be used by babies?

24 A. I'm not sure that they put that

25 explicitly in their specification, but you probably

Page 72

1 could use it that -- for that. I don't know.

2 Yeah, I'm not sure. And I -- I don't

3 actually have an opinion on that.

4 Q. You'll agree with me that Magid is

5 specifically focused on a walker apparatus that can

6 be used to teach babies how to stand and walk or,

7 alternatively, to be used for therapeutic purposes;

8 is that right?

9 A. No, I don't think that that's right.

10 Because it says specifically -- we already talked

11 about it, and it says also for people who want to

12 hold onto something while exercising. So exercise

13 is a part of the purpose of this invention.

14 Q. You'll agree with me that Magid only

15 discloses a two-belt design, won't you? Outside of

16 what it refers to as the prior art.

17 A. Yeah. I think that that's the case.

18 In their abstract section, they describe a --

19 describe a split-belt treadmill.

20 Q. It's not just the abstract section,

21 right? It's the entire patent specification?

22 A. Without reading through it, I -- I'm

23 not sure. But certainly, in the abstract, it

24 describes a split-belt treadmill.

25 Q. You don't recall if the rest of the

Page 73

1 specification refers to a split belt design, as you
2 sit here today?
3 A. Not -- not as I sit here, no.
4 Q. Magid repeatedly identifies that its
5 device may be used with a baby chair or a baby
6 stroller, doesn't it?
7 A. Probably.
8 Q. You don't recall?
9 A. Well, it has an embodiment, certainly,
10 in the figures there, where you can see it mounted
11 to the stroller and the baby seat. So -- and you
12 know, Figure 5, Figure 6, Figure 7. So yeah, I
13 mean, that's part of one of the things that they
14 intended this for.
15 Q. Are you aware that all but one
16 embodiment described in Magid is directed to a baby
17 stroller or a baby chair?
18 A. I probably am, but this has embodiments
19 that are not for that also.
20 Q. Are you aware that the only embodiment
21 that is not described as a baby chair or a baby
22 stroller includes that sentence we read earlier
23 stating that this form of an exercise walker
24 belongs in hospitals and in retirement homes?
25 A. Can you say that again?

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1 Q. Are you aware that the only embodiment
2 that is not described as a baby chair or a baby
3 stroller is the embodiment that Magid refers to as
4 belonging in hospitals and in retirement homes?
5 MR. TURNER: Objection. Form.
6 A. So the non-baby one, you're saying that
7 the non-baby one is the only one that they say is
8 the ideal one to go into retirement homes? Is that
9 what your question is.
10 Q. No. My question is whether you're
11 aware that the sole embodiment that is not
12 described as a baby chair or a baby stroller is,
13 instead of being for a baby chair or a baby
14 stroller, stated to be -- to belong in hospitals
15 and in retirement homes.
16 A. I don't agree with that because it
17 doesn't say that it belongs. It says it's ideal
18 for. So they can be used many places, but they
19 think the best one is those places.
20 Q. Column 5, line 56 states: "This form
21 of an exercise walker belongs in hospitals and in
22 retirement homes"; is that right?
23 A. That's fair, yes.
24 I apologize for that last one. I
25 didn't recall that, that word there.

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1 Q. None of the devices described in Magid
2 have a curved running surface, do they?
3 A. I don't think so.
4 Q. Does Magid ever even describe having a
5 user run on its treadmill?
6 A. Well, it states that it's ideal for
7 those who wish to keep fit. And it calls it a
8 walker or a walking device, so -- and a walker
9 apparatus.
10 So as something that simulates human
11 gait, I think that even though they say walker,
12 that people would understand that you could also
13 run on this, especially since it's called -- it
14 calls out exercising.
15 Q. Are you -- is it your testimony today
16 that in order for something to be an exercise
17 device, you have to be able to run on it?
18 A. No. There are plenty of pieces of
19 fitness equipment that do not incorporate any sort
20 of running.
21 Q. So you'll agree that the fact that the
22 walker apparatus or walker device described in
23 Magid is described as being used for exercising
24 does not necessarily mean that one could or would
25 run on it?

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1 A. I think anybody looking at this would
2 understand that even if they call it a walker, that
3 people could run on it.
4 And when I was referring to a plethora
5 of devices for exercising that don't involve
6 running, I was thinking of weight-lifting where
7 there is no running involved; and I was thinking
8 of, you know, like a lat pull machine or a stair
9 stepper.
10 So those are exercise devices that do
11 not incorporate running. So that's what I -- I was
12 thinking of. But I think just looking at these
13 pictures, you can see that if you can walk on this,
14 you can also run or jog on it.
15 Q. Would there be any necessary minimum
16 amount of coordination required to run on a
17 two-belt design like this?
18 A. The same amount of coordination that
19 you would use on a normal treadmill.
20 Q. So you don't think there would be any
21 difference whatsoever in the necessary coordination
22 to run on a device with two belts positioned in
23 parallel to each other?
24 A. No, because they're independent of one
25 another. So I know that this patent wants the

