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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PRIME TIME TOYS LLC, PRIME TIME TOYS LTD.,
and EASEBON SERVICES LTD,
Petitioner,

v.

SPIN MASTER, INC.,
Patent Owner.

IPR2023-01339 (Patent 8,640,683 B2)
IPR2023-01348 (Patent 8,371,282 B2)
IPR2023-01461 (Patent 8,596,255 B2)

Record of Oral Hearing
Held: May 16, 2025

Before HYUN J. JUNG, NEIL T. POWELL, and BRENT M. DOUGAL,
Administrative Patent Judges.

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The above-entitled matter came on for hearing on Friday, May 16, 2025, commencing at 1:00 p.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P R O C E E D I N G S

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JUDGE POWELL: Welcome, please have a seat. So we are here today for consolidated hearing for three inter partes reviews, petitioned by Prime Time Toys LLC, Ltd., and Easebon Services Ltd. against Spin Master, Inc., the Patent Owner.

Let us start with appearances, and we'll go with Petitioner first. So you can let us know who's here for the proceeding.

MR. GEORGE: Kenneth George, from Amster Rothstein & Ebenstein, for Petitioners. And with me is Brian Comack.

JUDGE POWELL: Okay. And Patent Owner, then?

MR. DARBY: Kenneth Darby, the Counsel representing Hasbro, exclusive licensee of the Patent Owner Spin Master. Sharing the Counsel table with me today is Mr. Jeffrey Shneidman who will be co-presenting. And also joining us by Webex is Counsel for Spin Master, Ms. Jennifer Bailey.

JUDGE POWELL: Okay. And I note now from my notes here that I should probably say which inter partes reviews we're handling and the challenged patents in those for the record. So the first one is IPR2023-01339, and that involves U.S. Patent Number 8,640,683 B2. The second one is IPR2023-01348, which involves U.S. Patent Number 8,371,282 B2. And the third is IPR2023-01461, which involves U.S. Patent Number 8,596,255 B2.

And very late, I'll say, I'm Judge Powell. With me in the hearing room is Judge Jung, and joining remotely from a hearing room in Denver is

Judge Dougal.

All right. With those housekeeping matters out of the way, you all know that you each have 45 minutes to argue the case. Now, one other thing that we need to address here is the confidential information that's in the demonstratives. It appears to me that we don't have anybody from the public in the hearing room, but as of right now, we do have the public line open for public access to the hearing. I believe Patent Owner is the only party here who has confidential information in the demonstratives.

And I guess I would ask, to what extent do we need to close the hearing? And do you think it's possible maybe we could just focus on the public information? We have all that information in the record, and we can study that for the written decisions that we ultimately issue. If that doesn't work for you, a second possibility is that we could separate off a certain amount of the hearing toward the end and make that confidential. With that, let me hear what Patent Owner has to think on that subject.

MR. DARBY: Thank you, Judge Powell. We conferred with Petitioner's Counsel this morning and we all decided to try to stick to the non-confidential portions of the record. As you stated, you all have the confidential exhibits and the confidential demonstratives. We'll stay on the public record.

JUDGE POWELL: Very much appreciated. That will make things easy and smooth. So Petitioner will start. Patent Owner will do rebuttal. Petitioner will do reply and can do reply. And Patent Owner has a chance for surrebuttal. Each party will have a little time -- will have the option to reserve time for their second round of argument. We're almost

ready then. Let me ask Petitioner, any questions on your part before we start. Anyone have any questions?

MR. GEORGE: Only one. I brought copies of our demonstratives. Do you want a copy?

JUDGE POWELL: Sure, I'll take a copy.

MR. GEORGE: Okay. May I approach?

JUDGE POWELL: Yeah, of course. I'm sorry.

MR. GEORGE: Thank you.

JUDGE POWELL: Thank you. Any questions generally from Patent Owner?

MR. DARBY: No. Thank you.

JUDGE POWELL: Okay. Well, you can see there's a clock behind me, so I'm going to try to keep time. And I've set it up so that it will -- the light here will go yellow when you've got two minutes left. I'll try to let you know when you're running short on time, and I encourage you, of course, to keep track of your own time. Let me see if there's anything else I should be saying here. Oh, when you present, try to speak which exhibits and demonstrative slides you're on so that, for example, Judge Dougal can follow along more easily. And with that, I guess I'll ask Petitioner, do you want to reserve time?

MR. GEORGE: Yes, I'll reserve 15 minutes.

JUDGE POWELL: Okay. So I'm going to knock this clock down to 30. That'll be nominally how much you're going to use, and we'll adjust as we go. And the floor is yours when you're ready.

MR. GEORGE: Very good. So I'm going to start with -- first of

1 all, may it please the Court, and you've already introduced me. I'm going to
2 start with our demonstratives, which is Exhibit 1054. And I'm going to go
3 straight to Slide 4. And this is, you know, our whole presentation has been
4 based on this portion from KSR, what some people call the problem-solution
5 approach. And let's look at the problem first.
6 And if we can go to Slide 6, I've just cited from the Director's
7 decision, Paper 12, where the Director found safety was a concern based on
8 the articles and the admissions made by Dr. Kudrowitz. If we then go to
9 Slide 7, Petitioner's Slide 7, which is also the Director's decision, there the
10 discussion goes to bruising and black and blue marks, welts, injuries from
11 Airsoft guns, damage to the human eye, and penetration of the skin.
12 So if we go to Slide 8, Patent Owner, they seek to minimize the
13 problem. Their focus really is on police and military training, but that really
14 ignores the teens and the young adults who unfortunately are the ones that
15 are getting injured. And so if we go to Slide 9, in our reply, we cited some
16 more articles. For example, Exhibit 1048 talks about eye injuries, and it's
17 youngsters -- and if you read the exhibit, you'll see it's all teenagers and
18 young adults getting hurt.
19 And 1033 is another article we added, and it talks about it's not just
20 eye injuries. There's other injuries as well. Penetrate the abdomen, the
21 thorax, even the cranium. So, in addition, what's interesting, if we go to
22 Slide 10, the Patent Owners put in these ASTM standards, and I thought it
23 was interesting, Exhibit 2029, which is one of the ASTM standards, it's the
24 first box. It says even low energy air guns can cause serious injury.
25 So none of this is really much of a surprise. In fact, if we go to

Slide 11, the patent itself, I'm just referring -- quotes from the '683 Patent, but the same language is in all three. They use the same term, serious harm.

So now I'd like to switch for a moment and go to the Patent Owner's demonstrative, which is Exhibit 2204, and specifically Slide 11, which we've put up on the screen. It's not in what I gave you. Yeah, I didn't give you a copy of this. I'm sorry. So, what's interesting is we have all this discussion about serious injury and yet Patent Owner's expert says there's a risk of minor injury.

And if we go to Patent Owner's Slide 13, they actually cite an article. It's Exhibit 2118, and it's a retrospective. It looks from 2016 back. So, this is even past the 2010 filing date. And if you keep reading the article, what's interesting, and I have it, if we go to the Exhibit 2118, if you go to Page 5.

So, this is 2016, from 1990 to 2016. And what is it telling us? It's telling us that we have hospital admissions, and of the hospital admissions, the paintball gun injuries had the highest proportion at 12 percent. Pellet guns, metal BB guns, had 8.3 percent, and Airsoft guns had 7 percent. So even the article they're citing says that the injury was a serious problem, contrary to what Dr. Kudrowitz said, and it's resulted in hospitalizations.

JUDGE DOUGAL: Counsel?

MR. GEORGE: Yes.

JUDGE DOUGAL: This is Judge Dougal. So, one of the -- so taking this next step, is a Spitball more like a paintball? I mean, is it greater injury than -- I mean, because it seems very similar, right? I mean, there's argument about whether it's liquid filled or not, but it's a mass of a material

that absorbs liquid. High mass, Patent Owner argues, right? And we have a lot of evidence that, and you just cited it, about how paintball injuries are actually higher than Airsoft gun injuries. And so, even if there's this known -- well, obviously, is a known injury problem, is it actually safer? Is it worse? You know, could you --

MR. GEORGE: Yes, I can address that. It's actually much safer. And what we have here is a situation where a paintball has a hard, rigid outer shell. When it hits, it cracks. Inside is a liquid. That comes out as a bolus, and it also can cause injury. This is completely different from Spitballs. Spitballs, SAP projectiles, they bounce or they break apart into mushy pieces on impact.

No water comes out. Even Dr. Kudrowitz admitted that, no water comes out of these. The water is absorbed. It's like a gelatin, if you will, a Jell-O almost. So it just breaks apart into mushy parts. There's no water. The interesting thing about kinetic energy is, is one issue is you look at the weight. The other issue is you look at the material, and the material of Spitballs is taught to break apart into mushy parts on impact, and that's not what you have with paintballs.

JUDGE DOUGAL: This is Judge Dougal again. So one of my concerns is what exactly is the combination? Spitballs talks about how, I don't remember if it's Spitballs, or if it's the video you put in, that talks about how it starts out as a hard bead, and if you let it sit in water for, I can't remember, it was two hours, four hours, some set amount of period of time, it gets to that state you're talking about. So, I feel like most of your argument is talking about the final state, if you let it get to the biggest

volume possible. But what about the smaller volumes --

MR. GEORGE: Yeah, that's not the argument, Your Honor.

JUDGE DOUGAL: -- is that -- one second. Is that the size that you are arguing would be able to be put in a gun and shot from a gun? That absorbs -- acts on springs, other things, or is it some other smaller size that is harder and not that? I mean, my other problem is we have a lot of wiggle words, like bounce, right? A metal ball bearing bounces off concrete or off my forehead, right? That doesn't make it softer or better. Squishy paintball, could be considered squishy by some people, right, it's softer than a ball bearing.

So, I'm struggling with a lot of this, what the actual combination is, what state of Spitballs we're talking about. So, sorry, I threw a lot of information out, a lot of thoughts there.

MR. GEORGE: That's all right, Your Honor.

JUDGE DOUGAL: That's my concern.

MR. GEORGE: Yeah. So the expert, Dr. Reitman, our expert, and their expert in the ITC, Dr. Fuller, the SAP technology was very advanced. You could make it any size you want, you could make it any softness you wanted. And so you're not just stuck with, oh, I have a Spitball, I have to go all the way to 15mm, and that's what I have to do. You're not stuck there at all. You can make it any size you want. And in fact, I'd like to go to our Slide 37, Patent Owner's Slide 37, because we talk about this.

