

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NXTGEN TOYS, LLC,
Petitioner,

v.

ZIPSTRING, LLC,
Patent Owner.

IPR2024-01213
Patent 11,674,774 B2

Record of Oral Hearing
Held: December 4, 2025

Before BENJAMIN D. M. WOOD, BARRY L. GROSSMAN, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

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The above-entitled matter came on for hearing on December 4, 2025,
commencing at 1:09 p.m., via video teleconference.

P R O C E E D I N G S

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THE CLERK: All rise.

JUDGE MARSCHALL: Please be seated. Okay. Good

afternoon, everyone. This is a hearing in IPR2024-01213 between Petitioner
NxtGen Toys LLC and Patent Owner ZipString LLC addressing U.S. Patent
Number 11,674,774. I'm Judge Marschall. With me are Judges Grossman
and Wood. Let's start with the parties' appearances, please. And who do we
have for Petitioner?

MR. MURPHY: Your Honor, it's James Murphy with Petitioner
on behalf of NxtGen Toys.

JUDGE MARSCHALL: And for Patent Owner?

MS. MCLANE: Jodi McLane on behalf of Patent Owner
ZipString and with me is Kenneth Cohen.

JUDGE MARSCHALL: Thank you and welcome. The argument
will proceed as set forth in the hearing order. We will take a short break
after Petitioner's initial presentation. During your presentation, please refer
to exhibit or slide numbers to aid us in following along and to make the
transcript clear.

Please do not interrupt the other party's presentation. You may
object only during your argument time or following the rebuttal. Please be
aware that we have provided a public access line for the public to watch this
hearing.

Each side is provided a total of 60 minutes of argument time, and
each side may reserve time for rebuttal. Petitioner will start, and before you

1 get going, if you could let us know how much time you would like to reserve
2 for rebuttal.

3 MR. MURPHY: I'd like to reserve 15 minutes for rebuttal, Your
4 Honor.

5 JUDGE MARSCHALL: Okay. You may begin when ready.

6 MR. MURPHY: I'm ready to begin. So, Your Honors, let me start
7 with Slide 2. And this gives an overview of the issues I'd like to discuss
8 with you today. One thing I'll note, this case is, you know, somewhat
9 different than other cases in the sense that the Board's already had a chance
10 to look at the evidence post-institution, given the motion to amend here.
11 And there hasn't been any new evidence or argument really added since that
12 point in time.

13 So we may be able to go through these issues relatively quick, but I
14 want to briefly discuss the patent itself in the background, the technology
15 here, and then the grounds of rejection, sort of starting in reverse order with
16 the grounds because the later grounds, Ground 3 and 4, have more relevancy
17 to the amended claims.

18 Going on to Slide 4, Your Honors. Looking at Claim 1, just as an
19 example here, there's three limitations that the Patent Owner disputes
20 between all these grounds, the body and a housing attached to the body.
21 Both these are obviously very broad limitations, and as we'll see, they tend
22 to read in limitations from the spec to try and distinguish on these
23 limitations.

24 And the other one that they raise for the grounds is also this last
25 one we've highlighted here, wherein the string comprises a surface texture

1 configured to increase air friction. But as we'll see, this is sort of a concept
2 that was very well known in this art, and it would have been obvious in view
3 of the art and the knowledge of a POSITA to do this with these prior art
4 devices.

5 So going on to slide 5, I think these examples in the '774
6 specification kind of illustrate that last highlighted limitation, the impact of
7 the air friction. So the '774 patent talks about how the prior art, when
8 gravity pulls the string down, so the distal end of the string is going to fall
9 towards the earth, as you see here depicted in Figure 4 of the '774 patent.
10 And the specification claims that if you use a fuzzy string, it will increase
11 the air friction, which will produce lift and overcome the effect of gravity,
12 and you'll get something that looks like Figure 3 of the '774 patent, which is
13 shown here.

14 Now, if we go to Slide 6, this is where we show some of the
15 background references. And the problem that the Patent Owner really has
16 here is that there is a lot of art in this field, and much of this art shows the
17 strings floating in that exact same manner that the '774 patent depicts that as
18 part of the novelty of their invention. And particularly here you see, you
19 know, the top right figure is Yeany. You can see the distal end of the string
20 is going up. The bottom left figure is Scorch. Again, it's floating in the air,
21 and the same with Abello, which is the bottom middle one. And these are all
22 prior art that we cite in our grounds of rejection. And so this was not a new
23 concept by the time the '774 patent was filed in 2021.

24 If we go to Slide 7, this is further confirmed by the background
25 references that we submitted in this proceeding. Anderson is just a textbook

1 on aerodynamics, and it sort of lays out the general principle that's at play
2 here, which is that friction is the reason we have lift. So once you have
3 friction, you have lift, which is going to raise the string.

4 And then Gregory and Abello talked about this specifically in the
5 context of string shooter devices, where they explored this phenomenon as
6 well. And they noted that when the air friction is greater than the weight of
7 the string, when it overcomes gravity, the string will become air-borne in the
8 sense of Gregory and Abello uses the phrase, the takeoff velocity. And this
9 takeoff velocity is an important sort of point, and we bring it up in some of
10 our arguments.

11 So what Abello is saying here, you can see in that bottom highlight
12 we have, is that the threshold speed, the takeoff velocity, depends on when
13 the air drag is going to dominate over the weight of the string. And a lot of
14 the obviousness arguments here are based on the fact that if you increase air
15 friction, you're going to reduce that takeoff velocity, which is going to
16 provide a number of benefits, as we'll see.

17 So with that background in mind, I'll move to the first ground
18 rejection I want to discuss, which is Ground 3, Wagner in view of Yeany.
19 And I'm on Slide 9 now. So I'm only going to discuss the limitations the
20 Patent Owner disputes. The rest of the limitations are certainly addressed in
21 our briefing. But the Patent Owner disputes that this combination discloses
22 a body and a housing attached to a body.

23 I'm not quite frankly sure how they arrive at this conclusion, but as
24 we can see here in Wagner, we got Figures 1 and 3 up there. It clearly has a
25 body. The whole device has a housing, where the housing in this case is the

1 cap piece that would be inserted into the body of the Wagner device. And as
2 described in our petition, it attaches using mechanical tabs. And this is used
3 to load and unload the string of the Wagner device as it is.

4 Now, if we go to Slide 10, Your Honor, that brings us to the third
5 limitation, which is the string comprising a surface texture configured to
6 increase air friction. And this is why we have obviousness, because Wagner
7 doesn't expressly get into the string surface texture. And so we have our
8 expert, Dr. Kudrowitz, who explains this and talks about how the
9 background knowledge of a POSITA that we just looked at would have been
10 well aware that increasing air friction would help overcome gravity, and in
11 particular would reduce the takeoff velocity. And this is going to provide a
12 number of benefits that would motivate a POSITA to make this
13 modification.

14 And on Slide 11, we have Dr. Kudrowitz's statement up here where
15 you can see he provides a whole host of benefits that this would do. By
16 reducing the takeoff velocity, you're going to reduce the power consumed,
17 which lets you have longer operation times. You could also reduce the size
18 of the device. You could reduce the batteries needed. You're going to
19 reduce the wear and tear on the device because you're running at slower
20 speeds. The noise gets reduced, and the motors can be smaller.

21 So by making this one change, you've now provided a number of
22 tangible benefits to the Wagner device just by using a string with increased
23 air friction. And then in Slide 12, as Dr. Kudrowitz notes, Yeany actually
24 gives an example of this. A person of skill in the art would want to use a
25 string like this, a woven string that has these radiating, extending fibers on

1 the string surface, because those fibers are going to be configured to increase
2 the air friction.

3 Now, on Slide 13, we've got the Patent Owner's response on this
4 ground of rejection. First, they argue that Yeany does not disclose the body,
5 the housing, or the surface of the string, and Wagner does not cure those
6 deficiencies. Well, as we just saw, this ground relies on Wagner's body,
7 Wagner's housing. So Yeany's body and housing aren't even relevant here.
8 And then the surface texture of the string, Yeany discloses it, but I think
9 even more importantly, the Patent Owner just doesn't even address the
10 background references, the knowledge of the person of skill in the art, and
11 why they would have known that air friction was beneficial and why they
12 would have wanted to use air friction.

13 And so, when you look at the record and the evidence the
14 Petitioner put in, I don't think there's much dispute here that all the
15 limitations are shown and that there is a motivation to combine, basically to
16 use a fuzzy string with the Wagner device.

17 JUDGE MARSCHALL: Can you address Patent Owner's
18 argument in their sur-reply that Yeany does not disclose the claimed string
19 because it's not configured to meet the limitations of the claim?