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1 split belt for people who have issues coordinating
2 their feet. But if you ask a person to run on
3 this, it -- it wouldn't be different than an
4 ordinary treadmill.
5 Q. Would a person with problems
6 coordinating their feet, such as babies or the
7 physically handicapped, have problems running on
8 this device?
9 A. They might have trouble running on any
10 device.
11 Q. Would you agree that the two-belt
12 design is intended to, at a minimum, facilitate
13 exercise for people who have coordination problems?
14 A. I believe that that's what they listed
15 as their motivation for using a split belt.
16 Q. Do you agree with that motivation?
17 A. I think in some circumstances that that
18 might be something that's important. For example,
19 you know, in the embodiment for babies, they might
20 not have enough strength to keep the belt rolling
21 or they might -- especially if you're seated, you
22 could be dragging one foot on the belt and causing
23 it to stop. So having a split-belt treadmill for a
24 seated use would be something that would be useful
25 for someone sitting.

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1 But for walking, I don't know that
2 there is much advantage. But split-belt treadmills
3 are certainly a thing in research and therapy used
4 across the world.
5 Q. Would you agree with me that there are
6 additional or different safety concerns for a
7 device that's intended to be used by people with
8 physical limitations compared to your typical
9 exercise treadmill intended to be run on by an
10 able-bodied adult?
11 A. There could be. I don't recall in here
12 where it discusses those things. For example, if
13 you're doing rehabilitation, usually there is a
14 harness. If you cannot stand up and you want to --
15 and they want you to get on a treadmill, you get in
16 a harness and you basically hang while trying to
17 walk around.
18 So those things do exist. I don't
19 believe and I don't recall reading that within the
20 specification here.
21 Q. In general though, you're aware of the
22 need for safety devices or safety features if
23 you're designing a device for use by people with
24 physical limitations; is that right?
25 A. Well, it's incumbent on all designers

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1 to include safety as part of their design for
2 devices that are used by people.
3 Q. And there are different or additional
4 considerations for people who have different
5 physical limitations, wouldn't you agree?
6 A. Depending on the devices.
7 Q. Is it fair to say that, yes, in certain
8 circumstances, there would be additional or
9 different safety considerations if you're designing
10 a device for people with physical limitations?
11 A. So yes, there are certain circumstances
12 where you would incorporate -- if you have
13 something that's specific for someone, say, who
14 doesn't have use of a leg or doesn't have use of
15 both legs where they can't stand, then you'd
16 definitely need to incorporate a harness. And that
17 is something that is established and something that
18 I've tested out myself in the past.
19 Or people who have, say, something
20 called ototoxicity where you -- it's basically
21 permanent vertigo, where you can't balance at all
22 and holding onto things doesn't really help you, so
23 you would want to have a harness in that -- in that
24 condition, which is commonplace in therapy.
25 Q. Harnesses aren't the only safety

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1 feature that would be intended for people who have
2 difficulty balancing, is it?
3 A. Sure. Handrails could be used as well.
4 Q. Other things?
5 A. You could have a therapist holding you.
6 You could have crutches.
7 Q. You can't think of any other safety
8 features that might be helpful if someone has
9 difficulty balancing?
10 A. I mean, if someone has difficulty
11 balancing, you have to have a restraint system for
12 that person. So whatever means you develop, you
13 could -- you would have to implement that.
14 Because if a person has difficulty
15 balancing and you try to sell them something, you
16 need to make sure that they can stay upright and
17 not hurt themselves. But if you want me to think
18 of safety devices for that on the fly, we're
19 probably going to have to get a new retention
20 together and form a different project.
21 Q. Would you agree that if someone has
22 difficulty balancing or uncoordinated movement,
23 it's particularly important to ensure that a
24 running belt on a treadmill they are using does not
25 move unexpectedly?

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1 A. No more than a normal person.
2 Q. So someone with uncoordinated movement
3 would have no additional need for that kind of
4 feature than your average able-bodied adult?
5 A. A fall would be just as severe for
6 either of those populations.
7 Q. Would the risk of a fall be more severe
8 for someone with coordination problems or balance
9 problems?
10 A. No. Because the technical use of the
11 word "risk" is frequency times severity. And so
12 the risk exposure there is going to be the same.
13 Q. Setting aside the semantics of the word
14 risk, is a person with coordination problems or
15 balance problems more prone to a fall than someone
16 without those problems?
17 A. Well, as a technical expert, I'm going
18 to use the technical definitions of -- of the words
19 that I use in my everyday practice.
20 But a person that has issues balancing
21 is more precarious than a person who is what we
22 would consider able-bodied.
23 Q. Do you know what a means-plus-function
24 claim term is?
25 A. I know that I described it in my