So on our Slide 37, this is the Patent Owner's argument that they're massive, and that they have 14 times more kinetic energy. And he's talking about a 15.24mm Airsoft gun. If we go to the next Slide 38, we were never

1 talking about using a 15mm SAP. We would make it 6mm. And we said
2 that in our petition, that's on Slide 38. We also said it in our reply brief,
3 which is Paper number 24, and I'll put it up on the screen, Page 13. Yeah,
4 Page 13.
5 And what we say at the very bottom of this, the last paragraph is
6 Petitioners' and Mr. Delman's position is that a POSITA would have been
7 motivated to make the Spitballs the same 6mm diameter as Airsoft
8 ammunition. Ignoring this, Dr. Kudrowitz calculates the kinetic energy of
9 more than twice as large a 15.24mm diameter projectile.
10 So all this kinetic energy argument -- and if we go to Patent
11 Owner's Slide 26. He does a calculation once we get to the Slide 26. Yeah,
12 so this is the calculation. The calculation is wrong. The radius for Spitballs
13 is not going to be 7.62. It's going to be 3. The mass is not going to be 1.84.
14 It's going to be much less. So, this whole argument is based on the incorrect
15 view that we're arguing to use a 15mm projectile. We're not. We never
16 have. It's 6mm. And the experts explain how you can make the Spitball
17 however you want to make it. And let me just see the slide for that. Which
18 one?
19 MR. COMACK: It would be 32.
20 MR. GEORGE: Yeah, if we could go to our Slide 32. Dr.
21 Reitman explained that the worker of ordinary skill in the art had the chemist
22 available. The chemist was able to make the SAP strong so it wouldn't
23 break apart. It was a straightforward routine thing to do. You could also
24 increase the crosslink density so that it would make it -- it wouldn’t fracture,
25 it would make it out of the gun.

1 So, all of these -- and I just want to go back a moment. One more
2 slide, our Slide 26. This is Dr. Fuller, their SAP expert in the ITC. And he's
3 agreeing that you can adjust size, strength, and durability, easily
4 accomplished by well-known methods. A POSITA would have known how
5 to produce soft, operative word, soft projectiles, projectile SAP ammunition,
6 configured for use with a projectile launcher as of the priority date of the
7 asserted patents.
8 Their own expert in the ITC admitted this, they didn't bring them
9 to this IPR, that the worker knew how to do this. He could make it any size
10 he wanted. Dr. Reitman talks about this a lot. And he could make it any
11 soft. And this is --
12 JUDGE DOUGAL: So, Counsel?
13 MR. GEORGE: Yes.
14 JUDGE DOUGAL: So, the hard part I have with this, and your
15 last slide, is, for all things, there are trade-offs. Like your other slide talked
16 about how you could make it denser and make it stronger to survive the
17 spring. And then you have here, you can say, well, you can make it softer,
18 you can change size, strength, and durability.
19 But don't we need some evidence on what the trade-offs are? If
20 you make it stronger to be more durable to survive spring pressure, is it still
21 squishy? Is this enough to just say I can choose whatever size, whatever
22 strength, I can make it soft and durable all at the same time. But you're not
23 telling me what those actually are or what the trade-off is when I increase
24 durability with softness, how it compares to an Airsoft pellet or a paintball
25 gun.

MR. GEORGE: Yes. So actually, what's interesting here is neither does the patent. And so the real question you're asking is, what's the definition of soft? And there is no definition of soft in the patent. The only definition is a high-traded --

JUDGE DOUGAL: So I'm asking -- your reasoning is safety. So my question is, what evidence do we have that your combination is safer?

MR. GEORGE: The best evidence we have is the Spitballs itself saying that it breaks apart into mushy parts on impact. And we have the admissions -- let me just find them. Let's start with Petitioner's Slide 14. We have Dr. Kudrowitz's admission that if it was made softer -- a worker of ordinary skill in the art knew that if it was made softer, it would be less likely to cause injury. Then if we go to Slide 16, we have Patent Owner's admission that if a SAP projectile breaks down on impact, then the force of impact is spread over a much wider surface area, and this reduces the likelihood of injury. He says that seems true.

We then asked him, would a POSITA have known this in 2010, and he agreed. And what do we know about Spitballs? It breaks down and is spread over a wide surface area. So the POSITA knew all of this. The POSITA knew if it's softer, if it breaks down over a wide surface area, you're going to reduce the likelihood of injury. These are admissions from the Patent Owner's expert. And then the POSITA is looking at Spitballs' reference that specifically says it bounces and explodes on impact into mushy pieces. We also have all of the SAP experts saying that this is all controllable.

And I want to speak to this other issue of whether or not it'll work

in the gun. And again, the SAP part is very well developed, and there's nothing in the patent that gives any clue as to what crosslinker they use or anything else.

So let's take a look at Patent Owner Slide 36. So here, Dr. Kudrowitz is saying that, oh, Spitballs is too soft and squishy. We don't know if it would withstand the compressive stresses of a high-powered gun. He doesn't tell you what those compressive stresses are. He just says, oh, it's high-powered. But if we go to Patent Owner Slide 23, we ask them, where in Peev does it say high-powered? It doesn't. Where in Peev does it say what the muzzle velocity is? It doesn't.

If we look at Slide 24. What Dr. Kudrowitz ended up saying is is that Peev shoots within the range of Airsoft, which is from 100 to 500 feet per second. That's the full range. That's high-powered. That's low-powered. It's everything in between. So that's the teaching of Peev. There's nothing about high-powered. There's nothing about these compressive forces. This breakage problem in the gun is a made-up problem.

And then we asked him, even though now he says that, oh, we don't know if it would work, in the ITC -- let's go to Slide 25. We asked him, we said, was it within the technical grasp of a person of ordinary skill in the art to modify Airsoft guns, such as Peev, to launch soft SAP projectiles in place of the hard plastic spheres that the Airsoft gun used? And he said, yes, if they were asked to do it, they could do it. So all of this was within the skill of the -- technical skill of the worker -- of the POSITA. And -- I'm sorry.

JUDGE POWELL: So, this is Judge Powell. On that point, that

1 raises a question for me that's similar to what Judge Dougal was asking
2 about. I grasped that at a high level, the combination is SAP projectiles in
3 the Peev gun. And I understand that there's some discussion, some
4 concession, some explicit discussion in the petition that you might have to
5 modify the SAP projectiles somewhat from what is disposed of Spitballs.
6 For example, you need a 6mm projectile. This testimony here, the way the
7 question is framed, it seems to ask if it's possible to modify the gun. So is
8 that part of the combination too?
9 MR. GEORGE: However you wanted to do it, you could modify
10 the gun. If we go to the very next slide, Slide 27 -- I'm sorry, the very next
11 slide, Slide 26. So we asked Dr. Kudrowitz about modifying the gun. He
12 says he could modify the gun. We asked, in the ITC, we asked their SAP
13 expert, Dr. Fuller, could you modify the SAP? And he said, yeah, you
14 could. We asked him the second question; do you agree that a POSITA
15 would have known how to produce soft projectile SAP ammunition
16 configured for use with a projectile launcher as of the priority date of the
17 asserted patents? And he said, yes.
18 JUDGE POWELL: Okay. So that particular testimony goes to
19 modification of the ammunition to work with --
20 MR. GEORGE: It does, Your Honor. And there's testimony from
21 Dr. Reitman, too. He was agreeing with Dr. Reitman that you could modify
22 the ammunition. I mean, our expert on the very next slide, Slide 27, he
23 basically put it all together. He looked at what the expert said and said,
24 yeah, they'd be able to do it. You could modify the gun, you could modify
25 the ammunition, but you're able to do it.

1 And this really is not surprising that these experts said all of this,
2 because as I said before, the patent just says, use SAP. Doesn't really give
3 you -- doesn't name a SAP, doesn't name a crosslinker, doesn't really tell you
4 anything. Doesn't tell you how soft to make it, doesn't tell you how hard. It
5 doesn't tell you.
6 And if we go to Slide 28, what all these experts are saying pre-
7 2010 is exactly what the patent says. The patent says you can hydrate the
8 SAP, you can project it with reasonable force without it breaking apart, and
9 then the SAP will break down under excessive pressure and it will reduce
10 the likelihood of injury. There's no examples, there's not a single example of
11 how you do this. Why? It was very well known. The SAP technology was
12 very, very well-known at this point. All the experts agreed.
13 And as far as even when they -- let's go to our Slide 29. When Dr.
14 Kudrowitz, their expert, had to do claim charts, how did he do it? How did
15 he say it was soft? He just said, oh, if you have SAP and you hydrate it, it's
16 soft. And this is in his declaration, in this case, Exhibit 2015, Appendix 1.
17 When hydrated, this is paragraph 10, the ammunition becomes soft
18 projectile, soft enough to disintegrate on impact; 28, hydrate the
19 ammunition, and in doing so, satisfy the limitation of soft projectiles.
20 And I'll just go to -- I think I did this already, but Slide 32, our
21 slide -- Petitioner's Slide 32. This has the --
22 JUDGE DOUGAL: Real quick, Counselor.
23 MR. GEORGE: Yes.
24 JUDGE DOUGAL: Do we have evidence of whether Xploderz
25 and Blaster Pro ammunition is 6mm projectiles?

MR. GEORGE: They're all 6mm, Your Honor.

JUDGE DOUGAL: All right.

MR. GEORGE: Yeah, all Airsoft is 6mm, and all of the -- his products and all of their products are 6mm.

JUDGE DOUGAL: Is that in the record?

MR. GEORGE: I could probably find it. I don't think a POSITA --

JUDGE DOUGAL: Maybe your co-counsel while he's --

MR. GEORGE: Yeah, I don't think he'd disagree with me.

MR. COMACK: I may not --

MR. GEORGE: I mean, it is in the record because they had to do claim charts for the Xploderz products, and in those claim charts there's a size limitation and they had to say it was 6mm. Yes, there is in the record.

JUDGE DOUGAL: Okay. Thank you.

MR. GEORGE: I think I want to talk a little bit more about kinetic energy. And so I'd like to go back to Slide 37. And we talked -- to Petitioner's Slide 37. So basically their argument is 15mm is too heavy. And of course, as I explained, we're not doing 15mm, we're suggesting 6mm for the combination.