20 MR. MURPHY: Yes, Your Honor. So that argument only really
21 applies to the Yeany anticipation, because with the obviousness, we are
22 saying that a person of skill in the art would have been motivated to
23 configure the string regardless, based on the background knowledge and
24 how the benefits of air friction. But for Yeany itself specifically, the case
25 law they cite is that configure to doesn't mean capable of, but this is not that

1 case. So, the string here in Yeany isn't just capable of increasing air friction;
2 it absolutely increases air friction.

3 And in fact, our expert explains why it's inherent that it's
4 increasing air friction. So this isn't -- those cases tend to fall onto
5 obviousness, where a modification was capable of being done to the device.
6 And in one case, the Board said that was enough to show that it was
7 configured to and the Fed Circuit said no. But here we're not relying on that.
8 The Yeany string is not capable of increasing air friction. It actually does
9 increase air friction.

10 So now moving on to Ground 4, Your Honor, and this is going to
11 be the one that hits most of the amended claims as well. So I'm on Slide 15,
12 and Claim 4 brings in this concept of the loading slot, which is also found in
13 a lot of the amended claims that we'll talk about after this. And here we
14 bring in the Scorch reference, because the Scorch reference clearly discloses
15 a string shooter device with a loading slot. The video shows him replacing
16 strings using this loading slot. It even gives an express motivation to
17 combine that this loading slot allows someone to swap the strings out really
18 quick.

19 And so, this aligns exactly with Dr. Kudrowitz talks about in our
20 next slide, Slide 16, on why you would modify Wagner to use a loading slot.
21 And Dr. Kudrowitz says that this would improve the convenience of
22 replacing the string because the existing process in Wagner requires
23 removing these tabs, mechanical tabs from the device, which is time-
24 consuming and can be difficult for consumers. And so, a quicker solution
25 would just be to use the loading slot as taught by Scorch.

1 Now on Slide 17, we have up here the Patent Owner's response to
2 this. And the first thing I'll note is the very bottom portion of this slide,
3 which is their expert statement, that he agrees that removing Wagner's cover
4 is an inconvenient process. So there's no dispute that Wagner had an
5 inconvenient loading process, and this was sort of ripe for modification,
6 exactly what a POSITA would look to in terms of modifying a reference.

7 But the Patent Owner argues that by using a loading slot, you're
8 going to make the Wagner device impractical, unsuitable, and they argue
9 that Wagner unmodified is an even better device than modified to use a
10 loading slot. But they don't have any evidence to back up any of these
11 points, and the case law is also against them. As we see on Slide 18 here,
12 the Fed Circuit has a number of these cases. We have the *Belden* case and
13 the *Fulton* case up here. I think we cite another one or two in our brief.

14 But motivation is a sort of wide-ranging view, and if there's
15 potential benefits, that might motivate a POSITA, even if there are other
16 disadvantages, such as the string might come out of the loading slot in
17 certain circumstances. And probably most importantly for the argument that
18 they're trying to make that the Wagner device is better unmodified in their
19 opinion, again, the Fed Circuit has said, that doesn't even matter because the
20 modification doesn't have to be the most desirable or most preferred device
21 to everyone. You just have to have some potential benefit in there to
22 motivate a POSITA, and both experts agree that the convenience would
23 certainly have been improved by using the loading slot.

24 But getting to sort of the Patent Owner's points of why they don't
25 think this would work, we want to address those, too, and I'm on Slide 19

1 now. So the first point the Patent Owner makes is that, well, Wagner has
2 this process where you've got to remove the flange to insert the string, but
3 this is based on Wagner's existing process where you remove the whole
4 cover, you remove the flange, and you put in the string.

5 But Dr. Kudrowitz actually addressed this in his original
6 declaration, talking about how a POSITA would make the changes to enable
7 the loading slot to work, that a POSITA could position the loading slot in a
8 way that the string can go around these flanges and sit on the wheel. And if
9 I go back to Slide 16 for a second, Your Honors, just to show this, we have
10 here in Slide 16 our annotations that we provided of where the loading slot
11 might be in the Wagner device in these dashed red lines. And you can see
12 this loading slot on the bottom left goes around that big flange of the right
13 wheel that they're talking about and how you could slide the string over that
14 flange and onto the wheel.

15 And so the argument they're really making is a person of skill in
16 the art would never have made any changes necessary to implement the
17 loading slot. They were stuck with Wagner as it was. But that's simply not
18 the law.

19 JUDGE MARSCHALL: Could you address the details of your
20 accommodation? You aren't asking a POSITA to add the whole funnel from
21 Scorch, correct? It's just the slot?

22 MR. MURPHY: That's correct, just the slot. So Slide 20, we
23 actually address this, because Patent Owner raises that position, Your Honor.
24 And this is a bodily incorporation argument. This has been discredited, you
25 know, by the Fed Circuit. We are not required to adopt the whole funnel and

1 just attach it to the Wagner device. And I don't think that would make much
2 sense in any event, but that's certainly not our argument here.

3 And lastly, in Slide 21, Patent Owner argues that Scorch also talks
4 about how the string can exit the loading slot, and so Scorch mentions this
5 optional piece that you could attach to help prevent that. It's not clear to us
6 the relevance of that. Scorch, you don't need that. It was certainly operable
7 without that piece. That's clear from the video. And Dr. Kudrowitz's
8 position is that the modified Wagner device would be operable, as described,
9 with the loading slot.

10 But Dr. Kudrowitz actually does even address this. He says, if you
11 wanted to, you could add some optional structures onto Wagner to help
12 reduce this, just like Scorch teaches, but it's not necessary. And so, they rely
13 on this sort of optional piece, but they never explain why this would need to
14 be included. It's really simply a design choice. If a person of skill in the art
15 wanted to further reduce the odds of the string exiting the loading slot with
16 the drawback of having some additional structure attached to it, but it's
17 certainly not required for the device to be operable.

18 So, next, I'm going to move on to the motion to amend. The
19 claims in the motion to amend are very similar, particularly to Claim 4 that
20 we just looked at. And the Patent Owner acknowledges this point in the
21 motion to amend. You know, they acknowledge that these claims are
22 substantively identical to the existing claims. As I mentioned at the start, the
23 Board has looked at these. The Board issued preliminary guidance. Nothing
24 has changed. The Patent Owner did not submit different amendments or any
25 new arguments or evidence for consideration since the preliminary guidance.

1 So going to Slide 23, the first substitute claim I want to discuss is
2 21. Both parties agree this is effectively identical to Claim 24, and both
3 parties rely on the same arguments they did for issued Claim 4. So I think
4 for the most part, the substitute Claim 21 is going to stand or fall based on
5 the Board's decision on the issued Claims 1 and 4. So I won't spend any
6 more time on that one, Your Honors.

7 Now go to Slide 24, which discusses substitute Claim 24. And
8 here, they add an amendment that the body is configured to be handheld in
9 addition to the loading slot. As we'll see in some of the other grounds, they
10 tried to read this handheld limitation into the issued claims. Here they
11 affirmatively recite it. But it doesn't change anything. As you can see in
12 these figures of Wagner, Figure 1 and Figure 3, this is a handheld device
13 that's ergonomically designed to be held by hand. And Wagner even
14 discloses that the device is gripped and that it's carried by hand, and we have
15 those disclosures cited in our briefs. So I don't think there's any reasonable
16 dispute here that the Wagner device has a body that's configured to be
17 handheld.

18 Going to substitute Claim 25, this is the one we would raise an
19 indefiniteness issue on. The Board looked at that. The Board disagreed and
20 came to the conclusion that 25 is just very broad. And I think if that is the
21 conclusion, then it's obvious over the prior art for the reasons we've given.
22 The prior art discloses a loading slot is a mechanism to load a string. And if
23 needed, as I said, Dr. Kudrowitz talks about, you can add extra structures to
24 the loading slot, like Scorch mentions, to even further reduce the probability
25 that a string would exit.

1 But I do want to touch on the indefiniteness point just briefly. And
2 this is Slide 26. This is, I think, the only issue the Board has at least
3 indicated at this point that they disagree with the Petitioner on. And the
4 problem we really have here is that if the claim just recited a loading slot
5 versus a claim that recited a loading slot provides a mechanism to load and
6 unload the string, it's not clear to us what the difference in scope of those
7 two limitations would be.

8 And this is why we argue that the outer bounds of this mechanism
9 claim is just -- we don't understand it. We don't know how far it goes. Is it
10 the loading slot itself? Is it something less than the loading slot? And if it's
11 less than the loading slot, if it's narrower than just loading slot, what is that
12 gap?

13 And for practical realities, I think the importance here would be,
14 you know, if our client were to try and design a toy that maybe had a loading
15 slot but not a loading slot that provides a mechanism to load and unload
16 string, get something in between that gap if loading slot claims are
17 unpatentable but for some reason this claim is not, we would like to know
18 what that difference in scope would be.

