

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

AUTONOMOUS DEVICES, LLC,
Patent Owner.

IPR2023-01169
Patent 10,607,134 B1

Record of Oral Hearing
Held: October 2, 2024

Before BARBARA A. PARVIS, ROBERT J. WEINSCHENK, and
RUSSELL E. CASS, *Administrative Patent Judges*.

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The above-entitled matter came on for hearing at 1:00 PM EST on Wednesday, October 2, 2024, at the U.S. Patent and Trademark Office, via video-teleconference.

P R O C E E D I N G S

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JUDGE PARVIS: Good afternoon, everyone. This is a hearing in IPR2023-01169. The challenged patent is U.S. Patent Number 10,607,134 B1. I'm administrative Judge Parvis. Judges Weinschenk and Cass are also on the line.

At this time, we would like appearances for both parties for those who will be arguing today. If anyone else is attending in person or remotely, but will not be speaking, please identify them as well. We will start with appearances for the Petitioner.

MR. DEVOTO: Well, thank you, Your Honor. On the petition, representing the Petitioner today is myself, Roberto Devoto, and my colleague, Karl Renner from Fish & Richardson.

JUDGE PARVIS: Thank you. Now, Patent Owner.

MR. JAIRAM: Thank you, Your Honor. I'm Arvind Jairam on behalf of Patent Owner Autonomous Devices, LLC. And with me here is my colleague, Stuart McCommas. And I believe joining via the public link is my colleague, Scott Hejny. And additionally, client representative Jasmin Cosic is also joined via the public link.

JUDGE PARVIS: Thank you. The hearing today will be conducted in accordance with the schedule and guidance provided in the Order setting oral argument, which was entered on September 11th, 2024, as paper 37 in this proceeding. We will assume that you are familiar with the hearing order and we will not repeat the information in that order unless we think it may be helpful to the parties. We have the entire record, including the demonstratives of both parties. When referring to demonstratives, please

1 do so by slide number. If you encounter technical difficulties, please let us
2 know immediately. The court reporter will provide a transcript of this
3 hearing that will become part of the public record in the proceeding. If the
4 parties wish to discuss confidential information, please notify us before
5 discussing anything confidential. After the hearing today, we ask that you
6 stay on the line to answer questions that the court reporter may have.

7 The hearing order states that each party will have 60 minutes to
8 present argument in this case. We will start with Petitioner. Petitioner, do
9 you wish to reserve any rebuttal time?

10 MR. DEVOTO: Yes, we do, Your Honor. We would like to
11 reserve 15 minutes for rebuttal time.

12 JUDGE PARVIS: Thank you. Petitioner, you may begin your
13 arguments when you're ready.

14 MR. DEVOTO: Thank you very much. Good afternoon, Your
15 Honors. As I indicated, my name is Roberto Devoto and my colleague, Karl
16 Renner, and I will be representing Tesla at this hearing.

17 I would like to turn to slide 2, please. So, as shown in this slide,
18 we've identified 15 issues in dispute in this proceeding. Due to time
19 constraints, we will not be able to address all of the issues. We intend to
20 focus on a subset of them, but of course we stand ready to answer any and
21 all questions you may have on any of the issues, if helpful. I will speak to a
22 subset of the Thomas-related issues and motion to amend issues. And my
23 colleague, Karl Renner, will speak to a subset of the remaining issues,
24 specifically issues that are similar to the issues that were discussed in the
25 hearing on the '974 patent that occurred about two weeks ago that he
26 attended.

1 He will also, time permitting, talk about satisfying -- or speak to
2 the issue related to Thomas satisfying Claim 3, which, again, implicates
3 language similar to what was discussed during the '974 hearing. And time
4 permitting, he will speak to Thomas satisfying Claim 4 as well as Buehler,
5 the Buehler reference satisfying Claim 3.

6 Now, before turning to the prior art related issues, I'd like to briefly
7 go over the '134 patent disclosure and provide some observations about the
8 claimed subject matter. If we could please turn to slide 4, Your Honors. So,
9 as we noted in the petition, the claims of the '134 patent are closely related to
10 the process depicted in Figure 30 of the '134 patent, which is shown in this
11 slide. In some embodiments, this process first learns how a user controls an
12 avatar of a computer game and then uses that learning to later simulate that
13 user's control of the avatar. In these embodiments Steps 9105 through 9120
14 of the process produce a correlation between instructions and a set of
15 circumstances presented to the user by the computer game. The instructions
16 are the user's instructions for operating their avatar in response to the set of
17 circumstances. The set of circumstances are defined by a collection of
18 object representations that represent a particular configuration of objects
19 presented to the user by the computer game.

20 So, for example, Your Honors, the collection may represent a
21 particular configuration of opposing team avatars that are surrounding the
22 user's avatar and the user's response to perceiving that particular
23 configuration of avatars that is that set of circumstances that represent that
24 particular configuration of avatars, is to move their avatar backwards, for
25 example. And the resulting correlations, that is, correlations between the set
26 of circumstances and the user input in response to those set of circumstances

1 that are produced by Steps 9105 through 9120, are thereby learned by
2 monitoring the user's instructions for operating the avatar in response to
3 different circumstances that are presented to the user by the computer game.
4 Now, Steps 9125 through 9145 use the learned correlations to simulate the
5 user controlling the avatar. To accomplish this, the process simply compares
6 new circumstances with the previously co-related circumstances. And if
7 there's at least a partial match, accessing and executing the user instructions
8 that were previously co-related with those circumstances to thereby simulate
9 the user's control of the avatar.

10 So, for example, if the new circumstances represent a particular
11 configuration of opposing team avatars, that at least partially matches the co-
12 related configuration of opposing team avatars represented by the learned
13 circumstances, the simulated user may move their avatar backwards, just
14 like the actual user did in learning mode when presented with that similar set
15 of circumstances, and thereby the user, the simulated user's act, is simulating
16 the actual user.

17 Now, Figures 36 and 37 of the '134 patent provide example
18 embodiments of the Figure 30 process as applied to a 3D and a 2D computer
19 game, respectively.

20 If you could please turn to slide 5, Your Honors. So, here we see
21 in slide 5, independent Claim 1 of the '134 patent, which is a system claim
22 that references code that executes steps similar to some of the steps of the
23 Figure 30 process of the '134 patent. Now, notably, Your Honors, Claim 1,
24 unlike the Figure 30 process, does not reference how the recited correlation
25 was generated. Instead, it just focuses on how the correlation is used. So,
26 that is, its recited first step of, quote, accessing a first correlation assumes

1 that a first one or more instruction sets for operating a first avatar of an
2 application have already been correlated with a set of circumstances defined
3 by the first one or more object representations.

4 So, Your Honors, in this sense, it's important to note that Claim 1,
5 while it certainly encompasses the computer game embodiments of the
6 process of Figure 30, it's actually broader than those embodiments. So, for
7 example, Claim 1 does not require the correlation to have been determined
8 through any learning process whatsoever that monitors a user's behavior. A
9 computer game designer, for example, could have simply hard-coded the
10 correlation between the objects and the corresponding instructions.

11 If we could please turn to slide 6, Your Honors. So, slide 6 shows
12 that the grounds that we asserted in our petition against the claims of the
13 '134 patent. As you can see, the first two grounds are based on the Thomas
14 reference, and the third ground is based on the Buehler reference.

15 I'd like to begin by providing a brief overview of the Thomas
16 reference, emphasizing the similarity between the system disclosed by the
17 Thomas reference and the computer game embodiments of the Figure 30
18 process that are encompassed by the challenged claims. I will then turn to
19 the issues related to Thomas satisfying Claims 1 and 12 in particular,
20 followed by a subset of issues related to the motion to amend. And as I
21 indicated earlier, Your Honors, my colleague, Karl Renner, will then address
22 Thomas with respect to Claim 3, and time permitting, Buehler with respect
23 to Claim 3 and Thomas with respect to Claim 4. And as I indicated, that's
24 because these present issues that are similar to issues that were handled and
25 discussed during the '974 patent hearing that occurred previously that he
26 attended.

1 If we could please turn to slide 10. So, Your Honors, as shown in
2 this slide, Thomas provides teachings that frankly bear a striking
3 resemblance to the computer game embodiments of the Figure 30 process of
4 the '134 patent. Specifically, Thomas describes a series of techniques to
5 enable a multiplayer game that otherwise would require two human players
6 to play, to instead now be playable by a single human player. That is
7 Thomas's techniques can be used to provide a computer game with a single
8 player mode by providing additional processing that enables a second human
9 player to be accurately and realistically simulated. And as shown by the
10 quotes on the left side of this slide, Your Honors, like the computer game
11 embodiments of the Figure 30 process of the '134 patent, Thomas uses a
12 learning mode to generate and store correlations in a user profile that can
13 then be used to simulate that user in a computer game.

14 Now, these correlations as described in the cited quotes of Thomas,
15 logically link a user's input or instructions for controlling their avatar in the
16 game with a set of circumstances that represent a configuration of objects
17 presented to the user by the computer game. And that inspired that user to
18 provide that particular input or instructions. In other words, the instructions
19 are the user's reaction to the configuration of objects represented by that set
20 of circumstances. And the set of circumstances are described in Thomas as
21 using the words an event and/or situation where an event is an action that
22 occurs such as, for example, movement of an avatar or a calling of a timeout,
23 and the situation is expressly described in Thomas as the circumstances
24 surrounding that event.

25 So, in one example Thomas may store a correlation between user
26 instructions to their avatar to perform a pump fake and a representation of a

1 particular configuration of opposing team avatars surrounding that user's
2 avatar that inspired that user to want to have their avatar perform a pump
3 fake.

4 Now, these stored correlations are then used to simulate the user in
5 the computer game. Specifically, the Thomas system monitors the
6 circumstances that arise in the game during simulation mode in order to use
7 these previously stored correlations to simulate the user's control of an
8 avatar. Now, Your Honors, it is abundantly clear that in order to use the
9 correlations stored in a user profile, you simulate that user, the Thomas
10 system would have to assess at least some degree of matching between
11 circumstances that arise during simulation mode and the correlated
12 circumstances stored in the user profile. To do otherwise --

13 JUDGE PARVIS: So, Petitioner relies somewhat specifically on
14 some disclosure in column 8 for the dispute of the limitation in Claim 1,
15 specifically that disclosure is for current circumstances the simulator 120
16 records how covered the user was, and the user's location. During playback
17 mode 600, the simulator 120 will monitor for a shoot event and analyze the
18 location of the simulated user and the defensive coverage. If criteria is met,
19 then simulator 120 will invoke a pump fake. Is that correct? Is that what
20 Petitioner -- one of the disclosures?