And then if we move forward to Slide 39, and this is -- something doesn't make sense here. The patent -- so 15mm according to their expert, that's the worst thing in the world, it's going to break apart. Interestingly, the patent says you can use 15mm. I'm looking at our Slide 39, the '683 Patent. In fact, 15mm is preferred and it even says you can go as high as 30mm. So what's the disconnect here? What are we missing? That their expert says

1 you can never do it, you shouldn't do it, it's a horrible thing to do, and yet
2 somehow the patent says to do it.
3 Well, let's go to Slide 40. What Patent Owner and their experts are
4 ignoring is really a fundamental principle of physics. Kinetic energy can be
5 dissipated in multiple ways, including by deformation, fragmentation, and
6 scattering of the fragments. And all the kinetic energy used to deform,
7 fragment, and scatter the SAP projectile is not transmitted to the target. And
8 this simple fact reduces the injury potential. There's no way around that.
9 And Slide 41, please, of Petitioner's. This is not contested. This
10 basic principle of physics is not contested. Dr. Kudrowitz has agreed. If
11 you spread it over a wide area by breaking it apart into mushy pieces, for
12 example, you're going to reduce the impact. And now I'd like to go to -- and
13 this wasn't even new. Let's go to Slide 50. Patent Owner cites the ASTM
14 standard. And it's Exhibit 2119. And even the ASTM standard says if the
15 kinetic energy is too high, then switch to resilient material. Use resilient
16 material.
17 So the worker of ordinary skill in the art, at the time, looking at the
18 ASTM standard, knew that you just don't look at kinetic energy. You go
19 beyond that. You look at the material. And it's telling you, right? He's
20 being told in the ASTM if it exceeds 0.08 joules, make the impact surface
21 resilient material. We asked Dr. Kudrowitz what he thought about that. He
22 said yes, if it exceeds a certain kinetic energy, it has to have impact surface
23 of resilient material. What's resilient? It's something that absorbs the force
24 of impact. It deforms. Spitballs passes this test.
25 A worker of ordinary skill reading this ASTM standard, knowing

about Spitballs, it passes the test. Here's the -- I just want to go back. Yeah, let's take a look at Petitioner's reply, Paper 24 at page 13. This is a question that you raised, Judge Dougal, about the difference between paintballs and Spitballs. And here it is -- just so it's easy, it's all in one place. It's on page 13 of our reply Paper 24.

JUDGE DOUGAL: Counsel, sorry, just one --

MR. GEORGE: Sure.

JUDGE DOUGAL: Oh, I see. Are the papers all the same numbers in all three cases?

MR. GEORGE: They are, Your Honor.

JUDGE DOUGAL: Okay.

MR. GEORGE: Yeah. On purpose.

JUDGE DOUGAL: Okay.

MR. GEORGE: So, yes. So, really -- and Dr. Courtney, she's a ballistics expert. That's why we brought her in here, to handle these very, very specific questions about kinetic energy, basic principles of physics that they're ignoring, and the differences between paintballs. And she explains in detail the differences between paintballs and Spitballs, and the fact that in Spitballs, the water molecules are physically held in place by the polymer chains. This is the first full paragraph on the page. It forms a gel. When the SAP shatters, the water remains with the polymer fragments.

And Dr. Kudrowitz admitted, water doesn't come out of a Spitball. Liquid doesn't come out of a Spitball when it hits. It just turns into mushy pieces. A paintball? Two things happen. That rigid outer shell cracks causing injury, and the liquid inside comes out as a bolus, and it also causes

injury.

I'll just do -- if I can go to their slide, Patent Owner's Slide 28. So, this is one of the slides that they put in, and the heading is, Deformable Projectiles Can Cause More Harm. And the question really is, more harm than what? This chart is comparing the injury potential of different projectile toys. It's not comparing a deformable projectile to a rigid projectile for the same toy launcher. And that's really the question here. You have the same toy launcher. You have a rigid projectile. What happens if I substitute a flexible projectile? Is it safer?

And if you keep reading the article, and this is our Slide 47, if you keep reading that article, which is Exhibit 1044, you will learn what happens. It compares a completely flexible missile to a rigid missile. And it says -- and it does tests on them, and it says the energy expended in bending is no longer available for deforming the pad. Hence, the resulting maximum force is less than it would have been if the missile were rigid.

It's telling you -- what is it telling you? This is 1979. You can manage kinetic energy. If you have too much kinetic energy, you can manage it, make the projectile flexible. And if we go to Slide 48, we asked Dr. Courtney what conclusion she drew from this, and this is her testimony. The flexibility of the missile was a mechanism for managing kinetic energy and reducing the kinetic energy that was applied to the target. You reduce the kinetic energy, you reduce the injury potential. All of this is basic principles of physics. This is not advanced. The POSITA knew of all of this. Okay. I've gone into my other time, so I'll stop.

JUDGE DOUGAL: Yeah. Can I ask one question real quick?

MR. GEORGE: Sure.

JUDGE DOUGAL: Can you briefly respond to Patent Owner's argument about whether the SAP material is one of a finite number of alternatives?

MR. GEORGE: Yes. I have a slide on that. Yes, so if we go to the -- I'd like to go to our Slide 20. So this is an excerpt from our reply brief. The Patent Owner cited this Exhibit 2120, which is a textbook. And actually, we can go to their slide. It's Patent Owner's Slide 31. And so Dr. Delman says there were a finite number. He wasn't deposed by the way. They didn't depose him.

On the right-hand side, there's two boxes. The first box is from the textbook that they cite. And all it says is there are many different polymeric materials that are familiar to us and find a wide variety of applications. That's all it teaches. The other box is the beginning of Dr. Reitman's discussion of her training. I don't know how that's relevant.

Now if we go to Slide 20, here's the big difference. Spitballs was -- Slide 20 of Petitioner's slide, sorry. Here's the big difference. The POSITA knew from the Spitballs reference that, one, SAP was ammunition, and two, it would break apart and explode into mushy parts on impact. So he knew it was ammunition and he knew it was safe. You can read this Exhibit 2120, the textbook, about these countless distinct polymers. Nowhere in there does it ever say any of them, one, are ammunition -- known to be ammunition for an air gun, or two, that they're safe. Did that respond to your question, Judge Dougal?

JUDGE DOUGAL: Yeah. So Patent Owner seems -- I guess, they

can respond -- they can explain this a little better. But I kind of read that they were taking your expert's statement of rubber-cloaked cork foam, soft plastics as a very large list of materials that encompasses all different types of plastics, all different types of foam, (INDISCERNIBLE) rubbers. So it wasn't a finite number of materials.

MR. GEORGE: My response to that is the same. The worker of ordinary skill in the art knew that SAP could be ammunition from Spitballs and knew that it was soft and broke apart on impact. I think once you expand that out -- the worker of ordinary skill in the art also knew about rubber bullets and knew about cork. But to me, they -- and if you think about what's really different about these patents is, they basically said they use a conventional air gun and they said, use SAP as an ammunition.

And if Spitballs didn't already say that, I wouldn't be standing here. It was already taught to use SAP. SAP can be an ammunition. And are there a lot of SAPs? Yes, there are a lot of SAPs, but it really doesn't matter. The technology -- we heard from the experts, the technology was there that the experts could make it however they wanted to make it, make it any size they wanted, make it any softness they wanted, and get it in that gun and shoot it out. It wasn't a problem. Thank you.

JUDGE POWELL: Thank you. Patent Owner, do you want to reserve any time for your surrebuttal?

MR. DARBY: Yes, we'll reserve five minutes, Your Honor.

JUDGE POWELL: Five minutes? Okay. When you're ready.

MR. DARBY: Excellent. Thank you. Kenneth Darby speaking for Hasbro, exclusive licensee of the Patent Owner Spin Master. I'm going

1 to start on Slide 9. And I know our time is limited today, so I'll get straight
2 to the point. Patent Owner should prevail in these three IPRs, because the
3 teachings of Peev and Spitballs just don't fit. And the reason they don't fit is
4 because there's no legitimate objective reason, no motivation, for a skilled
5 artisan to pursue the idea of using a science toy, like is described in
6 Spitballs, as ammunition for an automatic electric Airsoft gun, which is the
7 kind of gun that Peev is directed to.
8 And I heard a lot of discussion from Counsel about whether the
9 person of skill in the art could do something. What we're here to talk about
10 is what a person of skill in the art would have been motivated to do, which is
11 the key question. I heard a lot of talk about what the challenged patents say
12 could or could not be done. We're here to talk about what the person of skill
13 in the art, without the hindsight benefit of the challenged patents, would
14 have been motivated to do.
15 And the softer Airsoft theory that you just heard from Petitioner's
16 Counsel and that you read all about in the petitions, that's Petitioner's only
17 shot. That's their only argument and chance that they have here on
18 motivation to combine. And if that fails, all three of these petitions fail.
19 And so there's some very real problems with Petitioner's safer
20 Airsoft theory. We grouped them into three different buckets for today's
21 argument. So we have, first, there's the Airsoft premise bucket of problems.
22 And what we mean by that is that they premise their theory specifically on
23 Airsoft. It's specifically premised on making Airsoft safer.
24 But what they don't account for is for all that a skilled artisan
25 would have known about Airsoft, which is a major problem, because as

1 you'll see, or as you may have already seen in the record, the idea of using
2 softer ammunition to prevent injuries was not something that anybody had
3 ever contemplated in Airsoft, as far as this record goes. It was not one of the
4 known solutions.
5 Second, there's a softer means safer bucket of problems. So
6 Petitioner's safer Airsoft motivation theory here, it depends on this reductive
7 logic in the petition. So if we go back to the petition, what we see, they rely
8 on this logic because they're using it as a tool, as sort of an escape hatch, to
9 not have to do the comparative analysis. I heard Counsel said safer
10 compared to what? That's exactly the question, right?
11 And because we don't have a comparative analysis in the petition,
12 what they've done instead is use the softer means safer logic to suggest that
13 because Spitballs are softer, therefore they are safer. What we'll see is that
14 that logic doesn't hold up, and it's in fact pretty easily debunked by some
15 real-world examples, including paintball, for example, Judge Dougal as you
16 I think may have picked up on.
17 So third, there's another bucket that I'm calling the Spitballs
18 bucket. And so the Spitballs bucket of problems is that there are some very
19 specific characteristics that are described in Spitballs, that they're relying on
20 the petition for their mapping to the claim elements and for their motivation
21 to combine.
22 And when you look at those characteristics, it becomes apparent
23 pretty quickly that some of them would frustrate this idea of using the
24 ammunition in the context of Airsoft and really reveals that Spitballs
25 wouldn't have been something the person of skill would look at and see as a