19 So it's our belief that it's indefinite since we just don't know the
20 difference between this claim limitation and just a claim limitation to
21 loading slot, but to the extent it is definite, I think it is very broad, as this
22 Board noted. It would certainly be obvious for the reasons that we provided.

23 JUDGE MARSCHALL: The language in question is functional,
24 so that makes it broad to start with. And, of course, we're not going to
25 provide an advisory opinion on scope that might be relevant to a future

1 infringement inquiry. When I just read the claim language, there doesn't
2 seem to be a lot of ambiguity there. There is a structural limitation that has a
3 functional component to it, and you might have other structures in addition
4 to that, because it's a "comprising" claim, that also play a role in the
5 function. That would still fall within the scope of the claim, it would seem
6 to me, as long as you have a loading slot that provides this function.

7 So I guess I'm struggling to see any ambiguity for indefiniteness. I
8 understand that in a hypothetical, you know, different structures where you
9 have different kinds of loading slots, and we're looking at it, it might be
10 more unclear. But it seems like once you have a loading slot that provides
11 this function, you meet the claim limitation, even if you have other
12 structures that also provide the function.

13 MR. MURPHY: I understand, Your Honor. I think the, you
14 know, sort of one of the best piece of evidence of the indefiniteness is the
15 fact that the Patent Owner themselves say that a loading slot is a mechanism.
16 And I know we made that argument, you've already considered it. But "is a
17 mechanism" and "providing a mechanism" would seem to be perhaps
18 different things, and therefore, you know, it's unclear. But I'll move on. I
19 think Your Honors have read our argument and you understand it.

20 Slide 27 is the remaining substitute claims. These are all just
21 changing dependencies, so the limitations here are the exact same as the
22 issued claims, and the arguments for why they're obvious are the same. So I
23 won't go over them again now, but they are addressed in our briefs.

24 And this brings us to the next ground of rejection, Ground 2,
25 which is Abello in view of Yeany. So on Slide 29, again, we'll start with a

1 body and a housing since the Patent Owner disputes those. But as we've
2 shown in Abello, it's got a body, it's got the metal base, it's got the plexiglass
3 ring, and attached to that is this piece you can see on the bottom of the
4 screen here, this green piece which houses the string, and it has attachment
5 points that it would be used to attach it to that plexiglass disk. So the body
6 is the base, the plexiglass string, and the housing is attached to it by these
7 attachment points, Your Honor. And you can see that in the figure itself on
8 the top right and the top left.

9 On Slide 30, the Patent Owner's response to these are to read
10 embodiments from their spec into the claim. I briefly touched on this on the
11 amended claims, but here they try and argue that a body has to be configured
12 to be held by a user and that the housing has to be the housing disclosed in
13 the '774 specification that's configured to receive the wheels. But as we see
14 in the next slide, Slide 31, these are all described very expressly as
15 embodiments in the patent. So column 6, lines 14 through 17 says,
16 embodiments of the present disclosure are configured to be handheld
17 devices. So it's certainly not the invention itself as handheld.

18 Next, at the bottom we got the description of Figures 6 through 9,
19 which is where they get this limitation of the housing is configured to
20 receive the wheels. But the description of those figures also expressly states
21 that they are example embodiments.

22 Go to Slide 32. Even if for some reason the Board were to read
23 those embodiments into the claim, Abello discloses that his device is
24 configured to be handheld. You can see in this figure on the bottom left of
25 Slide 32 in Abello, there's actually a user with a hand holding the device, so

1 you can see the relative size and shape of these. And Abello actually has a
2 schematic with dimensions, which also show that it is sized and configured
3 to be handheld. We don't think these limitations should be read into the
4 claim, but particularly if configured to be handheld is, then it's still taught by
5 Abello.

6 Going to that last contested limitation, the string comprising a
7 surface texture configured to air friction, Abello gives much more detail than
8 the '774 patent on this concept. And Abello talks about drag prevailing over
9 weight. And Dr. Kudrowitz explained that in this context, air drag, air
10 friction, they're all synonymous.

11 And then Abello talks about how the smoothest strings have the
12 highest takeoff speeds. Now, this is sort of an important point, because the
13 Patent Owner tries to take this line and say, oh, this is a benefit, and so
14 Abello actually wants to use smooth strings. But that's the exact opposite of
15 what Abello is teaching us. If we look at that third highlight we have here in
16 Abello, we can see that Abello says the most severe issues occurred at high
17 speeds. And this is wear on the device, where the wheels would wear out,
18 and it causes stress on all the other mechanical components here.

19 And so, you know, the Patent Owner just completely misreads
20 Abello here. Abello is not telling you to use smooth strings. He's telling
21 you the exact opposite. He's saying that non-smooth strings are going to
22 reduce your takeoff velocity, and it's going to avoid these problems with the
23 wear and tear and with the stress.

24 So if we go to Slide 34, that's exactly what we see with Dr.
25 Kudrowitz's motivation here, that a person of skill in the art would look to

1 non-smooth strings based on these teachings of Abello and also the
2 background knowledge of POSITA that we talked about earlier. Abello
3 even mentions, you know, you can modify the characteristics of the string.
4 So he sort of even supports this idea that a person of skill in the art would
5 look for further modifications to improve the device, including the
6 roughness or maybe the material used for the string.

7 And so, Dr. Kudrowitz -- sorry, let me stay on Slide 34. Dr.
8 Kudrowitz notes that Abello actually cites to Yeany here. So a person of
9 skill in the art would certainly have been aware of Yeany. In fact, Abello
10 says it was the inspiration for his paper. And Yeany discloses a string that
11 would fit this definition of increasing the air friction providing the reduced
12 takeoff speed and the benefits that come with such.

13 Slide 35, moving on to the substitute claims for this ground. In the
14 substitute Claim 25, it's the loading slot. In here, you know, we just point
15 out that Abello does have a loading slot. It's shown in that green figure of
16 Abello. There's a notch you can see clearly on the backside, and Dr.
17 Kudrowitz explains that the string would go in there and would then be
18 housed in that large, rounded channel portion.

19 The other substitute claims, I'm on Slide 36. The other substitute
20 claims that we challenge with this ground are the same as the issued claims,
21 so we won't discuss them here. They just change dependency due to the
22 amendments. And that brings us to the last ground of rejection to discuss
23 today, which is Yeany. This is the 102 anticipation ground. It's not asserted
24 against the amended claims, but it is, we think, a very strong reference for
25 the issued claims still.

1 And so, here we've got the figures of the Yeany for body, which
2 the Patent Owner disputes Yeany teaches, but the body in Yeany is these
3 wooden blocks. And we also have the figure on Slide 38 showing Professor
4 Yeany actually holding this device in his hand and using it and moving it
5 around, as you can see in the video.

6 Going to Slide 39. Patent Owner again makes the same argument
7 that the claim requires configured -- a body is required to be configured to
8 be held by a user. We disagree. We think that's an embodiment of the
9 patent. It shouldn't be read into the claim. But even if it is, as we just saw in
10 the screenshot of Yeany, Yeany's holding it in his hand. So it doesn't seem
11 relevant even if it were read into the claim, Your Honors.

12 Slide 40, going on to the housing attached to the body. Again,
13 Yeany is not a sophisticated device. It's a home DIY device. And Professor
14 Yeany attaches this tubing that houses the string with some red tape. The
15 claim doesn't require any more than that, just as a housing attached to the
16 body. Tape attaches that tubing housing to the body.

17 Slide 41, the Patent Owner's response on this is, again, reading into
18 the claim the embodiment that the housing has to receive the wheels. And
19 again, we just point out that this is an embodiment in the specification. It's
20 not the invention, and it can't be read into the claim.

21 Now, Slide 42, we get to the last contested limitation here, which
22 is the string comprised of surface texture configured to increase air friction.
23 And Yeany is disclosing here exactly what the '774 patent discloses, a fuzzy
24 string that's going to magnify the air friction, providing lift against gravity.

25 So, Dr. Kudrowitz opines that a person of skill in the art would

1 understand this string would increase air friction. And you can see that on
2 Slide 43. Probably one of the strongest pieces of evidence of this is where
3 Professor Yeany actually deflects the string downward. And you can see the
4 string actually changes direction back upwards in mid-flight. And this is
5 only explained by the presence of lift on that string, overcoming that
6 downward deflection force and raising the string back into the air. And as
7 we know from Anderson, the reason we have lift is air friction. So a person
8 of skill in the art, just looking at Yeany, would know that that string is
9 configured to increase the air friction to produce lift.

