

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC. and HULU, LLC,
Petitioner,

v.

DIVX, LLC,
Patent Owner.

IPR2020-00558
Patent 10,225,588 B2

Record of Oral Hearing
Held Virtually: May 25, 2021

Before KEVIN F. TURNER, BART A. GERSTENBLITH, and
IFTIKHAR AHMED, *Administrative Patent Judges*.

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P R O C E E D I N G S

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1:01 p.m.

JUDGE TURNER: Hello, everyone. We are here for an oral argument for IPR 2020-00588, Netflix, Inc. vs. DivX, LLC. I am Judge Turner and appearing with me today are Judges Gerstenblith and Ahmed.

Starting with the Petitioner, will counsel please enter your appearance for the record, please?

MR. LIANG: Good morning, Your Honors. My name is Jeffrey Liang and with me is lead counsel, Harper Batts, for the Petitioners.

JUDGE TURNER: And Mr. Liang, you're going to be presenting today?

MR. LIANG: Yes, Your Honor.

JUDGE TURNER: Okay. Thank you. And for Patent Owner? I can't hear you, Patent Owner. I don't have your audio.

COURT REPORTER: It looks like you're on mute, sir. You'll need to unmute. There you go.

MR. LOWENSTEIN: Can you hear me now?

JUDGE TURNER: I can hear you now, good.

MR. LOWENSTEIN: Perfect. Yes. So it's Nathan Lowenstein for DivX. I'm joined by lead counsel, Kenneth Weatherwax, Parham Hendifar and Colette Woo. I will be splitting the argument with Mr. Hendifar.

JUDGE TURNER: Okay. Thank you, Mr. Lowenstein. Thank you for both. I'm glad we got to hear from Patent Owner. That will make it a more lively oral hearing.

1 We set forth the procedure for today's oral hearing in our order
2 granting the parties' request for an oral hearing which is Paper 46. Each
3 party will have 60 minutes of total argument time.

4 We'll begin with Petitioner, who may present its case with regard to
5 the challenged claims and the grounds set forth in the Petition.

6 Petitioner may reserve time for rebuttal. Thereafter, Patent Owner
7 may respond to Petitioner's argument and reserve time for sur-rebuttal.
8 Petitioner may then present its rebuttal followed by Patent Owner's sur-
9 rebuttal.

10 In this video format, we do not have a timer we can share.
11 However, when it's your turn if you would please let me know how much
12 time you'd like to reserve for rebuttal, I'm happy to remind you when we
13 reach the point in your opening arguments.

14 A few other things to keep in mind, some housekeeping. First it's
15 my understanding we are not discussing any information the parties deem
16 confidential. This hearing is open to the public, and there may be
17 somebody listening on the phone. So please keep that in mind.

18 Second, please be as clear as possible during your argument
19 regarding what slide you may be referring to or exhibit so that the record is
20 clear and we may follow along. We have electronic versions of your
21 demonstratives and all documents in the record.

22 Third, please remember to keep your line on mute when it's not your
23 turn to speak so that we may minimize any background noise.

24 Fourth, before speaking please use a half second or so to pause in
25 case there's any lag in transmission.

1 And finally, if either side experiences any technical or other
2 difficulties that fundamentally undermines counsel's ability to participate,
3 please let the Panel or the IT personnel with whom you've been in touch
4 regarding this hearing know as soon as possible so we may make
5 adjustments as needed. Petitioner, do you have any questions about what
6 I've just discussed?

7 MR. LIANG: No, Your Honor. And we are planning to spend 40
8 minutes of our time on opening and 20 minutes for rebuttal.

9 JUDGE TURNER: Okay. Patent Owner, any questions on what
10 we've just discussed?

11 MR. LOWENSTEIN: No, Your Honor.

12 JUDGE TURNER: Okay. I anticipate that we're going to take
13 two short breaks. One after Petitioner concludes its opening argument and
14 a second after Patent Owner concludes its opening argument. They will be
15 probably about five minutes at most. I just find sometimes that's a little
16 helpful. It gives the parties a chance to stretch their legs.

17 We also have a matter of the joint list of objections to the
18 demonstrative exhibits, with Petitioner objecting to none of Patent Owner's
19 demonstratives and with Patent Owner objecting to demonstrative Slides 57,
20 58 of Petitioner's demonstrative.

21 The panel considered the objections and has sustained those
22 objections. It deemed that the slides presented new arguments. As such,
23 Petitioner will refrain from referring to Slides Number 57 and 58 during its
24 oral hearing presentation today. So, again, demonstratives are not
25 evidence. But we would ask in lieu of our sustaining of the Patent Owner's
26 objections to those demonstratives that Petitioner will stray from those. If

1 you do, if you call our attention to 57 and 58, I will call your attention that
2 you're not supposed to.

3 So any questions that we have from either side? Let me start with
4 Patent Owner regarding the objections to demonstratives?

5 MR. LIANG: No, Your Honor.

6 MR. LOWENSTEIN: No, Your Honor.

7 JUDGE TURNER: I was going to start with Patent Owner and
8 then Petitioner, you're going to be speaking so I'm assuming there are no
9 questions you have, Petitioner? Counsel?

10 MR. LIANG: No, Your Honor.

11 JUDGE TURNER: Okay. Thank you very much. At the
12 conclusion of the hearing, we will go off the record and ask the court
13 reporter if there are any spellings or anything that's needed. But with that,
14 we're going to proceed to you, Mr. Liang. I understand that you anticipate
15 your presentation is going to be 40 minutes with 20 minutes for rebuttal. Is
16 that correct?

17 MR. LIANG: That's correct, Your Honor.

18 JUDGE TURNER: Okay. Please proceed, Mr. Liang.

19 MR. LIANG: We'll start with Slide 2. The ground we're talking
20 about is a combination of Chen, Lindahl and Hurst.

21 Slide 4. Patent Owner only disputes limitations [1e] and [1l]. It
22 doesn't dispute that all other limitations of Claim 1 are taught by Ground 1.

23 Slide 5. The specification doesn't clearly state what the alleged
24 invention that the 588 patent is supposed to be. But the title of the patent
25 does emphasize using a common set of cryptographic keys. That is taught
26 by Hurst.

1 Slide 6. There are three remaining disputes between the parties.
2 The first one deals with the motivation to combine and whether Chen may
3 be relied upon for its teaching of basic adaptive bitrate streaming.

4 The second goes to claim construction for limitation [11] and the
5 third goes to whether the combination teaches [1e], that common set of keys.
6 We've listed the simple answer for each of these disputes. And I could
7 walk through all of them. But when you look at the evidence, Petitioner
8 wins on all fronts.

9 I can walk through them in order. But I'd like to pause and just ask
10 the Board if there's any particular issue that the Board would like to start
11 with?

12 JUDGE TURNER: I think probably as you've indicated here, that
13 the panel is most interested in what you've indicated is Dispute Number 1,
14 which I assume maybe is where you're going to start. So please proceed.

15 MR. LIANG: Yes, Your Honor. Let's start on Slide 7. So when
16 we get into the motivation to combine, I want to start by just looking at what
17 teachings are being combined from the references.

18 Slide 8. It's undisputed that adaptive bitrate streaming was known
19 in the art. And this is admitted by the 588 patent, which also lists a number
20 of commercial products that perform HTTP adaptive bitrate streaming.

21 Let's go to Slide 10. Chen teaches HTTP adaptive bitrate
22 streaming. And that's the teachings that are used in the Petition.

23 Slide 11. Hurst teaches DRM for adaptive bitrate streaming and
24 specifically in Slide 12 Hurst teaches using the same key for encrypting
25 those alternative streams in the adaptive streaming system.

1 So for example here, it shows the high, the medium and low streams
2 all being encrypted with the same key. And that's the teaching that's being
3 applied from Hurst to Chen's adaptive bitrate streaming.

4 Slide 13. It's undisputed that partial encryption is also known in the
5 art. The 588 patent admits this. And Dr. Nielson also admitted it.

6 Slide 14. The combination applies Lindahl's partial encryption
7 teachings to Chen's adaptive bitrate streaming.

8 Slide 15. The Petition combines known adaptive bitrate streaming
9 from Chen with known partial encryption from Lindahl. And it specifically
10 included the motivation to do this. The express teachings in the prior art
11 including Chen 924 which teaches adaptive bitrate streaming with partial
12 encryption.

13 Chen 924 is fatal to Patent Owner's arguments regarding the
14 motivation to combine. The Patent Owner has never addressed this express
15 motivation in any of their briefing, and they cannot address it here today for
16 the first time.

17 Slide 18. Rather than address Chen 924, Patent Owner chose to
18 ignore it. Patent Owner argued there was only one sentence for the
19 motivation to combine. They stuck their head in the sand and pretended
20 there was nothing else. But the Petition actually had six pages on the
21 motivation to combine.

22 And Patent Owner, on the left-hand column, while it latches onto the
23 quote about improving efficiency and uses it to create all this noise about
24 network protocols and FEC and all these other features, Slide 19, the
25 efficiency explained in the Petition isn't some generic notion of efficiency.

1 It's specifically the computational efficiency that's gained from partial
2 encryption.

3 The Petition explained that Lindahl, by using partial encryption, it
4 reduces the computational load, right? You're encrypting less data.
5 There's less computation. And that's the motivation that the Petition relied
6 on in addition to Chen 924.

7 Patent Owner did not address the specific motivation in the Petition
8 of reducing computational load. And all this other stuff about network
9 protocol efficiency is irrelevant.

10 Slide 20. Patent Owner also argues there's no motivation to apply
11 Lindahl's partial encryption with Chen's file format. But when you actually
12 look at what the references say, that is simply not the case. Chen teaches
13 using the MP4 file format and Lindahl also teaches the MP4 file format.
14 So both references expressly teach using the same file format.

15 Slide 21. Patent Owner argued that there's no reasonable
16 expectation of success for following the express teaching of the references.
17 But Chen 924, it indicates otherwise. Chen 924 teaches the exact
18 combination using partial encryption with adaptive streaming with the MP4
19 and 3GP file formats.

20 The Petition cited this disclosure on Chen on the right, which is
21 Column 2, Line 59, of Chen 924, when explaining how the level of ordinary
22 skill included the known use of file formats.

23 So this known use of file formats was included in the definition of a
24 level of ordinary skill. And Patent Owner and its expert adopted that level
25 of ordinary skill. This is, for example, stated in Petition, Pages 15 to 16,
26 and Dr. McDaniel's opening declaration, Paragraph 68.

1 So once again, Patent Owner chose to ignore Chen 924. And once
2 again Chen 924 is fatal to their arguments.

3 Let's go to Slide 26. The Patent Owner has made a lot of noise
4 about scalable layers and FEC. I want to start this discussion by pointing
5 out that it's not required by Chen, and it's not required by the challenged
6 claims.

7 Slide 27. The Petition relies on Chen's basic teachings of adaptive
8 streaming in what Chen calls its simplest case.

9 Slide 28. That POR points to quote, various features such as
10 independent layers and FEC, which Patent Owner contends are integral to
11 Chen's system. But as you will when you actually look at Chen, that is
12 simply not the case. But even if it were, Slide 29, even if these features
13 were somehow integral or even if they were actually the invention, the
14 Federal Circuit has held that a reference must be considered for everything
15 that it teaches, not simply the described invention or a preferred
16 embodiment.

17 We've included a number of cases in our briefing and in the slides,
18 the subsequent slides, Slides 30 through 35, that explain why Patent Owner's
19 arguments are just legally impermissible.

20 So even if these were somehow integral features, Patent Owner's
21 arguments are not allowed under controlling Federal Circuit precedent.

22 JUDGE TURNER: Counsel? This is Judge Turner. Let me
23 follow-up on that fairly quickly. I understand all the legal citations that
24 you've made. But, you know, as a matter of logic, why wouldn't one of
25 ordinary skill in the art consider these teachings whether they're optional or

1 not? I mean, wouldn't they consider them to consider the full teachings of
2 Chen?

3 MR. LIANG: Well, Your Honor, Chen has to be considered for all
4 of its teachings. And the teachings that we're relying upon here is the basic
5 known adaptive bitrate streaming. The same basic techniques that are
6 taught in Lindahl -- I'm sorry, in Chen and Hurst. And we're combining
7 that with other known techniques.

8 As to whether a POSITA would be limited to using Chen's optional
9 features, right, whether it would have to also include in every case the
10 optional features, that's what the Federal Circuit has said again and again is
11 improper.

12 For example in the *Novartis* case that we cited, the Federal Circuit
13 held that it's improper to require proof that a POSITA would have selected
14 one known technique over others. And the reason why is because the
15 POSITA isn't limited to supposedly what is the best, right? The POSITA
16 can use known techniques in their known ways.

17 JUDGE TURNER: I understand that and let me follow-up. This
18 is Judge Turner. I understand you can't say, well, okay, we have to put
19 blinders on here. But why wouldn't one of ordinary skill consider these
20 others and say, okay, this goes purely to the motivation here. And this
21 would create a disincentive. You know, maybe it doesn't rise to the level of
22 teaching-away, but we certainly consider, you know, adverse teachings.

23 MR. LIANG: Your Honor, the Federal Circuit is clear that by
24 teaching other features, that doesn't mean those are adverse, right? So
25 Chen does teach embodiments with FEC and it teaches these layers. But

1 there's also an express teaching in the art, Chen 924, that says, hey, you
2 should combine known adaptive streaming with partial encryption.

3 And so there's an express teaching to take that known technique
4 that's taught in Chen and to use it with partial encryption. And that's what
5 we're doing here today.

6 So while a POSITA can potentially use other optional features,
7 which it's improper to limit Chen's teachings to only include those features,
8 to require those features.

9 JUDGE TURNER: Okay. And let me also follow-up because this
10 will probably move you along as well. I was trying -- in going through the
11 record, did your declarant say anything about Chen? I understand that
12 certainly there's been attorney argument that these features are optional.
13 But I couldn't really see where your declarant said, oh, I'm one of ordinary
14 skill in the art, and I reviewed Chen. And I think all these features really
15 should be optional. Is there a place that -- maybe I've missed it.

16 MR. LIANG: You Honor, I can come back to your -- I can come
17 back to you with citations for that.

18 JUDGE TURNER: Okay. I don't mean --

19 MR. LIANG: I don't have them readily available. But I will come
20 back with citations for that.

21 JUDGE TURNER: Okay. Because I understand. And this is -- I
22 understand you'll come back to it. This is Judge Turner. I know that you
23 had multiple expert declarations here. And certainly, you know, Dr.
24 McDaniel is certainly referred to, you know, doing FEC with partial
25 encryption. And he said, oh, that's possible.

1 But, you know, it would have been useful to have, you know,
2 someone who is of ordinary skill in the art opine and tell us, you know, that
3 that perhaps carries greater weight than all of these things in Chen are
4 optional as you're saying. But I'll let you move on and you can apparently
5 come back to that when you've had a chance.