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1 declaration and --
2 Q. You can turn to page 16 of your
3 declaration. I think that's where you might
4 describe it. And in paragraph 31, you state in
5 that paragraph: I understand that a claim that
6 includes functional language without sufficient
7 structural limitations may be construed as a "means
8 for" or a "means plus" claim. Such a claim may be
9 interpreted as requiring structural limitations
10 disclosed in the specification.
11 Did I read that right?
12 A. You did.
13 Q. If we look at Magid, specifically at
14 column 4, starting around line 46, in this section,
15 Magid states: "A unidirectional control means
16 6, 6' is installed to permit only unidirectional
17 movement of the left and right foot belts 4, 4'.
18 In this embodiment, the control means 6, 6'
19 includes a pair of ratchet gears 61 attached to
20 outer ends of the front rollers 41 and mounted
21 rotatably on the first shaft 411, and a pair of
22 pawls 62 secured to the base 11 and engaging one of
23 the ratchet gears 61 to permit only unidirectional
24 rotation of the front rollers 41, thereby
25 preventing bidirectional movements of the foot

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1 belts 4, 4'.
2 Did I read that correctly?
3 A. It sounded correct to me.
4 Q. Is the term "control means," as used in
5 that section, a means-plus-function term?
6 MR. TURNER: Objection, form.
7 Objection, calls for a legal conclusion.
8 A. Right. So yeah, I can't be sure, but
9 as for -- legally speaking. But as an engineer,
10 the first line there says a unidirectional control
11 means. So that -- that is just stating what they
12 want to put in.
13 And then after that, they say but in
14 the embodiment we show -- we've chosen this -- this
15 particular means. So that's -- that's what I read
16 in this paragraph.
17 Q. So you don't have an opinion sitting
18 here today on whether a unidirectional control
19 means is a means in a means-plus-function term?
20 MR. TURNER: Same objections.
21 A. Right, I don't have an opinion on that
22 right now.
23 Q. If we go back to your declaration,
24 page 101 and paragraph 167, so I'll represent to
25 you that this is part of your discussion of what

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1 you've termed element 1.7, which refers to a safety
2 device coupled to the running belt.
3 And you can review that -- that heading
4 on page 98 if you need to.
5 In paragraph 167, you state: Magid
6 does not explicitly disclose that the ratchet gear
7 or pawl is a race, nor that one substantially
8 surrounds the other.
9 Did I read that correctly?
10 A. You did.
11 Q. Are you referring to that
12 unidirectional control means disclosed in Magid in
13 this section?
14 A. Yeah. So in paragraph 167, the ratchet
15 gear and the pawl constitute the unidirectional
16 control means.
17 Q. Magid never implicitly discloses that
18 the ratchet gear or pawl is a race or that one
19 substantially surrounds the other, does it?
20 A. No, I don't believe so.
21 Q. So at no point in your declaration do
22 you assert that the ratchet gear or pawl would be a
23 race or that it would substantially surround the
24 other?
25 A. No, I don't believe I say that.

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1 Q. So you would agree with respect to this
2 limitation which includes the requirement that,
3 "the safety device includes a first safety race
4 element and a second safety race element, wherein
5 at least one of the first and second safety race
6 elements is adapted for rotation relative to the
7 frame, and wherein one of the first and second
8 safety race elements substantially surrounds the
9 other of the one of the first and second safety
10 race elements" is not disclosed in Magid; is that
11 right?
12 A. So yeah, in Magid, they say there's
13 a -- you need a unidirectional control means. They
14 picked a ratchet and pawl, but -- and the ratchet
15 and pawl might not necessarily have that, although
16 you might put a normal bearing within one of those
17 components, which would then have an inner and
18 outer race.
19 But I think, generally speaking, that
20 since it's just a -- Magid says this is an
21 embodiment that a person of ordinary skill in the
22 art would recognize that, like a one-way bearing is
23 a much better solution there.
24 Q. But Magid never discloses that?
25 A. No. It just provides its embodiment

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1 and states a unidirectional control means.
2 Q. In Magid's discussion of the control
3 means, did it ever mention safety concerns related
4 to a user losing their balance? Let me go back
5 just to make sure I state it correctly.
6 Did Magid ever mention safety concerns
7 related to a user losing their balance when first
8 stepping onto the device?
9 Do you need me to repeat the question?
10 A. Yeah, please.
11 Q. Does Magid ever mention safety concerns
12 related to a user losing their balance when first
13 stepping onto the device?
14 A. I don't recall seeing that in the
15 specification for Magid.
16 MS. RIEGER: All right. It's a
17 little after noon. Do we want to break for
18 lunch?
19 MR. TURNER: Sure.
20 (Lunch break.)
21 BY MS. RIEGER:
22 Q. Dr. Giachetti, welcome back.
23 A. Thank you.
24 Q. So we left off before the break talking
25 about Magid. I wanted to shift gears a little bit

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1 to talk about Sclater for a moment -- Sclater,
2 however we want to pronounce that -- which is
3 Exhibit 1017. I think that'll actually be in your
4 second binder.
5 So if you look at page 320 of Sclater,
6 we discussed certain things on this page during
7 yesterday's deposition. Do you remember that?
8 A. I do.
9 Q. And this is the -- that page that
10 refers to applications for sprag-type clutches,
11 right?
12 A. Right.
13 Q. So that -- I guess I'll call it the
14 introductory paragraph there on that page states:
15 Overrunning sprag clutches transmit torque in one
16 direction and reduce speed, rest, hold, or
17 freewheel in the reverse direction. Applications
18 include overrunning, back-stopping, and indexing.
19 Their selection, similar to other mechanical
20 devices, requires a review of the torque to be
21 transmitted, overrunning speed, type of
22 lubrication, mounting characteristics,
23 environmental conditions, and shock conditions that
24 might be encountered.
25 Did I read that right?