1 safer and suitable type of ammunition that would be suitable for the type of
2 automatic electric Airsoft gun that Peev teaches. So those are the three
3 buckets, and I'll turn to them shortly.
4 But before we go any further, I want to just very briefly address
5 what we heard from Petitioner's Counsel today, and what we've seen, I
6 believe it was in their reply brief, about the Director's decision. That
7 decision at the institution phase, it doesn't bind or guide this panel in terms
8 of the final written decision.
9 As I'm sure you appreciate, the Director was looking at a different
10 record. For example, some of the articles that we saw on Counsel's slide
11 there, a lot of those have been revealed as not really about Airsoft at all. In
12 fact, they're about BB guns. So we've got a new record here, a further
13 developed record here. We also have a different standard. We're not a
14 reasonable likelihood. We are preponderance of the evidence standard here.
15 So the Director was looking at different record, different standard, so that
16 decision doesn't guide or bind this panel, as I'm sure you'll appreciate.
17 Okay. So I'm going to start with the Airsoft premise bucket, and
18 I'll move to Slide 4. So as you'll see, as we walk through some of the
19 evidence here, the idea that a skilled artisan would have been motivated to
20 improve Airsoft safety by pursuing a never-before-seen kind of ammunition,
21 which has a radically different chemical composition merely because it was
22 softer, just doesn't make a lot of sense. And I think we've seen some of the
23 problems that arise with this notion. Softer ammunition wasn't something
24 that was a known solution in Airsoft.
25 So, let's start with Peev here on Slide 4. What we see is that Peev's

1 disclosure is about making specific kinds of improvements to a very
2 particular kind of Airsoft gun. It's an electric Airsoft gun. It's a quote here
3 from the excerpt on the slide. And the whole point of Peev's disclosure is to
4 make electric Airsoft guns more like real firearms.
5 You can see on the left-hand side of the slide, this is Mr. Vladimir
6 Peev holding his very realistic electric Airsoft gun. Slide 5. Here, this slide
7 depicts an excerpt from an introductory handbook on Airsoft. It's called The
8 Airsoft Question and Answer Book. It's contemporaneous with the time of
9 the patents, and it's got a wealth of information, basic information about
10 Airsoft.
11 And so, here, what we see on the excerpt in Slide 5 is that the
12 kinds of electric Airsoft guns that Peev was talking about, these are often
13 called AEGs, or Automatic Electric Guns. They typically have a muzzle
14 velocity in the 300 to 350 feet per second range, and they typically fire 500
15 to 70 rounds per minute. These are automatic weapons that, as far as Airsoft
16 goes, are fairly high-powered.
17 And so when people are using these AEGs and they're playing
18 these military simulation games and frankly shooting at each other, what do
19 they do? Do they create some kind of softer ammunition? No, of course
20 not. The 6mm plastic ammunition is a hallmark of Airsoft, and no one was
21 thinking at the time about making Airsoft safer by using softer ammunition.
22 We don't see any evidence for that.
23 If we turn to Slide 12, we have another excerpt from the same
24 Airsoft Question and Answer Book. And what it explains is that people who
25 were playing these military simulation games, rather than using softer

1 ammunition, what did they do? Well, they limited the muzzle velocities of
2 the guns so that they would be, and this is a quote, "Powerful enough to raise
3 a welt if a BB fired at close range hits an opponent on his bare skin, but not
4 strong enough to penetrate skin or cause any serious damage."
5 The quote goes on, "The only real danger in being hit by an Airsoft
6 BB is if you're hit in the eye or mouth, and virtually all regulated Airsoft
7 courses have strict rules about wearing adequate eye and face protection."
8 So what the evidence is telling us is that the known solution for
9 people that were out there in the field playing with these AEGs and military
10 simulation games was to use protective gear. They weren't particularly
11 concerned about bruises and welts and things like that, what they really
12 wanted to avoid is getting shot in the face. And what you see in some of the
13 evidence with respect -- you'll see in a lot of these articles that they're about
14 ocular injuries and things like that. It's about being hit in the eye or in the
15 face, which, yes, people were trying to avoid. The way they did that was
16 using protective gear.
17 The same is also true in the military context. We've got more
18 pincitations to the record and all that stuff on Slide 16. In the interest of
19 time, I'm not going to go there, but it's in the record and the pincitations are
20 there on the slide.
21 So moving back now to Slide 11, and this is Patent Owner's expert,
22 Dr. Barry Kudrowitz, and he's summarizing the evidence, I think, and he
23 does a pretty good job of it here. What he says is that with Airsoft, the speed
24 and the force of impact is a feature, not a bug. It was all part of the game.
25 And so there could be some risk of minor injuries, for example, these bruises

1 or welts, but that risk was all a fundamental part of Airsoft. And it could be
2 mitigated by taking reasonable precautions, like wearing protective goggles,
3 masks, and by wearing extra layers of clothing and that sort of thing.
4 On the right hand of the slide here on Slide 11, this is the same
5 ASTM standard that Counsel was just mentioning. And I believe this is on
6 their Slide 10. And what it tells us is that what did the ASTM standards tell
7 people to do in order to avoid Airsoft injuries? It told them to wear eye
8 protection, because that was the known solution at the time. It doesn't say to
9 create softer ammunition or anything like that.
10 And that's really consistent with all the evidence. You won't find
11 any of the evidence telling you to make softer ammunition. What you'll
12 instead find over and over and over again is to wear goggles, to wear masks,
13 to wear protective clothing, things like that.
14 I'll give you one more example of that. This is on Slide 14, just
15 showing an excerpt from a medical journal. This is one of the medical
16 journals that came about in the reply, and it was, I believe, discussed by
17 Counsel on their Slide 9. And what it says is that, yes, there are injuries, but
18 what do you do? What does the article recommend? What does the medical
19 journal recommend? Well, what it says here is that in all cases, not some
20 cases, in all cases, goggles could have prevented injuries.
21 Counsel's Slide 9 also had another medical journal. It was Exhibit
22 1033. I don't have a slide for it. But first, let me just say, please know that
23 when that document is saying that there are penetration of the abdomen, I
24 think maybe of the skull, et cetera, or something like that, it's not talking
25 about Airsoft. If you go back and you look at their slide, they added the

1 word Airsoft in there. That document is talking about BB guns, at least that
2 particular snippet that's talking about penetration injuries. So just take that
3 word of caution. And then --
4 JUDGE DOUGAL: Counsel.
5 MR. DARBY: Yes.
6 JUDGE DOUGAL: This is Judge Dougal. So this portion you're
7 talking about, you're talking about the bucket of Airsoft guns. But in the
8 petition, they argue that Airsoft guns can be adjusted to handle breakage of
9 these Spitball guns. So why should we confine their arguments to
10 standardized high-pressure or Army-style Airsoft guns as opposed to Nerf
11 guns and other toys that do normally hold softer ammunition?
12 And to a certain extent you can think about, well, if I modify an
13 Airsoft gun, what's different from it becoming a Nerf gun or a toy that can
14 shoot toy ammunition from science toys? Why should we limit it in this air
15 gun analysis that you're talking about?
16 MR. DARBY: Right. There are a couple of reasons for that. One
17 of them is because that's what the Petitioner said. Their entire case was
18 about making Airsoft safer. They weren't talking about changing Airsoft
19 into some other kind of sport. They were talking specifically about Airsoft,
20 so I think that's one reason. Another reason is that the reference that they
21 chose to apply in their petition is a reference that's about Airsoft, and it's
22 about a particular kind of Airsoft gun. So that's another reason.
23 I think also they have an issue with, again, going back to their
24 motivation being about safer Airsoft, right? They needed to establish
25 injuries, and the way they did that was by pointing to articles that are talking

1 about Airsoft shooting at particularly high velocities. And so for all those
2 reasons, I think that's why we cabin them to Airsoft, because I think they
3 cabin themselves. That's what they put in their petition, and I think it's fair
4 for us to hold them to that.
5 The idea about changing the gun, and we saw the testimony that
6 they put up. Again, that goes to what the POSITA, person of skill in the art,
7 could have done, not what the person of skill in the art would have been
8 motivated to do. I think if you look at the testimony from Dr. Kudrowitz for
9 example, he's saying if you ask somebody to do it, they could do it. That's
10 not the question that matters for motivation to combine.
11 So if we think about the evidence, all the evidence that we've
12 looked at, I would submit it's telling us, and telling us pretty loudly, that a
13 skilled artisan, they understood Airsoft, and they would have known that the
14 risk with Airsoft is relatively minor and even preventable, particularly if you
15 take common sense safety precautions like wearing protective gear.
16 And so knowing and understanding all of this, the inference that
17 the skilled artisan would have completely redesigned the gun or brought in a
18 chemist to create a new kind of ammunition that had never been seen or used
19 before in Airsoft, it just doesn't make a lot of sense. And so that's why when
20 you look at this record -- and Airsoft had been around for decades. Began I
21 believe in Japan in the '70s, and then maybe came to the United States
22 maybe the '80s, '90s, for decades before the patents. And what we don't see
23 is any of these articles telling us to use softer ammunition, even the ones that
24 are saying that there are injuries.
25 And so instead what Petitioner brings to the table is the ITC

1 testimony from Dr. Kudrowitz, the part where he said another way to make
2 the projectile less likely to cause injury would be to make it softer. Let's go
3 back and you look at that testimony, it's on their Slide 14, you'll see a couple
4 of things.
5 You'll see that Dr. Kudrowitz was not specifically asked about
6 Airsoft in that particular exchange. You'll see that he said make it softer,
7 meaning the given projectile in question. He never said or suggested that
8 you would use an entirely different kind of projectile that's softer, because
9 that wasn't one of the known solutions specifically in the context of Airsoft.
10 And again, the reason we're holding them to this is because that's what they
11 put forth in their petition. And in these proceedings, you know, they're the
12 master of their complaint, and their complaint is the petition.
13 And so just one last point here. Just to be clear, we're not saying
14 that softer SAP projectiles, the ones that Spitballs teaches, would have been
15 merely a less optimal option. We completely appreciate that the law doesn't
16 require the best option. It's really just a suitable option that was known,
17 suitable, and that the prior art doesn't teach away from. We fully appreciate
18 that.
19 What we're saying here is that softer ammunition of the type that's
20 described, like the projectiles in Spitballs, that wasn't a known solution at all
21 in Airsoft is what we're saying. And the Airsoft context, again, is how
22 Petitioner chose to present its case.
23 Okay. So that's the Airsoft premise bucket. If you agree with us
24 up to here, effectively the case is over. Petitioner can't establish a
25 motivation to combine if using this type of ammunition wasn't a known