10 Now, Slide 44 gets into the question Your Honor sort of raised
11 earlier. Patent Owner has made this argument that, well, maybe the string of
12 Yeany was smooth before he ever began and it got fuzzy as he was using it.
13 That simply doesn't matter. You know, let's say Yeany had an embodiment
14 with a smooth string and an embodiment with a fuzzy string; we're relying
15 on the embodiment with a fuzzy string. It simply doesn't matter what it was
16 beforehand, and it's also speculation. Nobody knows what Yeany's string
17 looked like beforehand.

18 And then to the other point that they make that, you know,
19 "configured to" can't mean merely capable of achieving that function as we
20 discussed earlier. Yeany's string isn't just capable of increasing air friction.
21 It absolutely is increasing the air friction, and that's what we see on this next
22 slide, Slide 45. You know, Dr. Kudrowitz opines that this would indeed be
23 inherent in the string of Yeany, because by having those fibers extending out
24 from the surface, it's going to disrupt the airflow. It's going to cause air
25 friction. It would be impossible for it not to compared to a smooth string.

1 So with that, Your Honors, if there's no other questions, I'll reserve the rest
2 of my time for rebuttal.

3 JUDGE WOOD: I have a quick question. It's in the sur-reply
4 from Patent Owner. On Claim 16, and this is with respect to the Abello
5 ground, they raise for the first time an argument that the combination doesn't
6 disclose a loading slot, at least partially, over at least one of the wheels. And
7 from the figures and the specification, I take it that's when you may be
8 looking at the device from the side where there's a slot over a wheel. And in
9 the Abello combination, the slot is kind of off to the side of the wheels, at
10 least from that same view. What would your response be to that argument?

11 MR. MURPHY: Yeah, so I agree. I think that's sort of a new
12 argument in their reply, but we did address it in our petition, and we based it
13 off the perspective. The claim doesn't require perspective. And so if you're
14 viewing rather from the side, I think we're talking about the same sort of
15 relative position here, but if you're behind the device, then you would be
16 over the wheel, that housing would be over the wheel. And we show that in
17 the petition. And we have a little graphic with an eye showing the
18 perspective of the user for that.

19 JUDGE WOOD: Okay, understood. I understand your argument.
20 That's all I have at this time. Thank you. You've got about ten minutes left.

21 MR. MURPHY: Thank you, Your Honors.

22 JUDGE WOOD: Twenty-five, I should say.

23 JUDGE MARSCHALL: We'll go off the record briefly.

24 (Whereupon, the above-entitled matter went off the record at 1:47
25 p.m. and resumed at 1:48 p.m.)

1 JUDGE MARSCHALL: We'll go back on the record. Patent
2 Owner, before you begin, if you could let us know how much time you'd like
3 to reserve for rebuttal.

4 MS. MCLANE: I'd like to reserve 15 minutes as well for rebuttal,
5 please.

6 JUDGE MARSCHALL: You can begin when ready.

7 MS. MCLANE: Thank you. And I'm going to start with the '774
8 patent. And we're looking at Figure 1 of that patent here. And in it, you can
9 see that the body five is listed and the housing I will show in the next image
10 here, where you can see that the housing is 100 and the loading slot is 101.
11 And again, all three are shown on that image.

12 Now, when we talk about some of these claim limitations, for
13 example, the body, it's important to remember that a POSITA is reading the
14 specification and looking at the figures as well in order to determine what
15 the various terms in the claim mean. And when a POSITA looks at the '774
16 patent, they would read and see that this is designed to be a handheld device.

17 And it doesn't say a particular embodiment. It says the
18 embodiments. It says embodiments of the present disclosure are configured
19 to be a handheld device where a user holds the body and turns on the motor
20 to drive the loop string while with the drive wheel three. And that's all while
21 holding this device. In fact, this device is an amusement device, a toy,
22 whatever you want to call it. But it is specific in the disclosure and in the
23 drawings that the body itself is designed to be handheld.

24 JUDGE MARSCHALL: Let's say we agree with you. Doesn't
25 Yeany itself show him holding it in his hand?

1 MS. MCLANE: It shows him holding it, I believe, in two hands.
2 And designed again, when we talk about the terms configured and designed,
3 we talk about, you know, can you lift just about anything? Sure. There's a
4 lot of things I can lift. I can lift a small table. It doesn't mean it's designed
5 for me to hold it. A table is designed to be put on the floor or a surface.
6 And, you know, to support things.

7 JUDGE MARSCHALL: Although it doesn't say configured or
8 designed to be handheld in the claim. So now we're kind of construing
9 configure to in the specification to mean something more than capable of
10 being handheld. Is that correct?

11 MS. MCLANE: We are reading the claim limitation of what does
12 a body mean? And it's very specific that the user holds the body. And the
13 specification actually says that it's configured that way, to be handheld.

14 JUDGE MARSCHALL: Does Patent Owner dispute that Wagner
15 discloses a handheld body?

16 MS. MCLANE: We don't dispute that Wagner itself has a body
17 that can be handheld, we do not dispute that. But I do think it's important,
18 when you're looking at combining references, that the similarities or
19 differences between the references would themselves be considered by a
20 POSITA, when looking at making certain combinations. So what we call
21 these is relevant because of that.

22 JUDGE MARSCHALL: Okay. And you don't dispute that
23 Wagner has a body that is configured to be handheld, correct?

24 MS. MCLANE: We don't dispute. The difference in Wagner is
25 sometimes when you look at how what they say a body is versus if you

1 interpret it correctly, there is a portion of Wagner that can be -- is configured
2 to be held. It's also configured to be placed on a tabletop. But the Yeany
3 reference is not so configured.

4 And then we come to the housing limitation. And the housing
5 limitation is one that gets short-shift by Petitioner and by their expert.
6 Because it's clear, again, in the disclosures, in the drawings of the '774
7 patent, that a housing covers at least partially the pair of wheels. And this is
8 where their arguments fall apart. And when they start calling things a
9 housing, as the Petitioner noted here, they're calling this piece of plastic that
10 has the string going through it the housing here.

11 They don't give any reason as to why this would meet the
12 disclosure of defendant's housing, where the housing covers, at least
13 partially, a pair of the wheels. And that's important, especially when we
14 come to the loading slot. Because the loading slot is the slot in the housing.
15 That is clear from the patents. And it's clear that that loading slot actually
16 loads that string between those pair of wheels. That's how it's configured.
17 So none of these references include that loading slot as part of the housing,
18 which we will get into in a minute.

19 JUDGE MARSCHALL: And you don't dispute that Wagner
20 discloses a housing within that meaning, correct?

21 MS. MCLANE: So Wagner does have a portion, a removable
22 cover, that covers at least partially the pair of wheels. Yes, it does. But
23 what we dispute is Scorch and whether or not that is a housing at all. So
24 that's where we will be leading to.

25 So moving on now to Claim -- to Slide 5, where we have Claim 1

1 and Ground 1 regarding anticipation. Again, it's clear that Yeany is missing
2 these elements. It does not have a body because, again, we believe a body
3 should be read in light of the specification, in light of the drawings, as a
4 POSITA would, and that that body would have been configured to be
5 handheld. And it also does not have a housing attached to the body. Again,
6 they look at a little plastic tubing and they say that that is a housing, but the
7 housing itself covers at least partially the wheels.

8 And when you consider this patent and you look at it and you look
9 at what it is, and that is it's this handheld device, as we read, that when you
10 turn it on, you're going to do movements. It talks in the patent about the
11 movements of the body, moves the string and gives it a floating nature and
12 they're doing these tricks. That is why when you look at Yeany, that it's
13 simply not a housing. These wheels are completely exposed in Yeany.

14 And for tabletop version, the wheels being completely exposed
15 may not make a difference, but we're not talking about that. We're talking
16 about this patent where the housing does at least partially enclose the
17 wheels.

18 And then finally, in Yeany, it's missing the surface texture
19 configured to increase the air friction. Which again, when they discuss
20 Yeany, they don't mention that Yeany talks about a lot of things in its video
21 regarding the actual device. But what it doesn't talk about at all is the string.
22 It doesn't talk about the string, it doesn't talk about the texture.

23 And as Counsel said, nobody knows what the Yeany string looks
24 like beforehand. And because nobody knows what the Yeany string looked
25 like beforehand, because Yeany begins its video with these strings moving

1 rapidly through three separate devices, nobody knows if the surface texture
2 there was in fact smooth. And that what we are seeing --

3 JUDGE MARSCHALL: Does that matter, though? I mean, at
4 some point in the video, there's certainly fibers extending perpendicular to
5 the string axis, right?

6 MS. MCLANE: It matters because the string is claimed as having
7 the surface texture configured to increase the air friction.

8 JUDGE MARSCHALL: Let's say half the video shows a string
9 that meets the limitations, the other half of Yeany doesn't. Wouldn't it still
10 anticipate?