6 MR. LIANG: Thank you, Your Honor. We'll --

7 JUDGE AHMED: Let me follow-up with a question along the
8 same lines. So when Chen's title says streaming using scalable encoding,
9 would a POSITA reading that really consider the use of scalable layers to be
10 optional or is that title referring to something else?

11 MR. LIANG: Yes, Your Honor. And this is what *CRFD* and
12 other cases have held is that even if Chen considers these features to be part
13 of its invention, it is improper to limit Chen to just those features. Because
14 Chen what it does is it explains, and we'll go through -- we can walk through
15 the express disclosures. But what Chen explains is here is basic adaptive
16 bitrate streaming that's known in the art. And here's some embodiments
17 that change adaptive bitrate streaming to add layers and FEC.

18 So what we're doing is taking that basic teaching of adaptive bitrate
19 streaming and combining it with other known techniques in the art. And
20 that's what the Federal Circuit says must be allowed because a reference
21 must be considered for everything it teaches not just the described invention.

22 JUDGE AHMED: Okay. Thank you.

23 MR. LIANG: Now, I want to go to Slide 36, where Chen explains
24 that even if -- and Patent Owner has pointed to benefits of scalable layers in
25 FEC. But Chen explains that even if there are benefits, even if it says there

1 are benefits, it should be understood that a viable system need not include all
2 of its features.

3 And going back to your question, Judge Ahmed, I do want to point
4 out that what we're doing here is taking the basic teaching of adaptive bitrate
5 streaming from Chen and using it with other known techniques. So we
6 aren't just taking -- in many ways Patent Owner's arguments require this type
7 of bodily incorporation where you just pluck out a part of Chen, you pluck
8 out something else and you see if it fits together.

9 But that's not what the Federal Circuit says you're supposed to do.
10 You're supposed to look at the teachings. And when you look at Chen, it
11 does teach the basic case of adaptive bitrate streaming.

12 And I want to walk through that. If we could actually just go to
13 Chen itself, the stamped Page 33 of Exhibit 1006. Stamped Page 33 of
14 Exhibit 1006 is where the detailed description of Chen begins.

15 In Paragraph 63, there's a section that describes that HTTP adaptive
16 bitrate streaming that we were just talking about. And in this paragraph it
17 begins by explaining, Paragraph 63, that you have alternative representations
18 encoded at multiple bitrates. And then in Paragraph 64, it explains that the
19 client chooses between these alternative encodings based on bandwidth.

20 And so this is adaptive bitrate streaming. That's the core of that
21 adaptive bitrate streaming that's relied on in the Petition, that's pointed to in
22 the Petition, right? That's how it works.

23 Now what does the Patent Owner cite to for scalable layers in Chen?
24 When you look in the Patent Owner response, it cites to Paragraphs 375 to
25 384. So let's go to stamped Page 56. Stamped Page 56, 300 paragraphs

1 later we find what the Patent Owner had cited for the allegedly integral
2 feature of scalable layers.

3 At the end of -- so that's on Page 56. And at the end of this page, you
4 see this section begins a discussion that includes several combinations using
5 scalable layers. And Patent Owner argues that every embodiment in this
6 section includes scalable layers. Well, yes, of course it does because this is
7 the section on scalable layers. And Paragraph 385 specifically says that it
8 is about to tell you some combinations that use the layers as described
9 above.

10 So we aren't disputing that there are embodiments that use layers in
11 FEC, but those embodiments are separate from the basic teaching of
12 adaptive bitrate streaming. And Chen makes this clear.

13 This section explains you can use layers in some cases. And when
14 you look at, for example, Paragraph 386, and this is shown and highlighted
15 in Slide 37 on Petitioner's slides, Chen explains that when you're using -- in
16 some cases when you use layers, right, it says that the known techniques of a
17 block request streaming system, that's referring to the known techniques of
18 adaptive bitrate streaming, may be applied with the modification that
19 different versions of the content referring back to those different versions of
20 those alternative streams at different encodings that we saw earlier, these
21 different versions of content are in some cases replaced by different
22 combinations of the layers.

23 So Chen explains that scalable layers replace the alternative
24 representations of adaptive streaming. You don't use them together. You
25 replace one with the other.

1 And that is actually the crux of Patent Owner's arguments. Patent
2 Owner can't dispute that point because that's the basis for why it pointed out
3 these scalable layers to begin with.

4 Patent Owner argues that unlike the alternative representations where
5 you just choose one bitrate, these scalable layers are decoded together.

6 And Dr. Nielson, for example, Paragraph 57 of his declarations, explains
7 that the quality of playback increases as the number of layers received by the
8 user increases. So you have these layers that layer on top of each other.

9 And Patent Owner argues the interdependency between layers are
10 the allegedly incompatible aspect of partial encryption. So the layers are
11 interdependent. So for example, that is in Dr. Nielson's declaration,
12 Paragraph 64 to 67 in Footnote 2.

13 So Patent Owner is arguing that you have these interdependent
14 layers. But it can't be disputed that Chen also teaches separately earlier in
15 its disclosures before it gets to Paragraph 375, earlier in his disclosures it
16 teaches that basic case of adaptive bitrate streaming that uses alternative
17 streams, right, not layers. It uses alternative streams.

18 So Chen does not require scalable layers. It teaches that there is a
19 base case of adaptive bitrate streaming known in the art. Chen doesn't
20 require layers or FEC. The claims don't require these features. And the
21 grounds didn't use these features.

22 And so the simple answer is that the Petition relied on the basic
23 adaptive bitrate streaming, separate from layered video or FEC. And
24 limiting Chen to those other features is contrary not only to Chen's
25 disclosure that you don't have to use all of its features, but it's also contrary
26 to controlling Federal Circuit precedent.

1 I'd like to continue to Dispute Number 2 unless there are other
2 questions from the Board.

3 I'd like to move on to Dispute Number 2 then, Slide 50. This is the
4 claim construction for limitation [11], Slide 51. The Petition applied the
5 claim language as it is written, the plain and ordinary meaning. And Dr.
6 McDaniel addressed the plain and ordinary meaning of the claim language
7 as written.

8 As the Board noted, the Petition applied the natural reading of this
9 claim. Now I want to go back to the claim, which is shown in our slide,
10 Slide 3. Petitioner's Slide 3 shows Claim 1.

11 Claim 1 requires a playback device. Step C has a top level index
12 that identifies a plurality of alternative streams of protected video.

13 Step D says that each of the alternative streams includes partially
14 encrypted video frames. So at this point we know from the claim itself that
15 there are encrypted portions of video frames within the streams of protected
16 video.

17 Step I selects a stream. Step K requests portions of the selected
18 stream. And then Step L locates encryption information back. And this is
19 consistent with the earlier language identifies encrypted portions of frames
20 of video within the requested portions of the selected stream of protected
21 video.

22 Let's go back to Slide 52. Now as the Board noted, the Petition
23 applied the natural reading of the claim. And the natural reading of the
24 claim is necessary for partial encryption because you need to identify the
25 encrypted portions of frames of video within the requested portions of the
26 selected stream in order to know what portions to decrypt. And therefore

1 the intrinsic record, the claim itself, supports the natural reading of this
2 limitation.

3 Let's go to Slide 55. Patent Owner repeats the same construction
4 that the institution decision rejected. And as we noted in the reply, the
5 construction should be rejected again for the same reasons.

6 Slide 55 shows that the Patent Owner is trying to rewrite the claim.
7 They want that within clause at the end to somehow go back. They want to
8 move it so that it can modify the encryption information at the beginning.

9 Slide 56. To make their construction work, Patent Owner always
10 needs to inject new language into the claim. And you see it throughout the
11 reading. They try to inject new verbs. And they try to modify the
12 sentence structure to make the claim mean what they want it to mean.

13 And here's an example where Patent Owner tries to explain what the
14 claim should mean and it adds in the words "and is." They add in that extra
15 verb and structure.

16 But if the Patent Owner wanted to rewrite the claim, they should
17 have filed a motion to amend. They chose not to. And it's wrong to use
18 claim construction to rewrite the claim, especially because the Patent Owner
19 is repeatedly contradicted by the intrinsic record.

20 If we look at the Patent Owner response, Page 28, the Patent Owner
21 points to -- it has a block quotation there. And actually if you look above,
22 the Patent Owner equates the DRM information with encryption information
23 and then points to various embodiments where the DRM information is
24 inside a modified Matroska container file.

25 To support its construction, Patent Owner emphasizes the disclosure
26 of this modified Matroska format that includes DRMInfo elements. Patent

1 Owner argues that these modifications to the container file are required for
2 every embodiment.

3 But as the Board noted in the institution decision Page 30, the 588
4 patent specifically states that these modifications to the Matroska format are
5 specifically identified as being directed to several embodiments. And the
6 Board cited to Column 9, Line 13. And I just want to go to that language if
7 we could, Exhibit 1001, the 588 patent, Column 9, Line 13.

8 And the cited sentence states that in several embodiments, the
9 Matroska container file is further specialized that additional DRM elements
10 can be included within the file to facilitate the distribution of protected
11 media.

12 And so the specification states that several embodiments, i.e. not all
13 embodiments, include this modified container file. The Board specifically
14 cited this sentence as a reason for rejecting Patent Owner's construction.
15 But the Patent Owner chose not to address it.

16 Patent Owner emphasizes extrinsic evidence from its expert, Dr.
17 Nielson, but he did not address the sentence in Column 9, Line 13. Now on
18 the points that the institution decision cited for rejecting Patent Owner's
19 construction, Dr. Nielson was silent.

20 The disclosure in Column 9, Line 13, is also consistent with the
21 parent application of the 588 patent.

22 We can go to Slide 59. In the parent application, Patent Owner
23 already told the Patent Office that the specification supports the encryption
24 information being outside the requested portions of the selected stream.

25 So Patent Owner obtained claims to that effect where the DRM
26 information is in the top level index, which identifies these streams but is

1 outside of them. All right. So the top level index is outside of the stream.
2 It's outside the container.

3 And so the DRM encryption information is outside the container file.
4 This is fatal to Patent Owner's construction. His entire premises is based
5 on the notion of the specification requires the encryption information to be
6 inside the container file.

7 Slide 60. On surreply, Patent Owner argues that encryption
8 information and DRM information are two different things. They're apples
9 and oranges.

10 Slide 61. But Patent Owner told a different story originally in the
11 Patent Owner response where it equated DRM information with encryption
12 information. And this is not an accident because every embodiment where
13 Patent Owner argues that encryption information is in the container, they
14 point to the DRMInfo element.

15 Dr. Nielson also admitted that the DRM information described in the
16 specification is the encryption information that's recited in the challenged
17 claims.

18 Slide 62. Other parents of the 588 patent include the limitations
19 that Patent Owner is now trying to inject. Slide 62 shows some claims
20 from these other parents. And so when you look at the intrinsic record,
21 some parents recite DRM information that's inside the video container.
22 Other parents recite DRM information that's outside the video container.

23 But when it came to drafting the challenged claims, Patent Owner
24 used broader language that does not require the encryption information to be
25 either inside or outside the container. And it would be wrong to use claim

1 construction to restrict that broader language to only one of those
2 embodiments.

3 Slide 63. Patent Owner now argues that locating encryption
4 information is central to the alleged invention. But that's not the story it
5 told in District Court. When it described the alleged invention in District
6 Court, it didn't mention the encryption information, locating the encryption
7 information. It instead pointed to the use of common keys.

8 Now I want to also go back to that Patent Owner paragraph, Patent
9 Owner response, Page 28. In the institution decision on Page 30, and as the
10 reply noted, the embodiments that Patent Owner relies on also support the
11 natural, more grammatically correct reading of the claim.

12 And so the embodiments don't help the Patent Owner. Specifically,
13 the institution decision explained that these embodiments support this
14 grammatical reading. And I note that on this critical point, Dr. Nielson was
15 once again silent.

16 The Patent Owner response when you look at Page 28 only
17 reinforces the Board's analysis. The Patent Owner response cites to the
18 DRMInfo element being inside the container file.

19 But that same DRMInfo element also identifies encrypted portions of
20 video frames within that container. When we look at this quotation, right
21 after that first set of bolded text, it says the client application configures the
22 processor to access video frames in a stream of protected video.

23 So even in this portion of the spec that Patent Owner relies on, it tells
24 us that the video frames are within the protected video stream. And then
25 the next line in the bolded text tells us the DRMInfo element indicates the
26 encrypted portions of the video frames within the protected stream.

1 So these embodiments do not help the Patent Owner because they
2 also support the natural reading of the claim.

3 And so on this issue of claim construction, the Petitioners win for
4 three simple reasons.

5 The natural reading of the claim as written is what the Petition
6 applied.

7 Number two, the patent does not limit its disclosures to only having
8 the encryption information being inside of the video containers.

9 For example, Column 9, Line 13, which Patent Owner never
10 addressed explains that that modification to the video container is in some
11 embodiments. It's in several embodiments, i.e. not all. And that
12 disclosure in the specification is consistent with the 522 parent application,
13 which shows that the specification allows the encryption information to be
14 outside the container file.

15 Those critical aspects of the intrinsic record were never addressed by
16 Dr. Nielson.

17 So for those simple reasons, Petitioners win. And I just want to
18 speak briefly about some of the case law that Patent Owner cites.

19 The Petitioner is not trying to change the claim here. We're just
20 applying the natural reading of the claim as its written in the order that it's
21 written.

22 The intrinsic record supports us. It's fatal to Patent Owner's
23 arguments. And they cannot change that intrinsic record with extrinsic
24 evidence. District Courts and the Board routinely perform claim
25 construction without extrinsic testimony or other extrinsic evidence.

1 And here, the focus of this claim limitation is on grammar. It's not
2 about the technical meaning of terminology. And Dr. Nielson just parrots
3 the attorney argument. He never considers these critical aspects of the
4 intrinsic record. And he cannot use extrinsic evidence to change those
5 portions of the record.

6 JUDGE TURNER: Counsel, this is Judge Turner. Just a quick
7 question before you move on. Is it correct to say that if we were to adopt
8 Patent Owner's construction here that the ground would fail? I don't
9 believe the Petitioner has any alternative arguments under Patent Owner's
10 construction that the references would teach or suggest the claim. Is that
11 correct?

12 MR. LIANG: We have not proposed an alternative argument based
13 on Patent Owner's construction.

14 JUDGE TURNER: Okay. Thank you.

15 JUDGE AHMED: Counsel, I had a question. Is there anything
16 other than the DRM information or DRMInfo that would meet the
17 encryption information that's recited in the challenged claims? Is there
18 anything else in the spec?