21 MR. DEVOTO: That is one of the examples that's given in
22 Thomas as to how this would be met. But more broadly, Your Honors, it
23 simply doesn't make sense if the whole point of Thomas's system is to
24 accurately simulate a user's behavior. And to do so, what you've captured in
25 Thomas's system is a user input responsive to a set of circumstances
26 presented to that user. It doesn't make sense that when you're actually trying

1 to simulate that user during simulation mode, that when you're monitoring
2 circumstances that arise, that the circumstances that arise -- you would
3 understand that the circumstances that arise during simulation modes must
4 bear at least some similarity to the learned circumstances. Otherwise, it
5 wouldn't make sense to actually use the user's response to those learned
6 circumstances to simulate the user responding to the new circumstances. It
7 almost becomes a --

8 JUDGE PARVIS: Is this an inherency argument?

9 MR. DEVOTO: It's a -- it's a -- we would argue this is a
10 reasonable inference based on the context of Thomas, where Thomas's goal
11 is to accurately simulate a user, and to do it any other way would not achieve
12 that goal. In fact, it wouldn't simulate the user at all, right? If there's no
13 relationship between the circumstances that arose that inspired the user to
14 input those particular instructions and the new circumstances that arise, there
15 is no reason to use that user's input to simulate the users, you know, to
16 simulate the user, as that input has nothing to do -- it is not connected at all
17 to anything similar to the new circumstances that arise during simulation
18 mode. So, using the user's input makes no sense if you're trying to simulate
19 the user. It's logically nonsensical, Your Honors.

20 JUDGE PARVIS: Patent Owner has argued that there's a
21 conceptual difference in the disclosure in Thomas, because the top -- the
22 disclosure refers to analyzing to determine if criteria is met.

23 MR. DEVOTO: Yes, yes.

24 JUDGE PARVIS: Would Petitioner like to respond to that?

25 MR. DEVOTO: I would, indeed. In fact, I think it would be
26 helpful to respond to that if we could turn to slide 15. So, I'd like to respond

1 to that because it actually speaks to a form of argument that the Patent
2 Owner has regularly advanced. And I think it's particularly illuminating to
3 look at it relative to what Your Honors had preliminarily concluded in your
4 institution decision. So, if you look at your institution decision, Your
5 Honors, you had preliminarily concluded that Thomas's system does
6 indeed -- would be understood to perform matching. And to support this
7 conclusion, Your Honors relied on various statements of Thomas. And
8 importantly, when you relied on those various statements of Thomas, your
9 analysis and consideration of these statements considered the context of the
10 statements and the reasonable inferences that could be drawn from that
11 context to develop your understanding and your conclusion as to why
12 matching was disclosed in Thomas.

13 And this understanding, as reflected in the reasoning that Your
14 Honors advanced, includes, 1) that the goal of Thomas's system is to
15 simulate a user's control of an avatar in a computer game, 2) that to select an
16 appropriate learned user input for executing during Thomas's simulation
17 mode criteria must be matched, and 3) that this criteria would be understood
18 to be matching criteria used to assess whether the new circumstance
19 presented during simulation mode matches the learned circumstance that
20 inspired that user input during learning mode. And let's be clear, Your
21 Honors, you pointed quite clearly to a statement in Thomas that was
22 important to the analysis, right? And that statement is, quote, if, and this is
23 the statement, the simulated user is located in the typical spot for catch and
24 shoot, then the simulator 120 will have the simulated user immediately shoot
25 the ball after the catch.

26 So, as Your Honors recognized from this statement, this statement

1 itself, when considered in context, envisions performing a matching analysis
2 between new circumstances and learned circumstances, specifically where
3 the new circumstances include the location of the simulated user's avatar
4 during simulation mode, and the learned circumstances include the learned
5 location of the actual user's avatar, and specifically, the matching analysis
6 would consider whether the new location matches the typical spot. That is,
7 it matches the learned location where the actual user typically instructed the
8 user's avatar to perform a catch-and-shoot, and if this matching criteria is
9 met, that is, if the simulated avatar's location matches the typical spot, the
10 simulated user's avatar would immediately perform a catch-and-shoot, and in
11 doing so would thereby, of course, simulate the actual user and performance
12 function of accurately simulating the user. And Your Honors, in the context
13 of a system like Thomas, that is attempting to accurately simulate a user's
14 control of an avatar --

15 JUDGE PARVIS: (CROSSTALK) --

16 MR. DEVOTO: Yes, mm-hmm.

17 JUDGE PARVIS: The Institution Decision noted certain
18 disclosures of Thomas.

19 MR. DEVOTO: Right.

20 JUDGE PARVIS: And it was obviously at a preliminary stage
21 before we had, you know, the full record before us.

22 MR. DEVOTO: Right.

23 JUDGE PARVIS: We just determined, you know, we didn't have
24 the full record and we did not make any determinations regarding
25 preponderance of the evidence. The standard was different at the institution
26 stage.

1 MR. DEVOTO: Yes.

2 JUDGE PARVIS: At this stage, with respect to the conceptual
3 difference, so how is -- what is Petitioner's argument then that -- how does
4 Petitioner respond with respect to the conceptual difference that Patent
5 Owner raised in its Patent Owner Response?

6 MR. DEVOTO: So, we don't think there is a conceptual
7 difference. What Patent Owner did was identify, basically assert that --
8 Patent Owner asserts that the identified statements that we pointed to in
9 Thomas, and that also Your Honors pointed to, don't include what I'm going
10 to call the magic words, which are the words that are in the claim. So, in
11 this case, the magic words would be "match" or "matching." That instead
12 the words use a different word. They use a different word, analysis, and the
13 word criteria. And these words are not the same as matching. And then if
14 you look at what they say, now that they've concluded the words aren't the
15 same, then frankly, Your Honors, they conclusorily assert, and without
16 regard to the context of these identified statements, that the statements of
17 Thomas are therefore directed to different concepts. And then they rest their
18 case.

19 At no point do they consider the reasonable inferences that are
20 drawn of what it means to do an analysis and matching in the context of a
21 system that is trying to attempt to accurately simulate a user controlling an
22 avatar on the computer game. That in fact, it's nonsensical, and I repeat
23 again, the notion that it is nonsensical to deem a system like Thomas that
24 when it's doing its simulation mode, to not draw at least some degree of
25 matching, i.e., similarity between new circumstances that arise and
26 previously learned circumstances that were correlated to previously learned

1 instructions responsive to those circumstances, that in simulation mode,
2 when new circumstances arise, to not consider a matching to those
3 previously learned circumstances being at least some degree of similarity as
4 being critical to then using that correlated learned input that was responsive
5 to those learned circumstances as the input that they would use in response
6 to that new circumstance. Because if there is no similarity between the
7 circumstances --

8 JUDGE PARVIS: Did you -- did Petitioner depose Patent Owner's
9 expert on this issue?

10 MR. DEVOTO: We did. We deposed the Patent Owner's expert,
11 certainly. Did we characterize and frame it in this way, perhaps not, but I
12 think it's implied in how we argued. And I think it's again, it seems
13 incredible to assert that there wouldn't be a degree of similarity. So, really,
14 we're just putting a fine point on arguments that we already made.

15 And frankly, Your Honors, the key here is that when you look at
16 statements in a reference, when you look at statements in a reference, you
17 have to look at the context. The law tells us that if we could turn to slide 17.
18 The law tells us that recognize that a person of ordinary skill in the art is
19 not a robot that only looks for magic words in a reference that matches claim
20 language. Instead, the POSITA draws reasonable inferences based on
21 context. And one reasonable inference that you would draw based on the
22 context of Thomas's system that's attempting to accurately and realistically
23 simulate a user is that when during learning mode when you're identifying
24 how the user would respond to different circumstances, that during
25 simulation mode there must be some similarity of the circumstances for you
26 to use that response in simulation mode to simulate the user. It just doesn't

1 make sense.

2 So, and frankly, the response to that is, we didn't use the magic
3 words to the claim language, and therefore, because the words are different,
4 the concepts are different. And then we're done. That's all they say. And
5 you can see that in the previous slide, as they responded to Your Honors'
6 reasoning on slide 15. They begin, it doesn't use the words analysis -- it uses
7 the words analysis and criteria, and these are different concepts than
8 matching. They're not different concepts than matching when those words
9 and the overall statements in which they're found are considered in the
10 proper context. That is, in a system that's attempting to accurately simulate
11 a user's control of an avatar.

12 JUDGE PARVIS: Patent Owner's --

13 MR. DEVOTO: Yeah, go ahead.

14 JUDGE PARVIS: Patent Owner's expert testifies that, in his
15 opinion, analysis is different than matching. And he testifies in support of
16 Patent Owner's position. Did you question him as to what, you know, from
17 his expert testimony standpoint and his opinion, what was the basis for those
18 differences? Did he provide any further testimony explaining his testimony
19 in his declaration?

20 MR. DEVOTO: I do not believe he provided any further
21 testimony clarifying this. I do not be -- yeah, I'll be able to respond to this in
22 rebuttal if I'm incorrect about that, but I do not believe he elucidated
23 anything further on this.

24 So, in the interest of time, Your Honors, unless there are any other
25 questions on this point, I think I'd like to move fairly quickly through the
26 remaining issues as I'm running out of time. Is that okay? Are there any

1 other questions, Your Honors, on this point?

2 JUDGE PARVIS: I don't have any other questions on that point.

3 MR. DEVOTO: Great. Thank you very much. If we could move
4 to slide 37, please. So, slide 37, as you can see from this slide, limits
5 Independent Claim 1 in several ways. It specifies that there's a first
6 correlation and a third correlation being sorted in the same database. It also
7 requires that at least a portion of the first correlation is learned in a learning
8 process that includes operating the first avatar of the application at least
9 partially by user, and at least a portion of the third correlation is learned in a
10 learning process that includes operating the first avatar of the application at
11 least partially by another user. So, the key aspect is by the first user and by
12 another user and having two distinct learning processes.

13 Now, even if we assume for the time being that these user-specific
14 requirements are given patentable weight, this feature is met -- or this claim
15 is met by Thomas. So, as we talked about earlier, and as I had indicated in
16 my brief overview of Thomas, Thomas has a user profile -- has multiple user
17 profiles stored in the same knowledge base that is in the same database, 130,
18 and each one of these separate user profiles would, of course, be generated
19 by a distinct and separate learning process corresponding to that user. I'll
20 have a -- my user profile will have its learning process directed to me,
21 capturing my inputs. My colleague Karl had his own user profile. He'd
22 have his own separate learning process captured with his inputs. So, these
23 are two distinct learning process for two distinct individuals.

24 And moreover, and importantly, in the expected and predictable
25 situation where two users control the same player on the same team such as
26 Shaquille O'Neal of the LA Lakers, the first and third correlations would

1 both be learned in distinct learning processes that include operating the same
2 first avatar. In this case, Shaquille O'Neal is arguably required by Claim 12.
3 And notably, I mean, we're dealing with NFL 2K5 as the game, for example.
4 It has 32 teams, right? So, there's, of course, If I'm playing Terry Bradshaw
5 as I'm populating and as my user profile is being populated through this
6 learning process, I control Terry Bradshaw of the Pittsburgh Steelers. Karl
7 could very much control Terry Bradshaw, and his correlation would be
8 different than mine since we each provided perhaps different user inputs,
9 and they would be stored in the same knowledge base. So, this would
10 satisfy Claim 12.

