## UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,
v.
VL COLLECTIVE IP LLC,

Patent Owner.

IPR2022-01086 Patent 8,605,794 B2

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Record of Oral Hearing Held: September 19, 2023

Before KARL D. EASTHOM, JEFFREY S. SMITH, and PATRICK M. BOUCHER, *Administrative Patent Judges*.

#### **APPEARANCES:**

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The above-entitled matter came on for hearing Tuesday, September 19, 2023, commencing at 1:00 p.m. EDT, via Video-conference.

1	P-R-O-C-E-E-D-I-N-G-S
2	1:00 p.m
3	JUDGE BOUCHER: Good afternoon. This is a hearing for IPR 2022-
4	01086, which concerns US Patent No. 8,605,794. Unified Patents is the
5	Petitioner and the Patent Owner is VL Collective IP. I am Patrick Boucher,
6	and also joining us by video are Judges Easthom and Smith. At this time,
7	we'd like Counsel to introduce yourselves, as well as anyone else you may
8	have with you. Who is appearing for the Petitioner, please?
9	MR. BOWSER: For the Petitioner is Lead Counsel, Raghav Bajaj,
10	and myself, Jonathan Bowser.
11	JUDGE BOUCHER: And will you be presenting, Mr. Bowser?
12	MR. BOWSER: Yes, I will.
13	JUDGE BOUCHER: Thank you. And Counsel for Patent Owner,
14	could you please introduce yourself and let us know who is with you?
15	MR. CARDENAS-NAVIA: Yes, good afternoon. With me is
16	Christine Lehman, who is Lead Counsel, and I am Jaime Cardenas-Navia.
17	We're both of Reichman Jorgensen Lehman & Feldberg on behalf of the
18	Patent Owner, and I will be presenting.
19	JUDGE BOUCHER: Thank you, Mr. Cardenas-Navia. As you are
20	aware, this is an entirely video hearing, so we ask generally that people keep
21	themselves on mute unless speaking to minimize disruptions. Sometimes if
22	people fail to do that, there can be some feedback that's a little bit
23	distracting. Also, to help the court reporter, we ask that you try to remember
24	to identify yourself before speaking. A full transcript of the hearing will
25	become part of the record of the proceeding in due course. I do want to

notify the parties that the hearing is open to the public, so the public is able to listen in on the proceedings.

I'm not aware of any reason to think that we'll be discussing confidential information, but if that proves to be incorrect for any reason, we're going to rely on the parties to let us know. We received demonstrative exhibits filed by both parties, and every member of the panel has a copy of those. In addition to copies of the demonstratives, each member of the panel has access to the entire record in case you choose to refer to something that's in the record, but not on one of your slides.

Finally, when conducting your presentation, please take care to refer to the slide number, exhibit or page number that you're discussing for the record. That will make it easier for us to follow your presentation, and it will also help with clarity in the transcript. As you know from our trial order, each party has a total of 60 minutes to present its argument. Because Petitioner has the burden to show unpatentability of the claims, Petitioner will proceed, followed by Patent Owner. Both parties may reserve rebuttal time.

Are there any questions from either party at this time? Mr. Bowser?

MR. BOWSER: Yes, Judge Boucher. I was wondering if I could share my demonstratives on the screen?

JUDGE BOUCHER: Yes, that's fine. You can go ahead with that. Any other questions before we start?

MR. CARDENAS-NAVIA: None from Patent Owner.

JUDGE BOUCHER: In that case, Mr. Bowser, when you're ready you can begin. How much time would you like to reserve for your rebuttal?

MR. BOWSER: I would like to reserve 15 minutes, Your Honor.

JUDGE BOUCHER: So I will put 45 minutes on my timer. If you can keep track of the time on your own, as well, I will try and let you know when we're kind of at the end of that 45 minutes and you can decide whether to proceed into your rebuttal time or reserve it. Whenever you're ready, please go ahead.

MR. BOWSER: Thank you, Your Honors. Again, my name is Jonathan Bowser. May it please the Board, I am representing Petitioner, Unified Patents, in IPR 2022-01086. I want to start off with the background of the 794 patent, and I'm on Slide 2. If we can see on the right-hand side is Figure 1. This is the device of the 794 patent. On the left-hand side of Figure 1 at the top, you can see video data segments. Then on the right-hand side you can see audio data segments. In the claims, the first data segments correspond to the video data segments, and the second data segments correspond to the audio data segments.

What I want to focus on is we can see at the top of Figure 1, in each case when there is a video file, D1, and on the right-hand side where there is an audio file, D2, in each case, a fragmentation description file specifies how the segments are to be obtained in the order of the segments according to a chronological sequence, R1 for the video segments, and R2 for the audio segments. That fragmentation description file, as we can see on the left-hand side, it's an important part of how the device operates because it defines the order of the segments and how the segments are to be obtained by the fragmentation modules, MF, in red and blue. What's important to keep in mind, however, is that the fragmentation description files are not recited in the claims at all.

We move to Slide 3, and we can see the next step in the process is the synchronization process. So on the right-hand side, again with Figure 1, we can see the video data segments, S1, and on the right-hand side we can see the audio data segments. Then there's a synchronization module, and it synchronizes the video and audio data segments together. It does so based on an assignment rule. We can see in Figure 1 one of the examples of the assignment rule that's disclosed in the 794 patent is a simple numbering scheme.

What we have is for every second video segment, there's a synchronization of one audio segment. That's how the 794 describes the synchronization process. I want to move to Slide 4 next. We can just see Claim 1, and today I'm going to focus primarily on Claim 1. The parties have both argued Claims 1 and 9 the same. Claim 1 is a method claim, and Claim 9 is a system claim. What the parties dispute are Limitations 1.0 and 1.2. We can see on Slide 5 are the grounds. There's two *Abbott* grounds, an anticipation ground and an obviousness ground, and there's two grounds for *Sonohara*, anticipation and obviousness.

I'm going to focus on *Sonohara* first, because that was the ground that the Board instituted review on. Before I do that, however, I want to focus on claim construction. That's important because for the *Sonohara* ground, Patent Owner, as we see on Slide 7, they've construed three terms. That's important because every single argument that Patent Owner presents with respect to the *Sonohara* ground is based entirely on their constructions. Patent Owner does not and cannot challenge *Sonohara* on the basis of a plain and ordinary meaning.

Throughout this proceeding, as we can see on Slide 7, Petitioner has indicated that all claim terms should be construed according to their plain and ordinary meaning. I'm going to focus first on Patent Owner's constructions and why each one of them is incorrect. We can see there are three terms, content-related data segments, assignment rule, and then the preambles, whether or not they are limiting. Moving to Slide 9, here we see Patent Owner's proposed construction of content-related data segments. The phrase content-related data segments, that's all that's ever recited in the claims, but we have this whole mouthful on the right-hand side about what Patent-Owner's proposed construction is, what they want to raise.

What is interesting, too, is that Patent Owner has shifted focus a little bit here, because this is a screenshot from the Patent Owner Response, the Patent Owner's proposed construction. What Patent Owner did then in their surreply is they split it up. They split it up according to the definitional construction and then what they now call their preferred construction. This is their preferred construction, and I'm going to explain why their preferred construction is just simply wrong. There's a couple reasons why and I'm going to walk through them.

We can see on Slide 10, Your Honors, this on the left-hand side is Claim 1. We've highlighted every instance of the words content-related data segments. There's either the first data segments or the second data segments. At no point are those data segments ever defined or described in any detail other than just the terms themselves. On the right-hand side we can see again this mouthful that we have, data segments ordered in a file such that they will present the file's contents in their intended presentation order when rendered sequentially.

You'll notice, importantly, that none of those features are in the claim themselves. It's well settled that it's improper to read limitations into the claims. I want to move to Slide 11. On the right-hand side, we can see this is a screenshot from the Patent Owner response. This is where Patent Owner gets their incorrect construction from. They rely on the fragmentation description file. Right there we can see it in the green highlighting. But the fragmentation description file, as I indicated earlier, it's just not recited in the claims.

Also, the other thing that Patent Owner has argued, and Dr. Goodrich, their expert has pointed out, was that well, if you look at the example to plurality of succeeding second data segments and how they represent the speech of the signal, that's an example. Everything that Patent Owner has relied on for this construction is just incorrect. I want to turn to Slide 12 next, Your Honors. I want to point out this is the construction from the District Court in the Starz litigation. What the District Court did there is they construed the term content-related as it's defined in the specification. We can see at the top of this right here, in Column 4, Lines 14 and 19, this is how the term content-related is described in the specification.

All throughout this proceeding, Petitioner has pointed out how the term content-related data segments should be construed according to their plain and ordinary meaning. However, we indicated that if the Board finds it necessary to construe this term, it should just simply adopt the definitional construction in the specification, just like the District Court did in the Starz litigation. I want to move to Slide 13. This is another reason why Patent Owner's construction is wrong, because it, by itself, also renders other portions of Claim 1 superfluous.

On the left-hand side of Slide 13, we see essentially the operative points here. We see sequentially outputting and the segments, and that's done on the basis of an assignment rule. If you adopt Patent Owner's construction here, what it does is it effectively renders the entire assignment rule superfluous because the assignment rule governs how the segments are supposed to be output. But what Patent Owner is proposing in their construction is the segments themselves dictate how they will be ordered. If you adopt Patent Owner's construction here, what it does is it effectively reads out of the assignment rule entirely.

I want to move to the next term that Patent Owner has construed—
JUDGE BOUCHER: Actually, Mr. Bowser, before you do that, this is
Patrick Boucher. I'm just curious, if we were to adopt the definition in the
specification as you sort of alternatively propose, what does it mean for the
first and second data segments to have a syntactical meaning?

MR. BOWSER: So that, I will point you to, Your Honors, I'm trying to get the cite here, Paragraphs 31 to 33 of Dr. Freedman's Supplemental Declaration. He goes through and he explains it. In short, what this means is identification information. You're having information that identifies the specific segments. Let me go back, Your Honors, to Slide 2. The reason I'm going to point to this is we see in the 794 patent, it refers to—and this is Reference #1, it refers to the Panis document. The Panis document is Reference #1 at the end of the specification, and it refers to that document to provide insight into what exactly is done to provide information about the syntax.

It's the same thing that's being done here, which is the fragmentation description file. It provides an identifier of the data, and that's exactly, as Dr.