19 MR. LIANG: I don't believe that's the case, Your Honor. And
20 that definitely has not been briefed by either party. The Patent Owner
21 throughout his briefing equated -- well at least the Patent Owner's response
22 equated the DRM information with the encryption information.

23 JUDGE AHMED: Okay. Thank you.

24 MR. LIANG: And before I move on, I just want to make one quick
25 point. I do note that Patent Owner had raised the case *Marvell v. Uniloc*.

1 And as Your Honor Judge Turner may recall, that was the case that I argued
2 before you last year. And it was just an entirely separate scenario.

3 In that case, the Patent Owner had tried to save the claims from
4 indefiniteness by rewriting them. And they said that instead of reading the
5 claim as is written, it should have said mean this period. No further
6 explanation. That's all it said.

7 And that's just not the case here, right? Here it's Patent Owner
8 that's trying to rewrite the claims. It's not us. And we explained why their
9 construction is wrong. And we're just applying the claim language, the
10 words as they're written.

11 And that's how our expert analyzed them. And we agreed with the
12 institution decision's analysis and, it's important, in which Patent Owner
13 never really addressed, and for that reason its construction should be rejected
14 again.

15 Now I want to talk briefly about the third dispute, the common keys.
16 And if we could just start with Slide 65. Ground One put forth two ways
17 that the combination satisfies this limitation. One is through Hurst and one
18 is through Lindahl. Either one is enough by itself to satisfy this limitation.

19 Slide 67. Hurst teaches that you have -- it, like Chen, teaches that
20 basic adaptive bitrate streaming where you have these alternative streams
21 encoded at different bitrates, and you select between them based on current
22 bandwidth conditions.

23 So that is -- well that's actually Slide 66. My apologies. So that's
24 Slide 66. And Slide 66 shows, for example, you have, low, medium, high
25 quality encoded at different bitrates.

1 Slide 67. Now Hurst then also teaches that you can encrypt these
2 different alternative streams using the same key. This is that feature that
3 the Patent Owner emphasized that the alleged invention in District Court,
4 they used the common keys.

5 And using the same key, Slide 68, was a natural approach to adaptive
6 streaming because as Chen explains -- Chen expressly teaches that this basic
7 piece of adaptive bitrate streaming that you encode these multiple bitrates to
8 form different versions. And then the client is expected to switch between
9 the different data rates based on the available bandwidth.

10 That's that basic adaptive bitrate streaming teaching that we're
11 relying on in the Petition.

12 And Dr. McDaniel explained that well, since the video, let's say, for
13 example it's a movie, since access is granted to all these streams as a group,
14 right, when you say rent a movie, you get access to these streams so you can
15 switch between them, then it's obvious to -- and there's a motivation to apply
16 first express teaching that these streams where access is granted together,
17 they should be encrypted in the same way.

18 Slide 69. Hurst also teaches -- so Hurst teaches using the same key
19 as one of two possibilities. Alternatively, Hurst explains that you could
20 also use different keys.

21 Slide 70. Patent Owner doesn't dispute that Hurst discloses
22 Limitation [1e] by disclosing using the same key.

23 Slide 71. But Patent Owner argues that somehow Hurst teaches a
24 way by disclosing this alternative. And I want to point out that Hurst
25 explains this alternative is beneficial when you have standard and premium
26 versions.

1 And the Petitioner explained that it was not relying on a standard or
2 premium usage model. And Dr. McDaniel explained different reasons
3 why.

4 Slide 72. Patent Owner argues teach-away based on a benefit.
5 But the Federal Circuit is clear that when there are only two possible
6 formulations, both are known in the art. The fact that there may be reasons
7 why one is preferred over the other does not amount to a teach-away.

8 I'll talk briefly, if we go to Slide 77, about Lindahl. Lindahl also
9 had the teaching where it explains that you can use the global keys to
10 encrypt all the media files.

11 In Slide 78, Patent Owner argues that Lindahl never discloses
12 encrypted media files with a global key. That's just not right because it in
13 fact does. And you see it in this quote. It explains, it expressly teaches
14 using the global key for media files.

15 Slide 79, you know, according to Patent Owner Lindahl only teaches
16 encrypting metadata with the global key. But that's not right because the
17 metadata is mentioned in the next sentence. And it says metadata can also
18 be decrypted. So Lindahl teaches using the global key for both media and
19 metadata when the content is not that sensitive.

20 Slide 80. And Petitioner explained that there are some scenarios,
21 such as for example academic settings and whatnot, where the global key is
22 sufficiently secure.

23 And with that, I will turn it over and reserve the rest of my time for
24 rebuttal.

25 JUDGE TURNER: Thank you, counsel. You will have 20
26 minutes for rebuttal. Unless there's any additional question, let me go and

1 poll the panel. Are there any additional questions for Mr. Liang before he
2 steps off? Okay. Seeing none, thank you.

3 We'll now go to Mr. Lowenstein, I believe, or Mr. Hendifar for
4 Patent Owner's presentation. Please start when you're ready.

5 MR. LOWENSTEIN: We're happy to begin. Your Honor earlier
6 mentioned taking a break. We're happy to do that if you prefer as well.

7 JUDGE TURNER: I'm sorry. Thank you. I forgot the break
8 myself and was going to plow right through. So, no, we'll take a five
9 minute break, and we'll recommence back here in five minutes. Thank you
10 very much.

11 (Whereupon, the above-entitled matter went off the record at 1:47
12 p.m. and resumed at 1:52 p.m.)

13 JUDGE TURNER: The panel is back. We'd like to
14 thank -- Mr. Lowenstein, I believe you're going to start us off for Patent
15 Owner? Was there time that you wanted to reserve for surrebuttal?

16 MR. LOWENSTEIN: Yes, Your Honor. We'd like to reserve ten
17 minutes.

18 JUDGE TURNER: Ten minutes. Okay, thank you.

19 MR. LOWENSTEIN: Okay. If we may, let's turn to our Slide
20 No. 3. I will be handling the first issue, the claim construction, which I
21 think Petitioners identified as Dispute number 2, and Mr. Hendifar will be
22 handling the other two issues, which I think Petitioner identified as
23 Disputes 1 and 3.

24 So, with respect to the claim construction issue, I would first like to
25 say that I lodge an objection to almost the entirety of Petitioner's argument

1 with respect to that issue, because it was almost entirely new arguments that
2 weren't even raised in the reply.

3 Many of the arguments were even, I think, subsumed within the
4 objections to our slide, which were sustained. And so, I'm not sure
5 procedurally if this were an appropriate thing to do, but I'd like to make an
6 oral motion to strike their argument as to Dispute No. 2, insofar as it
7 contains new arguments.

8 And I'd like to be a little bit more specific about that if I may. One
9 of the first arguments they made was they went to Slide 3 in their deck, and
10 they did a sua sponte, brand new parsing of the claim language. That was
11 not in their papers, so we object to that and we move to strike that.

12 At least three times, Petitioner went to page 28 of our Patent Owner
13 response and started making arguments about alleged embodiments in
14 support of their construction, that was not made in their papers. That was
15 the specific objection we made to Slide 58 that was sustained.

16 And if you look at Slide 58, that's exactly the argument that they're
17 making. So, we object to that. And that was, if anything, the heart of
18 their argument.

19 And we object to their -- three times -- and move to strike the
20 reference to column 9, line 13, of our Patent, which is a brand new
21 argument. I asked my colleagues to confirm that. That is not in the reply.

22 So, we object. I think that was about 80 percent of their argument,
23 Dispute No. 2. We make an oral motion to strike and I would ask Your
24 Honors' guidance as to whether that's sufficient, or whether we should seek
25 permission to file a written motion as well.

1 JUDGE TURNER: We can confer before you start. I assume you
2 don't want this to come out of your time overall for presentation. Is that
3 correct?

4 MR. LOWENSTEIN: We would graciously appreciate that if Your
5 Honors find it appropriate.

6 JUDGE TURNER: Okay. What we'll do is, I will understand that
7 you are seeking to make an oral motion. We'll go ahead and
8 contemplate it on the side here and we'll come right back. Please
9 hold.

10 (Whereupon, the above-entitled matter went off the record at
11 1:55 p.m. and resumed at 1:56 p.m.)

12 JUDGE TURNER: This is Judge Turner. The panel has
13 conferred offline. We're going to take Patent Owner's objections under
14 advisement.

15 We'll have the chance to review the transcript in the case where
16 counsel is responding to actual questions from the panel, they're certainly
17 allowed to go beyond what they -- purely on the slides -- and we will go
18 ahead and take a look at it.

19 Your objection will, of course, be memorialized in the transcript and
20 we'll address it and take it under advisement. Is that --

21 MR. LOWENSTEIN: Certainly, Your Honor.

22 (Simultaneous speaking.)

23 JUDGE TURNER: I'm sorry, go ahead.

24 MR. LOWENSTEIN: I was just going to say, if you require any
25 other specificity or briefing, or whatever it is from us, we're happy to
26 provide it.

1 JUDGE TURNER: No, I think that you were cogent enough in
2 providing what you said was your oral objection. It will be memorialized
3 in the record. We'll be able to take a look at it and be able to make the
4 determination.

5 And understand that we're not going to make the -- we'll have to look
6 a little bit more fully at it, and probably want to advise. And if there's such
7 an extent that we think that there's an inappropriate argument, we'll note that
8 we won't consider it. So, thank you. And I'm assuming we'll start you off
9 on your 50 minutes now.

10 MR. LOWENSTEIN: Perfect. Thank you so much, Your Honor.

11 JUDGE TURNER: Okay.

12 MR. LOWENSTEIN: So, let's start with Slide 3. As I said, I will
13 handle the claim construction issue, their Dispute No. 2, and my colleague
14 will handle issues two and three. Let's move to Slide 4 if we could. So,
15 this is the limitation in dispute.

16 Now, I think one of the arguments that they make, which actually we
17 don't find objectionable because they did make this argument previously, is
18 they say we're trying to rewrite the claim.

19 We are not trying to rewrite the claim. We are not trying to add any
20 words to the claim. We're not trying to add any limitation to the claim.

21 Our position is that the claim meaning supports our interpretation.
22 And to the extent there's any doubt about that, the embodiments to the Patent
23 fully support our position. And that's the way you should go.

24 So, what we have is a limitation. The locating limitation. It has
25 three clauses. The subject of that limitation is the encryption information.
26 That says, locating encryption information that what? What is the

1 encryption information? It's encryption information that identifies
2 encrypted portions of frames of video.

3 And where are you going to be locating that encryption information?
4 Within the requested portions of the selected stream of protected video.
5 There's a clear relationship between the word locating and the term within.
6 So, that's Slide 4. Let's go to Slide 5.

7 It is undisputed, the testimony of our expert, that the claim meaning
8 supports our position.

9 Let me be clear. What I mean by the undisputed is that there's no
10 expert testimony on the other side disputing Dr. Nielson's testimony about
11 the claim meaning. Let's go to Slide 6.

12 And I cannot overstate the importance of this. Every embodiment
13 of the Patent supports our construction. Every single one.

14 Now, if we look at figure 4E, for example, we see the requested
15 portion of video in the block group and we see the DRM information within
16 that.

17 I don't want to get too far off-track, but there's this notion that we're
18 saying there's a distinction between encryption information and DRM
19 information. It's possible that there could be some distance between the
20 two, but that's not our argument.

21 We are not arguing that encryption information is different from
22 DRM information. We'll clarify that later, when we get to the parent
23 Patent. But I want to make that point clear now.

24 The important point, for the purpose of this slide, is every single
25 embodiment supports our position. That's Dr. Nielson's testimony. But
26 you don't need to take our word for it. Let's go to Slide No. 7.

1 My colleague, Mr. Hendifar, took Dr. McDaniel's testimony and he
2 walked through the Patent, embodiment by embodiment. And what he
3 asked -- he asked embodiment by embodiment.

4 Question: In the embodiment of the Patent in column 9, line 23,
5 through 29, the encryption information is located within the requested
6 portion of the selected stream of the protected video. Correct?

7 Answer: It appears so.

8 Next embodiment, next answer: In this embodiment, yes.

9 Next embodiment, next answer: In this embodiment, it would
10 appear that the encryption information is included.

11 Next embodiment, next answer: It would appear it was included.
12 The DRM element was included in the stream.

13 Next embodiment, next answer: It would appear so in this
14 particular embodiment.

15 But that is not all. Slide 8. Question: Is there any embodiment
16 of the 588 Patent where the encryption information of a given cluster is not
17 located within that cluster?

18 Answer: There is not an explicit embodiment.

19 That is the only relevant testimony that we have from
20 Dr. McDaniels. Every embodiment supports our position, and there's no
21 embodiment that goes the other way.

22 Now, he says, explicit embodiment. But I think we've all read in
23 the deposition testimony to know that means there's no embodiment. Now,
24 let's go to --

25 JUDGE TURNER: Counsel?

26 MR. LOWENSTEIN: -- Slide 9 --

1 JUDGE TURNER: Counsel? This is Judge Turner. Let me go
2 ahead and ask a question. Hopefully, it'll be clarifying.

3 Between the two interpretations, the one that the Board has adopted
4 at Institution, that Patent Owner says is provisional, and the claim
5 construction that Patent Owner is now espousing, is there any difference in
6 scope between those?

7 MR. LOWENSTEIN: Yes. Okay, so I think you're asking
8 between our position and the provisional construction in the Institution's
9 position. There is.

10 Because under our construction, the encryption information that is
11 located must be located within the requested portions of the selected stream,
12 whereas Your Honors' construction, I believe, was ambivalent, or not
13 specific, as to where the encryption information would be located.

14 JUDGE TURNER: So, would it be fair to say that the Board's
15 claim interpretation is broader than the one that's being espoused here by
16 Patent Owner? Is that correct?

17 MR. LOWENSTEIN: Yes, that is correct.

18 JUDGE TURNER: Okay. And I guess as my follow-up, but if it's
19 broader, wouldn't it also encompass all the embodiments then, therefore?

20 MR. LOWENSTEIN: Well, theoretically. But I think if you take
21 that to its logical extreme --

22 JUDGE TURNER: I understand you're saying theoretically, but I
23 don't know if there's any theory involved. I would think that if it's broader,
24 it would cover that all those embodiments that would fit under Patent
25 Owner's construction, would also fit under the broader.

1 So, I'm just trying to tease out -- I understand that you're saying,
2 well, all the embodiments point this way, but I think that all the
3 embodiments would fall under both constructions, wouldn't they?

4 MR. LOWENSTEIN: Well, I understand your point. And my
5 only point is that if you take that train of thought to its logical extreme, you
6 could just have a claim that said a playback device. And then, that would
7 cover the embodiments too.

8 And so, I think what it boils down to is when you have a quite
9 specific limitation, and you have a natural relationship between locating
10 encryption information and within, because there's a natural relationship
11 between the word locating and the word within.