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1 A. You did.
2 Q. In reaching your opinions combining
3 Sclater with the various other references in these
4 IPRs, did you consider the torque to be
5 transmitted, overrunning speed, type of
6 lubrication, mounting characteristics, et cetera,
7 et cetera, before concluding that the specific
8 sprag-type clutch you referenced could be combined
9 with those other references?
10 A. Yes. So the first thing is that there
11 is the picture of it using -- being used with a
12 conveyor. So that was the first thing.
13 The second thing is that when it
14 describes the torque to be transmitted, on some of
15 the previous pages, they indicate that the torque
16 transmission has to do with how many interfering
17 elements there are within the one-way bearing.
18 And so there is another style where
19 there is, you know, only a few spherical
20 interfering elements that are spring-loaded. And
21 in the sprag type, there are tons of them.
22 So from the torque perspective, yes,
23 for sure. And then the lubrication and things like
24 that, that was taken care of by the Emerson
25 reference, which indicated that that was

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| <p style="text-align: right;">Page 89</p> <p>1 appropriate for exercise equipment. So the 2 environment and things like that were already taken 3 care of by the industry. 4 Q. You didn't cite the Emerson disclosure 5 as a reference in any of your grounds, did you? 6 A. Not directly, but I certainly cited it 7 as state of the art. 8 Q. Where, if at all, in your declaration 9 did you discuss the torque to be transmitted by the 10 sprag that you selected from Sclater? 11 A. So I cited Sclater on paragraph 168 for 12 saying that the sprag type meets the torque and 13 bearing requirements of most machine applications. 14 That's one place where I mentioned it with the 15 torque. 16 Q. Sorry. Can you repeat where exactly 17 that was? 18 A. Paragraph 168. 19 Q. 168? 20 A. On page 101. 21 Q. Where in that paragraph do you mention 22 the torque that is to be transmitted? 23 A. So it states: Sprags combined with 24 cylindrical rollers in a bearing assembly can 25 provide a simple, low-cost method for meeting the</p> | <p style="text-align: right;">Page 91</p> <p>1 balls) disposed between the inner race and the 2 outer race. 3 And then on the next page, you include 4 an annotated picture of a specific sprag from 5 Sclater. 6 Are you -- is it your -- is it your 7 position that you are not relying on the specific 8 sprag depicted in this paragraph? 9 A. I think that calling this a specific 10 sprag is not consistent with the way that I'm 11 highlighting a sprag one-way bearing in general. 12 And you can see in Sclater that there 13 are a number of depictions of sprag-type one-way 14 bearings. For example, on page 316, there are 15 other depictions of the sprags within a one-way 16 bearing. So... 17 Q. Do you include any analysis in your 18 declaration indicating that the other sprag-type 19 bearings disclosed in Sclater have all of the 20 features that are described in paragraph 169? 21 A. Yeah. Well, you can see it in page 316 22 of Sclater. But there is an inner race and an 23 outer race of that sprag-type bearing that's shown. 24 Q. Where do you discuss that in your 25 declaration?</p> |
| <p style="text-align: right;">Page 90</p> <p>1 torque and bearing requirements of most machine 2 applications. 3 Q. Let me rephrase. 4 Where in that paragraph do you mention 5 the torque requirements of the specific sprag that 6 you rely on in your opinions, as opposed to sprags 7 generally? 8 A. Well, I don't think that I call out a 9 specific sprag. I didn't -- I don't believe I have 10 a -- like a part number from the catalog or 11 anything. But we establish here that the sprags 12 that act as wedges can handle the torque and that 13 they do so in a fashion that is shown in Sclater to 14 work with conveyor-type systems like what a 15 treadmill is expected to do. 16 And we know that they can transmit high 17 loads, and we know from the state of the art that 18 they are -- applications are known for exercise 19 equipment. 20 Q. So if we look at that next paragraph, 21 paragraph 169 on page 101, you state: As 22 illustrated in the image below, Sclater discloses 23 that the sprag-type one-way bearing assembly 24 includes an inner race, an outer race, and a 25 plurality of sprags and rolling elements (e.g.,</p> | <p style="text-align: right;">Page 92</p> <p>1 A. Well, I would say maybe not that one 2 necessarily; but you can see in page 52 and 53 3 where I'm discussing inner races and outer races 4 and sprags and showing graphics from a number of 5 sources that -- that -- oh, and I'm also showing 6 that on page 55 in my report, so that graphic from 7 page 316 as well. 8 Q. And that's in the background section of 9 your report? 10 A. The state-of-art section, yeah. 11 Q. The state-of-the-art section. 12 So with respect to your actual analysis 13 of how, in your opinion, Sclater discloses the 14 specific elements laid out in the claims, you don't 15 cite to those other depictions; is that correct? 16 A. I mean, I'm just using that one as an 17 example. And I'm clear in the declaration that 18 Sclater discloses these bearings. 19 Q. And where do you say that that's only 20 an example or otherwise indicate that the same 21 features are present in other disclosures in 22 Sclater? 23 A. So I say as illustrated in the image 24 below. I don't say this is the exact thing. I say 25 this is illustrated with this one from Sclater.</p> |