1 solution in the prior art, they can't make their case. I'll pause here, just take
2 a beat to see if there's any questions from the panel before I move on.
3 JUDGE JUNG: Mr. Darby, just to verify my understanding of
4 your argument for this bucket is that there's nothing in the record that tells
5 you that SAP was an alternative ammunition for Airsoft. Is that right?
6 MR. DARBY: And we'd even go so further, I don't see any record
7 evidence about even using softer ammunition, period. Like foam, for
8 example, foam was also available, and you don't see any evidence saying to
9 use foam for Airsoft.
10 JUDGE JUNG: And you're also saying that -- Petitioner has talked
11 about the Airsoft gun, because there is no argument to modify that into a toy
12 or anything of that nature. Something that might require more safety
13 measures?
14 MR. DARBY: Right. Their case was based on Airsoft's safety,
15 specifically. That's the reference they put forward in Peev, which is really
16 about pretty high-powered, serious kind of Airsoft gun, and we think they
17 ought to be stuck with that.
18 JUDGE JUNG: So in Patent Owner's view, the toy standards don't
19 really apply to their proposed combination?
20 MR. DARBY: Well, it's interesting. And there are a couple of
21 issues about the toy standards. One of them is, and I don't have it on slide,
22 but Counsel put it up. It says, has resilient. It doesn't say change to a totally
23 different kind of ammunition. So even to the extent it does apply, we don't
24 think it -- we still don't think it gets them there.
25 The other thing is that the kind of Airsoft guns we're talking about

are not toys. And then the last point is that, and this is in the surreply, that those same toy standards tell you that you shouldn't be using projectiles with small parts, and 6mm especially, but even, I believe, the 15mm would fit into what they call small parts cylinder. And so even those particular ASTM standards still can't help them on motivation.

JUDGE JUNG: Okay. And then one last thing. Can you explain the difference between the Airsoft gun of Peev versus the BB gun that causes serious injuries cited in that article by the Petitioner? What's the technical difference between those two things?

MR. DARBY: Between the --

JUDGE JUNG: The Airsoft gun and the BB gun.

MR. DARBY: -- and the BB gun? Well, for one thing, BB gun ammunition is far more massive. And when you have the added mass, that raises up the kinetic energy. So when you ratchet up the kinetic energy like that, so when the mass goes up and the velocity goes up, you raise up the kinetic energy and they become more harmful.

JUDGE JUNG: Okay. Do you know -- like I say, you can look at the record, but do you remember off the top head how much more mass that we're talking about for that BB gun?

MR. DARBY: I don't have the specific mass on hand. I'm not sure if they -- it depends on which article you're talking about. Some of the medical journals give the mass for everything. Some of them don't. So I'm not exactly sure which one --

JUDGE JUNG: Okay. So we agree with you that those articles talked about a heavier BB, how much weight should we give to that

evidence, does that provide some guidance to one of ordinary skill in the art about the smaller BBs and smaller ammunition?

MR. DARBY: I don't really see it applying to the case here, honestly, because the BB guns haven't really been a part of the case. We're talking about Airsoft versus Spitballs. And we're talking about the comparative, which again, wasn't in the petition. When we get back to the petition, which is what I think they need to sort of stick to, it was about softer means safer. And that wasn't there.

JUDGE JUNG: Okay. And when they say softer means safer, I kind of think it's implied that softer versus harder means that softer would be safer. Is that your understanding as well? I know you kind of described that thing without making reference to anything else, but it seems like the implicit reference was softer versus harder ammunition. The softer one would be safer.

MR. DARBY: Sure, I'll go there. That was my second bucket. So I'll address that question, absolutely. So I'll move to Slide 17 as I start to address that. So the softer means safer was used as a way to avoid having to do the real comparative analysis because we, I think, all agree with the comparative analysis is not there. And so they use the softer means safer as sort of a shortcut, escape hatch, to avoid having to do that.

The inference only holds -- what we found, as you see on the slide here, what we found is that that only holds, softer means safer, only holds when all other variables are held constant. And we see that specifically from their expert, Dr. Courtney, when all other variables are held constant, softer is safer. But as we move to Slide 18, in the same paragraph -- this is the

1 same paragraph of our declaration, paragraph 39 of our declaration, the
2 projectiles being considered in these IPR proceedings vary in more ways
3 than one.
4 So softer means safer when all other variables are held constant.
5 That's what Dr. Kudrowitz was saying when he said make it softer, all other
6 variables held equal. All other variables are not being held equal in these
7 proceedings, and so the softer means safer logic simply doesn't hold up.
8 And we can see that in the real-world examples, for example, in paintball.
9 And so here on Slide 19, this is another excerpt from the Airsoft
10 Question and Answer book. And what does it tell us? It tells us that
11 paintballs are going to hit harder in almost every case because they are much
12 more massive. So paintballs have more mass, so paintballs are going to hit
13 harder. And again, we even see that in evidence submitted by the other side,
14 Petitioner here. This is one of the studies. I don't know, Judge Jung, is this
15 the study that you were referencing or is it a different one?
16 JUDGE JUNG: No, it's the one that, I guess, the article cited by
17 the Petitioner in their petition about causing serious injuries.
18 MR. DARBY: Okay. Was it Exhibit 1005 by chance?
19 JUDGE JUNG: Let me take a quick look. It was -- the article's
20 about -- let me see. Yeah, this looks like 1019, 1020.
21 MR. DARBY: Okay. That may have been the --
22 JUDGE JUNG: The injury to the eye --
23 MR. DARBY: Let me just check one quick, because I really want
24 to make sure I answer your question directly. Okay. This is the California
25 Senate Report. This is one of the documents that, as I was pointing out

1 earlier, it doesn't turn out to be about Airsoft. What this is talking about is
2 about BBs, and it's going to the idea of when you're far more massive, then
3 yes, you're going to ratchet up the kinetic energy.
4 We see that here on Slide 20. This is one of the medical journals
5 that the Petitioner entered into the record. And what we see is that the
6 Airsoft pellets here didn't cause any of the ocular injuries, caused globe
7 rupture. But two of the paintball specimens that you see in rows PE-7 and
8 PE-8, those two specimens did cause the injuries. And again, so paintballs,
9 they're heavier, they're more massive. They also are softer. They also break
10 apart on impact, just like Spitballs, Judge Dougal, to your point. And yet
11 they're more harmful, so there's more of an injury risk there.
12 So, we can't just say that softer means safer. And when we go
13 back to the petition, that breaks down the logic, because we didn't have a
14 comparative there. And so that's a real problem for them.
15 Okay. So that's the softer means safer bucket. If there are no
16 further questions on that, I'll move to my third bucket of problems, which
17 was the Spitballs bucket of problems.
18 I'll move back to Slide 6. So even setting aside everything else
19 that we've talked about so far, Petitioner still can't prevail on their
20 motivation to combine, because they haven't established that the super-
21 absorbent polymers taught by this reference would be something that a
22 skilled artisan would view as one of the finite options that would be safer
23 and suitable ammunition for the kind of Airsoft gun that Peev teaches.
24 So I'll go through a couple of these arguments here. The first thing
25 goes to the reference saying that Spitballs absorb water, meaning they're

1 liquid filled. And I mean, we see now that there's some argument from the
2 other side about, well, they're not liquid filled because no liquid comes out.
3 They absorb the water; they are filled with the water. Whether the water
4 comes out or not on impact doesn't really matter.
5 They are filled with liquid. The ASTM standards about Airsoft tell
6 us to use non-liquid filled -- non-metallic, non-liquid filled ammunition. So
7 why would a person of skill in the art go out of their way to defy the
8 standards for something that isn't even going to give necessarily a safety
9 benefit and something that's never before been used in Airsoft, and when we
10 all know that there are very well-established solutions for preventing injuries
11 in terms of wearing a protective gear? We said that the person of skill in the
12 art wouldn't do that.
13 Second, and again, reading from the slide, tells us that Spitballs are
14 designed to explode into mushy pieces when you throw them. That's the
15 premature breakage problem. And there's some talk about the person of skill
16 in the art being able to change the gun. Again, why do you do that when
17 there are these other measures that are known to be very effective? Why do
18 you go through -- why would a person of skill in the art try this new kind of
19 ammunition that then requires redesigning the entire gun?
20 On the other hand, if we're going to be talking about changing the
21 ammunition to somehow make this work, Judge Dougal, you picked up on
22 this, the trade-offs. We don't see anything about any of the trade-offs in
23 terms of Dr. Reitman's declaration.
24 And I think if you look very closely, even at the testimony that
25 Counsel just put up, when the experts are saying that you could change these

1 characteristics, what came out during Dr. Reitman's deposition is that there
2 are, in fact, trade-offs. You want to up the crosslink density because you
3 want to up the strength. Well, it has an inverse relationship with hardness
4 and softness.
5 So you're going to make it harder, not soft anymore, you're going
6 to make it hard as you change this crosslink density. You want to make it
7 smaller so you can partially hydrate it. That's trade-offs too. It's going to be
8 harder. It doesn't have as much time to swell. It doesn't swell up with as
9 much water. It's going to be harder.
10 So again, the trade-offs haven't really been addressed here at all.
11 And whether we're talking about downgrading the gun somehow to apply
12 less force or changing the ammunition in some way, again, we're talking
13 about could have, not would have been motivated to.
14 Third, and as noted at the bottom of the slide, now we're coming
15 around to the kinetic energy piece of this. Spitball tells us that it grows up to
16 about 0.6 inches in diameter. So a little bit more than 15mm. And
17 Petitioner's chemistry expert, Dr. Reitman, says, well, Spitballs weigh about
18 1.84 grams. And that's 14 times the weight of an Airsoft BB, which can be
19 0.12 grams or sometimes even less. That 14 times difference in mass
20 matters when we're talking about kinetic energy.
21 As we turn to Slide 21. So the experts agree that kinetic energy is
22 the cause of injury, effectively. As you ratchet up the kinetic energy, you
23 have more potential to cause harm. And Dr. Kudrowitz explains here that
24 kinetic energy was a conventional approach for evaluating safety. And as
25 we see on Slide 22, just summarizing up some of the evidence, evidence on