12 And then, the question is, well, what does that mean? And we look
13 to, where is the encryption information that identified cryptic portions of
14 frames of video? Where is that?

15 Every single embodiment, without exception, that is within the
16 requested portion. There's no dispute upon it.

17 And then, we only have testimony from one expert. And the only
18 testimony we have from the other expert is agreeing with our expert. And
19 so, the other question is, is that last clause modifying the first clause or not?

20 I think it's clear that our interpretation could be correct just on the
21 plain meaning. And then, the question is, well, which way does the Patent
22 nudge us?

23 And the Patent nudges us in our favor, because every single
24 embodiment is consistent with our position, and the only testimony as to
25 what a POSITA would understand is supportive of our position, and not
26 theirs.

1 JUDGE TURNER: Okay. And just as a follow-up -- this is Judge
2 Turner again -- I mean, the claim construction's a question of law. And I
3 understand that you're citing your declarant testimony here. Should that
4 carry some special weight, given that this claim construction is a question of
5 law?

6 MR. LOWENSTEIN: Yes. Yes. So, if we go back to *Phillips*,
7 certainly the -- well, first of all, the general merits of claim construction is
8 trying to figure out what does the term mean with respect to a person of
9 ordinary skill. And you have the plain meaning of the claim language, in
10 light of the specification and the prosecution.

11 So, of course, our expert's testimony as to what the plain meaning, in
12 view of those few things, is, is going to carry weight. And it's not just me
13 saying, take my word for it. He's saying, every single embodiment
14 supports this position. And he identifies it.

15 And then, we look at the deposition testimony of the other side.
16 Every single embodiment supports one position. So, if you ask me, is the
17 most important thing that the expert testifies in our favor? No. The most
18 important thing is that it is undisputed that every single embodiment
19 supports our position.

20 (Simultaneous speaking.)

21 JUDGE TURNER: This is Judge Turner. I'll let you continue,
22 unless the rest of the panel had any questions.

23 JUDGE AHMED: I had a question. Counsel, you said there's a
24 natural relationship between locating and within. Why isn't there a natural
25 relationship between identifies and within? Right? Wouldn't there be a
26 similar relationship between those words?

1 MR. LOWENSTEIN: I think locating -- because you're trying to
2 find, okay, where is something? Where are you going to locate it? Like,
3 imagine the claims that, locating apples that are green within the
4 supermarket. Well, there'd be no confusion as to what we're talking about.

5 There's another example. We give an example from Strunk and
6 White. There's a lawnmower and it's broken. It's in the garage. So, let's
7 say the claim said, locating the lawnmower that is broken within the garage.

8 There's just a natural relationship -- I don't know how to put it any
9 better than that -- between the verb locating and within, because within
10 denotes a place. And locating denotes locating, I guess is what I would
11 say.

12 JUDGE AHMED: Yeah. And I looked at those examples. The
13 key word over there in those examples, to me, was the word is. Each of
14 those examples had the word is. And what Petitioner is saying here, is that
15 that's the word that you're trying to insert in the claim. The words, "and is
16 within." So, how do you explain that?

17 MR. LOWENSTEIN: I strenuously disagree that that is our
18 position. Our position is your locating encryption that what? Identifies
19 encrypted portions of frames of video. And where are you identifying it?
20 Where are you locating it, rather? Within the requested portions of the
21 streaming.

22 So, we don't need to add any words to our limitation. We like the
23 limitation just as it is. And there, I think the question becomes, well, it
24 could be amenable to these two interpretations.

25 Let's say that's where you thought. That's where you ended up.
26 And personally, I think our plain meaning reads better than theirs. But let's

1 say you found those to be an opposed. Then, what I think the law suggest
2 that you do is you look to the embodiments of the Patent.

3 You look at the plain meaning in view of the embodiments of the
4 Patent. And there, the evidence becomes overwhelming. Every single
5 embodiment -- and it is undisputed.

6 Undisputed. Every single embodiment favors our position. And I
7 think if we look at the case law on Slide 19, you don't look at the plain
8 meaning in a document. You look at it in view of the specification if you
9 have a prosecution history.

10 In every single case where the plain meaning is susceptible to one
11 interpretation, and every single embodiment favors that interpretation, that is
12 the proper construction.

13 They do not cite any case law that goes against us on that. And it's
14 hard to imagine any case that could come out any other way than that,
15 because it's just so reasonable.

16 Judge Ahmed, does that answer your question?

17 JUDGE AHMED: Yeah. Thank you.

18 MR. LOWENSTEIN: Okay. So, let's go to Slide 10. It's
19 undisputed that the industry standard Matroska file had to be modified so as
20 to include the encryption information that's undisputed.

21 Now, let's look at their analysis in Slide 11. There's no testimony
22 in the opening declaration. Now, maybe you can say, look, it's
23 complicated, maybe they didn't foresee the issue.

24 But they certainly foresaw it by the -- they had to foresee it, because
25 it was clearly in dispute that the issue was raised by the time they read the

1 Institution Decision, by the time they read the POR, by the time they read
2 Dr. Nielson's declaration.

3 And what did we get from Dr. McDaniels? We heard nothing. He
4 did not address the issue. And it's not surprising that he didn't address the
5 issue, because in deposition he gave away the farm.

6 Because he admitted that every single embodiment supports Patent
7 Owner's construction. So, of course he didn't address it, because what is he
8 going to say?

9 Neither Petitioner nor Dr. McDaniels, until this very hearing, did any
10 person have the plain language. And that hearkens back to our objection
11 lodged at the beginning of this hearing.

12 There is no mention of the plain meaning in the reply. They don't
13 cite anything in the specification in support of their position. Nothing.
14 Literally, nothing.

15 Now, imagine that. You're trying to defend a claim construction
16 position. You don't defend the claimant. You don't identify anything in
17 the specification in support of your position.

18 You do not provide any expert testimony in support of your position,
19 and the only expert testimony we have is clarifying that every single
20 embodiment supports the Patent Owner's construction.

21 I don't think that this is that close of an issue, particularly when you
22 imagine they provided no case law -- none whatsoever -- in support of their
23 novel position that the correct claim construction is one with no evidence
24 behind it, that it has no embodiments behind it. Because there's no such
25 case law in support of such a position.

26 JUDGE GERSTENBLITH: Counsel?

1 MR. LOWENSTEIN: I'll go to Slide 12.

2 JUDGE GERSTENBLITH: Counsel, this is Judge Gerstenblith.
3 What's your response to the section of the Patent that we pointed to on
4 page 29 of the Decision to Institute, column 24 to 25.

5 MR. LOWENSTEIN: Yes. So, let's -- I will skip Slide 12, which
6 I think speaks for itself --

7 JUDGE GERSTENBLITH: And don't -- let me just -- I don't mean
8 to talk over you. I'm sorry. This is Judge Gerstenblith. Let me just say,
9 I don't want to take you out of order. So, if you were going to get to this,
10 please feel free to proceed.

11 MR. LOWENSTEIN: Okay. You caught me one slide too early.
12 We're going to get there in just a moment. I think Slide 12 sort of speaks
13 for itself.

14 But it's obvious when you have one expert whose testimony is
15 un rebutted, obviously that doesn't look good for the other side. I think you
16 can read these cases for yourself, but you probably would imagine that was
17 the law even without them.

18 Okay, now we get to the question you asked me on Slide 13. Okay,
19 and so, I think you said column 29, but my guess is you actually meant
20 column 24, 63 to 25, too?

21 JUDGE GERSTENBLITH: Yes. I think I said column 24 to 25,
22 which is this screen.

23 MR. LOWENSTEIN: Very good. I apologize.

24 JUDGE GERSTENBLITH: I was referring to the page of the DI.

25 MR. LOWENSTEIN: Okay. So, that is what Your Honors
26 provisionally found. Let's go to Slide 14.

1 So, if you look at what is being discussed here, in the portion that the
2 Institution Decision signed - we're talking about the top level index file that
3 contains information requested by ranges of video.

4 So, it's not about where is the encryption information. It's like,
5 okay, what second or sub-seconds from which stream are we talking about?
6 What byte ranges? It's not about encryption.

7 And then, if we go to the very next column just a little bit later, we
8 see, starting around line 15 of column 25, prior to decoding the encoded
9 media, the playback device can check for the presence of adherent info
10 element within each block group that is within the requested portion.

11 So, I think in context, the portion the Board cited I don't think
12 addresses the location of encryption information. And later on in that same
13 paragraph it clarifies that that element is within the requested portion.
14 Does that answer your question, Judge Gerstenblith?

15 JUDGE GERSTENBLITH: It does. Thank you very much.

16 MR. LOWENSTEIN: Yeah. And I think Slide 15 is just our
17 expert agreeing with that.

18 Now, the next issue Your Honors raised was grammar. And you
19 made me find a copy of Strunk and White and you said, okay, well, we're
20 going to bring together the words and groups of words that are related, that
21 makes good sense.

22 And that's, of course, true. But there are sentences, like here, where
23 you have three clauses, where both the second and third clause can modify
24 the first.

1 So, you can't put both the second and third clauses right next to the
2 first. That's impossible. I think we -- two words can't be in the same
3 space at the same time. And we'd all agree with that.

4 And let's go to Slide 17. And it's not hard to imagine possibilities
5 just like our claim. Or just like our limitation, where you have three
6 clauses, and both the second and the third modify the first.

7 Locating encryption information that was, identify some cryptic
8 portions for instance within the requested portions of the selected stream of
9 protected video, which is identical in structure, without regard to whether the
10 word "is" is there.

11 All I'm saying is we have examples from Strunk and White where
12 you have a subject -- the lawnmower -- and you have two clauses after it that
13 both modify the lawnmower -- that it's broken, it's in the garage.

14 And again, we could rewrite this so you take out the word is and it
15 has the same meaning. Locating the lawnmower that is broken within the
16 garage. Same meaning. Doesn't change it at all.

17 We took it -- Mr. Garner, the esteemed legal stylist, Mr. Garner.
18 The meeting, which starts at 10 a.m., is about the Matthews case. But the
19 second and the third clause both modify the first, just like our claim. So, I
20 would say the grammatical treatises support our position quite well, I would
21 say.

22 And even if you still disagreed with us on grammar -- Slide 18 -- that
23 shouldn't dictate. *Nestle's* is about Congressional intent, the first case we
24 cite. But that's on this exact rule. It says -- well, it shouldn't dictate where
25 you see the purposes of Congress. And I think if we look at the next case,
26 *Quality Edge*, they're going to reverse the claim construction where's no hard

1 and fast grammatical rule, just like there is here, when the specification
2 mandates an alternative construction.

3 So, I think even if you thought they had the slightest of edges in
4 terms of grammar, that shouldn't trump where every embodiment goes our
5 way.

6 Slide 19. Like I said earlier, you have the second and third clause
7 both modifying the first clause, reordering the limitation in that regard
8 would not make things any clearer. At least, today they wouldn't.

9 Now, let's get to apples and oranges. Slide 20. And I want to
10 confirm our position. Petitioner is trying to say it's the distinction between
11 encryption information and DRM information.

12 That's not what we're talking about. Obviously, those are closely
13 related terms. Do they have the exact same meaning? I don't know, but
14 they're closely related.

15 What matters though, is we're not just talking about encryption
16 information in the abstract, and DRM information in the abstract. If you
17 look at our claim, it's encryption information that identifies encrypted
18 portions of frames of video. That's the specific encryption information that
19 we're talking about, versus DRM information that identifies, not encrypted
20 frames of video, or portions, but alternative portions of the streamings.

21 So, if you rewrote the 522 Patent, the parent, to replace DRM
22 information with encryption information, it would not affect our argument
23 one bit, because we're talking about, in either case, different types of
24 encryption information.

1 The parent does not require partial frame encryption at all. So, the
2 fact that different types of encryption information or DRM information is
3 stored in a different place, is neither here nor there.

4 But let's get to Slide 21. The *Resqnet* case matters. It says there,
5 the parent Patent's prosecution history, is irrelevant because the two Patents
6 do not show the same claim language.

7 Of course, that is true. Slide 22. And I think what they're really
8 trying to say -- and I apologize if the name of the slide is not self-evident.

9 What they're really trying to say is, look at this limitation in a parent,
10 and we want you to imagine that there's some embodiment in keeping with
11 that limitation. We won't tell you what it is. We won't support it. But
12 you should just imagine that it's there.

13 Now, let's say we were -- in a court of law, we just went with a
14 supposition like that. Even that, under *August Tech. v. Camtek*, the mere
15 fact that there is an alternative embodiment not encompassed by our claim
16 construction, does not outweigh the language of the claim, and this is
17 especially true, whereas here, other unasserted claims in the parent Patent
18 cover the excluded embodiment.

19 So, even there is a phantom, unsubstantiated, unproven, unspecified
20 embodiment, it doesn't matter.

21 Okay, so I think that's most of it. They say, well, you could've
22 resolved the claim construction by writing the construction within the claim.
23 But that's true just about every single construction in history, isn't it? And
24 then they say, well, any uncertainty should go against you and for us.

25 I didn't see that in *Phillips*. That's a doctrine of contract law in
26 some states. That's not a doctrine of claim construction. Claim

1 construction, we try to figure out what the limitation means to a person of
2 ordinary skill in the art, and use the specification and the prosecution
3 history.

4 We don't go back in time -- not even Monday morning
5 quarterbacking, but quarterbacking six years later -- and say, well, you
6 should have anticipated this claim construction.

7 That's not the law. Again, we're not seeking to import anything into
8 the claim. We like the claim as it is, and our position is consistent with the
9 plain meaning.

10 Slide 24. I don't need to go through this, but I think all of the
11 evidence -- we take stuff out -- all of the evidence is on one side and there's
12 nothing on the other side.

13 With that, I think 1B, Petitioner, I believe, conceded. They don't
14 have a fallback argument. So, with that, unless there are questions, I will
15 turn it over to my colleague to handle Issues 2 and 3.

16 JUDGE AHMED: Counsel, could you address the -- I just had a
17 quick question. Could you address the other two parent Patent claims that
18 Petitioner had on their Slide 62?

19 MR. LOWENSTEIN: Yes. So, okay. So, the other two Patents
20 have similar limitations. But it's not unusual that you would have related
21 Patents that have similar limitations. And so -- stated slightly differently.

22 But that just seems to reinforce our point, which is that consistent
23 with every embodiment of the Patent, the encryption information is located
24 within the requested portion. And that's what those claims say too, I think,
25 although I'd have to check. They may just be within the container, as
26 opposed to the requested portion of the container.

1 But either way, it seems to reinforce our general position, which is
2 that every embodiment points in one direction.

3 JUDGE AHMED: Okay, thank you.

4 MR. LOWENSTEIN: Okay. Thank Your Honors.

5 MR. HENDIFAR: Good afternoon, Your Honors. I'm Parham
6 Hendifar and I will be presenting the balance of Patent Owner's argument on
7 Slide 34.