1	Freedman has explained, is the syntax information is identifying the
2	segments so that they can be ordered and appropriately addressed. That, if
3	you wanted to look, Your Honors, at Paragraphs 31 to 33 of Dr. Freedman's
4	Supplemental Declaration where he goes into detail explaining exactly what
5	syntax means.
6	JUDGE BOUCHER: Okay. The way you described it—I have to look
7	back and think about it more closely—but the way you described it sounds
8	sort of close to what the Patent Owner is proposing, doesn't it? That the
9	syntactical meaning gives you information on how the segments are ordered.
10	MR. BOWSER: Well, so it's not—let me go back to their
11	construction. It's just providing information as to identifying the particular
12	files. That information is used to then synchronize the data, but the syntax is
13	just identifying the individual segments. It doesn't actually say how they
14	will be synchronized. Another component, and in this case the
15	synchronization module—I'm going back to Slide 2, sorry, Slide 3—the
16	synchronization module takes the segments, the information, based on how
17	they're identified, and then synchronizes them based on their identifiers.
18	Really the syntax information is simply just identification information
19	which is used to find out what the order of the files is. But the identification
20	information does not by itself indicate the order. It's just an identifier.
21	JUDGE BOUCHER: So to be clear, your position is that the
22	syntactical meaning and the definition does not include any ordering
23	information with respect to the data segments.
24	MR. BOWSER: That's correct, Your Honor
25	JUDGE BOUCHER: Thank you.
26	MR. BOWSER: Sure. So I'm going to turn next to—

1	JUDGE SMITH: Actually, let me—I have a question real quick. This
2	is Jeffrey Smith. You mentioned that if we wanted to construe content-
3	related data segments, you'd be fine with us construing it from the definition
4	given in the specification. Is there any reason why we shouldn't construe this
5	term or why we should just rely on the plain and ordinary meaning for this
6	term?
7	MR. BOWSER: So Your Honor, the reason why you don't need to
8	construe it is because no construction is necessary to resolve the dispute with
9	respect to the prior art. The reason why is that Sonohara used identification
10	numbers for the image and the audio data segments, and it uses that
11	information, those identification numbers, for synchronization. The short
12	answer to your question is that if you were to construe the term, you could
13	do so with respect to the definition, but it's unnecessary to do so because the
14	prior art teaches it. We don't need to construe this particular term to resolve
15	the controversy here as to whether or not the prior art actually discloses the
16	content-related data segments.
17	JUDGE SMITH: Thank you.
18	MR. BOWSER: Sure. Turning—
19	JUDGE EASTHOM: So just to be clear, in other words, it doesn't
20	matter if we use Patent Owner's construction? It's still met by Sonohara?
21	MR. BOWSER: Yes, Your Honor. Well, to be clear here, this is the
22	interesting aspect here because in the Surreply, Patent Owner seems to have
23	sort of shifted focus a little bit. They call it their preferred construction, but
24	then they also call this the definitional construction. They're actually arguing
25	for their preferred construction, not necessarily the definitional construction.

The reason being is because they want to further define what's actually

defined in the specification. If you look in the Patent Owner response with respect to their explanation, they've argued that their proposed construction, their, again, "preferred construction" really captures the essence and reflects the construction.

As far as I understand their arguments, they don't want the definitional construction because they cannot overcome *Sonohara* just based on the definition. So moving to the assignment rule limitation—I'm on Slide 15 next—and here we can see that this is the assignment rule in Patent Owner's proposed construction. This is a screenshot of their construction. We've outlined here on Slide 15 the reasons why this is improper. I'm going to go to Slide 16, and we can just see the construction. On the left-hand side of Slide 16 is the actual language of the claim in Claim 1 on the basis of an assignment rule for assigning.

On the right-hand side, this is Patent Owner's proposed construction. So they have the actual claim language and then they go ahead and Part 2 is they add an entirely new negative limitation, wherein the assignment is not performed by using exact timing information for the content-related data segments. This negative limitation, which they need in order to overcome *Sonohara*, is improper and I'm going to explain why. Let me start off with Slide 19. This is just one of the reasons why. We can see on Slide 19 where Patent Owner at the top, they've equated exact timing information with timestamps, effectively saying that they're the same thing.

Using exact timing information such as timestamps, this is a direct quote from the Patent Owner response. Then on the bottom of Slide 19, we can see dependent claims. Dependent claims 20 and 21 have a negative limitation wherein the assignment rule is not based on a timestamp. If

dependent claims 20 and 21 are to have any meaning whatsoever, that means that Claims 1 and 9 could be based on a timestamp. Yet, we can see on the top of Slide 19, that's what Patent Owner's doing is they're equating exact timing information with timestamps.

I would also point out that this concept of using exact timing information, if you were to even search in the 794 patent, that phrase using exact timing information, it's found nowhere in the specification. To further compound the—

JUDGE SMITH: Let me just, before you move on to further compound things, this is Judge Smith, let me ask you—from what I understand, and I don't remember where Patent Owner said this, but I think Patent Owner said somewhere that exact timing information and timestamps are not the same thing. Timestamps are just one example of timing information so that these dependent claims are actually narrower than what Patent Owner is asserting as timing information. Can you speak to that? Is there any difference between timing information and timestamps so that these dependent claims would be narrower than the independent claim which would be for timing information?

MR. BOWSER: Yes, Your Honor, I have a slide directly on this point. You indicated earlier that it was Patent Owner's argument that dependent claims 20 and 21 are narrower. In fact, Patent Owner has argued the opposite. Patent Owner has argued that the negative limitation—and we can see on Slide 20 in the bottom highlighted portion of the Patent Owner's response, and I'm going to just read it—the negative limitation in claims 20 and 21 is broader.

I don't understand how you can have a dependent claim, a negative limitation that is actually broader than what they're trying to claim, in the independent claims. They've even admitted that it's not coextensive. Their proposed construction of assignment rule is not coextensive with the negative limitation. It's very difficult to understand this logic that they're trying to use. It's like saying that they have a negative limitation that they're proposing to add in the independent claims that is somehow narrower than what's in the broader dependent claims.

I just don't understand. That's Patent Law 101, how you cannot have that. Let me go to, if I can, Slide 17.

JUDGE BOUCHER: That seems like a semantics sort of quibble, though, doesn't it, in that quote you just showed us they also said it's more limiting. Maybe the use of the word broader isn't entirely clear to me, but wouldn't you concede that they're actually saying that those claims are more limiting?

MR. BOWSER: I don't, Your Honor. So the fact is that claims 20 and 21 are not based on a timestamp. What's difficult to understand exactly what they mean by using exact timing information is that concept is never described in the specification. If you go into the Patent Owner response in terms of how they propose this, they've said well, all of the examples don't use exact timing information. But that phrase, using exact timing information, is not discussed. I don't think it is, in fact, more limiting because we don't know how a timestamp differs from using exact timing information. A timestamp is exact timing information. That's exactly what it means. When something happens, it is a timestamp and you have a record of it. That is exact timing information.

I apologize, but I don't agree with that characterization that it is, in fact, more limiting, because a timestamp is using exact timing information. I want to go to Slide 17, and this is an example. This is the negative limitation in Patent Owner's assignment rule. They've argued that well, every one of our embodiments is not based on assignment rule, but they're confusing things here because what's happening is you have examples in the specification, and we talked about it earlier, where it's just a number scheme. On the left-hand side of Slide 17, we have the example we talked about earlier.

Each audio data segment is output with every second video data segment. Of course that doesn't have anything to do with time, but there's also no negative—there's no discussion of the limitation with respect to excluding time. It's just a simple number assignment. They also have examples—in Column 2, Lines 55 to 59 is another example where it's just talking about a chronological sequence. Again, they're trying to cherry-pick different portions and say well, because nothing has exact timing information, therefore we should be able to read this negative limitation in.

It's kind of like, if I don't have a helicopter in my garage, can I say that I don't have a helicopter in my house? Let me also point out Slide 18. The District Court considered the very same construction and the District Court rejected it. They just said plain and ordinary meaning, the terms are clear on its face. I want to go—

JUDGE SMITH: Let me ask you—this is Judge Smith—about they're just numbering them sequentially, that there's no timing information. I'm a little bit unclear on this. If each one of these segments is a certain length of time, I guess it's two video segments for each one sound segment or

something like that. If the two video segments and the one sound segment have the same length of time, wouldn't assigning them number just be kind of a shorthand way of identifying the timing information? I don't see how the sequential numbers are not correlated to the timing information if these segments have the same length of time.

MR. BOWSER: We don't know that—actually, in this example the segments don't have the same amount of time, so actually we don't know that in this specific example.

JUDGE SMITH: Okay.

MR. BOWSER: What we know is there's one instance in the specification and you can go to—and Patent Owner is going to harp on this—it's a single sentence in the specification where they actually try to somehow discourage the use of time. This is in Column 2, Lines 42 to 43. It says this is an advantage since the assignment is carried out without the use of timestamps. Well, guess what? That's in claims 20 and 21. That's the only instance that we have in the specification which tries to distinguish the assignment rule from anything having to do with time. My point earlier, Your Honor, was about the fact that when they talk about an assignment rule, they don't do so with respect to time or try to distinguish time except for this very one example that I just pointed out, Column 2, Lines 42 to 43.

There are other examples in the specification that have nothing to do with trying to distinguish time. Here we just have a numbering system or numbering scheme. If I go to the next term—sorry, my clock stopped. I'm going to go to Slide 23, and this is with respect to the preamble. This is the third term that Patent Owner has tried to construe.