11 So, I would like to turn briefly to the motion to amend issues
12 unless you have any questions on this point.

13 JUDGE PARVIS: I don't have questions.

14 MR. DEVOTO: Wonderful. Thank you. So, if we could turn to
15 slide 71, I'm going to make one quick observation about the motion to
16 amend. The motion to amend adds limitations to the claims that inject more
17 learning process elements into the claim by further limiting the contents of
18 the object representations and limiting how the object representations are
19 generated. So, you may recall when I talked about Claim 1, the claim is
20 really focused, it kind of just created -- it gives you the correlation as a very
21 beginning thing that's already in existence and is storing. This amendment
22 instead speaks a little more to the contents of the object representations and
23 it further talks a little bit about how those object representations were
24 generated.

25 Now, it should come as no surprise, Your Honors, that since
26 Thomas already contemplates a learning process and a simulation process

1 similar to the computer game embodiments of the '134 patent that these
2 embodiments will not distinguish Thomas alone or Thomas in combination
3 with Hirai as we advanced in our opposition to the amendment.

4 I'd like to turn to a few issues in dispute relatively quickly, I'm
5 running out of time so I want to make sure that I just cover, highlight just a
6 few issues. If we could turn to Claim element [SUB. 1] on slide 77. So, an
7 argument -- the preliminary guidance and Patent Owner assert that Thomas
8 fails to satisfy this limitation based on an argument that Thomas has learned
9 circumstances that represent one or more avatars do not represent objects of
10 the application as required by the claim. They also question whether
11 Thomas discloses 3D objects.

12 If we could turn to slide 78. Now, the arguments made by the
13 Patent Owner and advancing the Preliminary Guidance, they're not credible.
14 In fact, they turn on a misunderstanding of what we point of both our
15 mapping and the Thomas disclosure. We were clear as shown in this slide
16 78 that we were mapping the application to the NFL 2K5 video game, for
17 example. And as shown in the cited portion here of Thomas, this NFL 2K5
18 video game is an example of the embodiment of computer system 100 that
19 would include not only computer game 110 -- or sorry, computer program
20 110, but also simulator 120 and database 130.

21 JUDGE PARVIS: And I have a question for the Petitioner.

22 MR. DEVOTO: Yes.

23 JUDGE PARVIS: The language that's not highlighted. The first,
24 the very first word that's not highlighted is another example embodiment.
25 And so, to be clear Petitioner's position is that a person ordinary skill in the
26 art would understand that the computer system 100 as the embodiment

1 illustrated in Figure 1 pertains entirely, in its entirety to this --

2 MR. DEVOTO: Yes.

3 JUDGE PARVIS: -- other example by embodiment. Is that
4 Petitioner's position?

5 MR. DEVOTO: Yes. Our position is that the NFL 2K5 video
6 game that we pointed to as the application is, in fact, embodying that whole
7 system. And frankly, it makes sense, right? Because if you think about the
8 point in the context of Thomas, the point of Thomas is to give a multiplayer,
9 human-to-human computer game with a single-player mode. So, this is
10 really just adjunct processing and data manipulation that is done by
11 Thomas's system to imbue NFL 2K5 with a single-player mode. So, NFL
12 2K5 now has both a single-player mode and a player-to-player mode. So,
13 yes, the whole system would be NFL 2K5, and it would make sense for it to
14 be the whole system.

15 JUDGE PARVIS: Another portion that's not highlighted is after
16 all the highlighting, after the number 110, there's the language in the form of
17 a video game. And so, it seems to possibly indicate computer program 110
18 is in the form of the video game.

19 MR. DEVOTO: Well, it's in the form of -- I'm sorry, go ahead.

20 JUDGE PARVIS: And Petitioner's position is that's a misreading.
21 Is that correct?

22 MR. DEVOTO: No, not at all. I would say it's not necessarily a
23 misreading. What it is, is it's in the form of the NFL 2K5 video game
24 portion. It's the portion of the NFL 2K5 video game that represents the
25 multiplayer, human-to-human portion of the NFL 2K5 video game. But the
26 NFL 2K5 video game in aggregate is a -- would be the whole system

1 because now the NFL 2K5 video game includes both the portion, there is a
2 human-to-human portion, which is computer game -- computer program
3 110, and the portion that makes it single-player, which is the combination of
4 computer program 110 with the simulator and the database that interact with
5 the portion that is otherwise the multiplayer portion to offer and thereby
6 enhance the aggregate NFL 2K5 game to offer both a single-player mode
7 and a multiplayer mode, which is what it does. So, it's a whole application
8 now has -- it offers both modes. Does that help answer the question?

9 JUDGE PARVIS: Yes, Counsel. Thank you.

10 MR. DEVOTO: Thank you.

11 JUDGE PARVIS: A question: is Petitioner continuing to rely on
12 Exhibit 1027 with respect to the recitation of three-dimensional?

13 MR. DEVOTO: Yes. So, just to be clear, Your Honors, the
14 Exhibit 1027 was used as corroborating evidence for the understanding, as
15 set forth in our sworn testimony of our expert. He, from his independent --
16 from his understanding was that NFL 2K5 used 3D avatars. He relied on
17 Exhibit 1027 simply as to corroborate and show what his understanding was.
18 Now, importantly, the opposing side neither cross-examined -- they didn't
19 depose him at all. So, this testimony stands unrebutted -- unrebutted and
20 frankly, nor did they advance any evidence to the contrary that would say no
21 NFL 2K5 could be not or here's, here's a version of it that it's not 3D. And
22 why because everybody knows NFL 2K5 is 3D avatars because it is. And
23 so, the fact that his testimony is unrebutted and the fact that this article 27
24 merely corroborates his existing understanding, it would seem that this
25 publication or download dates are not critical to the inquiry.

26 JUDGE PARVIS: So, paragraph 78 of Exhibit 1022, which is Dr.

1 Janet's second declaration, that paragraph includes testimony that a person of
2 ordinary skill in the art would have understood that Thomas's avatars are
3 three-dimensional objects.

4 MR. DEVOTO: Yes, correct.

5 JUDGE PARVIS: And based on just the statement that -- the
6 reference to this NFL 2K5 video game. And then Dr. Janet continues that
7 this NFL 2K5 video game depicted players as 3D avatars. And Petitioner's
8 position is that that testimony is unrebutted?

9 MR. DEVOTO: Yes.

10 JUDGE PARVIS: Is that correct?

11 MR. DEVOTO: It's unrebutted. They could have cross-examined
12 him. They could have deposed him, cross-examined him. They didn't. It's
13 unrebutted.

14 JUDGE PARVIS: And Patent Owner did not submit expert
15 testimony to the contrary?

16 MR. DEVOTO: Correct. And of course, our position is because
17 you can't, because NFL 2K5 does use 3D avatars.

18 JUDGE PARVIS: Is Petitioner relying on Exhibit 1027 at all at
19 this stage?

20 MR. DEVOTO: It would be relied on simply to corroborate. So,
21 we don't think the publication date is essential for the corroboration.

22 So, Your Honors, given my limited time, unless you have any
23 questions, I think I'd like to hand the proverbial podium to my colleague,
24 Karl Renner, who will now talk about the issues related to Claims 3 and 4.

25 JUDGE WEINSCHENK: Mr. Devoto, before you step aside, can
26 we go back to Claim 12 for a minute? Because we moved through it kind of

1 quickly. I just want to make sure I understand something before you sit
2 down.

3 MR. DEVOTO: Yes.

4 JUDGE WEINSCHENK: So, if you go to slide 37 of your
5 demonstratives, I think it's my understanding here that the highlighted
6 portion, you have "at least a portion of the third correlation is learned in
7 another learning process that includes operating the first avatar . . . by
8 another user." So, you have the same avatar --

9 MR. DEVOTO: Correct.

10 JUDGE WEINSCHENK: -- that is -- you have another correlation
11 that's learned by a second user. So, two users are using the same avatar and
12 learning correlations. When I look at your next slide 38, I understand your
13 point about here that, you know, if someone, different users were playing
14 with the same team and the same player, you know, maybe you could get
15 this, but that doesn't seem to flow naturally from a disclosure in Thomas that
16 I could find.

17 What's the best part of Thomas that supports this idea that two
18 users could control, for example, Shaquille O'Neal, and that that player
19 would operate somehow based on correlations from two different users? It
20 would seem to me that what would make the most sense is that when user A
21 is playing with the team, that Shaquille O'Neal performs according to that
22 user, and when user B is playing with Shaquille O'Neal, they perform
23 according to that user profile, and not that they're somehow combined to
24 have, you know, this player, this single avatar, perform in accordance with
25 the correlations from two different users. So, am I understanding the claim,
26 or am I misreading Thomas?

1 MR. DEVOTO: So, the view on the claim, it says the first avatar.
2 So, what does it mean for one user to control or provide a correlation for the
3 first avatar? The first avatar is the same graphical figure. In this case, it
4 could be Shaquille O'Neal, for example, and in the database that stores
5 multiple user profiles, one user will have controlled and provided operations
6 for Shaquille O'Neal, which is the first avatar, and another user will have
7 controlled and provided a distinct correlation, learned correlation, for that
8 same avatar, Shaquille O'Neal. That is the first avatar. They are both the
9 first avatar because they are both the same avatar. They are both the same
10 represented figure to the user, i.e., you see a graphical three-dimensional
11 Shaquille O'Neal running around, right? That's the same avatar, consistent
12 with the breadth of the claim language. Does that help?

13 JUDGE WEINSCHENK: Yeah, no. If you look at what you said
14 from Thomas, it says any participating user could upload its own user profile
15 for access by any other participating user. It seems like a little bit of a
16 stretch to me to go from that to, you know, that this single avatar is going to
17 be controlled differently by different users. I mean, is there something I'm
18 missing here or is that the only cite you really have from Thomas for where
19 you're making this conclusion?

20 MR. DEVOTO: Well, I think it's the context that's being provided,
21 right? We've got NFL 2K5 video game. We have 32 teams. Anybody
22 reading this context would not think that, oh, yeah, but, you know, two user
23 profiles, two distinct user profiles that are stored in the same knowledge base
24 for the same computer game, in this case, NFL 2K5, to think that there
25 wouldn't be a reasonable and expected predictable situation where they
26 would control the same particular avatar of the same particular team in their

1 own separate and have that impact their corresponding learned correlations
2 for that same avatar of the same team be uploaded as part of their user
3 profile. It just wouldn't make sense, Your Honor, given the context of
4 Thomas's system. Again, 32 teams in NFL 2K5. It doesn't tell us -- it
5 doesn't say I can't use all the teams. It doesn't say oh, and by the way, we
6 don't -- we limit it who can use what teams and what avatars. It doesn't say
7 that, it's much broader than that.