8 I would like to first highlight the particular argument raised by
9 Petitioner.

10 We are not trying to take teachings out of Chen. Petitioner is the
11 party that is trying to say that a POSITA is going to ignore Chen's title,
12 Chen's teachings about scale of alerts, Chen's teachings about other parts of
13 the system.

14 It's the Petitioner that things the POSITA is going to ignore all of
15 Chen. I mean, they're going to surgically remove a part of Chen out of the
16 system, making less efficient jobs, so that it can be combined with legal.

17 So, and I will get to that point. But I just want to highlight this
18 point that we are not the party that is trying to leave anything out of Chen.
19 We argue that a POSITA would actually let out Chen in its entirety, and for
20 all of his teaching, including what Chen suggests a POSITA should do.

21 But I just added more detail. I'm going to Slide No. 35. The
22 limitation that's in dispute here is the limitation that a video would include
23 partially encrypted video frames. So, partial encryption in the context of a
24 system such as Chen.

25 Going to Slide No. 36 -- and I know that this point is in dispute -- the
26 POSITA is derived on Chen's system for most of the claim limitation, but

1 they did try to import partial frame encryptions, based on Lindahl or Hurst,
2 into a system such as Chen. For example, on page 18 of the Petition, the
3 Petition says, a POSITA would have been motivated by Lindahl's teaching,
4 to check.

5 Now, the premise underlying Petitioner's combination, going to Slide
6 No. 37, is that Chen is agnostic to what type of encryption would be applied
7 to the system, and therefore a POSITA would be free to do whatever it
8 wanted, whether it's a partial encryption based on Lindahl, or it's like another
9 type of encryption.

10 And that is not correct. We're going to show that Chen constantly
11 did not implement partial frame encryption, because that would jeopardize
12 the efficiency of the system. And I want to highlight, efficiency is the
13 motivation cited and relied upon by Petitioner.

14 Going to Slide No. 38, even the Petitioner says, Chen is a --
15 (Simultaneous speaking.)

16 JUDGE TURNER: Counsel? This is Judge Turner. I have just
17 a quick question on Slide 37. You sort of have indicated that you find that
18 to be false. That Chen doesn't require any particular DRM implementation.
19 So, are you say that Chen requires that's specific? That it says, here's how
20 you have to do DRM?

21 MR. HENDIFAR: Yes. What we are arguing -- and I think it's
22 undisputed and I'll show that it's undisputed -- is that Chen does not permit
23 partial frame encryption in the context of its system, because partial frame
24 encryption would not be compatible with the heart of what Chen is trying to
25 do. So, it requires not doing partial frame encryption.

26 (Simultaneous speaking.)

1 JUDGE TURNER: This is Judge Turner. Because I don't think
2 you're quite -- I understand what you're saying, but I don't really think you're
3 necessarily responding to my question. I understand that you're saying
4 what's there, you wouldn't do partial frame encryption. But the statement
5 that I think you've indicated is false, is that it did not require any particular
6 DRM implementation. Does Chen require a particular DRM, irrespective
7 of partial or full frame encryption? Does it require particular DRM
8 implementation?

9 MR. HENDIFAR: Yes. And maybe I'm misunderstanding. So,
10 a particular DRM implementation can be rendered as partial or full.

11 JUDGE TURNER: I understand.

12 (Simultaneous speaking.)

13 JUDGE TURNER: But there are other types of DRM I can have.
14 Perhaps I have some other DRM that doesn't have any frame encryption.
15 Perhaps it says, as Patent Owner has argued, that it's taking -- I can't
16 remember what the word is from Chen, that's it moments, or something like
17 that -- but it's taking a bunch.

18 But it may have -- I guess what I'm trying to understand here is,
19 you're saying it doesn't require -- that maybe if you're saying that it doesn't
20 allow for DRM, that it allows for particular encryption, but it does seem like
21 it does -- is it specifying and saying, here's the DRM that you have to apply?

22 MR. HENDIFAR: Let me try to answer to the best -- I'm not trying
23 to dodge it, so if I don't answer it, please let me know.

24 JUDGE TURNER: Okay.

25 MR. HENDIFAR: Because this is just a point that I want to make
26 so I convey that. So, maybe a better phrasing would be, Chen discloses full

1 encryption, and in the context of its system does not allow partial frame
2 encryption.

3 JUDGE TURNER: Okay. Because your raising sort of the
4 statement as false, and to me, I'm like, what does it say in particular. So,
5 that's what I'm trying to sort of tease out.

6 And I think what you just said makes more sense to me than perhaps
7 what you said on 37. And I think it's more in keeping with Patent Owner's
8 argument. But let me let you continue, please. Thank you.

9 MR. HENDIFAR: Your Honor, I have to state a clarification. So,
10 if there's any other part, I don't know if you have question, I would be happy
11 to answer.

12 And I'm going to Slide No. 38. Even though the Petitioner relies on
13 this underlying assumption that Chen is agnostic to whether he would
14 implement partial frame encryption or full encryption, Petitioner cites in
15 Slide 38 admitted, unambiguously, that in order to implement partial frame
16 encryption in Chen, you would have to modify everything about structure
17 that is disclosed in Chen.

18 And this is one example we have in our PR citations for different
19 types of partial structures disclosed in Chen, and all of those would have to
20 be modified for Chen to implement partial frame encryption.

21 Going to Slide No. 39, the only disclosure of encryption that the
22 Petition cites is Chen, in paragraph 522. And it's undisputed that that
23 disclosure discloses document level of encryption. Not partial frame
24 encryption, but fragment-level encryption.

25 Now, what is the difference? The difference is that if Your Honors
26 are going to next Slide No. 40, fragment is 12 to 30 different slides. And

1 when you encrypt a bunch of slides together, that's different from partial
2 encrypting a single slide.

3 And you have an expert declaration on this topic. And this is a
4 point that's undisputed, again, among many other points. Petitioner's
5 experts was not to address this point in his exam by the correction.

6 Now, going to Slide No. 42, there are additional aspects of Chen that
7 the Petitioner does not point to, but we point to, that support our position.
8 That's Chen, as this Board envisions encryption methodology was not partial
9 frame encryption.

10 So, in Slide No. 42, Dr. Nielson explains that, for example, today
11 Chen does disclose a DRM-info element. That element if you recall in
12 the context of our Patent, was within the portion, because it would have to
13 certify what has been done.

14 In the context of Chen, that DRM-info element is at the presentation
15 level. And I would like to remind Your Honors that the presentation
16 discloses the same in the context of Chen. And all of these are undisputed.

17 So, going to Slide No. 43, what we are really saying is, and I'm
18 going to show why it matters, is that Chen is not agnostic. Chen is not
19 silent. An actual analysis of Chen's system would reveal that Chen uses
20 full-document-level encryption, not partial frame encryption.

21 Now, why does Chen do that? Because in the context of teachers of
22 Chen that the system is trying to achieve, such as the scalability and other
23 cases, partial frame encryption was beyond the POSITA, and very, very
24 challenging.

25 And in fact, it was challenging rather recently if you all may
26 remember, Zoom at the beginning of the pandemic, had a lot of security

1 issue. And this system uses scale over there. So, this issue is actually not
2 something that we're just making up. A lot of people knew that that is an
3 issue.

4 Going to Slide No. 44, the Petition cites two motivations as to why a
5 POSITA would implement partial frame encryption in the context of Chen.

6 First, to address piracy concerns, and two, to improve efficiency.
7 Now, Petitioner's counsel pointed that you're ignoring efficiency in the
8 computation, and you're not ignoring that. We have addressed that and we
9 will address that, in the context of this presentation as well.

10 Now, according to Slide No. 45, even though the Petition at the first
11 motivation says, a POSITA without prior partial frame encryption in Chen to
12 address piracy concerns, there is no evidence -- zero, not even a conclusory
13 sense -- why applying partial frame encryption, in turn, would be better than
14 Chen itself, is already doing full fragment-level encryption. Why would a
15 POSITA go ahead and try to modify Chen by a partial frame encryption?
16 There is no piracy gain by doing that. And that motivation I think can be
17 summarily dismissed.

18 Which then brings us to the real motivation that the Petition cites to
19 propose, going to Slide No. 46, that applying partial frame encryption, in
20 turn, would cause improved efficiency.

21 But we will show that if a POSITA looks at the entirety of Chen,
22 which is what you're saying, even though the Petition would be trying to
23 question out, if a POSITA looks at the entirety of Chen's system, which the
24 Petition has to rely on for the claims because the claims insist on claim, a
25 POSITA would not be motivated to cut out integral portions of Chen piece-

1 by-piece, just so that they can go ahead and apply partial frame encryption.
2 And we will show that and it's undisputed.

3 Going to Slide No. 47, Dr. Nielson explained in his declaration at
4 least two features of Chen: the scalable layers and Chen's FEC that was
5 beyond a POSITA to implement with partial frame encryption. In these
6 two, as Your Honor's pointed out, Petitioner's expert chose -- even though it
7 submitted the declaration, Petitioner's expert chose not to address scalable
8 layers altogether. It is not addressed whether scalable layers were integral
9 to Chen. It is not addressed what a POSITA would do in the context of
10 Chen's entire teachings of a scalable layer. It is not addressed whether a
11 POSITA could implement scalable layers with partial frame encryption. He
12 categorically disregarded this issue. So whatever I'm going to say about
13 scalable layers is undisputed, and that's dispositive, as we'll submit.

14 Now going to slide No. 48, Chen's layers implement what is known
15 as scalable video coding. Now what is scalable video coding? Going to
16 slide No. 49 -- and just a little background before I get to slide 49, the
17 premise behind alternate video streaming is that you have something like an
18 Internet or a network that's blocked, wasting bandwidth. So and that's
19 where you have a different stream, but the idea is you want to have the
20 flexibility to adopt your system to the actual bandwidth that is present.

21 So scalable video coding, which was typically done at the time, and
22 even today, in slide 49, encrypts -- I'm sorry, encodes the video in multiple
23 layers of quality and the receiver would receive as many layers as the
24 bandwidth basically allows.

25 Going to slide 50, Chen's system is all about scalable encoding.
26 That's the heart of Chen's system. Even if Petitioner raises attorney

1 arguments that it does not, there is nothing in Chen that says otherwise.
2 They do not point to a single embodiment in Chen that does not have
3 scalability.

4 Going to slide No. 51, which is what I was just pointing out, Chen
5 explains that its system is configured to provide and consume scalable
6 blocks. The system. Not some parts of the system. Not some
7 embodiments of the system. Not sometimes the system. The system is
8 configured to provide scalable layers.

9 Now the Petition in its reply relies on the second sentence in this
10 paragraph in slide 51 that says in some embodiments those layers may be
11 independent. But that does not change the scalable nature of Chen. They
12 have scalable layers. Sometimes those layers may be independent;
13 sometimes they may not be. That does not change the fact that Chen's
14 system is a scalable system incompatible with partial frame encryption.

15 Now going to slide 52, we point to --

16 (Simultaneous speaking.)

17 JUDGE TURNER: Counsel?

18 MR. HENDIFAR: -- embodiment -- yes, Your Honor?

19 JUDGE TURNER: Counsel, this is Judge Turner. I had a quick
20 question. Now Petitioner has previously said that there's no embodiment in
21 Chen that includes both -- I think what you're stating, you're contrasting that
22 and you're saying every embodiment of Chen contains scalable blocks. So
23 any embodiment that also teaches FEC would also have to have scalable
24 blocks. So I assume you're going to get to that argument. I don't want to --

25 MR. HENDIFAR: We are.

26 JUDGE TURNER: -- rush you along but --

1 MR. HENDIFAR: Yes, we are, but I want to make it even simpler:
2 You don't need both scalability and FEC to reach the combination. Either
3 scalability -- neither scalability or FEC are compatible with partial frame
4 encryption. Petitioner has chosen not to have the scalability. That by
5 itself -- I'll get to that -- is alone the defeat the combination regardless of
6 FEC, regardless of whether you need FEC, you can't have FEC. Scalability
7 by itself is sufficient. And that makes it simpler for Your Honors. That's
8 why I'm focusing here. But, yes, I'll get to that point as well.

9 JUDGE TURNER: Okay. I'll let you go. Thank you.

10 MR. HENDIFAR: Thank you. Going to slide 52, Petitioner points
11 to four -- or we pointed to four embodiments that -- exemplary embodiments
12 that show scalability beyond a doubt. And Petitioner's counsel goes
13 through them and he says, well, in other parts of Chen there are no
14 scalability. But I want to emphasize again, Petitioner does not cite a single
15 embodiment. They do not point to a paragraph that says this is an
16 embodiment that does not have scalability, because it does not exist. Chen's
17 title, Chen's summary, Chen's summary of the invention that says the system
18 is configured. Every part of Chen has scalable layers.

19 Now slide 53 I've already addressed. Going to slide 54, Petitioner
20 relies on Chen in paragraph 70 to say Chen's simplest case is just alternate
21 streams with no scalability. And I believe Petitioner's counsel pointed that
22 out as well in their oral presentation today, but if Your Honors read the
23 entirety of that sentence in paragraph 70 of Chen, which is at the bottom half
24 of our slide, that sentence says in a simplest case each alternative
25 representation may be stored in a single 3GP file.

1 So the simplest case is that the entirety of the representation is in a
2 single file, not in multiple files for each segment. So this is neither here nor
3 there about whether they have layers or not. The simplest refers to how
4 many files you have, not to whether you have layers or you don't have
5 layers.

6 Now going to slide No. 55, it is undisputed; we point to it,
7 Petitioner's expert does not dispute it, it is abundantly clear that scalability
8 goes to the heart of Chen's system and without it you're not going to be able
9 really to implement adaptive bit rate streaming because your bandwidth
10 fluctuates and if you have to stall the presentation every time your
11 bandwidth is a little less or a bit more, that really damages the user
12 efficiency because you have to provide a much larger bandwidth to account
13 for the fluctuation. And Chen in slide 56 points that out, that without
14 scalability media quality is necessarily much lower and the user will have a
15 poor experience.

16 Now going to slide 57, looking at teachings of Chen it is entirely the
17 POSITA -- and Dr. Nielson explains that, and this is undisputed again.
18 Again Petitioner's expert chose not to do this. It was beyond the POSITA's
19 skill to implement partial frame encryption with scalability. Now why is
20 that?

21 Going to slide 58, Dr. Nielson explains that when you have scalable
22 layers and you encrypt each layer of the video -- I'm sorry, when you encode
23 a video in multiple layers but you only partially encrypt each of those layers,
24 those layers are not going to overlap. And you have testimony on this, and
25 it's undisputed. You cannot make them overlap. Not that they just happen
26 not to overlap. You cannot make them overlap because the encryption is

1 outside the encoded layer and you don't know where the encoded portion of
2 each layer is going to fall once they're encoded.