JUDGE BOUCHER: Actually, before you do that

1	JUDGE EASTHOM: Can I—go ahead—
2	JUDGE BOUCHER: —oh sorry, go ahead, Judge Easthom. I was
3	going to let you know, I heard you say something about your clock having
4	stopped. I have you with about 20 minutes left in your principal time. But go
5	ahead and ask your question, please, Judge Easthom.
6	JUDGE EASTHOM: Thank you, Judge Boucher. Mr. Bowser, your
7	friends are arguing also prosecution history narrows this claim, they
8	disclaimed it. Is it your contention that it's this broadening of the dependent
9	claims and also the fact that it's a negative limitation that overcomes
10	anything otherwise that they disclaim in the prosecution history? Or are you
11	contending the prosecution history isn't clear and it isn't a clear disavowal
12	or doesn't give us any, shed any light on the meaning of the claim? Or both?
13	What's your take on the prosecution history, I guess?
14	MR. BOWSER: Yes, so the—I apologize.
15	JUDGE EASTHOM: I'm sorry, yeah, I meant to stop, sorry, thanks.
16	MR. BOWSER: So we don't—we've argued that there actually isn't
17	prosecution disclaimer, so I don't have any slides specifically on their
18	arguments. But I do, I think if you wanted to—let me get their slides—sorry
19	I have too many papers here—starting at Slide 37 and 41, they made certain
20	arguments about how, with respect to the Shin and the Rosenau references.
21	But as we pointed out in the reply, and our argument is on Pages 9-10, those
22	arguments themselves do not constitute a clear and unambiguous disavowal.
23	Just with respect to the timing aspect with respect to the Shin
24	reference, they talk about how there's a difference here because they're
25	using metadata and then determining a specific point in time, how that

metadata is supposed to be identified and synchronized. They argue that

that's different than the assignment rule. Now the examiner didn't provide
any commentary. They're making arguments as to specific distinctions that
they've characterized, but at no point during the prosecution history was
there a clear and unambiguous disavowal. The standard is quite high for
prosecution disclaimer. We don't have that here.
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Patent Owner's only argument effectively here is that hey, we argued that there was a distinction. But let me point out, too, in the *Rosenau* reference, what was different—and this is on Slide 41 of their slides and on Slide 42 where you have the examiner's statements—they made this comment, well *Rosenau* uses a system time clock counter. And then the examiner noted the fact that well, okay, you don't use a system time clock counter. But they're not talking about limiting it to specific time segments, or sorry, that the segments are limited to a specific time.

Our position all throughout here, Your Honors, and as we've indicated on Pages 9 to 10 is there's just no clear and unambiguous disavowal. It doesn't rise to the level of prosecution disclaimer.

JUDGE EASTHOM: So you're saying it has a plain and ordinary meaning and the assignment rule just has a plain and ordinary meaning. What is that ordinary meaning that you give it?

MR. BOWSER: The ordinary meaning that we give it is the words themselves so that you are just assigning the first data segments—I'm sorry, you are assigning each one of the second data segments to one of the first data segments. What we've shown—

JUDGE EASTHOM: Based on any rule then, there's no restriction on the rule, in other words. Is that fair?

MR. BOWSER: Yes.

JUDGE EASTHOM: Okay. 1 2 MR. BOWSER: Yes, that's correct, Your Honor. JUDGE EASTHOM: In their Slide 38, they do say segments of one 3 type of data are not assigned to segments of the other type. Rather a 4 5 synchronization time is calculated. Then they say further there is no assigning of each second data segment to a first data disclosed—so for at 6 7 least these reasons, *Shin* does not blah-blah and then they quote the rule. You're just saying that this thing where they say a synchronization time 8 9 is calculated in *Shin*, you're saying that's not enough to be a clear disavowal. MR. BOWSER: Yes. Your Honor, that's correct, and we can see on 10 Slide 39, we don't know what was persuasive. On Slide 38, they've made a 11 number of arguments. We don't know which one the examiner was 12 persuaded by. Was it the fact that there's no assigning of each second data 13 segment to a first data segment? That's it. Were they persuaded by that? I'm 14 sorry, was the examiner persuaded? We just don't know. To rise to the level 15 16 of prosecution disclaimer, one of which is you can amend the claims to specifically exclude something or you could have a statement in the 17 prosecution history where it doesn't include a particular feature. 18 That's just not what we have. The applicant made a couple of 19 arguments, and it doesn't rise to the level of prosecution disclaimer. What 20 the case law requires is a clear and unambiguous disavowal of claim scope. 21 We don't have that. 22 23 JUDGE EASTHOM: There was a recent case—it wasn't too recent, but I think it was *PMC v. Apple*. Let me see if I can find the cite. The court 24 sort of—it's Personal Media Communication, LLC v. Apple, and it's 952 25

F.3d 1136, Fed. Circ. 2020. It criticized the Board. It said according the

Board, PMC's arguments to the examiner's thinking the distinguishing consideration should not "clearly disavow mixed analog and digital information transmissions," and then it goes on. It says—then the Board reasoned that because the prosecution history presents a murky picture as opposed to a clear waiver, the Board reasoned that it should be discounted for the purposes of claim construction.

Then the court says "we disagree with the Board's legal analysis and conclusion." Then it says even where "prosecution history statements do not rise to the level of unmistakable disavowal, they do inform claim construction." Then they cite another case there. I won't bore you with the details, but then they say—but then it says "an applicant's repeated and consistent remarks during prosecution can define a claim term." Then it says "especially whereas here, , there is no plain or ordinary meaning to the claim term and the specification provides no clear interpretation."

Then it says similarly, "an applicant's amendment accompanied by explanatory remarks can define a claim term whereas here, the claim language and specification fail to provide meaningful guidance." That being said, this case was cited a couple other times since then. I'm not real sure if the holding is limited to when there's no clear and ordinary meaning, but it did say especially then so it seems like it applies in other situations, too. I don't know if they watered down the requirement. I just wondered if you had any take on that or had considered that.

MR. BOWSER: Well, Your Honor, we haven't addressed that particular case and those specific facts. It sounds like it was very fact-specific based on the arguments that were made in the prosecution history. The point, I'm going back to Slide 19, is just simple here, is that while there

were some statements trying to distinguish the assignment rule based on time, the fact remains, Your Honors, that we have in claims 20 and 21 the requirement that the assignment rule cannot be based on a timestamp. That necessarily means that in claims 1 and 9, it can be based on a timestamp.

When we have Patent Owner equating exact timing information, whatever phrase they came up with to throw into their claims, they're equating that with timestamps. So they can't have their cake and eat it, too. The other point is—maybe a distinguishing consideration, Your Honor, about the case that you mentioned is that we do have a plain and ordinary meaning and we do have guidance from the specification where the assignment rule—and I'm back on Slide 17—we have the example where it's just a numbering scheme. That's it. There's an example.

We talked about that earlier with respect to Figure 1, where it's every second video segment gets an audio segment. We have a plain and ordinary meaning from the context of the specification. This, to me, Your Honor, does not rise to the level of just disregarding the fact that there are negative limitations in claims 20 and 21 that specifically conflict with Patent Owner's proposed construction. We also have guidance from the specification explaining how what the plain and ordinary meaning of an assignment rule is.

JUDGE EASTHOM: I'm sorry, I didn't understand, Mr. Bowser. So the numbering scheme that you're saying here that you're relying on, you're saying that that is just like, as Judge Smith posed the question, in other words it does include, it could include timing. Is that what your point is?

MR. BOWSER: Well, the point is, I raise this again, Your Honor, if I remember correctly, you, when you read out the portions of that case, I think I heard that there was something about—

JUDGE EASTHOM: That there was a clear—this is a clear thing that shows that it's not necessarily related to timing, so that doesn't cut in your favor. That's why I didn't understand your argument.

MR. BOWSER: The reason I pointed this out is because we have guidance from the specification how the assignment is—the rule is supposed to be carried out simply based on a numbering scheme.

JUDGE EASTHOM: But that precludes time. That doesn't include time, or am I missing something? If that doesn't include time, then that supports Patent Owner's position, not yours. If you're saying this is a clear thing that something doesn't support timing information.

MR. BOWSER: Your Honor, we only go to the prosecution history when there isn't a clear meaning. My point about—and the reason I'm relying on this numbering scheme is they said well, it doesn't have time. It doesn't have anything having to do, I don't know, with the color yellow or the color blue. Should we read that into the claim? This is the point here in the sense that we have guidance from the specification that the assignment rule can be based simply on a numbering scheme.

There was no discussion of excluding timing information from that. In fact, I keep coming back to this. This is why this is fundamental, in my opinion, why—I'm on Slide 19 again—how can you have a dependent claim that excludes a timestamp and then the independent claim is, if properly construed, can include the timestamp, but then you say well, no, we can't

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use exact timing information? There's just very problematic inconsistencies 1 2 here. That's why their construction just doesn't work. JUDGE EASTHOM: Thank you, I understand. I understand your 3 4 argument now. 5 MR. BOWSER: So I'm going to move to Slide 23 where we talk about the preamble. So this is--6 7 JUDGE BOUCHER: Actually, before you do that I just want to confirm something, which is I thought I heard you agree in your discussion 8 with Judge Easthom and I just want to confirm that during prosecution the 9 applicant did argue a distinction between timing information and use of an 10 assignment rule for both the *Shin* and *Rosenau* references. Do you agree 11 with that? 12 13 MR. BOWSER: There was—yes, they discussed timing, but we don't—let me go to Slide 21. It doesn't rise to the level of clear and 14 unambiguous disavowal. If you look at their slides, for example, what led 15 16 to— 17 JUDGE BOUCHER: I don't want to take too much of your time here, and I understand that your argument is that the statements perhaps were not 18 clear enough. I understand you have other arguments with respect to the 19 specification, negative limitation and those things. But with respect to what 20 actually happened during prosecution, it sounded to me like you just agreed 21 again that the applicant did, in fact, distinguish the prior art before the 22 23 examiner by drawing a distinction between the use of timing information and the use of an assignment rule. Is that right? 24

again, it doesn't rise to the level of clear or unmistakable disavowal. Let me

MR. BOWSER: They made those arguments, yes, Your Honor, but

move to Slide 23, the last term here, what they've tried to construe as the preamble. Now Patent Owner may argue here in the instance that in the District Court they adopted this specific construction. I just want to make clear that the District Court adopted the construction that Patent Owner and the plaintiff, the declaratory judgment plaintiff, agreed upon. There was no briefing whatsoever.

We don't have any guidance in the District Court as to why the District Court adopted it. It was just simply adopted because the parties agreed to it. So I don't think the District Court adopting it necessarily has the same persuasive authority here. Moving to Slide 24—sorry, let me go to Slide 23. The reasons why—go back to Slide 23—the reasons why Patent Owner's construction is wrong as to the preamble is—there's a couple reasons. Number one is that the preambles don't recite any essential structure to carry out the bodies of claims 1 and 9.

Claims 1 and 9 require synchronization of the first and second data segments. They don't require synchronization of the first and second files. We can see on Slide 24 on the right-hand side, so this is a reproduction of claim 1. At the top, this is the preamble. A method for synchronizing content-related first data segments of a first data file and content-related second data segments on a second data file. But look at the body of the claim. At no point is the first data file or the second data file ever recited. There is a structurally complete concept in the body of the claim which is synchronizing the segments.