1 both sides of the docket talks about kinetic energy and really promotes that
2 as being one of the conventional approaches.
3 So on Slide 23, we finally get to the punch line here. It's
4 undisputed that compared to Airsoft ammunition, the softer Spitballs
5 polymers are more than 14 times heavier and thus carry that much more
6 kinetic energy. So the person of skill in the art using the conventional
7 approach is going to look at Spitballs and think of them as being more likely
8 to cause injury, not less. And again, much closer to a paintball than anything
9 else, which was known to cause more harm.
10 And so there was some talk here about the case in chief never
11 being about a 15mm Spitball and actually being about a 6mm Spitball.
12 That's not right. They specifically relied on the as-disclosed characteristics,
13 and not just the characteristics of the Spitballs reference, the soft mushy and
14 all that stuff, also the dimensions. The dimensions are the basis for Dr.
15 Reitman's analysis for concluding that Spitballs discloses an SAP.
16 So they can't get away from the actual disclosure of Spitballs in
17 terms of saying that they never built their case in chief on that. They
18 actually did. They're talking about changing the size of the ammunition.
19 Okay. We needed to see the analysis in the petition. We could have used
20 the same dimensions that we ended up using for our kinetic energy analysis,
21 the dimensions that were given to us by reference and by their expert, we
22 could use that to analyze this alleged hypothetical 6mm Spitball.
23 JUDGE JUNG: Just to verify, that's because they just quoted
24 directly from Spitball, and there's no reason to modify the size of the final
25 Spitball products in Peev, is that correct?

1 MR. DARBY: I think we're getting to motivation to do it, right?
2 We're not talking about, okay, so we're going to use a new, radically
3 different ammunition nobody's ever used before. Now, we've got to draw
4 the chemists to make these changes to it somehow. We have all these trade-
5 offs that we haven't really analyzed.
6 And I think another thing here is that in the petition we don't have
7 the analysis. Where is the comparative analysis? Even in the reply, right?
8 They brought back another expert. They didn't bring back Mr. Delman. We
9 don't know why. But they had another expert come in and she's a ballistics
10 person. We don't think she's a person of skill in the art, but she's a ballistics
11 person, and yet we still didn't see any comparative analysis. Surely it should
12 have come into play there. We still don't see it, even with the 6mm Spitball.
13 So we think they have a big problem here. So why would someone pluck
14 the Spitballs teachings --
15 JUDGE JUNG: Would it correct to say that your position is if we
16 think the Petitioner did want to modify the Spitballs down to 6mm
17 ammunition, that 6mm SAP would still be heavier than the plastic
18 ammunition that it replaces?
19 MR. DARBY: I think that's a very real possibility. I mean, the
20 fact of the matter is I can't tell you for certain because I just don't know.
21 And I think when we don't know, I think that resolves in favor of the Patent
22 Owner who's not the party with the burden. And that was their burden to
23 show.
24 JUDGE JUNG: Okay.
25 MR. DARBY: Okay. So why would someone pluck the Spitball

1 teachings out of the sea of all these numerous other alternative options, when
2 Spitball show no sign of being safer or even suitable for Airsoft at all. We
3 submit that they wouldn't. And if we turn to Slide 31, we get to the finite
4 options. This is not a case where there are a small number of options
5 available. This is not a case where it was proven that there was a finite
6 number of options available. That's not what the Petitioner proved and that's
7 not frankly what the evidence shows.
8 The testimony from Petitioner's technical expert is Mr. Delman.
9 This is the only evidence they have on this. They have Mr. Delman's
10 testimony. It's right here on the slide. They put it up earlier in the
11 presentation. It's got some real problems. It's conclusory. It only pares
12 back the attorney argument from the petition. And it doesn't identify the
13 purported finite options. It gives us a broad, open-ended list with four broad
14 categories of polymers.
15 He doesn't say that these are only the types of polymers that would
16 work. We have underlined the word including here as an open-ended list.
17 For all we know, he thinks they're more. We just don't know. He doesn't
18 analyze these different categories to say anything about how big or small
19 they are or how a POSITA would -- a person of skill in the art would look at
20 them. We just don't know.
21 But the evidence on the right-hand of the slide, I think, is telling us
22 what we all intuitively know, which is that there are many different types of
23 polymers out there. It's not a small number. And I heard Counsel say, well,
24 we don't know how many of these polymers are suitable for Airsoft. Well,
25 again, they're the party with the burden. If they wanted to tell us that only a

1 small subset of the known polymers out there are suitable for Airsoft, they
2 could put the evidence in for that. We don't see the evidence from them.
3 JUDGE POWELL: I hesitate to ask this question because it's an
4 arguably bizarre philosophical question about the law. You said you're not
5 sure if there are a small number. The pivotal word is finite, though. And
6 there may be a difference between finite and small. Do you think the
7 Supreme Court meant small when they said finite? Do you think that's the
8 way for us to view that language from the law, or does finite really just mean
9 known? I mean, I think the denotation of finite, or at least one definition,
10 would be a known number, even if it's big.
11 And like I say, I'm way off the factual record here, but, hey, maybe
12 we'll spend a minute or two on philosophy and I'll get any thoughts you
13 might have on that.
14 MR. DARBY: That's a great question. I think it's interesting. I
15 was thinking the same thing, and I was just grabbing my slides here because
16 I think we have a slide on that. What I think the law is talking about there is
17 a small or easily traversed number of options. So this is our Slide 32, and
18 this is from the Ortho case that we have here on the slide.
19 So I agree with you. In a vacuum, finite could mean big or small
20 as long as we know how many they are. I would say we don't even know
21 how many they are. So I think they have a problem even with finite. But I
22 also think they have a problem with small and easily traversed, which is
23 what I think the law is talking about.
24 JUDGE POWELL: Thank you.
25 MR. DARBY: Okay. Absolutely. So with that, I'm going to

1 pause here and turn over the podium to my colleague, Mr. Shneidman, to
2 talk about objective indicia.
3 MR. SHNEIDMAN: Thanks. Thank you, Your Honors. Jeffrey
4 Shneidman, on behalf of Patent Owner. If we go to Slide 38 here of the
5 Patent Owner's demonstratives, I'd like to switch gears a bit and would like
6 to discuss the objective indicia, also known as the secondary considerations
7 in this case. And here what we have on the screen is a figure from the '282
8 and '683 Patents, as well as one of the Xploderz products from the Xploderz
9 Blaster product line. There's no dispute that the Xploderz Blasters practiced
10 Claims 8, 19, and 20 of the '282 Patent or for 5, 8, 9 of the '683.
11 There's no dispute that the Xploderz launched in the marketplace
12 less than a year after the invention date of the patent back in late 2010, early
13 2011. Now, the reason that the Federal Circuit has called objective indicia
14 evidence, quote, "often the most probative type of evidence," a quote we're
15 familiar with, is it's found in the words themselves, objective indicia. And
16 objective indicia give us wisdom. They provide the ability to go back in
17 time to look and see contemporaneous to the creation of the patent what
18 other sources of information say about whether the invention was obvious or
19 not.
20 And the law supports the idea of looking, for example, to the
21 marketplace's embrace of the Xploderz patent practicing product as
22 corroborating evidence when we're challenged with the idea that this would
23 or would not have been obvious back in 2010. And so I want to jump to
24 actually what is the specific dispute here in the interest of time.
25 If I could go to the Petitioner's demonstratives, this is an Exhibit

1 1054, Slide 54 of Exhibit 1054. And the heading on Slide 54 is that the
2 Patent Owner ties more distance and more ammunition to specific claims.
3 That's right. We do. There is uncontested record evidence that the Xploderz
4 patent practicing products were praised because of the distance and the
5 ammunition benefits from the '282 Patent Claims 8, 19, 20, and '683 Patent
6 Claims 5, 8, 9.
7 Patent claims are about structure. And here, there is specific
8 structure that is claimed in the '282 Patent. To paraphrase from '282, 19 and
9 20, for example, it's a piston disposed within and axially aligned with an air
10 compression chamber. We have a spring arranged with a biasing force
11 sufficient to make that piston move forward and force air out to force air
12 through the air compression chamber to accelerate and launch an SAP. In
13 other words, pull back, release and let the SAP ammo fly. That's what the
14 structure is providing.
15 And that structure had a benefit. And the benefit was the
16 astounding distance, that's a quote, compared to what was on the market. It's
17 a similar story for the feed chamber claims. More ammo that allowed you to
18 outlast your competitors than using standard blasters. And it's undisputed
19 that the benefits came about because of the structure of the patent claims.
20 And what I mean by undisputed there is the Petitioner isn't saying that, oh,
21 these distance advantages came from some other aspect of the claims. In
22 fact, the Petitioner's expert is almost silent on the objective indicia.
23 So the dispute here is that the Petitioner claims that more distance
24 and more ammo are unclaimed features. No, those are comparative
25 statements. Those are describing how the advantages were of the Xploderz

1 versus what was on the market at the time. And there are advantages
2 brought about by the claim structure. They're not themselves structure. The
3 claims don't recite more distance and more ammo. But the results and the
4 praise are for the more distance and the more ammo that's linked to the claim
5 structure.
6 So when the Petitioner says on the slide that the Patent Owner ties
7 more distance and more ammo to specific claims, we absolutely agree.
8 If I could go to the law, which is in our demonstratives Exhibit
9 2204, Slide 49. Another example is the WBIP case. The Federal Circuit,
10 now Chief Judge Moore, wrote about a claimed combination with results
11 from the low carbon monoxide emission marine genset. And the praise was
12 for the results. And if you look at 829 F.3d 1335, the praise is these
13 generators will save lives. Now, does the patent claim recite saving lives?
14 No. But does that mean it's not objective evidence? No. As the Federal
15 Circuit said, this is strong evidence of the significance of the value in the
16 claimed inventions and it weighs in favor of non-obviousness.
17 So, to relate this to our case, in the interest of time, I think I will
18 point to one set of evidence. And, in particular, I'll point to -- I'm going to
19 go from Exhibit 2015, paragraph 135. I say that for the record. This is just
20 Dr. Kudrowitz summarizing some of the case evidence. And what he says is
21 that the industry praise has a nexus to the Common Maya Practiced Claims.
22 For example, statements praising the distance, including the
23 astounding 100-foot range, the ammo that is made from a super-absorbent
24 polymer, where to fire you pull and release a spring-loaded lever, ties to the
25 invention itself and the quote, "astounding result achievable by the