8 JUDGE WEINSCHENK: All right. I think I understand. Thank
9 you.

10 MR. DEVOTO: Thank you.

11 MR. RENNER: All right. Thank you, Your Honors. And just
12 following up one thing that Mr. Devoto said there at the end, a reasoned
13 basis for suggesting that it doesn't make sense is, with there only being a
14 limited number of NFL teams, you'd run out of opportunities for people to
15 individualize and to simulate their version of Shaquille O'Neal or their
16 version of any one of the NFL players. So, you'd end up having a very
17 limited ability for this game to service a great number of people, which of
18 course would be its objectives. The game you would expect and our expert
19 believes would be applicable to a great number of people, any one of which
20 might happen to choose the same superstar, but they're going to have their
21 version of that superstar. And it's how they, it's the simulation of that player
22 as that superstar or the team. That's the kind of constant. So, that's the kind
23 of baseline of it and it just doesn't seem to hold true that that would be
24 limited to only one user getting to simulate and getting to customize that
25 particular NFL player because you'd run out of opportunities for the
26 remainder.

1 JUDGE WEINSCHENK: I guess while you brought this up, Mr.
2 Renner, you know, is this a situation where we know that you're actually
3 customizing, for example, the known players in the game, as opposed to the
4 user profile referred to like your own player that you've created such that
5 every user would have an individual player and that no one avatar would
6 have two users controlling the same avatar?

7 MR. RENNER: Yeah, that's a great question. In an NFL 2K
8 environment, the point would be to actually have NFL players and NFL
9 teams. So, I'm not sure I've ever seen a game and hadn't really thought about
10 it until you asked the question that you'd have an individual user, Karl
11 Renner, on the field with NFLers. That's not the way those games generally
12 work. It's more of the contextual nature of the response Mr. Devoto was
13 trying to give to you.

14 JUDGE WEINSCHENK: Okay.

15 MR. RENNER: Yeah. I was hoping to talk and spend our time,
16 what we have left, with Claim 3 in particular. If I could turn us to slide 19,
17 please, I'll begin that conversation. At slide 19, you can see Claim 3
18 reproduced and Claim 3 specifies details about the claimed matching
19 process, and specifically it calls for determining whether there are more than
20 a threshold number of at least partial matches between two object
21 representations.

22 Regarding the claim, there's really no dispute over the word
23 "threshold," but that is the term that's really at the center of this, and with
24 respect to that term, there's questions of whether or not Thomas and Buehler
25 meet the language of the claim. In fact, turn us to slide 20, I'll start a
26 discussion of Thomas as it relates to that. And in fact, as to Thomas, will be

1 focusing on that pass out of shot example that you can see depicted or at
2 least starting to explain in Thomas the clip here on the left hand side from
3 column 7, it discusses that particular pass out of shot example. And in that
4 example, what we're seeing from Thomas is a simulator causes an avatar to
5 pass the ball. It says, if the current circumstances meet the criteria, and
6 those criteria are exemplified in terms of how much the passing and
7 receiving avatars are covered.

8 Now, as indicated in the Petition, and you can see it highlighted in
9 the applied text here on the right at the top of the slide from pages 20 and 21
10 of the Petition. And this is really the text that was discussed by Dr. Janet,
11 and in his original and his supplemental declarations, you can see a POSITA
12 would have understood that the reference exemplified how much the passing
13 receiving avatars are covered. It implicates a number of how many
14 defensive avatars are in the vicinity of the passing and/or receiving avatar.
15 Much like a lot of the other testimony given by Dr. Janet, this was not met
16 with questions, and it wasn't met with an opposing view expressed by
17 anybody about what a person of ordinary skill would see in the game. It's
18 instead pretty common sensical. And that's particularly apparent when you
19 see that the actual clip here, it discusses to the left here, the very beginning
20 of it, you can read the simulator 120. There's a highlighted text on the left
21 hand side. It will analyze how well the passing avatar and the receiving
22 avatar are covered. Now, this is a reference to how well.

23 That's the sentence prior to the sentence that follows, where it
24 references how much, how much would be a more detailed view on maybe
25 how well. It's a quantification, of course. And that quantification is the root
26 of the comparison that will ultimately be used to determine, in fact, that

1 there is a measure of how many, how much, how much of the defense is
2 devoted to the shooting and the receiving avatars? The rendering obvious
3 how well the using the number how much.

4 And Thomas elsewhere likewise reveals that it monitors a number
5 of players. You can look at column 5, for instance, lines 13 to 16, where it
6 tells us if a user is controlling a basketball player near the three-point line,
7 and sees, for instance, two defenders, the user may choose to shoot a jump
8 shot or split the defenders. This is in the context of what you're observing
9 about a user, so you're controlling the avatar. And of course, you'd want to
10 call back the fact that that user shot rather than dribbled through or passed,
11 or whatever it may be, when you're doing the kind of matching that Mr.
12 Devoto was talking about.

13 So, in the context of how many avatars cover a given player,
14 Thomas describes invoking a pass if the current circumstances meet the
15 criteria. That's shown above in the text on the left. How do we know
16 whether the current circumstances meet a criteria? Well, in and around that
17 excerpt, shown in slide 20, Dr. Janet tells us that a POSITA would have
18 understood Thomas to disclose or render obvious resolving the number of
19 defensive avatars in that vicinity of that ball handling player, to see whether
20 that player overcame, dealt with this threat, dealt with this kind of scenario
21 and what it did in the past, so that you could resurrect the same kind of
22 activity in your actual simulated mode.

23 JUDGE CASS: Counsel, this is Judge Cass. So, could you
24 explain how much the passing and receiving avatars are covered corresponds
25 to the number of at least partially matching portions, which I think is, is that
26 what you're reading that onto?

1 MR. RENNER: Yes, Your Honor. So, each defender is an avatar
2 and each avatar that is a defender has to be recognized. It's an object when
3 Thomas has a set or a scenario, let's call it a scenario, players on the court,
4 offensively minded, defensively minded. It's indicating that it's going to
5 assess the defensively minded players and take account of them. It needs to,
6 in disclosing that, it renders obvious the idea that it will recognize those
7 players, those objects, those avatars, those players. And in doing so, it'll
8 count, it'll enable, you know, an accumulating figure on how many of them
9 are there.

10 And so, it comes up with the idea that I can see there are, there is a
11 double coverage, or there is single coverage, or there is no coverage on
12 either the passer or the shooter, whatever player you're talking about. And
13 it's capturing this so that it can store instances where a player to later be
14 simulated will have shown how it acts. Does it shoot? Does it -- does it
15 pass? Does it dribble through? Under the circumstance where there are an
16 indicated number of avatars in defense in the situation. So, it's the
17 comparison, or you -- the detection, determination of those avatars and
18 defensive positions on the passer and the receiver on the shooter that it's
19 talking about. And we think that that is the "matching" that we're talking
20 about, and when you're going to assess whether there's, in fact, a match, you
21 have to quantify that. Well, that's what it tells us how much rather than just
22 how well.

23 JUDGE CASS: Yes. I'm still having a little trouble following.
24 So, you're matching A with B. You know, what is the A and the B? What
25 are the two things that are getting matched here?

26 MR. RENNER: Okay. So, in two dimensions, one is, is there a

1 defender at all? So, in one dimension, you'd look into, see whether or not,
2 there's a defender in the vicinity, for instance, of the ball handler. And you
3 would resolve that there is a defender. Now, I know that it is, if I'm going to
4 use that to determine whether or not there is an instruction, you're going to
5 see there is one which is greater than zero. There is a defender there. And
6 that is going to indicate to you that you've eclipsed a threshold of there is no
7 defender. You could more advanced -- in a more advanced way, you could
8 manipulate the game to have it resolve that there's double coverage. You
9 could do all kinds of different variants here, but the point is you're trying to
10 look at the scenario of the game that the player is encountering with respect
11 to the defenders, account for them and see what thresholds are met so that I
12 can assess whether or not a jump shot or a pass is in fact appropriate under
13 the circumstances, given that player's tendency as it's been previously
14 recorded.

15 JUDGE CASS: All right. Thank you.

16 MR. RENNER: Certainly.

17 JUDGE PARVIS: You're, to Petitioner's counsel, you're going
18 into your rebuttal time.

19 MR. RENNER: Thank you, Your Honor, and appreciate the
20 questions this morning. It's been really excellent to help us to get the case in
21 front of you.

22 I'll conclude with respect to this portion. I'll go to Buehler if I
23 could, please. Let's advance to slide 54, if we could, please. Buehler
24 describes an augmented reality system in which a robot is taught how to
25 interact and that is to pick up a real-world object. And like Thomas, Buehler
26 has a training mode. And in that mode, Buehler's robot, it captures an image

1 of a real-world object, something that it wants to handle, and it matches that
2 object, that image of that object, to an image from the library of template
3 images that it stores. When a match is found by Buehler, the robot retrieves
4 the corresponding and previously stored routine, which specifies the robot's
5 interaction with that corresponding object as previously stored. The robot
6 then simulates, it actually takes that instruction that had been stored, it
7 simulates using it, the performance of the retrieved routine, using an avatar
8 on the screen that represents the robot arm. So, now it's all virtual. This is
9 all in the non-real-world context. And this is so that the user can look and
10 see what the observed interpretation of that movement is going to be and
11 adjust as necessary what those instructions are associated with that now
12 perceived object representation that's being manipulated.

13 When that simulation ends you have an updated set of instructions
14 but so too ends the training, and with the training completed in the real
15 world movement of the robot arm, the end effect, is now controlled by the
16 refined instruction causing the arm to physically interact with the actual
17 object. The Petition looked at this and said that claims through -- shows
18 Claims 1, 3, and 17 of the '134, they're anticipated by the training mode
19 alone. That is, you match an image of the real world object to a template
20 image. You follow that by retrieving and applying the virtual avatar
21 execution of the instructions correlated with that matched image and you
22 have the claim.

23 Now, with our limited time together I'll look just at the Claim 3
24 aspect of this if I could, to complete the narrative we were talking about
25 earlier with respect to Thomas. And for that, let's turn if we could please, to
26 slide 64. At the left, you can see that Buehler explains with reference to its

1 training mode that it looks for a match between two images, each of which
2 represents a real-world object. The first is the previously recorded template
3 image, and the second is the image representing an object encountered by
4 the robot in question. And to put a finer point on it, Buehler, it contemplates
5 a match that corresponds to the claim to at least a partial match between the
6 object representations, that is, between the images.