At no point is there any discussion of the first data file and the second data file. What Patent Owner, the only thing that they've been able to rely on

is the fact that there's antecedent basis with respect to certain dependent claims, 5, 13, 18 and—

JUDGE SMITH: But that's not—this is Judge Smith. That's not the only thing that Patent Owner relies on. There's also—Patent Owner says, and this is in the Patent Owner response around the bottom of Page 23, 24. They're saying if we do construe this context-related data segments, if we construe it based on the definition in the spec to mean data segments that have a syntactical meaning with the respective data file, then that brings the first and second data file from the preamble into the body of the claim by the virtue of the fact that we're construing content-related data segments to have meaning within the respective data file. Can you speak to that?

MR. BOWSER: The fact that you're getting syntactical meaning does not require the actual data file. All we need for syntactical meaning is just identification information. You don't need that from the data files. Just to address this issue is their construction of the preamble relies on their incorrect construction of content-related data segments. But again, the context—

JUDGE SMITH: But—

MR. BOWSER: --of getting the syntax—I'm sorry, do you have a question?

JUDGE SMITH: Yeah, if we rely on the definition from the spec for the construction of these data segments like you said we could do even during your presentation and also in your briefing, you said if we need to construe it to resolve a dispute we can rely on the definition in the spec. If we do rely on that definition in the spec, that definition in the spec does include the respective data files. Am I wrong?

MR. BOWSER: Well, it includes syntactical information from the data files. It doesn't require the data files. So let me actually—I'm going to jump to, if I can, Slide 31, 32. So this is where we get the syntactical information. *Sonohara* expressly teaches this concept. We have—and I'm sorry for jumping ahead, but what we—this is also, let me just say because someone in the art teaches it, it's another reason why you don't have to even construe it. What we have is we have syntactical information from the data file.

On the right-hand side we have Figure 4. We have what's important is that there is information syntax from the image file and syntax from the sound file. That information is then added to the header, so we have identification information. The syntax is the header and the track identifiers. That's what we have. Whether you construe the preambles as according to the definition, again that doesn't require the preamble to actually require—it doesn't require the, sorry. The construction does not require the first and second data files.

It just means, and looking at the definition it says that it's syntactical meaning within the file. So what we need is the syntax. We don't need the first and second data files. So Patent Owner's argument that you necessarily require the first and second data files if you construe it according to the definition, that's just simply wrong. I want to turn back to Slide 26. This is another reason why their construction is wrong is because the claims don't require synchronizing the first and second data files. It requires synchronizing the segments.

We can see that this is Dr. Freedman saying that the segment's origin from data files D1 does not change the operation of the synchronization

module. In the bodies of claims 1 and 9, it is talking about synchronizing data segments. The data files are completely irrelevant to what happens in the bodies of the claims. I want to turn to the *Sonohara* ground, and this is important because this relates somewhat to their construction. I know I'm getting into my time a little bit here.

This is Patent Owner's argument with respect to *Sonohara*, and I want to just reiterate, too, that Patent Owner's arguments against *Sonohara* are entirely dependent on their incorrect claim constructions. What Patent Owner has done with respect to *Sonohara* is they've focused on Figure 1 in isolation, effectively, in saying well, look, that's only one file. We have two files. But what they've done is effectively read out the rest of *Sonohara* and looking at Figure 1 in isolation. I'm going to show you why this is wrong.

We have the Image File #1. We have to keep the numbers straight here and I've tried to make this clear by using color coding. We have the Image File #1, and in that image file—I'm sorry, we have File #1. In that File #1, we have image data segments and we have sound data segments. Those are what's synchronized by the data synchronization means, #4. Going to Slide 29, we can see where does the file come from? This right here is the file production processing device on the right-hand side of Figure 4. That's the motion picture file that's produced.

Where does it come from? It comes from an image file and it comes from a sound file. Those segments, the image segments come from the image file and the sound file comes from the sound file. This is exactly what's recited in the claims. Even if you interpret claim 1, the preamble, as requiring the image file and the sound file, *Sonohara* clearly teaches that. I want to also point out here—

JUDGE SMITH: Let me just make sure I—can we go back to the 1 2 previous slide, please? MR. BOWSER: Slide 29? 3 JUDGE SMITH: Yeah, this is Judge Smith. So just to be clear, those 4 files in Image File 11 and Sound File 12, those files are already segmented 5 6 the way they are in Figure 1? Is that correct? 7 MR. BOWSER: I'm sorry, are you comparing *Sonohara*'s Figure 4 to the 794 patent's Figure 1? 8 9 JUDGE SMITH: No, to the—I'm comparing it to, I think it's Sonohara Figure 1, with the—no, no, Sonohara Figure 4 with Sonohara 10 Figure 1. 11 MR. BOWSER: Yes, so let me walk through this here. Let me go to 12 Slide 30 real quick, and this explains it. File production processing device in 13 green in 7, that's on the right-hand side, it produces the file. The file that we 14 see in Slide 31, that's the file that we're talking about. What the file 15 16 production processing device 7 does is it takes the segments from the image file and it takes—sorry, it takes the image segments from the image file and 17 it takes the sound segments from the sound file, and it incorporates them into 18 this single file. We can see that in Slide 30 on the right-hand side. 19 20 Just to reiterate, on Slide 29, we see this. The file production processing device, that's exactly what it does. It takes it from two different 21 files and it creates the File #1. I don't know if you can see my mouse, but in 22 23 the lower right-hand corner, that is the file right there. That's what's created and that's what contains the segments that are then synchronized, as we can 24

see in Slide 31. I want to point out, too, just one last point here with respect

to *Sonohara* again. *Sonohara* teaches the syntax information because the Syntax information is the header and the track identification numbers.

It's very clear. What happens in the file production processing device is it takes the image file and the sound file, it reads it, it analyzes it, and then it adds the syntax, the information that came from the image file and the information that came from the sound file. It takes that syntax and then it adds it into the header. So we have the header and the track information on the bottom left-hand corner. We can see that that is the syntax information that discloses exactly what is addressed in the 794 patent.

I want to briefly touch on the—

JUDGE BOUCHER: But isn't the—when you began your discussion you were talking about the fragmentation modules in the 794 patent, which I understood to be to define the segmentation of the audio and video files that they initially existed, which is kind of the point that Judge Smith was raising. Isn't the same thing true in *Sonohara*, that image file and sound file 11 and 12 are not yet segmented? That only happens once it gets down to probably box 13, where it defines the segmentation of the files.

MR. BOWSER: Let me go back to Slide 2 where we can see this is done. It's the same thing. So what we have in *Sonohara* is this is basically the image file and then D2 is the sound file. We start with that and we segment. Going back to—sorry, on the right-hand side you have the fragmentation modules, so they are taking out the segments. Let me go to Slide 29, and this is exactly the same. What you do is you take the segments out. How do we know that? Because you look at Slide 31.

There the segments, right there, in red and blue, those are the image data segments and the sound data segments. Those come from the files. It's exactly what the 794 patent is doing.

JUDGE BOUCHER: By the time you have defined segments, you no longer have two files.

MR. BOWSER: That is true, but the claim doesn't require when you have two segments to have two different files. All the claim requires is that the segments come—it doesn't even require it, but the preamble says that the segments—what does it say here in my claim? That segments of a first data file and segments of a second data file, that's it. That's all that's required by claim 1. It doesn't—you don't have to keep the files all throughout the process, because if you look at the body of claim 1, limitations 1.1 and 1.2, it's synchronizing the segments. No mention whatsoever of any of the first and second data files.

I want to turn to, in the interests of time here because I know I'm eating into my rebuttal, I want to show here on Slide 38, I'm turning to the *Abbott* reference. This is important to keep in mind. The Board preliminarily agreed with Patent Owner's mischaracterization of the *Abbott* reference. I say mischaracterization because I'm going to tell you exactly why the way that they characterized it was just incorrect. All throughout this process, there has been no expert testimony from Patent Owner on *Abbott*. The only expert testimony that we have in this proceeding explaining how a POSITA would understand *Abbott* is Dr. Freedman.

That's important because all we have, Patent Owner has only offered as the attorney argument. Turning to Slide 39, we can see this is an example. GOP1, so *Abbott* brings things into GOP—video segments into GOP1,

groups of pictures, then the audio segments are different. What Patent Owner argued, again, only attorney argument, is that segments A1 through A5 are all assigned to the beginning of GOP1. But that's not what's shown in Figure 9. We have Dr. Freedman explaining in detail why that's wrong.

It's very clear, as we can see on the left-hand side that A1, of course, is associated with the beginning of GOP1. But then you look at time T2, then you have audio segments A2 and A3. At time T3, you have A4. Again, all the claim requires is assigning each one of the second data segments, and in this example it's the audio segments, to one of the first data segments. Here that's exactly what's disclosed in *Abbott*. We have A1 through A5. Each one of those second data segments is assigned to one video segment. We've been clear all throughout the proceeding that the GOP corresponds to the first data segment.

What Patent Owner has done all throughout this proceeding is they just keep arguing this point. Well, A1 through A5 are all assigned to the beginning of GOP1. That makes no sense. The reason for it is because if you did that, you would have a bunch of audio, A1 through A5, just all on top of each other, and it would make no sense. The whole point, as we see in Figure 9, and as Dr. Freedman explained, is to have a synchronization of the audio with the video. With that, I will reserve my remaining time. It looks like I did 53 minutes. Can I reserve the remaining time for rebuttal, please?