11 MS. MCLANE: Well, it wouldn't anticipate because again, there's
12 no housing and there's no body. So there's no anticipation there because that
13 reference does not have all the elements needed. But it also doesn't have this
14 element because you have to say that its -- configure does have specific
15 language.

16 And although Counsel has stated that it doesn't mean capable of,
17 they're not saying it's capable of. Here it actually does increase the lift. He's
18 referring to the string as already being used and already having that surface
19 texture when he makes those statements. So it does matter because if that
20 string is smooth, then it's not configured. And the rest of the Claim does talk
21 about the string fibers actually being, you know, coming off of the axis.

22 JUDGE MARSCHALL: Your argument about configure to as
23 compared to capable of and reliance on aspects of (INDISCERNIBLE), I
24 only see that in the surreply, is that correct? I didn't see that in the Patent
25 Owner response.

1 MS. MCLANE: I believe it is in the surreply. I'm not sure that it
2 was in the original response. We did do it as part of the surreply, though
3 some of the arguments brought up there.

4 JUDGE MARSCHALL: Okay. Thank you.

5 MS. MCLANE: So continuing with Yeany, when we look at
6 Claim 12, there are aspects that are again missing with respect to the fibers
7 extending away from the axis and the surface texture of the string configured
8 to increase the air friction in response to the loop string being propelled.
9 And that's another part of the first Ground.

10 And when we come to Claim 15 of the '774 patent, it is also
11 missing receiving the loop string through an intake aperture of the housing
12 and guiding the loop string between the pair of wheels and propelling it
13 through an exit aperture of the housing.

14 Now, referring to Slide 10, as I previously said, it's completely
15 silent on surface texture despite the fact that it's not silent on many other
16 things. And in fact, the video itself that they have shown, you get 1 minute
17 and 16 seconds into it before you even see that string in the configuration as
18 showing it.

19 So, repeating again, concerning the housing, Yeany is mounted to
20 a piece of wood. Those wheels remain open. There's no covering. The term
21 housing, when you read it in terms of the specification, when you read it in
22 terms of the drawings, it covers something. But even if you want to read it
23 in terms of covering at least some of the wheels, which we believe that's
24 how it should, a housing is a housing. It does house. And --

25 JUDGE MARSCHALL: It houses the string in the prior art,

1 doesn't it?

2 MS. MCLANE: It doesn't house the string in the prior art. You
3 can't have it both ways. In some respects, they're saying it helps insert it or
4 it helps guide it. And it's not housing it because the string is moving
5 through. It's not covering, it's just guiding it. At the most, it's helping to
6 guide the string. And in the patent, you'll see there is a guide and there is a
7 loading slot. They're two distinctive things disclosed in the patent itself. So
8 when you read the loading slot, you need to read it in that reference. It's the
9 Patent Owner's position with reference to the disclosure.

10 JUDGE MARSCHALL: Do the other claims, such as Claim 4,
11 somewhat undermine your argument with respect to housing in Claim 1,
12 because Claim 4 states that the housing covers, at least partially, the parent
13 wheels and therefore, through the doctrine of claim differentiation, we
14 shouldn't read that limitation into Claim 1 from which Claim 4 depends?

15 MS. MCLANE: Well, Claim 4 repeats that limitation and it has
16 more limitations in it. So the doctrine of claim differentiation is still intact
17 because Claim 4 has additional limitations to it.

18 JUDGE MARSCHALL: There is the other doctrine that, you
19 know, when you see words in a claim that there are distinctions made, such
20 as here, we state that it covers at least partially a pair of wheels, that you
21 don't necessarily read that in somewhere else where that language was, for
22 whatever reason specifically omitted by the drafter of the claims who knew
23 how to claim it when they wanted to and they didn't in Claim 1. So what is
24 your response to that?

25 MS. MCLANE: My response to that is they included it in Claim 4

1 because the remainder of that Claim deals with that slot itself. And so
2 they're just referencing it in Claim 4 in order to do that. But even if you read
3 it the way you're reading it, it is clear that the housing does cover at least a
4 pair of wheels, which is our argument.

5 JUDGE MARSCHALL: In Claim 4, certainly.

6 MS. MCLANE: And that it doesn't here. So, while we disagree
7 that claim differentiation carries the day with respect to that, or even what
8 you're saying with respect to the other elements, it certainly does make clear
9 that in Claim 4, when you're talking about a housing, you are talking about
10 covering at least some of those pair of wheels, which Yeany does not
11 disclose.

12 JUDGE MARSCHALL: Do you argue in your Patent Owner
13 response with respect to Claim 16 that the prior art fails to disclose a loading
14 slot disposed, at least partially, over at least one of the wheels? Or does that
15 argument just appear in your later briefing?

16 MS. MCLANE: I honestly would have to look that up. I don't
17 recall off the top of my head whether that's the case. So I'm moving on --

18 JUDGE GROSSMAN: Let me ask a question before we leave the
19 subject that we're talking about, the housing. And I think both sides have
20 spent a lot of time talking about the housing and what is the housing and
21 what the housing does, and yet both sides have said that we don't need a
22 claim construction. But what I hear you saying is that you've got something
23 in mind that the housing means, what the plain and ordinary meaning is, but
24 you don't want to tell us what it is. You didn't put it into the claim.

25 MS. MCLANE: Well, I'm happy to address that.

1 JUDGE GROSSMAN: So do we need to do that? Do we need to
2 come up with a claim construction for housing before we can decide this
3 case?

4 MS. MCLANE: Well, honestly, in the District Court case, the
5 parties did agree on what a housing meant. And in their *Markman* briefing,
6 they said a housing meant it at least covers partially the pair of wheels.

7 JUDGE GROSSMAN: Right. But in this case, both sides say that
8 we don't need to construe what a housing means. So we've got a different
9 position here than we have in the District Court case.

10 MS. MCLANE: I mean, I think that we said that because we know
11 that we had agreed on it in the District Court case. So we didn't think it
12 needed to be construed.

13 JUDGE GROSSMAN: So does that mean you want us to adopt
14 your proposed construction or their proposed construction from the District
15 Court case?

16 MS. MCLANE: The District Court case has the same proposed
17 construction. The parties agreed on it. So it's not a different construction.
18 It's a construction that is -- that it partially covers the wheels. That's what
19 the parties submitted in the District Court case as an agreed upon
20 construction.

21 JUDGE GROSSMAN: All right. Thank you.

22 MS. MCLANE: You're welcome. So when we go to Ground 2
23 with Abello in view of Yeany and whether or not that renders the Claim
24 obvious, again, Abello is missing a body. It's missing a housing attached to
25 the body, and it's missing a surface texture configured to increase the air

1 friction. I'm going to take these in order. Where we talk about the body
2 Counsel showed a picture where they were holding it. But the illustrations
3 also show that it's attached. And even in the holding illustration, it's being
4 held on a stand, a metal base. And that is not a body because, again, we
5 represent the portions with the plexiglass and the actual wheels. This is not
6 designed to be held by hand.

7 JUDGE WOOD: Counsel, I apologize for interrupting you. I want
8 to get back to the comment you made just a few seconds ago about agreed
9 upon claim constructions and the District Court decision. Are those
10 constructions in the record?

11 MS. MCLANE: I don't believe they're in the record. I was
12 answering the question about whether or not Claim construction had to be
13 done here. So I felt that that was relevant. But I do not believe they are on
14 the record here.

15 JUDGE WOOD: Okay. I mean, I think agreed upon claim
16 constructions in the District Court are fairly relevant to this proceeding. So
17 we can talk more about logistically how to get those in the record. But they
18 probably should be.

19 MS. MCLANE: Thank you.

20 JUDGE MARSCHALL: Yeah, just so it's clear, I think we can
21 rule now that you have permission to file those. Usually at this late date,
22 you wouldn't have permission to file something like that. But if the parties
23 want to try to submit, and it doesn't matter who the filer is, any agreed upon
24 claim construction positions from the District Court or anything from the
25 District Court, any rulings. I assume there aren't any. But if there are any

1 rulings on claim construction, you have permission to file those.

2 MS. MCLANE: Thank you. Can I answer?

3 JUDGE MARSCHALL: Yes.

4 MS. MCLANE: There are no rulings, but there is a whole list of
5 agreed upon claim constructions that was submitted.

6 JUDGE MARSCHALL: Yeah, so it sounds like there's one
7 document. That would be helpful if you could file that within a week or so
8 of this hearing.

9 MS. MCLANE: Okay. Thank you.

10 JUDGE MARSCHALL: I do have a question before I lose track of
11 it, and it relates to the Yeany and Abello combination. In the Patent Owner's
12 surreply or reply on the opposition for the motion to amend, you state that
13 Yeany and Abello lack the housing between a pair of wheels as disclosed in
14 the '774 patent. And I'm wondering, and this is with regard to substitute
15 Claim 25, are you arguing the housing has to actually be between the
16 wheels? Because when I read Claim 25, that's not the way I read it.