7 Slide 65 shows Dr. Janet's explanation that a POSITA reviewing
8 Buehler's disclosure, pixel matching, that it would have understood to
9 involve application of the threshold to discern image matching. And to this
10 point, in paragraph 56 of Exhibit 1022, shown here, Dr. Janet explained
11 several things. Number one, if you're using a pixel-by-pixel analysis to
12 match two images to an identical object, a perfect 100 percent match it's just
13 unlikely because noise, lens aberrations, et cetera. POSITA would simply
14 not -- they wouldn't demand such an exact match. They would know that
15 that's not there. Rather, a POSITA reading this would understand that a
16 threshold would be used to account for real-life imperfections. And more
17 importantly, Patent Owner never deposed Dr. Janet on this testimony, and
18 much like in other instances we're talking about, they didn't provide any
19 additional evidence to help us understand a different perspective from
20 POSITAs.

21 Lastly, I would like to talk about Claim 4 if there aren't questions
22 on this, and I turn us to slide 26 to begin that conversation. It shows -- this
23 slide 26 shows Claim 4. It's referenced as having two distinct correlations
24 that are said to be connected. It shows in the call -- the slide says that the
25 knowledge base includes a first and a third correlations, and that those first
26 and third correlations are in fact connected. And in that sense, it resembles

1 what we talked about a couple of weeks ago in the '974 argument regarding
2 Claim 7. And similar to that, we see here the dispute is actually over claim
3 construction. The word “connection” is central to it. Slide -- actually, I'm
4 going to skip forward because of the time to -- if I could, slide 30, please.

5 And instead of talking about the fact that Thomas doesn't justify a
6 construction of this term or talking about the multitude of definitions we
7 believe to be applicable, or at least within the realm of what would be plain
8 and ordinary, I wanted to focus attention on the '134 patent disclosure that
9 wasn't highlighted by Patent Owner in trying to advance their view of what
10 this term means. They looked at a non-limiting example figure, but what
11 you see elsewhere in this specification of '134 is disclosure of connection
12 found, for instance, and shown here at the top left of this slide, where it tells
13 us the '134 patent does ... that connections can include weights, occurrence
14 counts, et cetera. And you can see this more fully in column 16, 8-10,
15 where, and I'll quote, “the connection may include or be associated with at
16 least one of: an occurrence count, a weight, a parameter, or a data.” There's
17 further discussion in the disclosure of other broad disclosures relating to the
18 word “connection.”

19 The point being this: Patent Owner did not intend and didn't
20 convey that the “connection” should have such a narrow meaning as only be
21 one of the many definitions, much less the link definition.

22 Important to this in particular, to this particular proceeding, is that
23 Thomas likewise discloses weights and even occurrence counts. Thomas,
24 you'd find, talks about the different related correlations between instructions
25 and observables, and that there are multiple of them that are selected in a
26 ratio. A user might, 30 percent of the time, shoot, 70 percent of the time,

1 pass. So, Thomas talks about that, and it says that you would divide and
2 allocate how you're going to make decisions as between which one of those
3 two activities to perform when presented with the exact same circumstance,
4 the same object representation matches. Some of the times you'll do one,
5 some of the other, 30 percent, 70 percent, or maybe you'll decrement. It
6 talks about a variety of these things, and you can see that throughout its
7 disclosure.

8 Given that we're short on time, I'm unfortunately going to leave
9 that to you in the record if I may. But I'm be happy to answer any questions
10 you may have about it or try to fill in any gaps of understanding if there
11 were any that you'd like to speak to.

12 With that, I would rest and reserve our time if there aren't any
13 questions.

14 JUDGE PARVIS: Thank you, counsel.

15 MR. RENNER: Certainly.

16 JUDGE PARVIS: The Petitioner has eight minutes for rebuttal.

17 MR. RENNER: Thank you.

18 JUDGE PARVIS: Patent Owner, how much time would you like
19 for rebuttal? Patent Owner's counsel, I'm not sure if you're speaking, but we
20 can't hear you.

21 MR. JAIRAM: Thank you, Your Honor. I'm going to reserve 20
22 minutes for rebuttal. And I'm going to begin by looking at the motion to
23 amend and the substitute claims.

24 We heard a little bit of discussion from Petitioner's counsel about
25 the motion to amend. I will address some of that discussion and also a few
26 other issues. And then after that, I will turn to issues regarding the existing

1 claims.

2 If we can turn first to our slide 98, please, from our
3 demonstratives. And I'm going to share on the screen, through the
4 teleconference, our demonstratives, so that if there's any question as to
5 which slide we're looking at, you can just look at the screen here, and it's at
6 the bottom right, the slide numbers.

7 So, turning to slide 98, one of the limitations that's added is [21.m],
8 which states that “the first data structure and the second data structure are
9 correlated with the first one or more instruction sets.” And there are a
10 couple of different problems with Petitioner's analysis of this limitation.
11 First of all, in the opposition to the motion to amend, Petitioner's entire
12 argument was very short. It was basically two conclusory sentences shown
13 on slide 99. And a quote from the abstract of Thomas, but with no
14 accompanying analysis. And this argument is entirely devoid of any
15 analysis related to the clear claim language that data structures, in particular
16 the claimed first data structure and the second data structure, are correlated
17 with the claimed instruction sets.

18 So, in light of that deficiency, Petitioner's MTA sur-reply points to
19 discussion in the petition that was allegedly referenced in the opposition.
20 But of course, under the Board's rules, a party cannot in one paper
21 incorporate by reference arguments from another paper. We'll just note in
22 the *Corning* case, IPR2023-00043, paper 95 at 13, the Board noted that it
23 shouldn't have to play the role of an archeologist to dig through the record
24 and trace meandering arguments, and that's basically what Petitioner is
25 asking the Board to do.

26 Additionally, 37 CFR § 42.6(a)(3) and the Trial Practice Guide

1 explicitly bar corporation by reference. But we'll take a step back and we'll
2 note, what is Petitioner doing for this limitation? They contended at page 10
3 of their MTA sur-reply that this claim limitation regarding the correlation
4 that's recited in this added limitation doesn't require the existence of any new
5 correlation that wasn't previously recited in the existing claims. But it's
6 apparent by looking at the limitation that the added limitation clearly recites
7 that the first data structure and the second data structure are correlated with
8 the first one or more instruction sets.

9 The claim language here is plain on its face in reciting a different
10 limitation than what is present in Claim 1. Petitioner appears to be either
11 avoiding the claim language or reading it out entirely. They have not sought
12 to construe this claim limitation as somehow not being entitled to patentable
13 weight, or as somehow being the same correlation as in Claim 1 other than
14 by stating that in a conclusory way.

15 Therefore, Petitioner's argument that this new limitation or
16 disclosure of it was somehow established in the petition, it suffers from two
17 problems, the incorporation by reference flaw and it also fails to account for
18 the clear differences between the existing and substitute claim language.
19 Their entire argument about this limitation is premised on fundamental
20 flaws.

21 Their argument is also flawed because Petitioner is basically
22 saying that the added limitation is automatically disclosed or suggested
23 based on what they had previously pointed to in the petition for a different
24 limitation. That's not a proper analysis. They are required to present
25 argument or evidence for each and every limitation. They certainly have not
26 done so in the opposition and their attempt to patch that in the sur-reply is

1 also deficient.

2 Turning to slide 100, I'll explain the mapping a little bit. So, when
3 Petitioner mapped the claim's first data structure, they mapped it to Thomas's
4 field 675 for a first opposing team avatar, and for the claim's second data
5 structure, they gave three alternatives. They mapped it to (alternative one)
6 field 675 for a second opposing team avatar, (alternative two) is to field 665
7 for a user controlled avatar, or (alternative three) to a modification of
8 Thomas's field 675 in view of Hirai. But none of those fields are correlated
9 with the claimed instruction sets. And also, the user profile of Thomas that
10 Petitioner points to does not contain those fields.

11 Thomas, excuse me, regarding Petitioner's argument at the bottom
12 of page 11 of their sur-reply, MTA's sur-reply about a situation as disclosed
13 in Thomas. Their argument misses the mark. Here's what Thomas
14 discloses. Thomas describes current circumstances being associated with
15 user inputs, but does not disclose that user profiles are associated with user
16 inputs. As Petitioner, I'm sorry, as we, Patent Owner, noted at page 10 of
17 our MTA reply, none of the specific fields that Petitioner has cited to for its
18 mapping are correlated with instruction sets, nor is the user profile
19 containing those specific fields. So, when you look at the actual mapping of
20 claim language to prior art, Petitioner just has not done the mapping
21 correctly.

22 In short, they have not put forth clear argument showing how
23 either Thomas or the Thomas-Hirai combination discloses or suggests any
24 two data structures, first data structure and second data structure, both
25 correlated with any instruction sets, much less the specific language of
26 limitation [21.m].

1 There's actually another flaw in their analysis as well. For
2 limitation [21.m], Petitioner presented an alternative -- they seem to have
3 presented alternative mappings for the first data structure. It's actually really
4 hard to figure out what their mappings are because if you look at just the
5 opposition, it's very unclear and we pointed that out in our MTA reply, and
6 they seem to have tried to explain that further in their MTA sur-reply, but it
7 seems that they presented two alternative mappings (CROSSTALK) --

8 JUDGE PARVIS: (CROSSTALK) Patent Owner. For example,
9 proposed substitute Claim 21 recites wherein the first object representation
10 includes a first data structure. And then it later claimed wherein the second
11 object representation includes a second data structure. And then this
12 limitation that Patent Owner argues is not met is where the first data
13 structure and the second data structure are correlated to the instruction sets.
14 The first object representation and the second object representation are
15 recited in Independent Claim 1. Is that correct?

16 MR. JAIRAM: Yes, Your Honor.

17 JUDGE PARVIS: So, the amendment is just saying that the object
18 representation includes a data structure. Is that correct?

19 MR. JAIRAM: The first object representation -- let's check the
20 exact language here. The first object representation, it includes a first data
21 structure and then there's also a second data structure, that's correct.

22 JUDGE PARVIS: So, is there a problem then with Petitioner
23 relying on this teaching of the object representation that same disclosure in
24 Thomas and saying, well, what we relied on in Thomas for disclosing the
25 object representation does include the first data structure. And what we
26 relied on in Thomas for this second object representation all includes a

1 second data structure. Is there any problem with that?

2 MR. JAIRAM: Well, they've been inconsistent in how they've
3 mapped it. For Claim 1 they didn't map these data structures, and they
4 talked about things like a spatial position of an avatar. I think they are road
5 conditions, basically things that are not data structures. And now there's
6 different claim language, narrower claim language that's being added in the
7 substitute claim. And so, they are required to have analyzed the specific
8 claim language of the substitute claim. They cannot simply rely on
9 something that is broader in the independent claim when what they pointed
10 to for Independent Claim 1, that was not the data structure itself, at least not
11 for correlation. So, in the (CROSSTALK) --

12 JUDGE PARVIS: They're relying on Thomas's disclosure of
13 recording events and situations, and that's being recorded and associated
14 with the occurrence of that event. And they're relying on that and the
15 definition of parameters. Is that correct?