3 So those encrypted portions are not going to overlap and a third-
4 party intruder is going to be able to determine what the encrypted portion of
5 one layer is based on the unencrypted portion of the video. And this is
6 again undisputed, beyond POSITA skill.

7 Now going to slide 59, which is something Petitioner's counsel
8 raised, we did not ignore what happens if a POSITA wanted to reduce just
9 encryption burden of the system. Dr. Nielson explains, again undisputed,
10 not as someone on the other side -- Dr. Nielson explains that what was done
11 at the time -- because you wouldn't be able to do partial frame encryption
12 with scalability, you would do what is known as selective encryption, which
13 means you encrypt entirety of frames with all of the layers, but you don't
14 encrypt all of the frames.

15 So you would for example encrypt every fifth frame. That way you
16 don't have to do partial frame encryption so your system is going to be
17 compatible with scalability on other features that you need, but you still
18 reduce the burden of encryption the same amount that you would do with
19 partial frame encryption. And that's what's specifically was done at the
20 time. That's what the POSITA would have known to do, and this is
21 undisputed.

22 Now going to slide No. 60, I think I've already hammered this point
23 that there is no testimony on this issue from the other side.

24 Going to slide 61, it is not just our expert that talks about
25 cryptography and the complexity. You can't just add cryptography on a

1 system that's not designed for it. Leading experts at the time and today
2 agree on that point.

3 Now going to slide 62, Petitioner has the burden to show why a
4 POSITA would have modified Chen to implement partial frame encryption.
5 Now they come back and say, oh, we're not modifying Chen; we are taking
6 something out of Chen without taking Chen's system, cutting out portions of
7 it. It's modifying display differently. And I want to emphasize again the
8 claim is the system claim. It is the playback device and its various features
9 that the Petitioners are arguing limitation by limitation. The Petitioners
10 relies upon various parts of Chen's system. It's not scalability in the
11 abstract. You can't send -- I'm sorry. It's alternate stream. You can't just
12 send alternative stream, alternative streams of video in a network and not
13 have a system that can actually handle it.

14 So they have to show why a POSITA would apply partial frame
15 encryption in Chen. Their motivations were privacy which doesn't apply --
16 efficiency, which doesn't apply because Chen's system is going to be less
17 efficient with partial frame encryption.

18 Now going to slide 63, this is dispositive. It's dispositive because
19 scalability by itself is sufficient to defeat the combination. There is no
20 expert report on the Petitioner's side and their expert does not answer it. So
21 that by itself is enough regardless of FEC, but there is also FEC.

22 Now going to slide No. 64, Dr. Nielson also explains that a POSITA
23 would not have been able to combine partial frame encryption with FEC.
24 FEC stands for forward error correction. Now, and the issue, as Dr. Nielson
25 explains, is it's the same as scalable layers. When you have different
26 packets, each packet is going to have redundant information for the other

1 packets that would be arriving. And if you only partially encrypt those
2 packets -- again you can deduce the encrypted portion of the one packet
3 from the unencrypted portion of different packets.

4 Now going to slide No. 67, it is again undisputed that FEC, just like
5 scalable layers, includes efficiency of Chen by 70 percent. And to point out
6 Judge Turner's comment, given that every embodiment of Chen has scalable
7 layers, every embodiment of Chen that also has FEC has both of those
8 features, but we submit that there is no actual embodiment of Chen that
9 actually does not have FEC.

10 It is true pointed that Chen points out non-FEC as a possibility, but it
11 points it out just to say why a POSITA wouldn't do it, not as an equally
12 valued alternative that you get to choose what to do.

13 Now going to slide No. 68, one of the very few points that
14 Petitioner's expert in his reply declaration chose to address was whether a
15 POSITA would be able to combine FEC with partial frame encryption.
16 And we are on slide 68. And in particular Dr. McDaniel relies on Exhibit
17 1023 to argue that FEC to partial encryption, quote, does no harm. But let's
18 look at what Exhibit 1023 actually says because it actually supports Patent
19 Owner's position. Why is that?

20 Going to slide No. 69, Exhibit 1023 says FEC does no harm with
21 partial encryption only if the FEC is not applied to the application layer data.
22 That's Petitioner's own exhibit.

23 What does Chen do? Going to slide No. 70, Chen is actually the
24 type of system that applies FEC to the application layer data.

25 So going to slide No. 71, Petitioner's Exhibit 1023 actually confirms
26 Patent Owner's position because it explains that when you apply FEC to the

1 application layer data, you get redundancy of transmitted data. And this is
2 from Petitioner's Exhibit 1023 on slide 71. The exact same reason Dr.
3 Nielson, our expert, identified as the issue with FEC as well as scalability.

4 Going to slide No. 72, Petitioner's expert also said, well, as POSITA
5 would have done, it was easily -- anybody knew that you would do FEC
6 after you have already done encryption, therefore you end up with an
7 encrypted data and then unencrypted FEC stream. And that's slide 72.

8 However, going to slide No. 73, the standards that were in effect at
9 the time explains that if you have an encrypted data stream and an
10 unencrypted FEC stream, that would result in layering violations.
11 Obviously because Petitioner's argument was untimely and it was
12 specifically required, we didn't get a chance to provide an expert testimony
13 on this issue, but we just want to highlight that there are many issues with
14 the argument that Petitioner's expert stated.

15 Now going to slide No. 77, if I may, Petitioner again says we are
16 trying to bodily incorporate Lindahl into Chen. We are not trying to do
17 that. We are just saying why a POSITA wouldn't be able to modify Chen
18 based on the motivation Petitioner raises. Petitioner says a POSITA would
19 be motivated to modify Chen because it improves efficiency. We have
20 shown that it does not in fact improve efficiency.

21 Now I want to highlight another point. Going to slide No. 80, if I
22 may, we also pointed out that a POSITA wouldn't have been able to modify
23 the standard file format to include encryption information within the file
24 itself. And Petitioner comes back and says, well, it was known that you
25 could have done partial encryption with different file formats, but that's not

1 what we said. What we said was you wouldn't be able to modify the file
2 format to include encryption information within the file.

3 Now in order to challenge that, as slide No. 30 shows, Petitioner had
4 to modify its definition of a POSITA from somebody who uses the standard
5 file format to somebody who can modify the standard file format. So I
6 want to emphasize this. Petitioner has to go back and change the definition
7 of a POSITA.

8 Now Petitioner's expert in his second declaration said he has all
9 along argued that a POSITA would not be able to modify this kind of file
10 format, but this issue was not even recognized in the petition or in the
11 opening declaration. They have has not recognized that the file format had
12 to be modified. So by extension they couldn't have argued that it was
13 within the POSITA's skill to modify this kind of file format.

14 Because I only have one minute left before our rebuttal. I want to
15 point Your Honors to slide No. 87. Really the heart of our argument on the
16 issue of the same keys being used for all of the stream is that individual
17 elements of a claim may have been known, and that's generally the case
18 (unintelligible) have said. That's often the case with a lot of inventions.
19 There may be individual elements that are known.

20 The question is whether a POSITA would combine those elements in
21 the same way that the claim does. And as shown in slide No. 7, the claims
22 of the patent have different features such as a sophisticated system that has a
23 top-level index, that has alternate stream, partial frame encryption that will
24 require specialized recorders, and a modification of the standard file format,
25 among other features.

1 The question becomes if you had in 2011 -- and if you recall 2011,
2 Netflix was still not really that popular. You may have had Blockbuster
3 video. So 2000 -- not today, today's may be -- obviously it's very easy, but
4 at the time of the invention if you went through the trouble of doing all those
5 things for a video, the video was important. And if you have a video that is
6 that important, why would you then jeopardize the security when you have
7 already jeopardized the security by doing partial frame encryption to further
8 jeopardize the security by using a single key?

9 And in our slides we have just some examples of how the DVD
10 systems are all breached, how even the general broadcast systems, which are
11 free, don't use a global system. So I don't -- for Your Honors because you
12 asked me to specifically address this point, but this is -- the heart of our
13 argument is why would you combine all of those elements into the frame?

14 Now if there are any questions, I'd be happy to answer, but other
15 than that we will reserve the balance of your time.

16 JUDGE TURNER: Thank you, counsel.

17 Did the Panel have any additional questions before we take our
18 break?

19 Okay. Seeing none, we're going to take our five-minute break.
20 We'll be back here in five minutes and we will hear from Petitioner and then
21 subsequently from Patent Owner. Thank you.

22 (Whereupon, the above-entitled matter went off the record at 2:49
23 p.m. and resumed at 2:55 p.m.)

24 JUDGE TURNER: Mr. Liang, you seem available. You have 20
25 minutes and I'll let you begin when ready.

1 Let me also note for both sides that the Panel is willing to be liberal.
2 If we have a lot of questions and it takes beyond your stated time, we can
3 give you a little extra time to respond.

4 But with that I'll throw it to you, Mr. Liang. You have 20 minutes
5 for your rebuttal. Please begin when ready.

6 MR. LIANG: Thank you, Your Honor. I'd like to start by pointing
7 out that -- well, how can Patent Owner object to the analysis that's in the
8 institution decision regarding claim construction? The reply explained that
9 the Patent Owner's construction had already been rejected and it should be
10 rejected again for the same reason. So they cannot claim that they didn't
11 have notice of the analysis that's in the institution decision and they made
12 the strategic decision not to address that analysis.

13 And specifically there's two reasons in the institution decision that
14 they ignored which are fatal to their arguments. And the first is that the
15 same embodiments support the petition, and this is the exact reason why we
16 went to the Patent Owner response page 28, because as the Board noted,
17 these embodiments that they're pointing to support the petition as well.

18 If we go to Patent Owner's slide 7, for example -- if we go to Patent
19 Owner's slide 7, they point out -- they emphasize that every -- this every
20 embodiment thing, but those same embodiments support the natural reading
21 of the claim. And that's what the Board rejected their construction for on
22 that basis in the institution decision and it still holds true today. The
23 embodiments are consistent with their construction, but they don't favor the
24 Patent Owner's construction, and they certainly don't justify limiting the
25 claims to the narrower -- the construction.

1 Slide 8. Briefly I point out that -- Patent Owner's slide 8, that all Dr.
2 McDaniel said here -- they emphasized this testimony from Dr. McDaniel.
3 He was asked whether there is a required embodiment where encryption
4 information is not within a given cluster and he said there's no explicit
5 required embodiment. And that's consistent with what we're saying. It's
6 not required, but the specification allows the encryption information to be
7 outside of the container file.

8 Now I'd like to go -- just keep going through their slides. If we go
9 to slide 10, Patent Owner's slide 10, I noticed that if you -- what they cite
10 here in the specification, it says many embodiments used this specialized
11 Matroska container file. So once again what they're relying on is a
12 description that many embodiments; i.e., not all embodiments -- and this is
13 consistent with that second reason that the Board cited for rejecting their
14 proposed construction, that the -- in column 9, line 13 the '588 says that
15 several embodiments use this modified Matroska container; several, not all.
16 And that's fatal to their position.

17 Indeed, these portions of the specification are consistent with the
18 other parts of the specification. For example, column 20, line 27 says, and I
19 quote, Many embodiments of the invention utilize the conventional
20 Matroska container, end quote. This was cited in Dr. McDaniel's opening
21 declaration, paragraph 173, where he was explaining what's in the top-level
22 index. And I'd note that the Board pointed out that the encryption info can
23 be in the top-level index.

24 And if we go back to Petitioner's slides -- and let's go back to
25 Petitioner's slide 59. That's exactly what the Patent Owner has previously
26 told the Patent Office is allowed by the specification. They obtained claims

1 where the encryption information is outside of the container file. So they
2 cannot argue now that the specification does not allow this because they
3 obtained claims directed to the scenario that they now claim is not permitted
4 by the specification. And that's just -- they're just contradicting their
5 previous representations to the Patent Office.

6 Slide 60. I'd also -- Patent Owner has now given up on this
7 argument it seems. They claim that they didn't -- that they never contended
8 these two -- encryption information is different from DRM information.
9 That's exactly what they argue. That's their apples and oranges. And
10 they're running away from this now, but they cannot run away from the fact
11 that they obtained claims directed at the scenario that they're now trying to
12 say is not allowed.

13 And if we could go to Patent Owner's slide 22, please. Go back to
14 the Patent Owner's slides and we go to slide 22. This citation to this case
15 law makes no sense in light of the disclosures in for example column 9 and
16 in the thing that they cited, which is that many embodiments use the
17 modified container; i.e., not all. And as we explain the parent applications,
18 there are some directed to the limitation that Patent Owner now seeks to
19 import, but the plain language of the claim uses broader language that isn't in
20 those parents. And so Patent Owner's argument here to *August Tech.* is
21 not -- is just inapposite.

22 Now with respect to file formats, I'd like to point out that -- if we
23 could go to Petitioner's slide 21, Patent Owner has still -- and they cannot
24 because they haven't yet -- they've never addressed Chen '924. So they
25 make all this -- they made all this argument about why would a POSITA
26 have combined these references in this particular way, taking partial

1 encryption and adding it to adaptive bit rate streaming? Well, that's exactly
2 what Chen '924 teaches. It teaches partially encrypting, right, at least a
3 portion of an i-frame, p-frame, or b-frame, right? And then it specifically
4 applies that partial encryption in adaptive bit rate streaming to the MP4 and
5 3GP file formats.

6 So this, Chen '924, is fatal to all of their arguments about the
7 motivation to combine. Why would a POSITA have taken the specific
8 adaptive bit rate teachings out of Chen? Why would they have taken the
9 specific partial encryption out of Lindahl? Why would they have combined
10 these teachings? Because there's an express teaching and suggestion on the
11 art in slide 22. That is one of the classic foundations for a motivation to
12 combine that has been seen in cases again and again.

13 Slide 24. Now Patent Owner tries to make this big deal about the
14 word use versus modify, but I want to point out if you look at what is in the
15 petition and what's in Dr. McDaniel for -- on the definition of what is in the
16 level of ordinary skill, it includes the citation. If you look in that paragraph,
17 a citation to Exhibit 1010 -- that's Chen '924, column 2, line 50.

18 So what Dr. McDaniel is saying is that they would have known how
19 to use file formats and that use of known file formats includes the specific
20 use in Chen which applies partial encryption to adaptive bit rate streaming
21 for the MP4 and 3GP file formats. So his reply declaration is entirely
22 consistent that using the formats in this way modifies -- includes the
23 modification of them. That's taught in the prior art.

24 Now I'd like to go to their -- Patent Owner's slide 39, please. So
25 let's go back to Patent Owner's slide 39. And I want to talk a little bit about
26 the fragment-level encryption. So according to Patent Owner, Chen

1 allegedly discloses fragment-level encryption, right? But then it -- these
2 slides are by themselves contradictory. First they say that Chen discloses
3 fragment-level encryption.