JUDGE BOUCHER: Yes, I think that's right. I did just want to clarify this point though, because I don't really understand the Patent Owner's argument the same way you do with respect to *Abbott*. It seems to me that A4 is played because it follows A3, not because it has been assigned to F4, for example. Am I wrong about that? The way I understand *Abbott* is that the

assignment happens with the first video segment of the GOP and the 1 corresponding audio segment, and then they just play out, but there's no 2 subsequent assignment of video segments with any of the audio segments. 3 MR. BOWSER: Well, Your Honor, each one of those audio segments 4 are assigned to the GOP1. That's all that the claim requires. Let's look at 5 limitation 1.2, and it says for assigning each one of the content-related data 6 7 segments to one of the content-related first data segments. That's exactly what's disclosed in Figure 9 of *Abbott*. We have audio segments A1 through 8 9 A5, and yes, they are played out, but they are still assigned to GOP1. GOP1 corresponds to the first data segment. Dr. Freedman again, this is the only 10 expert testimony in the record, for *Abbott* has explained how A1 through A5 11 12 are assigned to GOP1, as is clearly shown in Figure 9. The fact that A2 through A5 might play later doesn't change the fact 13 that they are assigned to GOP1. We can look, A6 through A9, those are 14 assigned to GOP2. That's another instance of a first data segment. What 15 16 Patent Owner's trying to do is read more into the claims than what's required. All that's required is assigning each one of the second data 17 18 segments to one of the first data segments, and *Abbott* teaches that. With that, I will-19 JUDGE BOUCHER: Thank you. We'll give you the full seven 20 minutes for your rebuttal. 21 MR. BOWSER: Okay. I'm going to stop sharing. 22 23 JUDGE BOUCHER: Patent Owner, when you're ready, we can proceed with your presentation, please. How much time would you like to 24 reserve for rebuttal? 25 MR. CARDENAS-NAVIA: I'd like to reserve 15 minutes. 26

JUDGE BOUCHER: So I will put 45 minutes on my timer. Similarly as with the Petitioner, if you can sort of keep track of your own time and I will try to let you know when we're at the end of your principal time there.

MR. CARDENAS-NAVIA: Will do. I want to make sure I get to all the claim constructions and spend plenty of time on *Sonohara*, but if it's okay I'll just pick up where we ended and briefly address *Abbott*. I agree with Your Honor's description of *Abbott*, and I'll point out that in the petition, all that Petitioner relied on for the assignment rule, and I'll refer you to Slide 6 of Patent Owner's Demonstratives, which shows Figure 9 of *Abbott*, and again, Figure 9 of *Abbott* is describing the indexes of *Abbott*. It's these indexes that Petitioner relied on as the alleged assignment rule.

What the indexes do is exactly what Your Honor was describing, is they say the indexes are only for when you're jumping or skipping in content. What they do is for the video frames, all the video frames are essentially associated with the start of the GOP that they correspond to. Similarly for the audio frames, all the audio frames, for example, that fall within a GOP, for example A1 through A5, they all get associated with the start of the first audio frame, A1. That's associated with the start of the first video frame, F1.

So what you're doing is these indexes, they do assign all the audio frames to the start of a single GOP, and they're only used once, not for each of the data segments as the claims require. That was Petitioner's theory in their petition. In their reply, they did change theories and we believe it's an improper new theory, but they appear to be now saying that well, if you look at Figure 9, A1, the different audio frames sort of match up with different video frames or at least the entirety of GOP1.

That's a new theory, but it also doesn't work out because I agree with Your Honor's understanding of *Abbott* that all the audio frames are played sequentially during normal playback. They're not based on any—they're not played out based on any correlation with the video GOPs or video frames. That's very clear from the portions of *Abbott* that both Petitioner and Patent Owner cite to. The other aspect is that the claims require more than just using an assignment rule to assign data segments, first data segments with second data segments.

They require outputting the first and second data segments based on that assignment. Again, *Abbott* does not do that. The indexes are only used once. It's not that each of the audio frames and video GOPs are assigned based on the indexes. Unless anyone has a question about *Abbott*, I'll now pivot over to the claim construction arguments.

JUDGE EASTHOM: I have a question. I don't understand why it doesn't meet the claim, even if some of them A2, A3, A4 are sequential, as long as they're all assigned according to the claim. Then with your observation about the output, doesn't the video and audio get outputted? Isn't that the whole purpose of *Abbott*?

MR. CARDENAS-NAVIA: They would get output sequentially, but that outputting would not be based on the alleged assignment rule, which are these indices. The assignment would just be based on purse ordering of the audio frames, irrespective of the video frames or GOPs, and the same would be true for the video frames and video GOPs.

JUDGE EASTHOM: But you don't dispute that A1 through A5 are assigned to GOP1, right?

MR. CARDENAS-NAVIA: Within the context of indices, yes, they have a certain assignment. In the context of normal playback, which again, now seems to be the new theory that Petitioner has relied on, I don't believe there is any kind of assignment disclosed in *Abbott* of that. What is happening is just standard playback which is just you've got your audio frames playing one after the other, and then you've got your video frames and just play them one after the other.

That's different than what the 794 patent is about, which is about making sure you're synchronizing the audio and video by having an assignment rule that creates relationships between them. The only thing in *Abbott* that gets at all close to that is the indices, but again, they fall short because they're only used and they have a many to one relationship that doesn't meet the claim limitations.

JUDGE EASTHOM: Thank you.

MR. CARDENAS-NAVIA: With that, I'll now refer to Slide 15 of the demonstratives, Exhibit 2015. I'm sorry, Slide 16, and I'll start with the construction for the term content-related data segments. This is an interesting one because the parties and their experts both agree on the definitional construction, and I just want to be clear that there wasn't a changing of position between Patent Owner's response and Patent Owner's surreply. In both papers we address both of these constructions.

We do believe that if Patent Owner is to prevail under either of these, we again do have the preferred construction that elaborates on what syntactical meaning is, both because that's a term that's given a specific meaning within the context of the 794 patent and because it leads to additional distinctions between *Sonohara* and the claims of the 794 patent.

For the preferred construction, what it makes clear is that the data segments have a specific order. That specific order, it comes from how the content was ordered in the data file.

Within the data file—let's say it's the audio of a movie—it has a specific ordering, and just because you segment the data doesn't mean you forego that ordering. You need to retain that ordering, and that's what the term content-related is intended to capture, that you retain that ordering of the content even though you now have data segments instead of a whole data file. There's a number of explanations of that in the specification.

If you look at Slide 20, directly following the definitional language for content-related it gives examples of a plurality of succeeding second data segments represent the speech signal of a specific speaker within a dialogue sequence. Here we're talking about again order, succeeding data segments, and we're also talking chronological order because we're talking about speech signals. The following example is very similar. Now it's talking about video, but it's talking about individual images of a video sequence.

Again, there's a strong emphasis on order and there being an intended chronology. If you turn to Slide 21, this again has more examples and it has by far the clearest example, which it talks about having a data segment with the audio word good and then the next data segment having the audio for the word morning. It explains that, of course, the data segment with the word good is output first and then you output the data segment with the word morning.

Again, it's invoking these—the two common threads through all these examples, you're talking about the order of data segments and the order is a chronological order. Again, it's the order you had for the content in the

original data file that's still preserved, and that's what makes these data segments content-related data segments as opposed to just any old data segments in any old order.

JUDGE SMITH: Let me just ask you real quick—this is Judge Smith. Is it fair to say that if we reject the preferred meaning and go with either the definitional meaning or plain meaning, is it fair to say that in that case the Petitioner would win?

MR. CARDENAS-NAVIA: No, not at all. We have arguments—
JUDGE SMITH: Is this something—do we need to reach this far to
resolve the dispute, or would it be enough to stop at either the definitional or
just not construe it?

MR. CARDENAS-NAVIA: So we believe we have multiple avenues to distinguish *Sonohara*. This is one of them. The existence of multiple data files that have syntactical meaning is another, and of course, the assignment rule and lack of use of exact timing information is another. We do believe they're all important. This one is a bit of a threshold one. It's used throughout the claims. I certainly do think that at least the definitional construction should be adopted, both because it's definitional—there's zero dispute about that—and also because it does vitally, it recites the limitation that the data segments are always defined within the context of the data file.

That's relevant to a number of the other claim constructions and also to some of the distinctions with *Sonohara*. At a minimum, I do believe that construing it with a definitional construction would be quite helpful. Just one thing I want to point out for this construction and I'll direct everyone to Slide 22—although I do apologize, Slide 22 has a typo in it. The language highlighted in yellow that says the content-related first data segments

according to their chronological sequence, it should say the content-related first data segments and the content-related second data segments according to their chronological sequence. It was inadvertently omitted.

But what I want to point to this slide for is the relationship between the content-related data segments and the requirement in claim 1 that the data segments be sequentially output according to their chronological sequence. Again, this shows the centrality of the order and the syntactical meaning of the data segments. Because if you're sequentially outputting a series of data segments, it's far from guaranteed that the data segments will also be output chronologically.

You can think of a simple example where you've got three data segments, a beginning data segment, a middle data segment, and an end data segment. If they're ordered middle, beginning, end and you output them sequentially, then you're not going to output the content chronologically. It's only if the segments are already ordered chronologically beginning, middle, end that when you output them sequentially, they will also output chronologically, which is what the claims require.

You sequentially output all the data segments and that results in them being output according to their chronological sequence. Again, that fits in perfectly hand in glove with Patent Owner's preferred construction for content-related data segments.

JUDGE BOUCHER: Right, so what is your construction actually adding that isn't already recited in the claim with the language according to their chronological sequence?

MR. CARDENAS-NAVIA: So the way I view it is the construction is a precondition for the data segments to be output properly, because again, if

you don't have that as a precondition, they won't necessarily output in the proper order. Then also again, it establishes that relationship between the data segments and the order in the original data file.

JUDGE BOUCHER: I just don't see where the combination of the definitional construction with the language you highlight in yellow doesn't already capture everything that you want with your preferred construction.

MR. CARDENAS-NAVIA: I believe the preferred construction does—oh, I see what you're saying. I guess I view it as otherwise the claims could be awkward in a way. You could have data segments, and if there's no clarification of what syntactical meaning, you could potentially have a scenario where they're ordered middle, beginning, end and then you output them sequentially and it doesn't end up output chronologically, so the construction would avoid that type of scenario.

JUDGE BOUCHER: Okay, thanks.

MR. CARDENAS-NAVIA: Another thing I'll point out is Petitioner made the argument that our preferred construction, which again talks about the order of the data segments within a data file, would render the assignment rule superfluous. That's not correct. If you look at this claim closely, you see that there's a clear division between the order in which the data segments are output and between the alignment of data segments from the first data file and the second data file. So the order of the data segments within each data file is just—the order in which they're output is just sequential and chronological.

That's clear from the language of the claim. That's unrelated to the assignment. What the assignment rule governs is the timing of the outputting of that order for the data segments within each of the two data files. If you

look at Figure 1 of the 794 patent, which is also up on Slide 22, you see those at play. So you start off with your two data files, D1 and D2, they get fragmented into data segments 0-9 for the audio and 0-4 for the video, and you already see those arrows R1 and R2, which indicate chronological order.

So that chronological order exists as soon as the data segments are fragmented. It also exists apart from the assignment rule, which is indicated in Figure 1 by the capital Z in that circle there. The assignment rule is not applied until you get to that synchronization module. Then you look at the output of that module, and what you have is, again you've got the data segments for the audio and for the video and you again have the arrows R1 and R2 because they're both output sequentially and chronologically.