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1 Q. Well, what you say exactly is: As
2 illustrated in the image below, Sclater discloses
3 that the sprag-type one-way bearing assembly
4 includes certain features.
5 There is no reference there to any
6 other sprag-type one-way bearing assembly, whether
7 in Sclater or otherwise, is there?
8 A. Well, in the background section, you
9 can see that I've pointed out all the different
10 places where you can see sprags and races. And
11 they're illustrated with graphics as well. And
12 then you can see in the -- in Emerson the same
13 things which I show on page 56 and 57.
14 Q. But you didn't cite any of that in the
15 actual discussion of the claim limitations; is that
16 correct?
17 A. In the claim limitation languages, I
18 relied primarily on Sclater.
19 Q. Did you rely on anything else
20 secondarily to the specific image depicted in
21 paragraph 169 for those specific limitations?
22 A. Well, I would say that that graphic,
23 which is only part of Figure 1 on page 318 of
24 Sclater, pretty much points you to the direction of
25 the other ones.

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1 But as far as being explicit in my
2 declaration for those -- those specific components,
3 even though I highlighted it at several places
4 others -- in other areas of the declaration, that
5 it's not explicitly relying on those other
6 embodiments of sprag-type clutches. It's just a
7 general depiction of the sprag-type clutch.
8 Q. The sprag that you took and annotated
9 from page 318 is in a different section from the
10 sprags depicted on page 316; isn't that right?
11 They have different headers on those two-pages?
12 A. Sure. So it's in the ten ways to apply
13 overrunning clutches. And the other section that I
14 was just pointing to is details of overriding
15 clutches.
16 Q. Turning back to that language at the
17 top of page 320, where in your declaration, if at
18 all, did you ever mention the overrunning speed
19 that would -- you would be required to review
20 before selecting a sprag-type clutch?
21 A. I know I mentioned speed in here
22 somewhere. Let me just find it.
23 All right. Well, I mention on page 71
24 that from Sclater, we can see that ratchet and pawl
25 have some deficiencies, whereas the roller and

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1 friction type clutches like sprags do not have
2 those same limitations.
3 Q. And where does that mention overrunning
4 speed?
5 A. It says "including noise and speed
6 limitations."
7 Q. So speed limitations there, in your
8 opinion, it specifically relates to overrunning
9 speed?
10 A. I think just speed in general.
11 Q. Paragraph 116, which you just read
12 from, refers to deficiencies of pawl and ratchet
13 clutches as compared to roller and friction type
14 clutches. There is no specific reference in there
15 to sprags or the specific sprag that is depicted in
16 paragraph --
17 A. The picture right above it.
18 (Reporter clarification.)
19 Q. In paragraph 116.
20 A. Yeah. So that paragraph 116 is
21 preceded by Figure 1 from Sclater on page 318
22 showing the roller/friction type sprag clutch.
23 Q. So the previous paragraph where that
24 picture -- that image is provided essentially just
25 provides a background of Sclater, including a

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1 statement from you that Sclater describes different
2 types of coupling, clutching, and braking devices
3 in Chapter 9, including ratchet clutches and
4 one-way bearing assemblies that include sprags.
5 Is it your contention here today that
6 by virtue of the fact that that paragraph mentions
7 sprags amongst the different types of coupling,
8 clutching, and braking devices, the following
9 paragraph that refers generally to roller and
10 friction type clutches is necessarily discussing
11 the sprag application that you applied in these
12 grounds?
13 A. Well, that was a really long question.
14 Q. Yeah. I can -- I can rephrase if you
15 need me to.
16 A. That would be great. Thank you.
17 Q. I'll break it down a little bit.
18 A. Okay.
19 Q. So paragraph 115 states: Sclater
20 describes different types of coupling, clutching,
21 and braking devices in Chapter 9, including --
22 (Reporter clarification.)
23 Q. Sclater describes different types of
24 coupling, clutching, and braking devices in
25 Chapter 9, including ratchet clutches and one-way