4 And then if we go to slide 42, now all of a sudden Patent Owner is
5 saying no, it's not fragment level. It's encryption at the presentation level.

6 And then we go to slide 45 and it's full-segment encryption. But let
7 me -- let's just be clear on what they're even pointing to here.

8 Let's go back to Petitioner's slide 41. Let's go to Petitioner's slide
9 41. So what is Patent Owner pointing to for this notion that Chen teaches
10 fragment-level encryption? It's a hypothetical discussion. This -- the
11 thing -- the portion of Petitioner's slide 41 that's underlined shows what
12 they're relying on. It says that you could encrypt each fragment. But what
13 does the rest of this paragraph say?

14 It starts off by saying this is a hypothetical used to simplify this
15 discussion for bandwidth calculations. So for this hypothetical it wants you
16 to suppose -- to simply this discussion suppose various conditions. And one
17 example, the EG, it's just one example, you could do this, you could do that,
18 or you could suppose that each -- that encryption is being employed to
19 encrypt each fragment. So this is just a hypothetical. It's not what Chen is
20 doing for -- Chen doesn't require fragment-level encryption.

21 Now, Patent Owner has argued that we don't point to a single
22 embodiment where -- without, without scalable layers. But, the Petition
23 pointed to the -- the Petition did do that.

24 The Petition points to those earlier sections of Chen, including
25 paragraph 63, with that basic teaching of adaptive bitrate streaming before

1 the FEC and you know, scalable layer features are added. It uses
2 alternative streams, not layers.

3 And as I explained before, and they -- and they -- and the Patent
4 Owner had no answer. The layers are used to replace the alternative
5 stream. That's what Chen exclusively discusses in paragraph 386.

6 And that's the basis of their whole argument. You saw Patent
7 Owner's argument. When they -- when they started putting up the slides
8 about layers, and how this interdependency between the layers creates
9 security issues.

10 But, we're not using those layers, right? We're not using these
11 interdependent layers. We're relying on Chen's teaching of alternative
12 streams, where what's based on your bandwidth, you choose the bitrate you
13 want. And that's the stream you want.

14 We're not using these layers that add on top of each other. The
15 ones where Dr. Nielson in paragraph 57, explains that as you get more
16 layers, you can code them together to get higher quality.

17 We're not using those layers. We're using that basic teaching per
18 there of the alternative streams that Chen teaches.

19 And if I could point you to the expert declaration, paragraph 113.
20 So, Exhibit 1003, paragraph 113. This is document N of Opening
21 Declaration, Exhibit 1003, paragraph 114.

22 And front and center in the motivation to combine, we explain the
23 motivation starts with Chen's teaching of common adaptive streaming
24 techniques that were widely known in the art.

25 And he explains that this -- these are those common techniques that
26 are used in both Chen and Hurst. Common techniques that are -- and he

1 mentions, for example, in paragraph 127, the com -- these -- these are
2 applied to an adaptive framing stream -- adaptive streaming frameworks
3 such as MPEG-DASH.

4 So, there's a standard out there about this known basic adaptive
5 bitrate streaming. So, the -- so what, what the Petition relies on, is just the
6 commonly known adaptive streaming where you have alternative streams,
7 and you're switching between them based on your bandwidth.

8 We are not relying -- we're not relying, well, we're not restricted to
9 relying just on the invention of Chen. Right? The case law is clear that
10 you don't have to point to embodiments of the invention.

11 You're allowed to rely on teachings of things that are known in the
12 art. Even if they're in the background art. That's what the case law and
13 the Federal Circuit is clear on.

14 And that's what we're relying on here. Chen's teaching of just this
15 known adaptive bitrate streaming. And the motivation about why you
16 combine that with partial encryption, is explicit in the art, because Chen '924
17 teaches it, and they never address that express teaching in the art.

18 JUDGE TURNER: Counsel, this is Judge Turner. Let me -- let
19 me ask a question that is a little bit hypothetical. Maybe you can answer.

20 So, I guess in hindsight maybe, maybe there was a better reference to
21 cite than Chen? So, you're sort of saying well, you know, forget all the
22 scalable encoding. We don't really want that.

23 So, you know, in hindsight, and obviously we can't go back and redo
24 the Petition, but, maybe it would have been better to find a different
25 reference than Chen.

1 Because then you don't have to all -- everything that Chen is saying
2 as desirable, you don't have to sort of exclude that in order to make your
3 combination.

4 I think that's maybe what you're arguing. But, help me out here.

5 MR. LIANG: Well, Your Honor, because adaptive bitrate
6 streaming is so well known in the art, any patent that references it, is going
7 to then add something on top of it. That's why the patent exists.

8 Now, the -- it doesn't -- and just because -- so, adaptive bitrate
9 streaming is known. And now if Chen comes along and says hey, you
10 know, here's what -- here, let me describe the known adaptive bitrate
11 streaming, and now I'm going to tell you some additional features that you
12 can use.

13 And now I'm going to tell you some benefits for that. That doesn't
14 make that known adaptive streaming patentable. Just because once
15 someone teaches an advantage of something else, it doesn't take that base
16 known teaching and make it patentable.

17 And I think that's what the Federal Circuit is clear about. And for
18 ex -- for example, we have -- we have some -- we have some slides on this,
19 including the case *In re Gurley*, I believe, which is on a -- well, in the case
20 *In re Gurley*, which explains this.

21 That just because -- let me see if I can find it. Apologies. Yes, so
22 slide, Petitioner's slide 73. In *Gurley* -- the Federal Circuit explains that a
23 known or an obvious competition does not become patentable simply
24 because it is described as being somewhat inferior to some other product for
25 the same use.

1 So, in other words, even if the known adaptive streaming exists and
2 people know how to use it, just because Chen comes and says hey, here's
3 some additional features, it doesn't mean that that known teaching cannot be
4 used for obviousness.

5 And that's exactly what *CRFD* and other Federal Circuit cases that
6 we've cited, are stating. That you have to be able to use those known
7 teachings that are in the art.

8 You have to be able to consider Chen if it teaches that known
9 adaptive bitrate streaming, you have to be able to consider it for that known
10 teaching. You can't restrict Chen too just its described invention.

11 That's what's in *EWP*, *Applied Materials*, *CRFD*, the Federal Circuit
12 has reiterated this multiple times. And I think what's clear here, is that we -
13 - is that Chen does teach these alternative streams.

14 That's what we're using. And there's an expressed motivation in the
15 art, Chen '924, to take -- to use those known adaptive streaming techniques
16 and imply them with partial encryption.

17 And that's what we've done.

18 JUDGE TURNER: Thank you, but how --

19 MR. LIANG: Does that answer your question?

20 JUDGE TURNER: It does respond to my question. I'll -- you
21 have just a little bit more time. I'll let you, you get to what you need to.

22 MR. LIANG: Okay. Well, I -- I also point out, if we can go to
23 Petitioner's slide 31, that none of these -- none of these extra -- all of this
24 stuff is a sideshow about scalable layers and FEC.

25 But in the end, we're just taking that known adaptive bitrate stream
26 that was known in the art, and we're using it as a way that was part of the art.

1 The Patent Owner is trying to distinguish all this prior art by
2 pointing to scalable layers and FEC, but it's not required. It's not using our
3 ground. It's not required by our ground. It's not required for the
4 combination.

5 And it's not required by the claims. And I'll just point it out, that
6 these unclaimed features can't be the point for finding the, you know, for
7 finding the patent to be non-obvious.

8 JUDGE GERSTENBLITH: Counsel, this is Judge Gerstenblith.
9 Let me just jump in.

10 On Patent Owner's slide 53, --

11 MR. LIANG: Yes, Your Honor.

12 JUDGE GERSTENBLITH: Has paragraph 27 from Chen. What's
13 Petitioner's response to the green highlighting? Talking about that the
14 system is configured to provide and consume scalable blocks?

15 MR. LIANG: Well, yes, Your Honor. So, that is -- that is still a --
16 that is still just an embodiment of Chen, I'd point out to begin with.

17 So, the -- it says, when you look here, that it can -- it can be adapted
18 to take advantage of the congestion process. And what it says here, is that -
19 - yes, what it says is that it can be done in that way.

20 And regardless of -- and regardless of what's in the invention itself, I
21 do point out that the -- that's what *CRFD* is stating, is that the teachings of a
22 reference are not limited to its invention.

23 So, we don't have to rely on an embodiment of the invention. We
24 can rely on just the teachings of Chen that explains what's known in the art
25 for adaptive streaming before it adds scalable layers and FEC.

1 That's what the Federal Circuit is clear about. And that's what
2 we've done here.

3 JUDGE GERSTENBLITH: So, I -- this is Judge Gerstenblith. I
4 thought you had pointed to this paragraph in your opening to talk about the -
5 - in some embodiments language at the end of that paragraph, as supporting
6 your argument that, you know, that scalable layers, it's not in every
7 embodiment.

8 Did I misunderstand that?

9 MR. LIANG: Well, that's correct, Your Honor. And in paragraph
10 27, you see that that's still the case, because it says the client's device can be
11 adapted to take advantage of the ingestion process by improvements that
12 would make for a better presentation.

13 And then -- and it explains that if -- it says you can do that. And it
14 has some examples as well. And it-- and it does note that these are some --
15 that there are some embodiments, these multiple independent scalable ability
16 layers, which is actually what the Patent Owner was citing to, those multiple
17 independent scalable layers.

18 But, I point out that when you actually go to those portions of the
19 spec that describe these layers, the ones cited in the Patent Owner's response,
20 around -- which the Patent Owner's response starts at paragraph 379 when it
21 cites about these independent scalable layers, it talks about these as
22 embodiments.

23 And -- and so in the end, all these disclosures in Chen, even if it's in
24 the title, and even if there are advantages, Chen still uses -- the express
25 language of Chen still uses permissive language about that you can do it this
26 way. And that it's for embodiments.

1 JUDGE GERSTENBLITH: And one more question. The Patent
2 Owner's slide 54, speaks to -- has paragraph 70 of Chen. And I believe
3 responds to Petitioner's argument about what -- what is the simplest case
4 referring to.

5 And that it wasn't -- I don't want to put words into their mouth, but,
6 what's Peti -- I think you know the argument I'm referring to, but what's
7 Petitioner's response to this?

8 MR. LIANG: Yes, Your Honor. As I -- as we -- I explained in
9 the opening, the alternative representations are -- when Chen -- this is the
10 basic teaching of adaptive bitrate streaming.

11 And when Chen says, it described its embodiments for scalable
12 layers starting on, in paragraph 386, it explains that it replaces, it replaces
13 these multiple representations, these alternative representations at different
14 bitrates. It replaces them with the scalable layers.

15 That -- that's also what Patent Owner has argued time and time
16 again. When you see its arguments about the layers, and it's explanation
17 about how they're interdependent, they're -- because the layers are -- as Dr.
18 Nielson said in paragraph 657, the layers are used together.

19 You have the low -- you have the base layer, and then you have these
20 enhancement layers. And as you get more layers, it increases the quality.
21 That's what Dr. Nielson said.

22 So these -- so the layers are used instead of the alternative
23 representations. The alternative representations in Chen, paragraph 63 to
24 70, it explains that you just, you have like a movie, it's encoded at a bitrate.

25 You -- you do it at multiple bitrates, right? One hundred kilobits a
26 second, 200, 300, so that depending on the current bandwidth, this is in

1 paragraph 63 and 64 of Chen, depending on the bandwidth, you choose
2 which representation, which of those alternatives fits within your bandwidth
3 budget.

4 So, the alternative representations are in fact, in the description of
5 adaptive bitrate streaming before layers are applied instead.

6 JUDGE GERSTENBLITH: Okay. I understand what you're
7 saying. But, just to be clear, the paragraph 70, the language in the simplest
8 case, that's not comparing alternative representations versus the layers.
9 That's talking about how it's stored.

10 And when I say it's --

11 (Simultaneous speaking.)

12 MR. LIANG: Right. This is --

13 JUDGE GERSTENBLITH: The simplest case language, that
14 phrase.

15 MR. LIANG: Yes. This paragraph, the simplest case, describes
16 the alternative representation stored in the 3GP files. That part is -- that
17 point is correct, Your Honor.

18 I think my answer was just that by mentioning the alternative
19 representations, this section and toward the beginning of Chen, is explaining
20 the adaptive bitrate streaming before layers are added.

21 JUDGE GERSTENBLITH: Okay.

22 MR. LIANG: The fact that it says alternative representation is the
23 thing that distinguishes it from layers.

24 JUDGE GERSTENBLITH: Okay. I understand. Thank you.

1 JUDGE TURNER: You're just about at your time. But, I have --
2 I have one additional question. And maybe this is a lexicon or a
3 nomenclature question.

4 But, what was described in Chen in paragraphs 63 and 64, you're
5 talking about, I don't think we would say that's an embodiment of Chen. Or
6 would you disagree with that point?

7 MR. LIANG: Well, I'm not sure if it would be an embodiment of
8 Chen's invention. But, it -- but, it is at least a teaching of known adaptive
9 bitrate streaming.

10 That the Federal Circuit says that that -- that's what the Federal
11 Circuit is saying. That in *CRFD*, that you have to be able to consider a
12 reference for all that it teaches. Not just the embodiments from the
13 invention.

14 JUDGE TURNER: Okay. I understand. We'll give you one
15 minute to -- to wrap up since we've taken some time. Please go ahead.

16 MR. LIANG: Sure, Your Honor. I'd just like to -- I'll just go
17 through Patent Owner's slide 70 briefly. And point out that, you know,
18 with respect to FEC, the Petition explained, or you know, Petitioner has
19 explained that FEC isn't -- isn't required.

20 And even if it were, people who are skilled in the art knew how to
21 use FEC in the manner we described. That's in the reply starting at page
22 12.

23 And I point out that this -- this thing in Sur Reply, this argument that
24 Patent Owner is raising, this is just for some embodiments. So, some
25 embodiments do this thing that they're pointing to.

1 They tried to -- they are trying to argue this is at the application
2 layer. I'm not seeing it. But regardless, it's just been some embodiments.

3 So they want to limit Chen, not just at FEC, but also this particular
4 embodiment that's mentioned here. And I point out that in paragraph 73 as
5 well. The -- slide 73, the Patent Owner's slide 73, they tried to introduce all
6 these arguments about -- about FEC and layering violations.

7 But this whole deal, this is Sur Reply evidence that is not allowed
8 under the rules. And, it's Sur Reply evidence that's not allowed under the
9 rules and it discusses this RTP protocol.

10 That's what the layering violation is. It's some kind of a violation
11 of an RTP protocol that has never been raised by any parties or witnesses or
12 anything before this Sur Reply evidence.