16 MR. JAIRAM: I believe so, but they did not point to a specific
17 data structure, and that's actually the reason why the proposed substitute
18 claims narrow further to distinguish beyond disclosure of Thomas.

19 And then specifically reciting that the data structure, the first data
20 structure has to be correlated to the instruction sets, and the second data
21 structure has to be correlated to the instruction sets. That's a narrower
22 limitation that has not been addressed properly by Petitioner.

23 JUDGE PARVIS: What about Thomas's disclosure of parameters?

24 MR. JAIRAM: Well, a parameter is a parameter, but it's not the
25 claimed data structures.

26 JUDGE PARVIS: The basic claim data structure is -- we

1 discussed the claim construction of object representations. Is Patent
2 Owner -- Patent Owner did not argue -- make arguments regarding that term
3 in its Patent Owner response. Is that correct?

4 MR. JAIRAM: Regarding what, Your Honor? I beg your pardon?
5 I'm sorry, I don't understand the question.

6 JUDGE PARVIS: Claim 1 recites, for example, a first one or more
7 object representations. And in its preliminary response, we discussed here at
8 the institution stage. We heard object representation, and we discussed
9 certain arguments that Patent Owner made in its preliminary response. But
10 Patent Owner does not maintain those positions now at the institution. Is
11 that correct?

12 MR. JAIRAM: That's correct, Your Honor.

13 JUDGE PARVIS: Thank you.

14 MR. JAIRAM: I guess if I'm trying to recall exactly what your
15 question was about the data structure, I would just note that there isn't really
16 much to guess about because the claim language, in particular of the added
17 limitations, explicitly recites the details about the data structure. In
18 particular, 21i recites that the first object representation includes the first
19 data structure. 21j includes details about generating the data structure in a
20 particular way. 21k describes some things that the data structure must
21 include. And finally, 21l recites the second data structure, and 21m, which
22 we were just now talking about, recites the correlation.

23 So, getting back to my point, regardless of what may have been in
24 the petition, the petition was addressing features that are not part -- well, the
25 petition could not have addressed all of these additional limitations because
26 they were not part of the claims of Independent Claim 1. And so, it's not

1 enough to say, well, something that we pointed to for Claim 1 has some
2 features and therefore, that discloses claim 21.m because now it's the very
3 specific first data structure and second data structure as recited in the
4 amended claims that have to be correlated, and they have not established
5 such a correlation.

6 I will turn to slide 101, please. In the MTA sur-reply, Petitioner
7 also pointed to an event of Thomas, and we'll show this in the next slide, 102
8 as well, but looking at 101, slide 101, they mentioned, as we've annotated
9 here with an orange bar, that they say an event shown in orange, i.e., the one
10 or more instruction sets. But that's an incorrect mapping, or it's inconsistent.
11 It's not clear what they are doing. Thomas is very clear about what an event
12 is. It's defined at column 4, lines 16 through 19, as being a particular action
13 occurring. We noted that definition at page 5 of our Patent Owner response.
14 That is clearly not an instruction set or the claimed instruction set. And also,
15 it's not what Petitioner mapped to the instruction set for Claim 1, which is, of
16 course, now part of the proposed substitute claims, because the substitute
17 claims are rewritten to include what was formerly in Claim 1. So,
18 Petitioner's analysis for [21.m] is incorrect, both with respect to what
19 Thomas itself clearly says, and also it's internally inconsistent with respect to
20 Petitioner's own prior mapping.

21 And turning to slide 102, which I alluded to, the event is shown
22 here with an orange annotation. It looks like Petitioner basically needed to
23 point to something in this figure to be the recited or claimed instruction sets
24 of the amended claims, because this figure shows the user profile of Thomas
25 that Petitioner mapped to the claim data structures, again, of the data
26 structures of the proposed substitute claims. But as I just now finished

1 explaining with reference to the previous slide, the event of Thomas simply
2 does not disclose or have anything to do with the claimed one or more
3 instruction sets. And as to the rest of this annotated figure, we'll note that
4 Petitioner included it in the MTA sur-reply without any expert support. This
5 is basically just mere attorney argument that in any event does not establish
6 the disclosure of instruction sets, much less a correlation between the
7 claimed data structures, first and second data structures, and the claimed one
8 or more instruction sets.

9 And the last point I'll make about this issue is with reference to the
10 next slide, 103. Petitioner is inconsistent with its mapping of instruction
11 sets. When we go back and look at the petition, this is clear. In the
12 paragraph of the MTA sur- reply, that spans pages 11 and 12, Petitioner first
13 mapped the instruction sets to a user input, and then mapped it to an event.
14 But when you go look at the petition, the instruction set was mapped by
15 Petitioner to the user's input for controlling an avatar in the computer
16 program. And of course, the Petitioner is required to present a consistent
17 mapping throughout, regardless of whether it's a portion of the claim that
18 was previously in Claim 1, and now in the substitute claim, or if it's in a
19 portion that's added now for the first time in the substitute claim. The claim
20 has to be mapped in a consistent manner to the prior art.

21 I'll turn next to another aspect of the amended claims. This is
22 [21.h], and we'll look at slide 92, please. I don't believe that we heard
23 Petitioner's counsel discussing this limitation, but I will note, well, actually,
24 we talked a little -- we heard Petitioner's counsel talking about this one.
25 This is the first object representation that represents a first three-dimensional
26 object and a second object representation that represents a second three-

1 dimensional object. Okay.

2 So, we heard a lot of discussion about this NFL 2K5 video game
3 during Petitioner's portion of the oral argument. I'll note that, first of all, that
4 the reference that's relied upon is the Thomas reference. The video game is
5 apparently or allegedly, it's not even clear what exactly, if it's a printed
6 publication or what, and exactly what the relationship it bears to Thomas.
7 And we'll look at that in some detail here.

8 So, let's look at the next slide, please, slide 93. So, in the MTA
9 opposition, Petitioner cited to NFL 2K5's 3D characters as meeting the
10 claimed 3D objects of the application. But we'll note that Thomas itself
11 never mentions 3D objects at all, and the opposition has very brief mention
12 of NFL 2K5 at all. We pointed out problems regarding Petitioner's mapping
13 and the MTA sur-reply then comes forth with a bunch of new analysis
14 regarding the NFL 2K5 video game, but that's something entirely different
15 from Thomas itself. I mean, it appears that it's almost like the Petitioner is
16 asking the Board to somehow take judicial notice of Petitioner's
17 interpretation of NFL 2K5. There is very little scant description of NFL
18 2K5 in Thomas itself. And let's take a look at it in a little bit more detail.
19 So, with respect --

20 JUDGE PARVIS: With respect to judicial notice, Petitioner does
21 cite to that paragraph 78 of Dr. Janet's testimony in Exhibit 1022. And that
22 testimony, Dr. Janet testifies that a person of ordinary skill in the art would
23 have understood Thomas to have this -- describe this video game, that the
24 video game would depict players as 3D avatars. Petitioners stated that
25 Patent Owner did not depose Dr. Janet. Is that true?

26 MR. JAIRAM: We did not depose him with respect to the motion

1 to amend the second declaration. That's correct.

2 JUDGE PARVIS: And Patent Owner has not submitted expert
3 testimony on this point. Is that correct?

4 MR. JAIRAM: That's correct, Your Honor. We submitted an
5 expert declaration of Dr. Saber with our motion to amend. We did not
6 submit an additional declaration at the MTA reply stage, because we saw all
7 the flaws in the opposition, and we have pointed out the errors of their
8 analysis. And so, that's laid out in our MTA reply.

9 JUDGE PARVIS: With respect to the preliminary guidance, we
10 dropped a footnote referring to only Exhibit 1027, but we did not discuss
11 this testimony in paragraph 78 of Exhibit 1022. Is that correct?

12 MR. JAIRAM: I believe that's correct.

13 JUDGE PARVIS: So, Petitioner's position is that that testimony is
14 un rebutted. Does Patent Owner want to respond to that?

15 MR. JAIRAM: Well, we can just look at the disclosure of Thomas
16 itself, and based on the disclosure of Thomas itself, which doesn't say
17 anything about the 3D objects, it looks like Petitioner's expert is basically
18 saying something that appears to be conclusory. We'll note that wherever
19 Thomas itself talks about the video game, we have referenced it -- we have
20 rebutted and we have explained why the arguments presented by Petitioner
21 are wrong when you just go look at Thomas itself.

22 Thomas never mentions 3D objects. It doesn't incorporate by
23 reference the video game. I'm not even sure what that would be given that a
24 video game is, you know, it's like a video game. Nobody has looked at
25 source code. So, we're not even sure what Petitioner was trying to do there.
26 And so, even if Petitioner's expert has a conclusory sentence about it, they

1 still have the burden to demonstrate looking at all the evidence that Thomas,
2 and in particular the part of Thomas that they have mapped to the object
3 representations, that that is representing a 3D object. And we think that they
4 have fallen short of that.

5 Petitioner also made a point that's a little hard to understand about
6 the 2K5 video game itself, including Thomas's disclosure to the extent, if
7 that's what they are arguing, that is wrong. The notion that the commercial
8 video game product itself includes the disclosure of Thomas or some part of
9 it doesn't make sense. And apart from a very broad statement that the video
10 game includes a computer program 110, Petitioner hasn't pointed to, and
11 Thomas doesn't say anything about the video game itself, including
12 Thomas's disclosure. Petitioner is speculating. They would have needed to
13 have looked at the source code of the video game to know exactly what the
14 video game includes. And, of course, there's no source code at issue in this
15 IPR or in the motion to amend aspect of the IPR.

16 Let's look at slide 93, please. We're on slide 93. Petitioner relies
17 on a slight mention of the NFL 2K5 video game as an example embodiment
18 of the computer system 100. But basically, what they've done is they've then
19 imported other supposed features such as 3D avatars back into Thomas's
20 disclosure. But notable that they didn't say that it would have been obvious
21 to configure the system to implement 3D objects. Rather, they said that a
22 person of ordinary skill would have understood that Thomas discloses. In
23 other words, Thomas itself discloses that feature. And so, Petitioner's
24 attempt to conflate teachings of Thomas with alleged teachings of NFL 2K5
25 is short and falls short of their mark. And even if NFL 2K5 included
26 everything --

1 JUDGE : Mr. Jairam?

2 MR. JAIRAM: Yes, Your Honor.

3 JUDGE WEINSCHENK: Can I stop you for a second? This is
4 Judge Weinschenk. I mean, I question whether they needed to say that it
5 would be obvious to combine features from NFL 2K5 because Thomas
6 actually tells you to do that. So, do they need to say that it would have been
7 obvious to do that? Because they're saying that the embodiment of Thomas's
8 computer system can be used in something like NFL 2K, which has 3D
9 objects.