17 MS. MCLANE: No, it should be the loading slot, including the
18 loading slot between the pair of wheels. But it says that the housing includes
19 that loading slot. So to the extent that the housing includes the loading slot,
20 it's the loading slot that is between the pair of wheels. So that's part of the
21 housing.

22 JUDGE MARSCHALL: Okay. And the Claim also talks about
23 receiving a looped string into a housing, including a loading slot between the
24 pair of wheels. So maybe the receiving the string between the wheels is a
25 limitation. But I don't know if you have a position on that. I'm not

1 necessarily asking you to have one right here, but I just wanted to make sure
2 I was reading that Claim correctly.

3 MS. MCLANE: Are you still with --

4 JUDGE MARSCHALL: Claim 25. Because receiving a looped
5 string into a housing, including the loading slot between the pair of wheels.
6 So maybe receiving the string is what's happening between the pair of
7 wheels. That's how I read it. Is that accurate?

8 MS. MCLANE: Yes, that's accurate. That's what's happening.

9 JUDGE MARSCHALL: Okay. I just wanted to make sure I
10 wasn't seeing new argument in that reply that we needed to then apply to the
11 original Claim so that appears, but it doesn't sound like that's the case.

12 MS. MCLANE: No, that's not the case. And, again, when you
13 look at the Figure here, you can see that loading slot and the pair of wheels
14 and the loading slot. It receives it, and then it's between the pair of wheels.

15 JUDGE MARSCHALL: The string is between them.

16 MS. MCLANE: The string is between the pair of wheels.

17 JUDGE MARSCHALL: Okay, thank you.

18 MS. MCLANE: Yes. So when we look at Abello, and Counsel
19 did discuss this about what it discloses explicitly and it doesn't disclose. Dr.
20 Kudrowitz admits that Abello does not provide explicit details on the surface
21 texture of the string, merely discusses exploring changes in various
22 parameters of this string. And the fact that Abello specifically notes that the
23 smoothest string has a take-off speed indicates a desirability for the string to
24 be smooth.

25 What Counsel didn't mention is that later on, when it talks about

1 high speeds, it's not saying that that's the take-off speed. The take-off speed
2 is one speed. The speeds that you're operating it at are not necessarily the
3 same as your take-off speed. So I just wanted to clarify that. When we said
4 that, we were discussing the take-off speeds, and the smoothest string has
5 that highest speed.

6 JUDGE MARSCHALL: Where in Abello does it say that that's a
7 positive, that you have higher take-off speeds?

8 MS. MCLANE: So what Abello says is many, many things, and
9 what Dr. Janet, the expert, says for our case, is that because high take-off
10 speeds help with the lift, I believe, it indicates a desirability for that. It also
11 does talk about, though, that there's a lot of unknowns here, I guess I would
12 say, because they talk about exploring changes to the various parameters.

13 And it's interesting because Abello itself does, you know, they are a
14 POSITA who knew of Yeany and Scorch when they were doing this.

15 So the fact that Abello knew of these things, and as noted,
16 mentions the smoothness of the string, but doesn't mention anything
17 regarding the desirability of the roughness. It just says that other things, like
18 linear density, roughness, fiber material, diameter, et cetera, you know, can
19 be explored, you know, basically in future experiments, because that's what
20 Abello was doing here, was experimenting.

21 JUDGE MARSCHALL: I guess I don't see the correlation
22 between high take-off speed and a positive. I see -- I understand what you
23 just said, that a higher take-off speed will increase lift, but that doesn't mean
24 you desire a higher take-off speed. You'd prefer to have a lower take-off
25 speed with the same lift, I assume, so you use less energy. And it seems to

1 be they're saying you need higher take-off speeds if you have a smoother,
2 dense string, and that would be, in Petitioner's view, a negative. And that
3 seems to be supported by the idea that you don't want higher speeds if you
4 don't need them.

5 MS. MCLANE: I think what they were saying here, well, what Dr.
6 Janet was saying, is that the note in Abello was simply that the smoother
7 strings have a higher take-off speed, and that in Dr. Janet's position, that is
8 desirable. Now, I understand that later on, they talk about the issue with if
9 you keep them at high speeds, things can happen, like we see in Yeany,
10 which is that it can roughen up the string, right?

11 So, at the same time, you know, while Counsel was saying that we
12 misread this because smooth isn't necessarily good, roughen, you know,
13 degradation of the string is also something that wouldn't necessarily, you
14 know, be good either. And that is something that can happen as you're, you
15 know, using these devices.

16 JUDGE MARSCHALL: What is the take-off speed? Is that the
17 speed at which the string will lift?

18 MS. MCLANE: That's my understanding from what Abello says
19 and what Dr. Janet says, is yeah, it's the speed at which it -- how quickly it
20 lifts, you know.

21 JUDGE MARSCHALL: Why does Dr. Janet believe that that's a
22 positive, that a higher speed for take-off?

23 MS. MCLANE: Because when you're looking at these devices,
24 which all have this kind of floating string effect, you want it to stay and you
25 want it to get up there. And in order to do that, there's -- the take-off speed

1 being higher helps achieve that, you know, quickly.

2 JUDGE MARSCHALL: I think we're talking in circles.

3 MS. MCLANE: I'll move on.

4 JUDGE MARSCHALL: Wouldn't you want a lower take-off
5 speed so you wouldn't have to use as much energy to get the same string to
6 lift?

7 MS. MCLANE: Well, again, one of the things that we've talked
8 about here is the whole handheld device, right? And this device is handheld
9 and it's a toy and you do tricks. So, you turn it on, you want it to take off,
10 and you want to be able to then keep it, no matter what you're doing or how
11 you're moving it. You know, as your body moves, as you move the body,
12 you want that to also stay in the air.

13 And that is one of the differences between these stationary devices
14 versus a handheld device is you are -- which is why it's important, because
15 they're not the same. You know, a stationary device sitting on a table with a
16 large motor and bigger wheels that aren't covered is a different device than
17 an amusement device that you're holding with your hand, you're turning on,
18 and you're doing tricks with.

19 JUDGE MARSCHALL: Okay. Getting back to the smooth and
20 dense strings, is it the fact that Abello discloses that smooth and dense
21 strings require higher speeds in order to start taking off than less smooth and
22 less dense strings? Is that accurate?

23 MS. MCLANE: I'm sorry, could you repeat that?

24 JUDGE MARSCHALL: Right. Smooth and dense strings,
25 according to Abello, require a higher speed in order to take off than less

1 smooth or less dense strings, correct?

2 MS. MCLANE: Yes, I believe that's correct if you're talking about
3 both smoothness and density.

4 JUDGE MARSCHALL: How about just smoothness? A
5 smoother string will require a higher speed in order to take off than a less
6 smooth string, correct?

7 MS. MCLANE: It definitely has a highest take-off speed. I would
8 have to look at Abello to check that.

9 JUDGE MARSCHALL: Okay, thank you.

10 MS. MCLANE: Thank you. So regarding what we have gone
11 through so far, I'd like to skip now to the Slides dealing specifically with the
12 Scorch reference. So, Ground 4, and I apologize, it says anticipate. It
13 should be obviousness here. Sorry. Ground 4, Wagner in view of Yeany
14 and Scorch does not render obvious Claims 4, 16, and 17.

15 As we've been discussing, Claim 4 talks about the housing, it
16 covering at least partially the pair of wheels, and the housing defines a
17 loading slot through which the string is loaded or removed from between the
18 pair of wheels. And not one of the references cited by the Petitioner
19 includes a housing that has a loading slot through which the string is loaded
20 or removed from between the pair of wheels. None of them show that.

21 JUDGE MARSCHALL: Petitioner doesn't contend that they do,
22 do they?

23 MS. MCLANE: Well, Petitioner contends that certain things are a
24 housing, like the Scorch device, and that that has a slot. And we say that is
25 not a housing because it doesn't cover at least partially the pair of wheels.

1 It's a completely separate element from what is claimed here.

2 JUDGE MARSCHALL: In this combination, does the Petitioner
3 rely on Wagner for the housing?

4 MS. MCLANE: Petitioner says that Scorch, and says that the
5 funnel is the housing and that Wagner has a housing, and you could modify
6 the Wagner housing with the Scorch reference. And what we're saying is
7 because Scorch does not have a housing that has a loading slot, it wouldn't
8 be combinable the way that Petitioner combines it. And even if you did
9 combine it, as Dr. Janet points out, it would be inoperable because the
10 reference of Scorch specifically talks about the problem with the string
11 flying out of that slot.