1 invention."
2 And as popular science noted, a praised benefit brought by the
3 Xploderz firing mechanism was a range, quote, "farther than all other toy
4 guns." Dr. Kudrowitz goes on to explain how this is tied to the invention.
5 He explains the astounding distance as a result of the increased force acting
6 on the type of ammunition.
7 Dr. Kudrowitz has a PhD from MIT in mechanical engineering.
8 His master's thesis was on an exploration of blasters, of projectile toys. This
9 is his domain, and he is linking -- he's explaining why it is that this praise
10 about this astounding distance from the spring-loaded lever that ties to this
11 piston, actually aligned and launched with the spring biased in a certain way.
12 It's true also for commercial success. From paragraph 200 of the
13 same Exhibit 2015, he's describing testimony from Ron Brawer. Ron
14 Brawer is one of the inventors on these patents. He's not associated with
15 either the Petitioner or the Patent Owner or Hasbro, the exclusive licensee.
16 He was the founder of Maya Group, and one of the things that he says is,
17 when the Maya Group released the Xploderz product in 2011, how did the
18 firing range of that product compare to the other blasters? And he says we
19 were double the range, if not more.
20 Question: how did your ability to achieve double the firing range
21 of your competitors' products impact yourself? Answer: I believe that's
22 what was driving consumers to want Xploderz positively. And we see that.
23 If we could go to our Slide 41, and I won't read it, in that we're on the public
24 record here. But I'll say, Dr. Kudrowitz's place is what you're seeing here in
25 the context of the toy industry.

1 At Exhibit 2015, at paragraphs 151 to 164, it is a, quote,
2 "phenomenal success." The other slides continuing forwards, Slide 42,
3 shows that the Xploderz were the number one selling boy toy in the spring at
4 Target when it launched; 43 shows sales of the Xploderz product as if it had
5 been placed in the lineup of the market leader at the time.
6 So this is, again, all showing, and there's no dispute that this was
7 related to the commercial success of the product. And I guess I'd just like to
8 close, noting the time and the quote from a particular case, again, the WBIP
9 case, that I think is applicable. And the reason I think it's applicable is we
10 are here, what's before the Board, is a case where the evidence of objective
11 indicia, the advantages flow directly from the structure that is claimed. And
12 it's the combination, the combination of the as-claimed ammunition with the
13 as-claimed blaster in the particular way.
14 And this is what Judge Moore said in WBIP. The obviousness
15 analysis involves determining whether the claimed invention as a whole
16 would have been obvious. This is especially true for situations like those at
17 issue here where the claimed invention is, admittedly, a combination of
18 elements that were known individually in the prior art. Commercial success
19 can be linked to the inventive combination of known elements. And these
20 are fact questions to which we must give difference on appeal.
21 Slide 54 of the Petitioner's demonstratives sums up the Patent
22 Owner's objective indicia case. You know, we have tied the praise and the
23 commercial success to these certain claims. We have shown the evidence is
24 linked to, or as the Petitioner says here, ties to the inventive combination.
25 Thank you.

JUDGE POWELL: Thank you. You have ten minutes for rebuttal.

MR. GEORGE: Thank you, Your Honor. So I'd like to start with talking about the Patent Owner's inability to show a nexus. Could we go to Slide 55 of the Petitioner's demonstratives? Actually, let's go to --

JUDGE JUNG: Before you go on --

MR. GEORGE: I'm sorry?

JUDGE JUNG: Quick question just before you proceed.

MR. GEORGE: Sure.

JUDGE JUNG: The original proposed modification, it did not propose any actual modifications to the gun and feed itself, correct?

MR. GEORGE: Actually, in the petition, what our expert said was you could modify the gun, or you could modify the SAP. You could do either one.

JUDGE JUNG: Okay. Did he propose any modifications to the gun itself, or any explicit modifications?

MR. GEORGE: Yes. He explicitly said if there was a problem with breakage, you could just reduce the spring pressure. That's in his -- that's in the petition.

JUDGE JUNG: There was no modification to make it a toy, correct?

MR. GEORGE: The modification, it might make it a toy, it might not make it a toy. I'm not sure what the definition of toy is in this context.

JUDGE JUNG: Does Peev call its gun a toy?

MR. GEORGE: It does, actually. So what Peev says is that, yes,

1 you can use it. This is Exhibit 1003, page 23. It finds application in the
2 sporting gun industry and are used for military emulations or training, or for
3 fun when conducting Airsoft games. If you're doing it for fun, it's a toy.
4 And this --
5 JUDGE JUNG: Is it meant for young kids?
6 MR. GEORGE: I'm sorry?
7 JUDGE JUNG: Do you think it's meant for young kids when it
8 talks about the Airsoft games?
9 MR. GEORGE: Yes. We know that Airsoft was used -- let's take
10 a look at -- let's take a step back. All of the injuries are in teenagers. These
11 were being used by teenagers. This is the problem with Patent Owner's
12 position. Patent Owner reads Peev and says, it's for Airsoft games,
13 regulated, for military simulations. That's what it's all about. That's not the
14 reality. The reality is is that kids were using these, teenagers were using
15 these, and they were getting hurt. And that was a problem that needed to be
16 solved. And that's our problem.
17 And there's plenty of evidence of that. The ASTM standard that
18 they cite says exactly that. It says -- and let's go to Petitioner's Slide 10. It
19 says even low energy air guns, even low energy, are causing serious injury.
20 And this serious injury, as I explained this morning, when I was talking
21 about Exhibit 2118 at page 5, resulted in hospital admissions. Airsoft was a
22 danger to teenagers. That's who were using it. That was the problem. The
23 problem wasn't -- let's just take a look at the Slide 16 rebuttal. If you look at
24 Patent Owner's Slide 16 --
25 JUDGE JUNG: So you would agree that the toy standard would

1 also apply to Peev?
2 MR. GEORGE: Say it again?
3 JUDGE JUNG: Would you also agree that the toy standard would
4 apply to Peev?
5 MR. GEORGE: Yeah. I mean the toy standards, there's toy
6 standards for projectile launchers, for Airsoft guns, there's kind of mixing
7 them all up, and that's okay. The bottom line here is what they're focused
8 on, what they want you to focus on, is not the teenagers that were getting
9 hurt. They want you to focus on the use in training. Let's go to the next
10 slide.
11 JUDGE JUNG: Focus on the teenagers getting hurt.
12 MR. GEORGE: I'm sorry?
13 JUDGE JUNG: Let's focus on the teenagers getting hurt.
14 MR. GEORGE: Yes.
15 JUDGE JUNG: Okay. So we have a BB Airsoft gun, the -- you
16 apply the ASTM standard. And on top of that, you apply the toy standards.
17 And on top of that, you apply this recommendation to wear goggles. And on
18 top of that, you know, you have this small plastic BB, low power. And
19 despite all those precautions, your argument is one of ordinary skill still have
20 looked at the ammunition itself. Change it out for something that might be
21 better because it's softer.
22 MR. GEORGE: Yes.
23 JUDGE JUNG: And we don't know if it's going to actually be
24 Patent Owner's position. It would have been heavier because plastic that it
25 replaces is actually lighter.

MR. GEORGE: If you go with their 15mm, which we weren't going with. It was 6mm --

JUDGE JUNG: Even if we go down to the 6mm, it sounds like that, the SAP ammunition might still have been heavier.

MR. GEORGE: It might have been heavier, but what the hard plastic Airsoft ammunition didn't do was bounce or break apart into mushy parts on impact. That's a teaching they ignore. They even used ellipses to ignore it. And that's the critical teaching here. There's a teaching that SAP can be used as ammunition for a blow gun. And that's an air powered gun. And they've disclaimed the broadest claims that cover that. And then there's a teaching that it's going to break apart on impact. And it's for kids ages 3 and up. So we know it's safe.

JUDGE JUNG: Okay. Now you brought a little doubt in my mind. Is the SAP ammunition heavier or lighter or the same weight as the ammunition that it replaces? What do you think?

MR. GEORGE: It can't -- it actually doesn't matter. Let's assume it's heavier.

JUDGE JUNG: Okay.

MR. GEORGE: The big difference is you don't just look at kinetic energy. Even that slide they showed, it said if the kinetic energy is too high, ASTM said, you use a resilient material. That's exactly -- so even if Spitballs weighs more, the question -- well, it's not you look at the kinetic energy and just stop, no. ASTM standard says, you look at the kinetic energy, if it's too high, make it resilient. I mean, that's a clear motivation in the yard to look at the ammunition and change the ammunition.

1 So you look around, what ammunition do you have? And it is a
2 finite number. You have Spitballs teaching SAP ammunition that breaks
3 apart on impact. You have rubber bullets and maybe cork, and there's not
4 much else. And the SAP ammunition is right there. It makes it so -- you
5 could shoot it with a blow gun. It could be air powered and it is soft. It
6 breaks apart on impact. It's good for 3-year-olds.
7 JUDGE DOUGAL: So are you saying -- this is Judge Dougal
8 again, that -- and going to Spitballs, right?
9 MR. GEORGE: Yes.
10 JUDGE DOUGAL: If you took an Airsoft BB and blew it out of a
11 straw, you're saying it's necessarily the Spitballs are safer than a small
12 plastic BB?
13 MR. GEORGE: Yes, because the small plastic BB is not going to
14 break apart into mushy parts. It's just not going to happen.
15 JUDGE DOUGAL: But if it's heavier -- like, are there too many
16 variables for us to say, yes, necessarily one of skill in the art would have said
17 this is safer?
18 MR. GEORGE: You know, they argue about that our experts said
19 could have if they cite a paragraph. If you read a few more paragraphs later,
20 he sums it all up and he says would have. Was it obvious to try, it certainly
21 was. It certainly was. You have an Airsoft gun that's causing injuries in
22 teenagers. There's no question about that --
23 JUDGE DOUGAL: Would you make an obviousness argument in
24 your petition?
25 MR. GEORGE: No, we made the argument under KSR, and I can