13 So, it is irrelevant to this case. And we have a motion to exclude
14 this argument.

15 Does the Panel have any other questions?

16 JUDGE TURNER: No. Thank you very much for your
17 presentation. Thank you very much. We will now pass it over to Patent
18 Owner's counsel for their sur rebuttal.

19 I'm not sure who's going to give it. But, you have nine minutes.
20 And again, we can -- if we ask questions, we can give you additional time if
21 you need it.

22 Please, --

23 MR. LOWENSTEIN: Perfect.

24 JUDGE TURNER: Go ahead when you're ready.

1 MR. LOWENSTEIN: Perfect. So, we're going to split this sur
2 rebuttal. I expect you'll hear more from Mr. Hendifar than from me.
3 Perhaps not the same kind of questions.

4 I'd like to start however, again, with a quite similar objection. And
5 a little motion to strike in relation to the claim construction issue, because
6 they -- I'll make a general objection and motion. And then I'll be more
7 precise as well.

8 I object to, and orally move to strike, any suggestion from Petitioner
9 that there was any embodiments -- that they identified any embodiments in
10 support that their claim instruction, except in so far they're specifically
11 relying upon the parent Claim One. The language of the parent.

12 They never made any other suggestion in that regard. And so we
13 object. And we orally move to strike in that regard.

14 And then I would also like too more specifically point out that they
15 again, referenced POR 28, which is the same argument we objected to
16 successfully on slide, on their slide 58.

17 They several times referenced column nine, line 13, same objection.
18 This time they added some new ones, column nine, line 27, that's new as far
19 as I'm aware. We object.

20 They cited paragraph 173 of their expert declaration. That's an
21 entirely different limitation. That's on limitation 1J, or not 1L.

22 So, as to all that, we object. And we orally move to strike. If
23 Your Honors have any questions about that, I'm happy to address it.
24 Otherwise I'd like to just move on, if that's okay?

25 JUDGE TURNER: Yes.

26 MR. LOWENSTEIN: Okay.

1 JUDGE TURNER: Not surprisingly, the Panel will take that under
2 advisement, and we'll allow you to proceed onto your sur rebuttal. Please,
3 do.

4 MR. LOWENSTEIN: Okay. Thank you very much. And I
5 think -- we're mostly, not very much is in dispute. There was nothing said
6 about the plain meaning, really, in support of their position.

7 They seem to -- as to the claim construction. They don't dispute
8 our discussion of the grammatical treatises.

9 They don't really dispute or discuss the law other than some quibble
10 with. I think it was the *August Tech.* case. I'm not sure I quite understood
11 the point there.

12 They eluded not a lot to some phantom embodiments in support of
13 their position. But, they never got around to identifying them.

14 And the best they could say is, well, it said some embodiments in
15 some portion of the patent. But, they never actually get around too actually
16 identifying an actual embodiment that actually supports their position.

17 As to the material that I object to, they did not oppose our motion.
18 They did not say, what is he talking about? We cited column nine, line 13
19 here. We cited POR 28 there. And we cited -- there was none of that.

20 There's no opposition. They know that these are new arguments.
21 These are not arguments that were raised in their briefing. They say we
22 ignored the Institution decision.

23 Well, first they said we object to the Institution decision. I mean,
24 we disagree with it in this regard. But, we don't object to it. And we
25 actually addressed the Institution decision's argument at some length,
26 including at slides 13 to 18.

1 And with respect to slide 20 of ours, they again, missed the point.
2 They say we're running away from it. But, these are screenshots from our
3 briefing.

4 And you'll notice we didn't just bold and italicize encryption
5 information and DRM information and say, there we are. We -- I bolded
6 and italicized the encryption information that identifies encrypted portions of
7 forensic video versus DRM information that identifies something else.

8 So, they're mischaracterizing our arguments while claiming we're
9 running away from it. And I would just point you again to our slide 24,
10 which just about sums it up.

11 All of the evidence, all of the case law, all of the grammatical
12 treatises, all of everything, there was one side, and I think that's the correct
13 instruction.

14 And with that, I'll turn it over to my colleague.

15 JUDGE TURNER: This is Judge Turner. Before you go, with
16 respect to the parent claim, I'm assuming that the parent in the present
17 application, they share almost the same disclosure. Is that correct?

18 MR. LOWENSTEIN: That is correct.

19 JUDGE TURNER: So, what could be supported in -- from the
20 parent claim should also be supportable from -- from the instant disclosure
21 of the instant patent, yes?

22 MR. LOWENSTEIN: I -- okay. So, I -- it is correct that to the
23 extent the claim in the parent can be supported that would likely suggest it
24 could be so in the child.

25 Perhaps there's some distinction about if the support is found in the
26 claim itself, where sometimes you have those sorts of arguments. But, I

1 think what we're really talking about is we're talking of the patent that was
2 not at issue in this proceeding.

3 And they point to one limitation in that proceeding. And they're
4 asking Your Honors to infer the existence of an embodiment in keeping with
5 that limitation.

6 But, I think it's incumbent upon them to identify what are they
7 talking about? Here's the -- here's the column, the page, the line, citation
8 where -- where that is what we're latching onto.

9 Instead they're asking to make an inference, and even if you
10 ultimately inferred such a thing, under *August v Camtek* the fact that there's
11 some phantom embodiment has not bearing upon, you know, that just further
12 supports our position because it shows we claim a different embodiment.

13 JUDGE TURNER: Okay. Thank you.

14 MR. HENDIFAR: And thank you, Your Honors. So, I would like
15 to start by pointing out, there is a reason why Petitioner has to take this
16 particular Chen reference and combine it with Lindahl.

17 It wasn't a coincidence that they had a thousand different references
18 that this was very similar because it just happened to choose it to reference.

19 Alternate bitrate streaming whatever has used and published at the
20 time. It had a lot of requirements. For example, you have to be able to
21 switch between the alternate stream, otherwise you would stall and you
22 would get the purpose.

23 Which, for which Chen uses scalable layers. As another example,
24 you have to have a top level index which would allow you to walk through
25 the stream. Then you would have to be able to have a pilot structure that
26 would allow you to choose portions of a particular stream.

1 So, there are a lot of different features in the system, alternate bitrate
2 stream is not an abstract in that we just send over a network. You need to
3 have a system that supports it.

4 And Petitioner claims that they are not relying on Chen's system, is
5 incorrect. For example, in claim -- on page 22 of the Petition, for limitation
6 1A, they rely on Chen's playback device for the disclosure of the claimed
7 playback device.

8 But, Chen explains that his playback device is a part of a system that
9 is able to switch, for example, between alternate stream because it has a
10 scalability.

11 As another example, page 39, limitation 1K, they rely on Chen, on
12 Chen's ability to detect various streaming conditions and switch between
13 them. But again, the reason Chen is able to switch between the streams in
14 real time is because its system has features that add the scalability, that
15 allows it to actually perform that function.

16 So, it's not a case that they just happened to choose Chen. They
17 needed a reference that actually had a functioning system that could dispose
18 a lot of the communications.

19 And Chen was the only one they could find. Not surprisingly, it
20 didn't use partial streaming descriptions for the reasons I explained.

21 Now, Petitioner's Counsel also relies a lot on Chen '924, which is
22 Exhibit 1010. So, in the context of a different reference with different
23 features, with different requirements, there may have been different
24 combinations.

25 But, there is a reason why they didn't use Exhibit 1010 as one of
26 their actual companionable references, because it doesn't have the features

1 that the claim requires. And in the context of those features, the POSITA
2 would have had to combine all his various features.

3 Now, Petitioner's Counsel also makes the argument that Chen's
4 layers are actually alternate streams, they are not overlapping layers. And
5 as there are a lot of responses to that first, their expert never said so. This
6 is purely attorney argument.

7 But second, any part of the Chen that Your Honors look at, makes
8 clear that that is not the case. And you can start with Chen's abstract,
9 which clearly says that alternate streams and the more layers you get, the
10 higher quality you get.

11 But, this is not an alternate issue where you either have streams that
12 are alternate, or you have scalable layers. Chen is a system with alternate
13 streams which uses a scalability as a fundamental aspect of its system.

14 JUDGE AHMED: So Counsel, let me --

15 MR. HENDIFAR: Yes?

16 JUDGE AHMED: Ask you a question. How do you respond to
17 the part of Chen that Petitioner pointed to that said, or they argued that
18 shows that the alternate streams are replaced with layers?

19 MR. HENDIFAR: Sure.

20 JUDGE AHMED: So, I understood Petitioner's argument to be that
21 first part talks about these alternate streams, and then you get to the later part
22 of Chen that says, now let's replace these streams with layers.

23 MR. HENDIFAR: Give me one second to get to that paragraph,
24 please. Does Your Honor happen to have the slide number for Petitioner?

25 JUDGE AHMED: I couldn't find it. I'm looking too.

1 MR. LIANG: Your Honor, if I may, it is paragraph 386 that I have
2 cited earlier. I think that may be what you were thinking of.

3 MR. HENDIFAR: If you please. So, we decided with that
4 interpretation that Chen proposes different layers for the same stream, and
5 both part -- both on top of the different alternate streams with different
6 layers.

7 First of all, you don't get -- so, I essentially what Petitioner's Counsel
8 is saying is that in that embodiment, Chen instead of using alternate streams,
9 he just uses different layers with one stream.

10 And that's just not what Chen's system does. Chen's system is all
11 over the place, does different alternate streams plus the layers. But, this
12 analysis of paragraph 386 frankly, was just set into here. So, I wasn't really
13 able to read the paragraph in full.

14 But, I had separately looked at various embodiments. And the
15 notion that the alternate streams are replaced by layers, and therefore there
16 are not alternate streams and they're just layers, that's incorrect.

17 So, I want to also highlight how the Chen system works, so that I
18 could show that's not the case. So, you first get a top of it in the cloud,
19 which tells you how many streams you have and how you would choose
20 them.

21 Now, if you were just replacing that with different layers, you
22 wouldn't need a top index point, because you wouldn't have different streams
23 to select.

24 So, once you select the stream, within that stream and the bandwidth
25 that you have selected, you may receive different layers. But, at some
26 point if you use a threshold, you may choose a different alternate stream.

1 So, that's how the Chen system works. And the whole reason Chen
2 didn't have a possible index file as the current requires, would be because it
3 has alternate streams.

4 So, if Petitioner's Counsel was correct, that Chen replaces alternate
5 streams with layers, then Chen's system wouldn't need to have a top level
6 index file. Then it's not going to meet other limitations of the claim.

7 Because again, the whole point of the top level index file is to tell the
8 user, these are the alternate streams, which one would you like?

9 So, we show that this is attorney argument, and that's all it is,
10 attorney argument. It's incorrect. But, it was raised for the first time here,
11 so, I'm really not able to provide an analysis.

12 But, as I mentioned, the sole purpose of Chen is that's how it
13 operates. And that -- if that is how Chen operates, then they're not going to
14 meet the top level index file for communication.

15 JUDGE AHMED: Okay. Let me ask a different question. I
16 know you said that Chen '924 is not part of the ground. But, why can't we
17 look at it for the knowledge of a POSITA?

18 So, basically Petitioner argues that it features adaptive bitrate
19 streaming with partial encryption. Why can't we look at it for just
20 background knowledge?

21 And why did Patent Owner not address that?

22 MR. HENDIFAR: Sure. So, in the abstract, the POSITA may
23 know that it could do adaptive bitrate streaming with partial frame
24 encryption.

25 But, first of all, it's not adaptive bitrate streaming, it's different
26 streams. The different streams don't have to be adaptive bitrate streams.

1 So, you could have different things of movies, some of them may
2 have subtitles. Some of them may have different language. So, the notion
3 of it's similar. I believe the patent, and I think the question is responded, so
4 I can't see the point myself.

5 But, there are portions of the patent and Chen that explains the
6 stream doesn't necessarily mean bitrate. But, that's the first aspect.

7 The fact that there might be in a different system that you could
8 apply partial encryption with different streams, that part is positive.

9 But then, we don't know what that Chen '924 reference does in order
10 to make the system functional. So, for example, we don't know if it has a
11 top of the index file that allows you to choose.

12 We don't know if it allows you to request portions. We don't know
13 what feature it uses so that the user can actually switch between the
14 differences in real time.

15 Chen is in scalable layers. We don't know what Chen '924 does to
16 allow it even to encrypt partial framing system. What I also want to point
17 out is that sentence talks about selective encryption.

18 Selective encryption is different from partial frame encryption in the
19 following sense, and Dr. Nielson actually addresses that. I think that's in
20 our slide number 60 -- one moment, please. That is in our slide number 69.

21 Selective encryption is when you fully encrypt frames for select
22 frames. Partial frame encryption is you partially encrypt frames. But,
23 these are different terms of art.

24 So, what I'm saying is that Chen '924 is a completely different
25 system. Completely different requirements, different context. So, the fact

1 that it is a different system which may not meet any of the other common
2 requirements.

3 You may in the abstract do selective encryption with different
4 streams, but neither here nor there.

5 And their expert, I want to point out, didn't come back to provide --
6 didn't come back to provide an expert report that said, you know, in my
7 reply declaration, I want to explain why Chen '924 teaches a POSITA how
8 to implement partial framing system in the context of the Chen referenced
9 system.

10 They didn't do that. The reason they didn't do that is that they
11 couldn't. So, now they're just doing a hand waving that, you know, it says
12 something in the abstract, so you should infer that it was possible. Their
13 expert didn't say that.

14 Now, I also want to, as I said, Petitioner keeps saying they're just
15 relying on Chen's background knowledge of system.

16 JUDGE TURNER: Counsel, this is -- this is Judge Turner. I'm
17 going to give you the benefit to wrap up for one minute as I did opposing
18 counsel.

19 MR. HENDIFAR: Sure.

20 JUDGE TURNER: But, you're quite a bit over, over your sur
21 rebuttal time. But, I'll give you one minute to sort of sum up. So, use it
22 wisely.

23 MR. HENDIFAR: Okay. Thank you. So, we are not excluding
24 any part of Chen. So, Petitioner is not just relying on Chen's background
25 knowledge for alternate streaming, they're relying on Chen's index files,
26 playback device, ability to switch between streams.

1 So, this is not a case that we are excluding anything from Chen.

2 This is a case where they're taking Chen's system, surgically cutting out any
3 portion that doesn't work with partial frame encryption, and they knew it
4 didn't work, because they came out and said, we don't want to touch this.

5 And now, they're saying, oh, we're not modifying Chen. But, really
6 they're the ones who are trying to have a POSITA not with that any part of
7 Chen except the part that happens to be the portion of the communication.

8 With that, if there are any questions, I'll be happy to answer.

9 JUDGE TURNER: I want to thank the parties for their attention.

10 We'll now go off the record.

11 (Whereupon, the above-entitled matter went off the record at 3:38
12 p.m.)

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