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| <p style="text-align: right;">Page 97</p> <p>1 bearing assemblies that include sprags. 2 And then you provide an excerpt from 3 Sclater at page 318 that shows precision sprags, 4 per Sclater, right? 5 A. Correct. 6 Q. In the next paragraph, you state: 7 Sclater also discloses some of the deficiencies of 8 pawl and ratchet clutches as compared to roller and 9 friction type clutches, including noise and speed 10 limitations. 11 A. That's right. 12 Q. Is it your contention that because 13 sprags happened to be mentioned in that preceding 14 paragraph, that the reference in paragraph 116 to 15 noise and speed limitations is specifically 16 intended to apply to the sprag application that you 17 used in these grounds? Do you think that's 18 apparent from the language in your declaration? 19 A. Yes. Because that paragraph is saying 20 ratchet and pawls have noise and speed limitations 21 that are not present in the roller and friction 22 type clutches, which roller and friction type 23 clutches are the -- are sprag-type roller bearings. 24 Q. And considering the language on 25 page 320 of Sclater discussing the different</p> | <p style="text-align: right;">Page 99</p> <p>1 discloses noise and speed limitations that, 2 according to you, refers to the noise and speed 3 limitations of sprag-type devices. 4 So I guess I'm asking -- I'm asking you 5 what the noise of a sprag-type clutch is relative 6 to the noise of a treadmill while in operation. 7 A. You wouldn't be able to hear a 8 sprag-type bearing on a treadmill in operation. 9 Q. So this section that we've been talking 10 about is from Section VIII of your declaration, 11 which is titled "Patentability of the Challenged 12 Claims," but more specifically, Subsection A, 13 "Overview of the prior art." That's on page 69. 14 Do you see that? 15 A. Yes. 16 Q. Where in your actual analysis of the 17 claim limitations do you discuss overrunning speed 18 related to the -- to applying Sclater to the 19 combination of references in the grounds you put 20 forward? 21 A. So in the ratchet and clutch section of 22 the state of the art, I discuss ratchets as being 23 used in low-speed applications. 24 And there is another consideration with 25 speed where you basically end up where if -- you're</p> |
| <p style="text-align: right;">Page 98</p> <p>1 features that one would be required to review for 2 selecting a specific sprag-type clutch, how does 3 that one sentence indicate how you have reviewed 4 the overrunning speed of a sprag-type clutch -- or 5 the sprag-type clutch that you used in this 6 section? 7 A. So again, I'm not -- I'm not selecting 8 a specific type of sprag clutch. You can go in the 9 Emerson catalog and you can see that there are a 10 number of different sizes and strengths of the 11 sprag-type clutches in there. So if you would like 12 to take a reading of Sclater, as in you can't pick 13 the type of bearing because you have to require it 14 to do those other things, I think is a different 15 question than what we're answering in the 16 disclosure, which is between ratchet and pawls and 17 the sprag type. 18 The sprag types can operate faster, and 19 they can operate quieter. And those two things are 20 very advantageous. 21 Q. How does the noise of Sclater compare 22 to the noise of a treadmill while in operation? 23 A. Can you define what you mean by "noise 24 of Sclater"? 25 Q. Well, you say here that Sclater</p> | <p style="text-align: right;">Page 100</p> <p>1 dependent on that pawl being able to lock into the 2 teeth on the ratchet. So if you hit the resonant 3 frequency, you might end up jumping teeth, which I 4 believe is in here. 5 Q. I'm asking specifically about your 6 analysis and the grounds -- your grounds of 7 invalidity. For example, in the sections we were 8 talking about previously, in paragraphs -- I 9 suppose it's 163 through 174 and then the rationale 10 to combine following that, do you discuss any of 11 these situations or any of these considerations as 12 a part of your actual combination analysis? 13 A. Yeah. So in paragraph 188 and 189, I 14 talk about the limitations, talking about how the 15 spring needs to keep the pawl in contact with the 16 ratchet. And then in 189, I talk about how the 17 pawl may skip past teeth before engaging with the 18 ratchet, which is not the case in sprags. So that 19 would be a speed consideration, and the first 20 sentence there indicates that. 21 Q. So the first sentence where? Sorry. 22 A. In 189. 23 Q. 189. You refer in 189 to roller 24 clutches generally; isn't that right? 25 A. As in comparison to ratchet and pawl</p> |

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1 clutches.
2 Q. Right.
3 Where in this discussion -- again, in
4 your actual argument related to combining Sclater
5 with the other references, do you mention the type
6 of lubrication to be used?
7 A. I don't discuss -- I don't believe I
8 discussed lubrication issues, except that it's
9 present in Emerson and present in the Power
10 Transmission Handbook.
11 Q. You don't actually reference any of
12 those disclosures from Emerson or the PT Handbook
13 in this section, do you?
14 A. I don't believe I do. But I do
15 reference Emerson, that where they say they -- they
16 sell these specific type of one-way bearings for
17 exercise equipment, food processing equipment, and
18 roll conveyors.
19 Q. What about shock conditions? Do you
20 ever mention shock conditions anywhere in this
21 section?
22 A. I don't recall mentioning shock
23 conditions.
24 Q. With respect to Magid's ratchet and
25 pawl structure, would you be able to hear that