1 go through that argument. Was there a problem, and this is Slide 6 -- Slide 4
2 rather, Patent Owner's Slide 4. There was a problem.
3 JUDGE DOUGAL: I mean, I feel like I only need to determine is
4 it safer, right? You talk a lot about this and that, but that just still seems to
5 be an open question is would one skilled in the art still determine that your
6 last item is safer?
7 MR. GEORGE: Your Honor, the standard is a reasonable
8 expectation of success. It was reasonable for one of ordinary skill in the art
9 reading the Spitballs reference, seeing it was good for kids 3 and up, and I'm
10 seeing it broke apart into mushy pieces. It was a reasonable expectation that
11 that would be softer than a hard plastic Airsoft ammunition. That's common
12 sense, especially when that same worker knows that hard plastic Airsoft
13 ammunition is putting people in the hospital. That's undisputed. That's their
14 article. It's putting kids in the hospital.
15 JUDGE DOUGAL: Isn't this -- I'm still struggling with this apples
16 and oranges thing, right? Because you're talking about it's necessarily softer
17 because Spitballs talks about blowing it through a straw. You know, I don't
18 know what the pressure is blowing out of straw, but that does not compare
19 anything to an Airsoft gun shooting a --
20 MR. GEORGE: Your Honor, it's the exploding into mushy parts
21 on impact. It's all the kinetic energy and Dr. Courtney said -- and Dr.
22 Kudrowitz said a POSITA knew this. All that kinetic energy is being
23 dissipated, and these calculations are wrong. Where's the calculation about
24 the mushy parts? They didn't do that. They're -- the bottom line here is s
25 that the one of ordinary skill in the art need a reasonable expectation of

1 success.
2 He knew that hard plastic ammunition was putting kids in the
3 hospital. He knew that there was a new ammunition called Spitballs that
4 would explode into mushy parts. He went to the chemist, one of the
5 workers -- we all agree, he can go to a chemist and the chemist said, yeah, I
6 can make it 6mm. I can make it so it comes out of the gun. I can make it
7 however you want. I mean, there's a reasonable expectation of success that
8 you're going to have something softer. That's the evidence. And again --
9 JUDGE JUNG: Mr. George.
10 MR. GEORGE: I'm sorry.
11 JUDGE JUNG: It seems like you're pushing the burden back on
12 the path over here. It's not up to the Patent Owner to show that it's going to
13 dissipate its kinetic energy on impact. It's up to you to show how much of
14 that kinetic energy is going to be dissipated. How much less kinetic energy
15 is going to be dealt with on impact versus a plastic BB?
16 MR. GEORGE: Okay. Is that what we're learning here? I think
17 we fulfill a burden. We have plastic ammunition that's putting kids in the
18 hospital. We have soft SAP ammunition that breaks apart on impact that
19 he'll tell you was good for kids 3 and up.
20 JUDGE JUNG: Only if it came out of a blow gun, not an Airsoft
21 gun.
22 MR. GEORGE: I mean, if we're looking -- I don't think our
23 burden was that we absolutely had to prove that it was safer under all
24 circumstances. The --
25 JUDGE JUNG: It's still a bit safer --

MR. GEORGE: What's that?

JUDGE JUNG: You still have to prove it's safer with the Ubisoft gun -- with the Airsoft gun of Peev.

MR. GEORGE: I think there's a reasonable expectation of success, Your Honor, that we've proved by showing this evidence. And also this Airsoft gun, the high-powered, he even said it goes from 100 to 500. So this focus should not be on the military uses. It should be on the teenagers.

JUDGE JUNG: Okay. Yeah, we're focusing on the teenagers.

MR. GEORGE: I'm sorry?

JUDGE JUNG: We are focusing on the teenagers. Could you show it's actually safer for the teenager?

MR. GEORGE: I mean, if you're showing that we have to prove absolute success, that's not the law.

JUDGE JUNG: Did you show it's actually safer? Is it safer?

MR. GEORGE: We have SAP experts, their SAP expert and our SAP expert, saying you could do it and reduce injury. We have Dr. Kudrowitz saying that if you make it softer, if you spread it out -- I'll just put it up there, if it's spread out, it will reduce injury. We have the admissions. Yeah, let's go to Slide 40.

JUDGE POWELL: So we're a little over time and that's due in large part to the panel here. I'm going to let it run a little bit, but let's try to wrap it up.

MR. GEORGE: Okay. I would just go to Slide 40. This is our expert, Dr. Courtney. This is the evidence we have. All of the kinetic energy used to deform, fragment, and scatter the SAP projectile is not

transmitted to the target. This reduces injury potential. She said this. Dr. Kudrowitz said this. And a SAP projectile -- this is exactly what you're asking. A SAP projectile compared to projectiles with similar kinetic energy, but do not deform, fragment, or scatter.

JUDGE JUNG: The only problem I have with this is that we just discussed the SAP ammunition versus the plastic ammunition that it's going to replace. It kind of indicates that SAP ammunition might actually be a little bit heavier, right? So it's not exactly the same kinetic energy comparison.

MR. GEORGE: It's not --

JUDGE JUNG: You want us to say the difference between the two kinetic energies would be made up for by the scattering, deformation, and fragmentation, but this testimony doesn't actually say that. Is there something else you have to kind of close that gap?

MR. GEORGE: I have the admission by Dr. Kudrowitz that if it scatters, it will reduce.

JUDGE JUNG: Okay.

MR. GEORGE: Yeah.

JUDGE JUNG: Reduce below what was the original kinetic energy of the original BB in Peev?

MR. GEORGE: No, we didn't -- no.

JUDGE POWELL: Thank you. So we ran a little four minutes over on the Petitioner's side. Like I said, that was due in large part because we had lots of questions. I'm going to grant Patent Owner four additional minutes also, which leaves you with seven for your surrebuttal.

MR. DARBY: Thank you, Your Honor. Appreciate that.

JUDGE POWELL: Sure.

MR. DARBY: Can I begin?

JUDGE POWELL: Yes, when you're ready.

MR. DARBY: Thank you. And again, we appreciate the extra time. It's been a long day. I'm going to try to not use it. I'll try to be brief. But here's where I want to start. Too many variables. There are too many variables. And it was Petitioner's burden to show what those variables are and how they ultimately result in a safer Airsoft theory that they put forward in the petition. We just don't see it.

I heard Counsel's say obvious to try. Judge Dougal, you're spot on. Don't see obvious to try in the petition. They backed away from that. They just haven't made out their KSR case.

They can -- what we still didn't hear is that there's any evidence in the record that people were using softer ammunition in the context of Airsoft. So we're still talking about doing something that had never before been done in the art. And there's no evidence in the record as to why a person of skill in the art would make that unprecedented step and, by the way, run into all these roadblocks that require us to reconfigure the gun in some way and require us to engage a chemist and change -- now we're not even using what's in the Spitball reference. We're now having to change the SAP projectiles that are described in the reference.

And, you know, look, they say a person of skill in the art could have done it, could have done it, could have done it. They don't get to the why a person of skill in the art would have been motivated to do it. And

1 they didn't offer those particular theories in the petition. And we have to
2 hold them to what they said in their case in chief. And what they said in
3 their case in chief in the petition is that Spitballs are safer because Spitballs
4 are softer. And we've seen that that's not the case. So for that reason alone,
5 the petition fails.
6 And so, look, I'll just conclude here. Even if there was some sort
7 of injury problem with Airsoft, again, what we've seen in the evidence, the
8 evidence is telling us that what you did in that situation is use the protective
9 gear. Because there's so many variables, we don't know if there's any
10 particular injury. I mean, we haven't seen any concrete statement about a
11 particular injury that would be prevented if we used some variety of SAP-
12 based ammunition as opposed to Airsoft. We haven't seen a single concrete
13 statement about that.
14 So this idea that it would have been seen by a person of ordinary
15 skill as being a safer form of ammunition just hasn't been proven on the
16 record. And in fact, the only place where we see SAP put forward as being
17 the kind of ammunition that we're talking about here is in the patents
18 themselves. And that's, I mean, you all hear it all the time. I hate to say it,
19 it’s hindsight.
20 And I think what we have as a protector against hindsight is not
21 only the requirements for there to be a motivation to combine, but we also
22 have the objective indicia. We didn't hear anything about objective indicia
23 from Counsel. We saw very little about it at all in the petition, and we saw
24 very little about it in the reply. And we've addressed the arguments that
25 were raised. A lot of it is not even disputed. So for all those reasons, we

1 submit that these patents ought to be upheld, and that the Petitioner hadn't
2 carried its burden in these items.
3 JUDGE POWELL: I have one question to wrap this up. Well,
4 maybe. We'll see if it wraps this up. What would you say about Petitioner's
5 comments that the person of ordinary skill in the art would have had a
6 reasonable likelihood of success in implementing the SAP ammunition with
7 the Airsoft gun or the Peev Airsoft gun? What would you say about that?
8 MR. DARBY: Right. So we've argued in the -- apologies, didn't
9 mean to cut you off there. What we've said in the Patent Owner's response
10 and in the surreply as well is that to the extent they're talking about going
11 down a road where we're changing the ammunition, we're doing things like
12 increasing crosslink density, that's the main thing. We asked Dr. Reitman,
13 what do you do if you want to make it stronger so that it can withstand more
14 compressive forces? She says, well, you increase the crosslink density.
15 Well, what happens if you increase the crosslink density? Well, that makes
16 it harder.
17 So, yes, they are between a rock and a hard place there. There's an
18 inverse relationship between those things. So if we're going down that road,
19 we have a very real problem with reasonable expectation of success. And
20 when you look at the testimony from these experts, they're not telling you
21 about the trade-offs. And that came out during deposition. And that is what
22 causes them to have a problem with reasonable expectation of success.
23 If we're going down this road about changing the ammunition -- if
24 we're talking about changing the gun, we have a different argument there.
25 Our argument there is, again, could have, not would have been motivated to.

Why are we downgrading the gun when Peev tells us we're trying to have this high-performance, automatic -- and it's an automatic fire electric Airsoft gun. It's supposed to be high performance. And we're talking about downgrading the gun in some way. A person of ordinary skill in the art would have been motivated to do that.

And we see in the evidence is that a person with skill in the art would have put on goggles, would have put on a mask.

JUDGE POWELL: Thank you.

MR. DARBY: Okay. With that, I'm happy to cede the podium.

JUDGE POWELL: I believe we're a wrap on the substance. It seems like my colleagues don't have any more questions. Thank you both, both Counsel, for staying focused on the issues we wanted to talk about in this very nuanced case. We appreciate that. And with that then, we will adjourn, go off the record, and handle perhaps some logistics for the day. And that's that for the record.

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

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