12 And so, if you have a string that you're trying to keep in motion,
13 the fact that as you're using it the string flies out of the slot is not de
14 minimis. It's an important factor to making the device operational. And
15 here, when you look at what Scorch is doing, they completely ignore that
16 Scorch adds another device, another component to their device to keep the
17 string inside and not have it go flying out. And that's an important
18 distinction because in Scorch, the funnel is not a housing.

19 And even if Wagner does have a housing, that housing is a cover
20 that is removable in order to load the string. Now, while it's true that Dr.
21 Janet said it may be inconvenient, some people may see it as inconvenient,
22 it's still operational as a kinetic device that keeps the string within the
23 housing and within the device. Which is why it would not be modified in
24 the way that the Petitioner suggests because it makes it non-operational to
25 have the string flying out of that slot.

1 So if we look at Scorch, you see in this video the two wheels, and
2 actually one of the wheels actually pivots upward, and the slot is actually a
3 slot in this separate piece, which is not the housing. It's a separate add-on
4 component, and it talks about the string can shoot out of the slot and says
5 that that can happen during use. When you look at the next video picture, it
6 says to aid in keeping the string from shooting out, he adds an extra piece
7 that will go on, which is a bent wire with a corkscrew at the end to prevent
8 the string from coming out of the side during use.

9 And our position is that that separate piece, which is not part of the
10 funnel and which does not join or otherwise become part of it, is a separate
11 piece that Dr. Kudrowitz has completely ignored and has ignored it as far as
12 the fact that for a kinetic device, the string shooting out of it makes it non-
13 operational.

14 JUDGE MARSCHALL: Why couldn't a POSITA just add that
15 piece of wire or some other structure to keep the string in the device as part
16 of the normal expertise that a POSITA would bring to this sort of device?

17 MS. MCLANE: Well, again, when you look at the housing and
18 you look at what Wagner has, a POSITA would see that Wagner has
19 stability. Wagner has a cover that protects the wheels. It has a cover that
20 prevents the string from flying out. Wagner also discusses the fact that it's
21 rotational and that there's apertures that line up with the cover. So a
22 POSITA wouldn't have any reason, even though there may be some slight
23 inconvenience with taking the cover off and putting the cover on, there's a
24 lot more inconvenience in adding another separate piece somewhere on this
25 device, which they don't even argue in their briefings, to prevent the string

1 from coming out of the slot.

2 JUDGE MARSCHALL: And even if that's the case, and Scorch
3 expressly says it's quick to put the string in or take it out with this slot, it
4 might be more inconvenient with Wagner to do that. There's an advantage
5 there. And even if you're correct about some potential disadvantages, what
6 is your response to Petitioner's argument that that's the kind of thing a
7 POSITA weighs, and you can't just say it's not obvious or you would have
8 no motivation just because there's a disadvantage in the combination?

9 MS. MCLANE: It's not just that there's a disadvantage. It makes
10 it inoperational, which is an important distinction. However, even so,
11 Scorch is talking about the funnel. It's talking about inserting and taking it
12 out of that funnel piece, not from between the wheels of the actual device
13 because it's not a housing. And therefore, Scorch is just discussing this
14 separate piece that is an actual funnel with a slot. It also talks about the fact
15 that the funnel could be made without a slot. So the discussion about the
16 slot and it being easier to put it in and out is simply with respect to the
17 funnel itself, because they discuss both a funnel that doesn't have a slot and a
18 funnel that does have a slot.

19 JUDGE MARSCHALL: Okay. But getting back to the
20 inoperational argument, that hinges on POSITA not being able to
21 incorporate a wire as taught by Scorch in the combination to prevent the
22 inadvertent removal of the string during operation, correct?

23 MS. MCLANE: It's something that wasn't argued. They didn't
24 discuss the wire at all and the incorporation of that at all. But had they, you
25 would know that that is not part of the body, it's not part of the cover. It's a

1 separate element that they place, you know, a distance from all of this. So
2 even if you combined it that way, you wouldn't get what is claimed in
3 independent -- with dependent Claim 4 where the slot is over, you know,
4 you have the housing itself that has a slot that covers the pair of wheels,
5 because that would be a completely separate element as is the funnel itself.

6 Again, it's important because these are handheld devices that
7 you're moving around, as is said in the patent, and you want that string to
8 remain within that housing and you want it to load into between the wheels.
9 And Scorch doesn't do that. It doesn't load it between the wheels. In the
10 body that we showed, one of the wheels was directly up because the wheels
11 rotate. It's part of a separate component, would be the argument. And here
12 again, you can see it, and you can see that it's not even between the two
13 wheels because the wheel is up.

14 JUDGE MARSCHALL: Just for the record, if you go back to the
15 Slide that you just were showing us, could you identify the Slide number just
16 so that the transcript will know what we're looking at?

17 MS. MCLANE: I'm sorry. The Slide number is Slide 27, where to
18 the left you can see the rotated piece which holds one of the wheels, and the
19 other wheel is on that wooden structure. And you can see that it's moving
20 out of the funnel and over the top of one of the wheels, but it's not inserting
21 it between the pair of wheels because it doesn't cover at all. These wheels
22 are not covered.

23 JUDGE MARSCHALL: But Scorch also shows it with that wheel
24 pivoted down. So the string is between the two wheels, correct?

25 MS. MCLANE: They're not covered. There's no slot between the

1 two wheels. There's no housing. There's a separate component that's
2 underneath this one wheel, and that's the funnel.

3 JUDGE MARSCHALL: You're right. They're proposing
4 modifying Wagner's housing to add the slot, correct?

5 MS. MCLANE: They're proposing only taking the slot and putting
6 it in a position that is, you know, they draw some dotted lines, they say it can
7 go here, they say there's a slight inconvenience here to taking off the top.
8 But they don't discuss the inoperability of having it fly out of the slot, or the
9 fact that the housing of Wagner would then be in two pieces, where it's one
10 piece that's removable. And there's a structural component there as well
11 regarding the kinetics as Dr. Janet discusses.

12 And this case law I think is important, relevant to what we're
13 talking about, because the burden always falls on the Petitioner to show not
14 only the motivation, but a reasonable expectation of success in doing so.
15 And again, because of the operational difficulties with combining these
16 references and the slot, you know, there is not a reasonable expectation of
17 success in doing so. It is, you know, quite the opposite.

18 Scorch has talked about the challenges and the fact that it might
19 not even be worth, you know, using this element because of those
20 challenges. And then, you know, again, the benefits both lost and gained
21 have to be weighed against each other. And not just looking selectively,
22 which we say the Petitioner is doing here, looking selectively, and creating
23 something that would be inoperable and not capable of doing what is
24 disclosed and claimed in the patent.

25 And it's important to note too, that it does -- the patent does state

1 that the loading slot is both to load and to remove that loop string. And the
2 Wagner cover is rotatable and it doesn't, you know, it purposely doesn't
3 include the slot. They chose to take that cover off. And there's nothing in
4 Petitioner's arguments that go to that additional device that uses a wire.

5 And, you know, again, just to state that the position that we've
6 taken is that the unstable slot, allowing it to pop out and cutting the once
7 stable and removable cover would not reach, you know, a desired result for a
8 POSITA. There's not that likelihood of success, and it's unsupported. And
9 that burden always stays with the Petitioner. And I'm going to reserve the
10 rest of what time I have left.

11 JUDGE MARSCHALL: Okay, thank you. You have 18 minutes
12 left.

13 MR. MURPHY: I'm ready, Your Honors. First, let me just
14 address the claim construction issue. I apologize, but I'm not that involved
15 in litigation. I reached out to a colleague to get some details. I do know the
16 case is stayed. There was no claim construction order. But if there's some
17 agreed upon construction, you know, we'll certainly work with Patent Owner
18 to get that submitted for your consideration.

19 JUDGE GROSSMAN: Let me ask you a question about that, that
20 yes, there was a joint claim construction statement by the parties. Following
21 that, each party separately submitted its own claim construction briefing. So
22 apparently, there's not complete agreement between the parties about what
23 every word of the claims mean. There's apparently some agreement, and as
24 I understand it from Patent Owner, the agreement would extend to housing,
25 it seemed to me, from her answer to the questions.

1 But there seem to be some words that you don't agree on. Can you
2 tell us what those are, or can you also provide us with copies of the briefing
3 of the parties on all of the terms they do not agree on for which they each
4 submitted separate briefing?

5 MR. MURPHY: Certainly, we will provide briefing, any briefing
6 the Board wants. The claim construction has not come up in the IPR, and so
7 I can't really address right now the differences of the parties because I
8 haven't considered those, except they haven't come up in the IPR context at
9 all.