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1 structure when the treadmill is in operation?
2 A. Yes.
3 Q. How do you know that?
4 A. Well, I think anyone that's ridden a
5 bicycle would understand that.
6 Q. Can you explain the --
7 A. A bicycle with gears.
8 Q. Can you explain the relationship to me?
9 A. Yeah. The thing within your bicycle
10 wheel is essentially a ratchet and pawl. And you
11 could hear that clicking, the click, click, click,
12 click, click, every time you let the bike coast.
13 Not one where you go backward with the pedals to
14 make the braking occur, but like a ten-speed-style
15 bike.
16 Anyone who has used a ratchet wrench,
17 those clicks are really apparent. And so if you
18 could imagine two of those going at the same time,
19 you would hear a symphony of clicking. And in
20 particular, if you put these in a gym with 10 or 20
21 of them being used, you would probably be
22 overwhelmed by the sound.
23 Q. Did you do any actual analysis of the
24 noise that would be caused by Magid's ratchet and
25 pawl relative to other noises caused by the

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1 treadmill's operation as part of your analysis?
2 A. Well, having experience with conveyors,
3 I came preloaded with how quiet a belt on rollers
4 is. And I've run on a curved nonmotorized
5 treadmill in the past, so I'm aware of the sound
6 that they generate -- or that is caused by running
7 on them. And I'm aware what ratchets sound like,
8 so that was the analysis that I needed.
9 Q. So you didn't actually conduct any sort
10 of formal analysis comparing the sound of all the
11 various components in Magid relative to each other,
12 did you?
13 A. I didn't have to.
14 Q. How many times have you used a curved
15 manual treadmill?
16 A. Probably around ten times.
17 Q. Over what time period?
18 A. 2015 to 2023.
19 Q. So over the span of eight years,
20 approximately 1.2 times per year, on average?
21 A. Yeah.
22 Q. Do different treadmills make different
23 amounts of noise, depending on their structure?
24 A. If you count the motor as a structural
25 element, then a motorized one versus a nonmotorized

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1 one will have different characteristics.
2 Certainly, noise is a consideration with a bunch of
3 patents in the prior art. And so certainly there
4 are aspects of the treadmills that could be noisier
5 than others.
6 Q. What about limiting it just to manual
7 treadmills? Are those all going to make the exact
8 same amount of noise?
9 A. I doubt it.
10 Q. So you haven't conducted any analysis
11 of the relative noise caused by a pawl and ratchet
12 or of -- of a pawl-type device versus a sprag-type
13 device in different kinds of manual treadmills,
14 have you?
15 A. I got lost in your question.
16 Q. You haven't -- you testified that
17 you -- you doubt that all manual treadmills are
18 going to make the exact same amount of noise,
19 correct?
20 A. That's reasonable.
21 Q. I'm asking if that's what you
22 testified.
23 A. I -- yeah, I don't remember every word
24 I said. But I know that your question asked me if
25 they all make the exact same amount. And so I

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1 haven't done a measurement to determine with
2 precision exactness whether or not they make the
3 -- all the same noise.
4 I know for sure that different
5 treadmills will make different noises, depending on
6 where they're located; for example, what type of
7 room they're in, are they on a carpet, are they on
8 a hardwood floor, are they on tile, is the room
9 padded, has it got hard surfaces in it.
10 So the treadmill, where it's located,
11 what's next to it, what the tread is made out of,
12 what the side rails are made out of could all
13 influence the amount of sound that the treadmill
14 makes.
15 But we know from prior art, even back
16 to Schmidt who was interested in making a quiet
17 treadmill, that quietness is a benefit. And I know
18 for sure -- and anyone who has had experience with
19 a ratchet wrench or a bicycle that can freewheel
20 knows how loud ratchets are.
21 So in relation to just the ratcheting
22 element versus a one-way bearing, the one-way
23 bearing is hands-down much quieter. And that is
24 backed up by the Sclater reference.
25 Q. So you mentioned a lot of things that

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1 could contribute to the noise of a treadmill.
2 Did you do any analysis whatsoever to
3 compare the noise caused by any or all of those
4 elements to either a ratchet and pawl type device
5 or a sprag device?
6 MR. TURNER: Objection. Form.
7 A. What do you mean by any and all
8 elements?
9 Q. Did you analyze any of those elements
10 before determining that a ratchet and pawl device
11 would be too loud to use in one of these devices?
12 A. I don't know that it's my opinion that
13 it's too loud. It's not going to cause hearing
14 damage. But we know quietness is an important
15 feature. And in a comparison between a sprag-type
16 one-way bearing and a ratchet and pawl, the sprag
17 type is basically silent; whereas with the ratchet
18 and pawl, you get all the clicks. Every time the
19 pawl strikes the ratchet gear, there is going to be
20 a -- a pinging sound or a clicking sound.
21 Q. But you didn't do any analysis to
22 confirm one way or another that that, what you
23 called a pinging sound, would even be audible to
24 --
25 (Reporter clarification.)