10 MR. JAIRAM: Well, if Thomas disclosed that, then they wouldn't
11 need to establish that it would have been obvious to configure or modify
12 Thomas to do that. But based on --

13 JUDGE WEINSCHENK: My question is, I think, why doesn't
14 Thomas disclose that? Thomas says, you can use this with NFL 2K5, and
15 their expert says, everyone, you know, a person of ordinary skill in time
16 would have known that that game has 3D figures or 3D avatars. So, why
17 would they need to go to an obviousness analysis when it's in Thomas that
18 you would use it with this type of game?

19 MR. JAIRAM: Well, so Thomas says very little about NFL 2K5.
20 It mentions NFL 2K5 for kind of a different reason. And then there's a
21 single statement from Petitioner's expert. And getting back to the object
22 representations, if you say, well, what are the object representations that
23 Thomas allegedly discloses and that Petitioner is pointing to? Well, if the
24 object representations are spatial positions of avatars, or if they are virtual
25 road conditions, I mean, that's not clearly tied to anything that looks like a
26 3D object. So, there would need to be more to, certainly there would need to

1 be more in Thomas giving some sort of a reason why what Petitioner has
2 mapped to object representations for Claim 1, why would that now represent
3 3D objects? And that's not found. I mean, in the opposition, there's a one --

4 JUDGE WEINSCHENK: Mr. Jairam, a large part of the
5 disclosure that Petitioner relies upon is players in sports games, like
6 basketball and football games. So, it's not like this is like a drastic deviation
7 here to talk about an NFL 2K5 game when a lot of the disclosure was talking
8 about how you position avatars in sports games.

9 MR. JAIRAM: Well, the object representation as claimed has to
10 include specific features. Thomas's mention of sports is apparently what
11 Petitioner is using to then say, well, NFL 2K5 has allegedly, 3D objects and
12 representations that represent 3D objects. But then in the context of the
13 claim language, it doesn't make sense that those 3D objects would then
14 include all of the additional features that are claimed. And certainly, when
15 you look at the MTA opposition, there's I think just a single sentence
16 mentioned with regard to the 3D objects. So, simply put, Thomas is silent
17 on all of this. And so, beyond a single cryptic sentence in Petitioner's
18 opposition, they haven't really -- Petitioner hasn't tied object representations
19 in Thomas to 3D objects.

20 JUDGE WEINSCHENK: Okay, I understand. Thank you.

21 MR. JAIRAM: And I'll also note that at page 7 of their MTA sur-
22 reply, Petitioner again says that the video games player avatars, which
23 Petitioner attributes to Thomas, correspond to the 3D objects of the
24 application, but Thomas only discloses 2D avatars and objects, as the Board
25 noted in its preliminary guidance. And so, the idea that there are 3D objects
26 in Thomas is unsupported beyond speculation by Petitioner.

1 I'd like to turn to another limitation of the amended claims, and this
2 is what we've labeled [21.j], slide 94, please. This limitation recites that the
3 data structures are -- the first data structure is generated in a specific way,
4 namely in response to certain claimed processing, and not just any
5 processing, but processing the type and the location. So, we've explained in
6 our MTA reply that this sets forth a causal relationship. So, the Petitioner
7 mapped the claimed first data structure to two different alternatives, as I
8 mentioned earlier, like Thomas's user profile or modification of that user
9 profile in view of Hirai's athlete character information. But neither of those
10 discloses or suggests generating either of those data structures in response to
11 the claimed processing of a type and location. When you look at the
12 Thomas reference and the Thomas-Hirai proposed combination, basically all
13 that Petitioner has said in its MTA opposition is that the data structures can
14 be generated in advance or on demand.

15 Let's look at slide 95, please. But that's not the same as saying that
16 the data structure is generated in response to something else. Petitioner has
17 ignored the clear causative relationship, their causation. In their MTA sur-
18 reply, they tried to fix their lack of analysis of the opposition by saying that
19 the analysis of current circumstances, which Petitioner maps to the claimed
20 processing, is performed by the simulator during learning mode. But the
21 portions of Thomas that the sur-reply cites, they only disclose that during
22 learning mode, the simulator records a user's input as the user is interacting
23 with the game. Thomas just does not disclose that any data structure, much
24 less the claimed data structure, is generated in response to the claimed
25 processing. The analysis of current circumstances that Petitioner is pointing
26 to in their MTA sur-reply is not supported by expert analysis and is instead

1 mere attorney argument.

2 Petitioner tries to get around this lack of obviousness analysis by
3 saying that the limitation would have been an obvious implementation detail.
4 But just as Petitioner in its oral argument said it's not about magic words,
5 well, Petitioner cannot try to recite magic words to stand in the place of
6 meaningful obviousness analysis. Petitioner simply hasn't shown why a
7 person of ordinary skill would have modified Thomas's system to implement
8 the claimed generation of data structures in response to the claimed features.

9 Slide 95, please. And of course, there's Federal Circuit --

10 JUDGE PARVIS: Patent Owner's counsel, this is a five minute
11 warning. And you asked to reserve 20 minutes for rebuttal, and that's a five
12 minute warning, and five minutes is going into that 20 minutes.

13 MR. JAIRAM: Thank you, Your Honor. Petitioner cannot
14 employ mere conclusory statements. Slide 95. Slide 96, Petitioner hasn't
15 explained, nor has Dr. Janet beyond verbatim copy of the Petitioner's brief,
16 why data structures being generated in advance or on demand is equivalent
17 to or discloses or suggests being generated in response to an event, in
18 particular, the claimed processing. They just have not logically linked the
19 generation of the data structure to the claimed processing. And furthermore,
20 Thomas's user profile, which Petitioner mapped to the claimed first data
21 structure in one alternative, it isn't generated in response to processing
22 Thomas's spatial positions and team archetypes. The time and the score, for
23 example, are within the user profile and they have nothing to do with the
24 spatial positions. It's not the case that the data structure is generated in
25 response to that processing.

26 With respect to the independent claims, and I will turn to slide 3,

1 please. Okay. So, for Claim 1, let's go on to slide 4, please. For the
2 Thomas ground, Ground 1, that there has to be at least partial match between
3 the different object representations, we heard Petitioner's counsel say
4 basically that there's, I think their words were reasonable inference. But
5 Thomas just does not disclose the claimed features. It sounds like Petitioner
6 is basically trying to now shade their argument more towards an obviousness
7 argument by invoking inferences. But this is a 102 ground. And there just is
8 no teaching in Thomas about the matching that's claimed, in particular the
9 matching of object representations to other object representations. And as
10 Dr. Saber testified, analysis is not the same as matchings. I mean, even to
11 just pull a commonsense example, if you analyze something, I'm analyzing
12 this oral argument as we're going through it. Does that mean I'm performing
13 matching? The claim language has meaning and it needs to be honored.

14 Let's go to the next slide, slide 5, please. We've noted basically
15 that an analysis and the various other phrases --

16 JUDGE PARVIS: A question for Patent Owner, even in a non-
17 obviousness setting, it is proper for us to take into account not only the
18 literal and specific teachings of the reference, but also inferences, which one
19 of skill in the art, reasonably would have been expected to draw from the
20 references. Is that correct?

21 MR. JAIRAM: Yes, Your Honor, but there has to be some
22 supporting rationale, it has to be well grounded. It's not enough to say, well,
23 it would have to be -- and I think we heard Petitioner's counsel say it would
24 be nonsensical for it to be otherwise. But these are conclusory statements.
25 If you just look at what Thomas actually discloses, which we'll show on
26 these next two slides, it just doesn't come to the claim language, even with,

1 as Your Honors mentioned just now, inferences.

2 Slide 6, please. I mean, this disclosure from the cited section of
3 Thomas about analysis simply mentions nothing about the claimed
4 matching. It's analyzing a user's behavior. Yes, but there are many ways to
5 analyze a user's behavior. And slide 7, please. Petitioner argued that the
6 simulation mode covers the matching, but that's wrong because Thomas
7 never explicitly says that the spatial position of defenders is matched.
8 Petitioner could have explained how the matching is specifically met, but it
9 has not. And if look at the portion of the petition, it's very short regarding
10 this limitation.

11 Slide 8, please. Yes, there is some analysis in Thomas, and it
12 mentions if criteria is met. But what does that mean? Thomas never
13 explains how it determines if the criteria is met. And this is just insufficient
14 disclosure.

15 Slide 9, please.

16 JUDGE WEINSCHENK: Mr. Jairam?

17 MR. JAIRAM: Yes.

18 JUDGE WEINSCHENK: It's Judge Weinschenk. Can you go
19 back to slide 8 for a moment?

20 MR. JAIRAM: Yes.

21 JUDGE WEINSCHENK: Because you said that it doesn't disclose
22 what analysis is done. And if you look at this portion that you cited here on
23 slide 8, it says the simulator records how covered the user was and the user's
24 location. And then during playback mode, it monitors and analyzes the
25 location of the simulated user and the defensive coverage. So, I think it's
26 pretty clear that it's saying it's comparing the user's location and how

1 covered the user was, which means where the defensive players were
2 located, in the simulator mode. And in playback mode, it's comparing it to,
3 again, the location of the user and the defensive coverage. It seems like it's
4 going to compare those two things to see if there's a match, to see if it
5 invokes this particular action. That seems to describe exactly what the
6 analysis is. Am I missing something?

7 MR. JAIRAM: Well, Thomas doesn't describe in more detail
8 about exactly what is going on. I mean, there could be different ways of
9 doing this analysis, even if it said compare here. I'm not sure that right here
10 it says that. But looking at how covered a user was, or looking at the
11 location, it could be implemented in other ways than by the matching. In
12 particular, it depends what is the object representation that Petitioner is
13 mapping Thomas to? If the Petitioner is mapping it to just the location of an
14 avatar, well, Thomas is silent about exactly how that is done. And perhaps
15 that's what Petitioner is trying to do is to get to inferences, but they're going
16 more into the territory of saying, well, in light of Thomas's disclosure, would
17 it have been obvious to implement Thomas in a certain way? But Thomas's
18 disclosure itself does not describe the claimed language.

19 I think in the interest of time, I'm going to sit for the rebuttal -- to
20 keep my rebuttal time, and I'm happy to answer any of Your Honors'
21 questions before I do that. Okay.

22 JUDGE PARVIS: Thank you, Counsel. And Patent Owner has 16
23 minutes for rebuttal. Petitioner's counsel, you may proceed when you're
24 ready.

25 MR. RENNER: All right, thank you, Your Honor. I'll begin, and
26 Mr. Devoto will join in just a moment.

1 I wanted to return, if I could, to a question that I received. If we go
2 to slide 13, please. Judge Cass, you had asked me about the comparison that
3 was done with respect to Claim 3, and how you got to a threshold and what
4 that looked like. And I just wanted to offer a few more words on that if I
5 could. And slide 13 doesn't show you something immediately. We'll get to
6 that in just a moment.