But now in addition, you've got the interrelation between the audio data segments and the video data segments. So audio segment is 0 is output with video segment 0, and then the audio segment 1 is output, and then the audio segment 2 is output with video segment 1 and so on.

JUDGE BOUCHER: So if we talk about this drawing just for a moment, those segments on the left and on the right, where are those? Are those in—we start with D1 and D2, which are clearly separate files, and then the fragmentation module chops them up into these segments. Where are the segments?

MR. CARDENAS-NAVIA: They can be segments, they can be part of distinct files, as well.

JUDGE BOUCHER: Because your argument with respect to *Sonohara* seems to rely fairly critically on these segments being in distinct files. It's not clear to me from your patent where those segments are,

whether they're in distinct files at this point or not. The data certainly originates from distinct files just like it does in *Sonohara* and they get fragmented just like in *Sonohara*. So where is the distinction you're actually making and where's the support for that distinction?

MR. CARDENAS-NAVIA: Sure. So the distinction, it again comes from this term content-related data segments, because there's content-related first data segments, content-related second data segments, and for them to be content-related, they have to have a syntactical meaning within a data file. Looking at this figure—

JUDGE BOUCHER: That's not the distinction I was after. It's your other argument with respect to the first and second data files being different. Why isn't the Petitioner correct that in *Sonohara* the first and second data segments are of a first and second data file like here?

MR. CARDENAS-NAVIA: I am trying to answer your question. It just has maybe a bit of a longer windup than you might have expected. So the reason I was starting with content-related data segments is because what the claim expressly requires is that again, you've got the first set of data segments, and there is a syntax for those segments within a first data file. Then you've got a second set of data segments that have a different syntax within that different second data file. That's the clearest breaking point with *Sonohara*, is if you look at what Petitioner maps to in *Sonohara*, all Petitioner ever points to is a single syntax within a single data file.

Where rubber meets the road on two data files versus a single data file is that if you have two data files, you have two syntaxes. Again, the syntax matters because that gives you your chronological order. That's what allows the contents to be played correctly. *Sonohara* does not have that. As you

correctly point out, you start with two data files. There's no data segments. There's no syntax in either of those data files. You then create a single data file and now you've got different sets of units times audio data and image data within that single data file, but at best you've got a single syntax within a single data file.

The syntax within that single data file would also be very different than, for example, the syntax in Figure 1 here of the 794 patent, where you've got a chronology just with respect to the audio data and you've got a chronology and a relationship just with respect to the video data. There's a lot of reasons why that matters. The 794 patent in the background talks about being in the context of adaptive bit-rate streaming where you would actually swap out the video or the audio midstream, and how this technology enables that by always keeping the audio separate from the video and having two streams that are synchronized at a precise point in time, not already synchronized and you're just playing it out.

JUDGE SMITH: This is Judge Smith. A lot of what you just said isn't in the claim, even if we give you the definitional meaning of what's in the spec about content-related is understood to mean they have syntactical meaning. The whole thing that you said about different syntaxes, none of that is in the claim or at least in the definitional support in the spec. It seems like based on what you said, we'd be reading a lot of things that are not in the claim into the claim without really any basis for reading them into the claim.

MR. CARDENAS-NAVIA: May I address that? JUDGE SMITH: Yes.

1	MR. CARDENAS-NAVIA: So I'll direct you to Slides 15-16, and I'll
2	start on Slide 16. I'll go with the definitional construction, which is data
3	segments that have a syntactical meaning within the respective data file.
4	We're talking about, let's say, content-related first data segments, so for
5	those data segments, they must have a syntactical meaning within those
6	segments' respective data file. If you're talking about audio data segments,
7	you have to have syntactical meaning within the audio file. The same would
8	be true for the second content-related data segments. They have to have a
9	syntactical meaning within their respective data file, which is the video data
10	file.
11	Again, if you look at Slide 15, we see that where the preamble recites
12	content-related first data segments of a first data file. Then when you get to
13	the body of the claim and you've got content-related first data segments, and
14	then through the definitional construction you're referring to the respective
15	data file of those first data segments, that is the first data file in the
16	preamble. The syntax is specific to first content-related data segments of a
17	first data file and second content-related data segments of a second data file.
18	JUDGE SMITH: The syntactical meaning would be related. Is there a
19	difference between syntax and syntactical meaning?
20	MR. CARDENAS-NAVIA: Ah yes, not particularly. I'm using one as
21	shorthand for the other, saying the meaning of syntactical meaning gets
22	confusing very quickly, so sometimes I just refer to it as syntax for
23	shorthand.
24	JUDGE SMITH: Okay, thank you.
25	JUDGE EASTHOM: Mr. Cardenas-Navia, I just had a quick question,
26	if you could go back to Slide 22, please.

MR. CARDENAS-NAVIA: Slide 22, yes.

JUDGE EASTHOM: Just to be clear, so in D1 they're not segmented yet. It's just that you can define the segments with this program language or whatever this is, this command BSD. This is some other data structure that helps you define the segments in D1, but there's nothing segmented in D1 in that, right? Is that right?

MR. CARDENAS-NAVIA: I agree with that, and that's why in terms of distinguishing *Sonohara*, it's not that the data segments once they've been segmented are necessarily in a distinct data file or not. It's again, it's what is your syntax within that data file. Because of the point in time, because there is no syntax at all in *Sonohara* until you get to the single data file—

JUDGE EASTHOM: So wait, can I interrupt you just to—so what you're saying is the claim requires that when you have this D1, I'm not reading it, but in *Sonohara* you have to have, somewhere in *Sonohara* where you have a similar D1, a file where you start out and you know that they're segmented. But even though they're not segmented, but you could segment them if you wanted to, and segment them in a chronological order. Is that what your argument is?

MR. CARDENAS-NAVIA: I apologize. I'm not sure I quite followed that. I think what the primary distinction for *Sonohara*, again, is the requirement I was just referring to on Slides 15 and 16, which is because of the construction of content related data segments and because, as I'll get to, the preamble is limiting and requires a first data file and a second data file, the results of the combination of both of those two is that you have to have first data segments that have a syntactical meaning within a first data file and

24

25

second data segments that have a syntactical meaning with respect to a 1 second data file. 2 JUDGE EASTHOM: But you don't have data segments in the data 3 file D1 and D2 in your spec, right? You're not relying on that for support on 4 5 what you just told me. MR. CARDENAS-NAVIA: That's correct. What I'm relying on 6 7 would be kind of bracketed with S1 and S2, the segments as they exist with that R1 arrow next to them, because that order and that chronology is the 8 9 syntactical meaning, is the syntax, and it exists for those data segments with 10 respect to the data file D1. JUDGE EASTHOM: Okay, and then if we don't agree with your 11 reading of the preamble, that argument is not going to be a winner. Is that 12 true? You need both of those? 13 MR. CARDENAS-NAVIA: If what you don't agree with is just the 14 preamble, I still think this argument is viable. 15 16 JUDGE EASTHOM: I mean if we disagree that the preamble—if we construe the preamble and we say we don't think it's limiting with respect to 17 the first data file because there's no reference back to the first data file in the 18 body of the claims, say we think that, then do you lose with respect to 19 Sonohara? 20 MR. CARDENAS-NAVIA: No, because as long as you agree with, 21 well, you can agree with me on the assignment rule limitation and we prevail 22

for that reason. But even sticking more to this, if you agree with me on the

construction of content-related data segments, the definitional construction,

whichever one agrees with, that construction imports the limitation of

syntactical meaning within a data file, with one data file for the first set of data segments and with another date file for the second set of data segments.

JUDGE EASTHOM: Okay, I need to understand—

MR. CARDENAS-NAVIA: Yeah.

JUDGE EASTHOM: Okay. Setting aside the assignment rule, most of this boils down to whether you have syntactical segmentation in a data file, not necessarily segments, correct? That's okay, don't answer that. I don't think I'm being very clear, I'm sorry. Go ahead.

JUDGE SMITH: Yeah, just to be clear, though, this drawing does not show a first data file having content-related first data segments, right? D1 isn't at—the specification of the patent doesn't describe what that stuff is by S1, where that is. There's no specific disclosure that that is a file with segments, right? This seems like the patent was contemplating that the audio and video data originated from separate files just like in *Sonohara*. Then they were segmented and then they were synchronized with an assignment rule. But the distinction you're drawing, it's hard for me to see where that was actually contemplated in the specification here.

MR. CARDENAS-NAVIA: Well, again, I think it all has to do with—the patent talks about the context and adaptive bit rate streaming, and there's an important need to have the audio separate from the video, for example, because you might want to swap one or the other out as the quality of your internet connection changes. Additionally, it's partly for that reason, but the patent is pretty clear that you have a syntactical meaning within a data file that is respect to one set of content-related data segments.

Yes, I do not dispute that there are separate data files, but again, when you get to the segmentation point and when you get to the syntactical

meaning and the syntax of those data segments, they're in the context of two distinct data files. The claim was very express about that. That is through the preamble, which we certainly believe is limiting, the claim sets that out as a clear requirement. In addition to the preamble setting that out, let me jump now to Slide 28. On Slide 28, we've got two dependent claims from the 794 patent.

Both of them refer to the first data file and the second data file, so again, there's more antecedent basis and more structure from that preamble that is being relied on in these dependent claims. Again, that suggests they're limiting and the inventors viewed two distinct data files as an important distinction for this patent, an important requirement of it. I believe it's undisputed that every single embodiment in the patent involves two data files and having content-related data segments that have a syntax within a distinct data file.

JUDGE SMITH: Let me ask you about Petitioner's construction of the preamble. To Petitioner's point, Petitioner is saying if we look at the preamble—just look at the claim, we start under Phillips we construe the claim. The first thing we look at are the words of the claims themselves. Looking at the words of the claims, content-related first data segments of a first data file, content-related data segments of a second data file, so the disputed terms are the first data file and the second data file.

If we just remove the disputed terms, there are a couple of cases—I think you cited them in your briefing. The first case was the *Bio-Rad* case on Page 1371. In that case, the Federal Circuit said we don't need to construe the entire preamble, we can construe a portion of the preamble. So the portion here would be the disputed terms. The second case that you cited

was the Catalina case, and on Page 810 of Catalina, the Federal Circuit said if we delete the disputed phrase—if deleting the disputed phrase doesn't affect the structural definition or the operation of the body of the claim, that is the body of the claim defines a structurally complete invention, the preamble wouldn't be given patentable weight.