10 JUDGE GROSSMAN: Well, it did come up in the IPR in that you
11 told us that you didn't think that any terms needed to be construed and yet
12 you apparently told the District Court something differently. You told it
13 because you have briefing in the District Court on some terms. So the
14 District Court, I think, is looking at exactly the same claims we are from the
15 patent. I don't think the District Court is looking at the amended claims.
16 But I don't know from the District Court's record, and it has been stayed, as
17 you said. But there's apparently some terms that you don't agree on.
18 Otherwise, I don't understand why there would have been briefing in the
19 District Court about claim construction.

20 MR. MURPHY: Your Honor, I unfortunately just don't have a
21 good answer for you right now simply because it hasn't been an issue in this
22 IPR to this point. I am happy, as I said, to work with Patent Owner
23 submitting a briefing, and if necessary, the parties could submit
24 supplemental briefing if this is an issue. I think one point I would make on
25 that is regardless, it doesn't seem to impact the Wagner rejections at all. As

1 Counsel for Patent Owner mentioned, Wagner housing does cover the
2 wheel, which seems to be the main point that they're trying to make with
3 this.

4 The next point I want to get into is the Scorch. Patent Owner's
5 Counsel spent a lot of time on Scorch, and so I have up on the screen Exhibit
6 1002, paragraph 176. She said, we don't address this wire cone of Scorch at
7 all. That's absolutely wrong. We do address it, and this is Dr. Kudrowitz's
8 declaration which we cite to. And the premise of his statement here in the
9 declaration is that this combination, there is a chance this string would
10 inadvertently leave, but Wagner already addresses that with these flanges
11 that will keep the strings in a channel, in his opinion.

12 But Dr. Kudrowitz also does note, if we go down here towards the
13 bottom of this paragraph, that a person skilled in the art, if they wanted to,
14 they could add a structure just like that wire cone in Scorch. So, Dr.
15 Kudrowitz addresses this explicitly. He doesn't think that that structure is
16 needed, but if you wanted to, a person skilled in the art could add it, and it
17 would even further reduce the chance of the string inadvertently exiting the
18 string shooter. So it was part of his consideration.

19 And I would say Scorch itself notes that this wire cone is optional.
20 The device is clearly operable without it. The combination that we proposed
21 with Wagner would be operable without it. The fact that a string has some
22 chance of exiting does not make the device inoperable. In fact, you would
23 just put the string back in with the loading slot and continuing to operate the
24 device.

25 The other thing that the Board brought up was whether some of

1 these arguments were made in the Patent Owner's response, two of these
2 arguments in particular. I want to go to Paper 9. This is the Patent Owner's
3 response here. Let me start on page 11 of this Paper. This has to do with the
4 configure to argument of Yeany, is configure to capable of that argument?
5 But this is the entire argument that they have -- sorry, let me scroll up a little
6 bit. This is the entire argument they have on this, and they never raise that
7 case law that configure to is capable of. They simply say that Yeany is
8 silent as to the surface texture of the string. So we do believe that is a new
9 argument that was raised in their surreply.

10 And going to page 13 of Paper 9, this gets into the Abello
11 argument of whether the housing is disposed, at least partially, over the
12 wheels. They don't make that argument here at all. As you can see, this is
13 their whole argument, this one paragraph. And they just simply talk about
14 the string texture. They don't really talk about the language and the Claim of
15 being partially or being disposed partially over the wheels. So again, that's
16 another new argument that's raised for the first time in their surreply. I think
17 with that, that is all of the statements I have, unless the Board has any further
18 questions of me.

19 JUDGE GROSSMAN: Yeah. Just to make sure the record is
20 clear, when you refer to the statement in the surreply that you've got on the
21 screen now, that's not one of your demonstratives. That's actually from the
22 document in the case. And if you could identify what it is and what page it's
23 on, if you -- for the transcript, that would be helpful.

24 MR. MURPHY: Yes, Your Honor. Up on the screen right now is
25 Paper 9, which is the Patent Owner response. And I looked at pages 11 and

1 13 of that.

2 JUDGE GROSSMAN: Thank you.

3 MS. MCLANE: So, I just wanted to address two things. One is
4 regarding -- I'm not referencing my Slides right now, so I'm just putting
5 them on Slide 1. So regarding whether or not the wire cone was discussed,
6 what was discussed was something having a similar function to what the
7 wire cone was disclosed. And that similar function was mentioned at being
8 at the intake aperture with no further explanation or anything else.

9 When we're looking at the burden here, which does not shift at all,
10 as the Board is aware, over to the Patent Owner, the fact that the string can
11 fly out of it is definitively mentioned in Scorch as being a negative and that
12 it might not even be worth doing this configuration because of that. And the
13 operation of the device requires a loop string to continuously be working.

14 And to have something that is known to potentially cause that,
15 again, goes to the weighing that has to be done here and the fact that we do
16 believe that makes it inoperable. Because within our own patent, you can
17 read that they talk about the desirability of keeping the string within the
18 device and how threading it between is one of the ways that they do that.

19 So this idea that picking and choosing and combining and drawing
20 red dotted lines and we'll keep the tab, but we'll get rid of the one-piece
21 cover that's removable and we'll cut it in half, essentially, because we're
22 going to make a slot through it. And that is what a POSITA would do.

23 You know, it's a very conclusory and an argument that is, you
24 know, trying to get where they want to go without having the support to do
25 that. Because again, we're talking about the fact that there is no housing in

1 the Scorch reference at all, and it doesn't -- that slot does not in fact put the
2 string in between the two wheels, it simply doesn't. That's not the function.
3 So if you're talking about a similar function as the wire, the similar function
4 of the funnel is to guide. It's not to insert it between the two wheels. That
5 slot in the funnel does not serve that function. It doesn't insert it between the
6 wheels at all.

7 JUDGE MARSCHALL: Any other questions?

8 MS. MCLANE: Any other questions?

9 JUDGE GROSSMAN: Yeah, I'll ask you the same follow-up
10 question on claim construction that I asked the Petitioner's Counsel, and that
11 is I understood your statement to be that there was a joint claim construction
12 statement by the parties, and I understood that included a joint agreement on
13 the construction for housing.

14 But then, as I indicated to Petitioner's Counsel, the District Court
15 docket sheet shows that there were two rounds of separate briefing on claim
16 construction, each side submitting its own brief after the joint claim
17 construction was submitted. Can you tell us anything about what you
18 disagree on with each other on claim construction?

19 MS. MCLANE: Absolutely. Let me just bring it up. I
20 prematurely unhooked myself. There we go. So here is the joint claim
21 construction statement that the parties made. Here are the terms that the
22 parties agreed to. So you'll notice that the surface texture to increase air
23 friction, the agreed construction, is a surface texture designed to increase air
24 friction. Turbulent air boundary layer is also one of the ones that is agreed
25 upon. There's another patent involved in this case, so you'll see '774 patent

1 listed. The next two are not for the '774 patent.

2 Generates lift is housing, a structure that covers at least partially
3 the pair of wheels, is also there. '774 absolutely aligned was agreed to.
4 Aperture was agreed to. And that's it. Those are the ones that were agreed
5 to for the '774. And then if we submit this to the Court, there are claim
6 terms and phrases that have Plaintiff's and Defendant's propose constructions
7 that were not agreed to.

8 JUDGE GROSSMAN: And are some of those that are not agreed
9 to from the '774 patent?

10 MS. MCLANE: The ones that are not agreed to are the loading
11 slot for the '774 patent, the guide slot for the '774 patent, the loading tab for
12 the '774 patent, and that's it.

13 JUDGE GROSSMAN: Thank you.

14 MS. MCLANE: You're welcome.

15 JUDGE MARSCHALL: And the guide slot claims, I don't believe
16 are at issue here, correct?

17 MS. MCLANE: The guide slot claims were not asserted as an
18 issue here.

19 JUDGE MARSCHALL: Were there briefs filed after this
20 exchange of statements, or was the case stayed before you got to briefing?

21 MS. MCLANE: I honestly don't remember that, because it's been
22 a while since this case has been stayed.

23 JUDGE MARSCHALL: Okay.

24 MS. MCLANE: But we can certainly let the Court know that.
25 And if there was briefing, we could provide that.

1 JUDGE MARSCHALL: Yes, that's what I was going to say. You
2 have authorization, and please do file any briefing on claim construction
3 [INDISCERNIBLE].

4 MS. MCLANE: We will, thank you. Any other questions?

5 JUDGE WOOD: I have nothing further.

6 JUDGE MARSCHALL: That's it. Thank you very much for your
7 time today. This is very helpful. Both sides represented their parties well.
8 And have a good rest of your day.

9 (Whereupon, the above-entitled matter went off the record at 2:47
10 p.m.)

IPR2024-01213
Patent 11,674,774 B2

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