7 But, Thomas, I just wanted to ask you I just want to make the
8 point, it stores criteria to be used in assessing whether stored instructions
9 should be applied to an avatar that's positioned to, for instance, shoot or
10 pass. We saw that in the disclosure that we showed in claim 7. And at the
11 most basic level, Thomas contemplates assessing the number of defenders
12 covering a shooter and/or receiver, and looking for an exact match within the
13 presently observed defender avatar orientation.

14 You know, double coverage, for instance, per that column 5 that I
15 mentioned earlier within the user profile. So, you look at the scene, you see
16 there's a double coverage. You look in your user profile to see whether, in
17 fact, there's a simulated user instruction related to double coverage under the
18 circumstances. And the application of instructions that are stored in the user
19 profile, it'll correspond to the presently observed defender avatar orientation.
20 And whether it's to surface those by Thomas based on the presence or the
21 absence, in this case, of an exact match. Non-match goes to default
22 operation. So, in this sense, a perfect match 100 percent is obvious from
23 Thomas. Not only obvious, it's probably disclosed from Thomas, and it
24 constitutes, we believe, the application of what would be a threshold.

25 And now we get to the slide 13 testimony from Dr. Janet if you
26 look at the bottom right. Here, you see Dr. Janet relating what an exact

1 match looks like, what numbers and percentages. He's basically saying it's
2 within the realm of obviousness for a person of ordinary skill to assess the
3 match using numbers and percentages. And it's shown here, and it says in
4 paragraph 18 from his supplemental declaration, which was not subject to
5 testimony, or a deposition rather. He explains that the obviousness is using a
6 number.

7 JUDGE CASS: So, counselor, what slide are you on?

8 MR. RENNER: Oh, pardon me.

9 JUDGE CASS: What slide are you on, counsel?

10 MR. RENNER: Well, on slide 13. Oh, sorry, slide 22. My
11 apologies. Okay, sorry.

12 JUDGE CASS: Okay. Yeah, there's certainly no need to
13 apologize.

14 MR. RENNER: Yeah, thank you. Page 22, or slide 22 in the
15 bottom right. Thanks for asking. And it comes from paragraph 18 of his
16 Exhibit 1022. We've got some highlighting applied, but really here it's Dr.
17 Janet explaining that the obviousness of using a number or a percentage to
18 determine whether the criteria is met, this is one way of implementing a
19 determination of whether and how much the covered avatars are covered
20 satisfies that criteria.

21 Additionally, and this goes a little differently. This goes to a
22 question that was asked of my colleague, and he'll stand there right after I
23 present this. But Judge Cass, you -- or and it was asked of him, of Mr.
24 Devoto, whether there was deposition of opposing expert as it relates
25 essentially to matching. I'd point everyone to Exhibit 1023, page 97, lines 2
26 to 18 for your reference, where what you'll find there is Patent Owner's

1 expert giving a simplistic example, several of them actually, showing that
2 when configuration avatars in playback mode is the same that has matched
3 the configuration of the avatars that previously learned, that the system will
4 carry out the learned action for that configuration. We think that pertains
5 both to the independent claim and, of course, Claim 3 as well.

6 I'd invite Mr. Devoto up if you don't have any further questions for
7 me on Claims 3 or 4. Thank you, Your Honors.

8 MR. DEVOTO: Thank you, Your Honors. Just wanted to make a
9 few observations. I'd like to, if you could turn to slide 86, the [SUB.6] claim
10 element. In fact, let's turn to slide 74 if we could. So, just to be clear, the
11 first one or more object representations that we mapped to in our petition is
12 really shown here, and we clarified further details and fleshed out that
13 mapping in more detail in our motion to amend. And you'll see it here
14 enclosed in these dashed lines, and it's specifically an event and situation
15 profile that is structured as part of the user profile.

16 So, here it would be this whole profile that is captured by all of
17 these blocks that represent these distinct sub-data structures within this
18 larger event situation data structure. And these data structures we know are
19 representing objects in the application because they are formed of
20 parameters, sets of parameters that define these circumstances and these sub-
21 parameters including spatial position parameters, as well as of not only the
22 user's avatars but the opponent's avatars. These parameters will speak to
23 locations of different types of avatars and they will be part of this first set of
24 circumstances that we map to the first one or more object representations.

25 Now for this [SUB.6]element where we now have to identify a first
26 and second data structure, well we did. We identified the portion of this

1 aggregate data structure showing the overall circumstances to the spatial
2 position of the user's avatars which would include parameters that would
3 identify the user's avatar, both archetype and location given the broader
4 teachings of Thomas, and the spatial user -- and the spatial position of the
5 opponent's avatars which is a distinct type or label of avatar. And these are
6 distinct data structures. And these are the distinct data structures that frankly
7 match and show support that Thomas does indeed render obvious the
8 [SUB.6] element. So, there's been no distinct, no change in matching.

9 Now, I want to touch very briefly upon the [SUB.3] element, the
10 very last one where it says wherein the first object representations include a
11 first data structure that is generated at least in response to processing a type
12 and a location of a 3D object. Now, keep in mind, what are these object
13 representations, Your Honors? What the heck are they? Well, they're the
14 parameters, right? This is a set of parameters that define the current set of
15 circumstances as clearly taught by Thomas. How do you generate these
16 parameters? I mean they don't poof into existence magically. You had to
17 generate these parameters by looking at what the current configuration of
18 objects that are presented to the user by the computer program 110 that
19 inspired that user's response.

20 So, you have to generate these parameters by processing those
21 objects, processing, grabbing from them the type, their location, things from
22 those objects. And of course, the result that in response to that processing is,
23 you populate the parameters, the location, and the archetype. And you
24 don't -- we used obviousness, but frankly, it's almost just completely there.
25 How else would you generate these parameters? They don't magically come
26 into existence, Your Honors.

1 I would also like to mention one last thing before I conclude. You
2 had asked whether we had deposed the Patent Owner's expert about the
3 analysis and the discussion and the context of his argument about how
4 analysis and criteria are distinct from matching. But we did, as my
5 colleague said, if you look at Exhibit 1023, lines 97 to 218, and what you're
6 going to find is that while he didn't use the word matching, the examples he
7 gave for both defensive coverage and for also when you would do a catch
8 and shoot are comparing things to see whether they're similar.

9 So, for example, he said that if it sees you 15 feet away and you've
10 always pump faked, then it's going to pump fake. If it sees you 15 feet
11 away, that is, if it sees the current avatar 15 feet away and the learned
12 situation was that you always pump faked when you were 15 feet away,
13 well, then you're going to pump fake. That's similarity. That's matching.
14 And that's clearly contemplated, as I indicated earlier, in Thomas, because
15 Thomas is trying to simulate a user, of course. And of course, it makes
16 sense that you're only going to use a person's previously recorded response
17 to a set of circumstances when those circumstances match. In this case,
18 what are the circumstances or the location of the avatar? This avatar was 15
19 feet away. Okay. And when, as their own expert acknowledged, when the
20 avatar is 15 feet away, just like he typically was, you're going to take a shot.
21 You use that previously learned instruction to take the shot. And that is how
22 you simulate the user, because if you don't have that similarity, you simulate
23 nothing. It makes no sense.

24 With that, I think I've taken more than my time. Your Honors,
25 hopefully that was helpful. Thank you.

26 JUDGE PARVIS: Thank you, Counsel. Patent Owner, you may

1 proceed when you're ready.

2 MR. JAIRAM: Thank you, Your Honor. And I believe you said I
3 had 16 minutes. Is that right?

4 JUDGE PARVIS: That's correct.

5 MR. JAIRAM: Thank you, Your Honor. We heard discussion just
6 now about object representations and parameters and data structures. I
7 would note that the mapping that Petitioner uses for its analysis regarding
8 the added limitations has to be consistent with what's mapped for Claim 1,
9 because Claim 1 is now part of the -- well, parts of Claim 1 are brought into
10 the proposed claim. Look at in Claim 1, when Petitioner, in its petition, was
11 mapping the object representations, they pointed to things just like the
12 spatial position and the road conditions. That's, for example, at page 14 of
13 the petition.

14 What the amended claims have done is they have further limited
15 the object representation and mentioned, in particular, some very specific
16 details about the data structures. And so, it's not sufficient to just say, well,
17 here's something about a location and it's a parameter, therefore it's a data
18 structure. The exact claim language of the substitute claims has to be
19 mapped to the prior art.

20 We took a look at the MTA opposition to try and figure out what
21 exactly the data structures are being mapped to. And we certainly invite
22 Your Honors, as you do your analysis, to go look at that as well. And it
23 looks like Petitioner's mapping of the data structures has shifted a bit from
24 the MTA opposition to the MTA sur-reply, and that's not surprising because
25 we pointed out in the MTA reply how Petitioner's analysis is incorrect.

26 So, I'll basically invite Your Honors to simply look at the MTA

1 opposition. And for a lot of these arguments, including the ones that I talked
2 about in my earlier discussion, about the object representation that represents
3 3D objects, generating data structures in response to certain claim
4 processing, and the correlation of very specific data structures to the claimed
5 one or more instruction sets, when you just look at what the opposition said,
6 it was deficient. There's certainly more added in the MTA sur-reply.

7 Now, of course, the MTA sur-reply cannot add new arguments,
8 that would be violative of the Board's rules. So, any new arguments that are
9 found -- and it sounds like Petitioner's counsel is perhaps referring to some
10 of that -- any new arguments cannot properly be applied or considered. And
11 actually, the incorporation by reference is perhaps a new argument. It's
12 certainly not mentioned in the MTA opposition. It's the attempt to basically
13 say, well, we are relying on something that was previously addressed in the
14 petition. That is not mentioned in the MTA opposition.

15 We would say just if one looks at the MTA opposition, it simply
16 does not address all of the added limitations. And we have explained that in
17 the MTA reply, and hopefully I've explained that here as well.

18 I will note that it is a contingent motion to amend, and we certainly
19 stand behind our analysis for Claim 1 with respect to both of the grounds. I
20 addressed the Thomas ground in a little bit more detail. If Your Honors
21 have questions about anything, including the Thomas ground or the Buehler
22 ground, or any of the dependent claims, I am certainly happy to answer. But
23 I will note that our briefing is thorough and on all remaining points. And
24 that we've also included this set of demonstratives that -- as a guide to the
25 various arguments.

26 So, I would just ask if Your Honors have any additional questions.

1 Otherwise, I will sit down. Thank you.

2 JUDGE WEINSCHENK: Thank you, Mr. Jairam.

3 JUDGE PARVIS: Thank you to both parties for appearing today
4 and for answering our questions.

5 We will take this case under advisement and issue our decision in
6 due course. We remind the parties to please stay on the line and answer any
7 questions that the court reporter may have. We are adjourned.

8 (Whereupon the above-entitled matter went off the record at 3:04
9 p.m.)

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