To Petitioner's point, it seems like that's the case here. Looking at the claim language itself, deleting first data file, second data file, the body of the claim is structurally complete. There are no functions or structure that are affected by deleting these disputed terms. What's your response to—in that case, we wouldn't even need to go to the definitional construction for content-related in the spec because there would be no dispute to resolve. What are your thoughts on that?

MR. CARDENAS-NAVIA: Three things come to mind. One, I keep saying this, but the content-related data segments term includes a reference to the respective data file. If you take the first data file and the second data file out of the preamble, you suddenly have a term that's definitional that has no antecedent basis. The antecedent basis for that construction, which is in the body of the claim, only comes from the preamble. The second thing I'd say is I'll have to find the case name maybe before my rebuttal, but there is Federal Circuit case law warning against splitting up a preamble and saying this part's limiting, but that part's not limiting.

There has to be a really good reason to do that. Otherwise, that's certainly a disfavored way to conduct claim construction. I believe it's cited in our papers. I'll do my best to find that case name before my rebuttal. I'm now forgetting the third thing I was going to say. But the third thing I'll point out, referring back again to Slide 28, is for example, claim 18,

dependent claim 18, where again, it's just reinforcing how the inventors viewed the significance of having two distinct data files.

Claim 18 says where an assignment rule is maintained in a file separate from the first data file and the second data file. Here again, when inventor wants to find a new data file, it uses the word a file and defines it a new file. But when it wants to refer to preexisting data files, it uses the word the. This is just more and more evidence that the inventors absolutely considered first data file and second data file to be limitations to provide structure in claim 1, that in my view through the definitional construction content-related is referred to in the body of claim 1, but is certainly referred to in claim 18. There's no reason to—that's again, just further evidence that it's limiting in all the independent claims.

JUDGE EASTHOM: But how—claim 5 seems to make it so that the media data can be represented in both of those files, and so I don't understand how that helps you. It looks like it's saying that there's no—first of all, it's a dependent claim, so it's the first time that you see the first data file and the second data file in the body of a claim. I think your point in your briefing was that media data is different than the broader limitation in the claim that doesn't specify the type of data. But this also broadens claim 1 in that it allows some type of data to be in either one of those files, both types of data to be in both of those files.

MR. CARDENAS-NAVIA: The way I understand dependent claim 5 is that claim 1 doesn't specify the type of data other than its content-related data. If you look at the specification, there's a clear disclosure of what type of content data there could be. One category is media data, which is referenced in claim 5. The other category is metadata, which I think is

referenced in claim 13 or something like that. Claim 5, the way it's further 1 2 narrowing claim 1— JUDGE EASTHOM: I understand that argument, but I guess I was 3 trying to get you to answer media data has audio and video data, right? Is 4 that right? 5 MR. CARDENAS-NAVIA: It could be audio data or video data. 6 7 JUDGE EASTHOM: Or both, right? MR. CARDENAS-NAVIA: I would want to think about that a little 8 9 more. Possibly. JUDGE EASTHOM: Don't think about it too much. Let's just assume 10 for the sake of my question maybe, and then you don't have to agree. What 11 you're saying is that, if my premise is right, then you have two types of data 12 and they could be both of them, without any distinction could be spread 13 across the two files. That broadens up the meaning of how you're storing. It 14 contradicts what you're saying claim 1 is limited to. You're saying oh, for 15 general data, they have to be in one file or the other, but for the specific data 16 they could be in both data files. 17 MR. CARDENAS-NAVIA: I believe I'm not quite following your 18 example in why media data would somehow be broader. It's a more specific 19 type of data. 20 JUDGE EASTHOM: No, no, I'm not saying media data is broader. 21 I'm saying the fact that you can put media data in two different files—you 22 23 could put audio and video data in one file and you could put audio and video data in another file, so you could mix the two up. Whereas in claim 1 you 24 seem to be saying well, if I have one type of data it's got to be in the first 25

data file and another type of data has to be in the second data file.

26

Then you come along in claim 5 and you blur the distinction and you say hey, if I have the specific type of data which has two different types of data in itself we can spread those across—I don't know. Maybe it's not very clear how I'm asking you, but it seems like you're using the data files as kind of broader. I guess that's my question.

MR. CARDENAS-NAVIA: I believe I understand what you're saying now. Thank you for that additional explanation. I did not mean to suggest that claim 1, the first data file is somehow limited to just audio or just video or the same for the second data file. I think in claim 1, the first data file, it could be some type of media data, certainly audio data or video data or metadata. I would like to think about it more if I can. It could possibly be some combination of audio and video data. I haven't ruled that out yet. I'm not sure if that would interfere with how the assignment rule—it might not.

Maybe you could have a situation where you have multiple audio and video or have combined audio and video that you synchronize with subtitles. Maybe that's a possibility. But I do see the data files in claim 1 as broader and the media data in claim 5 as narrowing the scope of what kind of data can be in one of the two data files.

JUDGE EASTHOM: I appreciate that. Okay, thank you.

MR. CARDENAS-NAVIA: Absolutely. I think given that, and given where we are with the time, I'll probably turn to the assignment rule claim construction. Here, at a very high level, here's how I view this dispute. If you just look at—and I'm on Slide 35—if you just look at the assignment rule limitation in the context of claim 1, I don't read claim 1 this way in the context of all the intrinsic evidence. But just in a vacuum you could look at it and say well, what if you have an assignment rule and your assignment

rule is well, take all the time stamp information from each of the audio data segments and take all the time stamp information from all the video data segments and line the two up just by playing the audio and video according to their time stamp information that aligns.

Again, I think the POSA reading the 794 patent would not interpret assignment rule that way, but in a vacuum that could be the case. I think it's very clear that the assignment rule should not capture that type of embodiment or you're just blatantly relying on time stamps. Using time stamps is addressed in the patent, it's mentioned. It's disparaged as something not to do because it has downsides. The two references that were overcome during prosecution, and I'll go through them in just a second in more detail, *Shin* and *Rosenau*, the backdrop to both of them is using time stamp information in data segments to align audio and video.

There's just no way the 794 patent would have been allowed if assignment rules were so broad as to encompass just an assignment rule that was just based—just used timing information. I do want to clarify something about exact timing information, which is what's in our construction, and time stamps. Exact timing information is intended to encompass time stamps. It is also intended to encompass additional uses of exact timing information as we see with *Shin* and *Rosenau* where, for example, you have time stamps and then maybe you're doing some adjustments to those exact time stamps, again based on other types of exact timing information. So I just—

JUDGE EASTHOM: Just to clarify, were your friends correct in characterizing—was that a mistake? You seem to be saying claim 5 is

1	broader than claim 1, the time stamp claim. I'm sorry, I don't know if I have
2	the right one, but.
3	MR. CARDENAS-NAVIA: No, and let me—I understand what
4	you're asking.
5	JUDGE EASTHOM: Thanks.
6	MR. CARDENAS-NAVIA: It's on Slide 56 of the demonstratives,
7	and actually I'll direct you to Slide 57. It puts a side-by-side between our
8	construction for assignment rule and the limitation in claims 20 and 21. It is
9	kind of nuanced, but there are clear distinctions. Exact timing information is
10	broader than time stamps, but the words I'm using to draw a distinction
11	between the construction and so then the independent claims and the
12	dependent claims is the difference between using exact timing information
13	and being based on a time stamp. The analogy would be like it's the
14	difference between making a movie that uses historical footage and events
15	versus making a movie that is based on historical footage and events. The
16	first one is a documentary. The second one is a Hollywood movie.
17	JUDGE EASTHOM: But not-withstanding that distinction that you're
18	making about those two words based on and using—it would otherwise be
19	broader, right? Claim 20 and 21 would otherwise be broader because it's a
20	negative limitation?
21	MR. CARDENAS-NAVIA: So the way I use it, because of the based
22	on language, the negative limitation of claim 20 and 21 is broader.
23	JUDGE EASTHOM: Oh no, I—oh, the negative limitation in 20 and
24	21 is broader, you're saying?
25	MR. CARDENAS-NAVIA: That's how I view it. If you think of
26	claim 1, let's say, and there's no negative limitation, so you've got a circle, a

pie, of the scope of the claim. Then if you apply our construction and you're removing assignment rules that use exact timing information, then you're taking out, let's say, a quarter of the pie. Now if you say the assignment rule is also not going to be based on a time stamp, you're taking out an additional chunk of the scope of the claim because being based on something is broader than just using something.

So in our review, as you go from the independent claim to the dependent claim, this is why it's a little confusing, because the negative limitation gets larger, essentially what you're taking out of the pie gets larger. But the result is that the scope of the claim is more narrow, so there is nothing improper. There is no potential for a doctrine of claim differentiation-type scenario that is created by Patent Owner's construction. Just the other thing I'll note is that even if there were, which again there isn't, but that would be a proper basis to undo disclaimer.

JUDGE SMITH: Before you get to disclaimer, let me just be real quick, I heard you say that there's a difference between timing information and time stamps, but I'm not really clear on what that difference is other than the words timing information are different than the words time stamps. But other than that, what's the difference as a practical matter?

MR. CARDENAS-NAVIA: It actually is helpful to use a *Shin* or a *Rosenau* to explain it, but essentially there's—it didn't want to be too limited to just using time stamps. The POSA, if all the construction said was it's not by using time stamps, that might be interpreted as data segments historically have time stamps in them. So all you're excluding is explicitly taking those time stamps out of the data segments and aligning the data segments based on those time stamps. That's why we did not just say

1	excluding based on using time stamps, because if you look at the file
2	history—
3	JUDGE SMITH: What I'm asking you is what is timing information
4	that is not a time stamp? Do you understand what I'm asking you?
5	MR. CARDENAS-NAVIA: I do. I'm trying to explain it. If it's okay,
6	I think it actually would be helpful if I used Shin or Rosenau. It's a clear
7	example of what I mean that's encompassed and might help more broadly
8	inform what—
9	JUDGE SMITH: Okay.
10	MR. CARDENAS-NAVIA:we're trying to capture here.
11	JUDGE SMITH: So what does Shin say is timing information that's
12	not a time stamp?
13	MR. CARDENAS-NAVIA: Let me get to the slide.
14	JUDGE BOUCHER: You are, by the way, about a minute into your
15	rebuttal time so far.
16	MR. CARDENAS-NAVIA: Thank you. I'll direct you to Slide 36,
17	and so this is Figure 6B from Shin, which is a reference that was overcome
18	during prosecution. What Shin has is, it's got your content that's represented
19	by the lower line, and the content has time stamps as part of it. It's
20	segmented and the segments have time stamps. The problem confronted with
21	Shin is that you want to align that content with segment metadata. So you've
22	got some kind of overlay of metadata you want to play in synchrony with the
23	content.
24	But the problem is the metadata for various reasons might arrive
25	earlier or later to whoever is viewing the content, so you need some way to
26	resynchronize the content and the metadata when it arrives. What you do is,

again, both the metadata and the content, they already have time stamps, but what you're calculating is that delta T you see on the left there, which is basically how out of sync are the content and the metadata. Normally you would just match T sub A, which is the time stamp for the segment metadata with the T sub A for the content and just play based on that.