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1 Q. -- would even be audible to a user over
2 all of the other noise caused by the various other
3 factors that you mentioned, did you?
4 A. I just used my experience as a person
5 that's used bicycles and treadmills in the past to
6 make that judgment.
7 Q. So that's a no, you did not conduct any
8 specific analysis, right?
9 A. No. I just relied on the art that I
10 cited as my specific analysis.
11 Q. If Magid's device would, in your
12 opinion, be so loud that someone would
13 immediately -- or by someone, I mean a POSA --
14 would immediately want to replace it with something
15 quieter, why would the POSA ever consider using
16 Magid's device in a curved manual treadmill in the
17 first place?
18 A. For safety.
19 Q. As we discussed earlier today, Magid
20 does not mention a curved running surface, does it?
21 A. I don't recall it discussing that.
22 Q. It also doesn't discuss any safety
23 concerns related to stepping onto or off of the
24 running surface, does it?
25 A. No. I don't recall that it does. It's

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1 concerned with people using it for exercise.
2 Q. Well, you say people using it for
3 exercise. As we discussed earlier today, isn't it
4 the case that all but one of Magid's embodiments
5 describes a baby chair or a baby stroller?
6 A. Magid definitely discusses baby
7 strollers and baby chairs.
8 Q. And for the one embodiment that we
9 discussed that does not relate to a baby chair or a
10 baby stroller, if you'll recall, in column 5, lines
11 56 to 59, it states that: This form of an exercise
12 walker belongs in hospitals and in retirement
13 homes. Correct?
14 A. It does state that.
15 Q. Okay. Wouldn't the noise of a ratchet
16 and pawl device discourage a POSA from combining
17 Magid with other references, despite its apparent
18 advantages, in your opinion?
19 A. From a safety perspective, no, I don't
20 believe that that's the case. And it's only an
21 embodiment used there. So it states that --
22 that -- a unidirectional control means. And so
23 certainly the sprag-type one-way bearing fits that.
24 But no, I don't believe that that would
25 discourage someone from -- from using it for

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1 safety.
2 Q. Magid doesn't -- doesn't describe any
3 other structure for its unidirectional control
4 means besides the ratchet and pawl embodiment;
5 isn't that right?
6 A. That's its only embodiment that it
7 describes.
8 MS. RIEGER: All right. So I think,
9 at this point, I'm finished with what I wanted to
10 cover related specifically to '745.
11 MR. TURNER: Okay.
12 MS. RIEGER: Did you have any
13 redirect?
14 MR. TURNER: Just a second.
15 No, I don't have anything for
16 redirect.
17 MS. RIEGER: All right. And I think
18 we decided we're going to close this one out.
19 MR. TURNER: Yeah, close this one.
20 (Deposition concluded at 1:55 p.m.)
21
22
23
24
25

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1 ACKNOWLEDGEMENT
2 UNITED STATES PATENT AND TRADEMARK OFFICE
3 BEFORE THE PATENT TRIAL AND APPEAL BOARD
4 LIFECORE FITNESS, INC. d/b/a ASSAULT FITNESS,
5 Petitioner,
6 v.
7 WOODWAY USA, INC. Patent Owner.
8 IPR023-00849
9 U.S. Patent No. 10,799,745
10 I, ROBERT GIACHETTI, Ph.D., P.E.,
11 state that I have read the foregoing transcript
12 of the testimony given by me at my deposition
13 on January 10, 2024, and that said transcript
14 constitutes a true and correct record of the
15 testimony given by me at the said deposition
16 except as I have so indicated on the errata
17 sheets provided herein.
18 _____
19 ROBERT GIACHETTI, Ph.D., P.E.
20 SUBSCRIBED AND SWORN to before me
21 this _____ day of _____, 2024.
22
23 _____
24 NOTARY PUBLIC
25 MY COMMISSION EXPIRES: _____

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1 CERTIFICATE OF SHORTHAND REPORTER
2 I, JENNIFER L. BERNIER, Certified
3 Reporter and within and for the State of Illinois
4 do hereby certify:
5 That ROBERT GIACHETTI, Ph.D., P.E.,
6 the witness whose deposition is hereinbefore
7 set forth, was duly sworn by me before the
8 commencement of such deposition and that such
9 deposition was taken before me and is a true
10 record of the testimony given by such witness.
11 I further certify that the deposition
12 of ROBERT GIACHETTI, Ph.D., P.E., occurred at
13 the offices of Foley & Larnder LLP on Tuesday,
14 January 10, 2024 commencing at 9:25 to 1:55 p.m.
15 I further certify that I am not related
16 to any of the parties to this action by blood or
17 marriage, I am not employed by or an attorney to
18 any of the parties to this action, and that I am
19 in no way interested, financially or otherwise,
20 in the outcome of this matter.
21 IN WITNESS WHEREOF, I have hereunto set
22 my hand this 15th of January, 2024.
23
24
25 JENNIFER L. BERNIER, CSR, RMR, CRR
CSR No. 084-004190

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1 ERRATA SHEET FOR THE TRANSCRIPT OF:
2 CASE NAME: LIFECORE FITNESS, INC. d/b/a
3 ASSAULT FITNESS v. WOODWAY USA, INC.
4 DEP. DATE: JANUARY 10, 2024
5 DEPONENT: ROBERT GIACHETTI, Ph.D., P.E.
6 U.S. Patent No. 10,799,745
7 CORRECTIONS:
8 Pg. Ln. Now Reads Should Read Reason
9 _____
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22 Signature of Deponent
23 SUBSCRIBED AND SWORN BEFORE ME
24 THIS _____ DAY OF _____, 2024.
25 (Notary Public)
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