But because they're out of sync, what you do is you take that time stamp for the content and you add that delta T to it. You do that for all the time stamps for each of the segments within the content to then restore synchronization between the content and the metadata. What you're doing here, this is the type of thing we're trying to capture with excluding exact timing information. You're not just using time stamps. You're using time stamps plus this delta T, which is another exact time delta, which is another form of time stamp. Based on that, that's how you're doing the synchronization.

This reference was expressly distinguished by the Patentee, if you look at Slide 37, it says, it's highlighted the content data and metadata each include time information for synchronization. Then it goes on to say the synchronizer then determines a relative time point and synchronizes the content data and metadata based on the determined time point. That's the T sub A plus delta T. It's got a twist, but you're essentially using time stamps plus this delta time stamp to synchronize the content and the segments within *Shin*.

Now if you look at Slide 38, this was expressly distinguished by the Patentee on that basis. It says on the contrary, *Shin* at best determines a point in time in content and metadata so that they are synchronized. Segments of one type of data are not assigned to segments of the other type, which is

what the assignment rule is about. That's more the numbering schemes or outline every third video segment with every audio segment. That's more what an assignment rule is. It's not supposed to be about all these doing things with time stamps.

That was the expressed basis for distinguishing *Shin*. If you look at Slide 39, the examiner accepted those arguments. I know I'm short on time, so I'll very quickly touch *Rosenau*, which is shown on Slide 40. Again, you see on Slide 40, you've got audio data segments, you've got video data segments. They all have time stamps, *Rosenau* is very clear about that. What you're doing is you're just keeping track of have the data segments fallen out of sync with one another? You measure that as a precise time. If they do, you take a corrective action to get them back in sync based on that precise time.

Again, it's all about exact timing information, really time stamps, but if you say just time stamps, maybe that's construed as more limiting. Again, if you look at Slide 41 and 42, sorry, 41, the Patentee was expressed about distinguishing them based on timing information parsed from a data stream and then the system clock counter, which tracks how out of sync they are. That was the basis. Then on Slide 42, this is what the patent office said, and they agree, using very similar language saying we agree.

It's about frame synchronization based on timing information from a data stream. That is not what the claim requires, which is the assignment rule. I believe this was clear disclaimer of certain type of timing information that could, in a vacuum, be viewed as within the scope of assignment rule, so a construction is needed to make clear that no, it's not within the scope. As

1 I'll hopefully get to, maybe spend one minute on, distinguishes *Sonohara*.

Now let me—

JUDGE EASTHOM: Do you agree that assignment rule has a plain and ordinary meaning, or do you think it has a different meaning? Is there a plain and ordinary meaning for it?

MR. CARDENAS-NAVIA: I think it has the plain and ordinary meaning in light of all the intrinsic evidence in the file history, so not particularly. I think especially to capture this file history, you need the construction. The intrinsic evidence does disparage time stamps and says not to use them, but that again leaves some ambiguity about exactly then what is the scope. So I do believe a construction would be very helpful to clear that up.

JUDGE EASTHOM: Right, but normally when we use prosecution history, a lot of times the black letter law, as well, it has a plain and ordinary meaning and if you want to change that, if you want to narrow that, you have to have a clear disavowal. That's why I'm asking you if you think it's something that you need a clear disavowal for or do you think it's ambiguous and you don't need such a clear disavowal?

MR. CARDENAS-NAVIA: I believe under either standard it's met. I do think given the disparagement in the spec and the file history, that does create a little more ambiguity than usual about what the term means. That is a term that only exists in the context of the 794 patent. If you say assignment rule, it doesn't have a general meaning in the art. It is only described in the context of the 794 patent with a specific meaning. But even if the standard were to be a clear and unmistakable disclaimer, again, two references, very

similar, all about the timing information. The examiner agreed that was the basis on which the references were overcome.

Now for one minute let me direct you to Slide 54. For *Sonohara*, we see we've got some sound data segments. We've got some image data segments, but when we get to the description of how they're actually output, it's only described with reference to these specific times, t1, t2, t3. It doesn't say just output sound data 1 with image data 1. It says, as we see here on Slide 55, at the time t1, then you output sound data #2-01 with image data #1-01. Then at time t2, output the next set of segments. Then at time t3, output the next set of segments.

They're all, again, in every embodiment in *Sonohara*, they're all exactly one second. All of this is done in the context of the segments have this duration, output them at this time, and that's how you get there. See *Sonohara* is using exact timing information very clearly. Petitioner doesn't really explain how this wouldn't be exact timing information. Petitioner sort of seems to just ignore this description of the time and the exact durations. With that, I'll go ahead and save the rest of my time for rebuttal.

JUDGE BOUCHER: According to my timer you've got about five minutes left for rebuttal. I do just want to ask, though, if you could answer briefly, the District Court disagreed with grafting on this negative limitation. What would be the basis for us to come to a different conclusion? Would it be just that we disagree with the District Court? I thought perhaps you were going to say that the Personalized Media case that Judge Easthom had spoken about with the Petitioner might provide a basis for doing that, but then you seemed to say that prosecution history supported either standard. What would be the basis for disagreement with the District Court?

MR. CARDENAS-NAVIA: I do believe that Personalized Media case provides support, but I also believe it meets it under either basis. I guess I'll say two things about the claim construction. The District Court is, of course, not limiting on this panel. Two things: One is, as the judge actually made clear if you look at the transcript hearing, her preference, as is some judges' preference, is to resolve claim construction disputes with knowledge of the impact that it will have on the case.

She wanted to know, what invalidity or infringement dispute am I resolving when I make this claim construction determination? That was not presented to her at the claim construction hearing. She noted that, and for one other term, the content-related data segments and what is syntactical meaning, there she was expressing look, I'm docking this construction for now. Parties can raise it at summary judgment and give me the context of what is going to be the impact of my construction.

I think a bit of that was going on here, where the judge wanted more context on what the impact of her decision would be. The other thing I would say is that the judge, at that time especially, had a much more limited record before her than the Board does. It's District Court litigation. I believe there were four patents in the suit at that time. We had, maybe it was three—there was at least 10 claims being construed. We had a couple of pages and some briefs to address it, whereas here there have been much fulsome briefing, a more complete record along with oral argument. That would be an additional basis of this panel just has additional information that was not available to the District Court.

JUDGE BOUCHER: Thank you. Mr. Bowser, when you're ready, I have seven minutes on my timer for your rebuttal. It looks like you're speaking, but I don't hear you.

MR. BOWSER: Sorry, you'd think I'd get the hang of this after this many years. Let's see. I'm going to share my screen again here. What I want to focus on first is the chronology aspect. What I have on the screen right now, Your Honors, is the petition. On pages 42-44, this is where we address the specific feature. What I want to point out is the Patent Owner's counsel during his argument, he mentioned that there is no chronology from the data segments. That's just simply not the case because what *Sonohara* very clearly teaches is that the data identifying section, it gives data identifying numbers.

Those data identifying numbers identify and represent the order of the data. I'm just showing you here Page 43. We can see this from the text itself from *Sonohara*. These are all quotes and we've emphasized this. *Sonohara* uses the data identifying numbers. The reason I'm putting up the petition is because we don't have a slide that uses Figure 7, but here this is just an example. We can see that when the image and the sound data are assembled together in the file, they have the syntax information from the track information. They also have the data identifying numbers.

Just to be clear, the track identifiers are the ones on the left-hand side, the ones with the number sign, and the data identifying numbers are the ones on the right. *Sonohara* is very clear that that is for identifying the order. Patent Owner's argument that somehow *Sonohara* does not disclose the order is just incorrect. I want to move to—sorry, let me go to Slide 34 of Patent Owner's slides here. This is a different topic, but I want to show you

a somewhat slightly different topic. It's about the assignment rule, but I want to show you in the bottom left-hand corner, and this is clearly we can see how these are lined up.

There is a chronology to the data segments. Sound data, for example, in blue. We see #2, that's the track identifier. All the sound has track identifier #2 and all the image has track identifier #1, but the data identifiers are linked up together, 01 is linked up with the #2-01. We can see on the right-hand side. Also, as we can see on this slide, as well, Slide 34, that *Sonohara* clearly teaches the assignment rule because there is the control information in the header. The header defines a relationship between the image data and the sound data, and that's so the image data and the sound data is output together and synchronized as its intended to.

The last point I want to raise is something that Patent Owner has brought up. I'm going to just put up Patent Owner's Slides 8 and 9. This is its concept about how somehow *Abbott* only uses the indexes when jumping and only once. I would implore you to look at the actual text that Patent Owner cites. They cannot cite to anything that actually says there's a limit on when these indexes are used. Yes, the concept of the indexes are used when there's jumping or skipping. I'm going to look at Slide 9, same thing. Just the highlighted text, there's no limitation in *Abbott* that says that these index files are only used when there's a jump or a skip.

I want to point out, too, just the last thing here. Let's look at the claim language itself. This is another indication of how Patent Owner is trying to read in things that are just not there in order to distinguish the claims. This is claim 1. There is no time limitation as to when this synchronization occurs. It doesn't occur—I wrote down here what Patent Owner's counsel used, and

I'm quoting, "normal playback." You'll see that claim 1 is certainly not limited to normal playback. It also doesn't exclude jumping or doesn't exclude skipping. It just talks about synchronizing segments and that's it.

Patent Owner's argument that *Abbott* is somehow, you can only look at the indexed files only during jumping and only during skipping. You should reject those arguments because they're just incorrect. With that, I will answer any other questions that you may have.

JUDGE SMITH: I have a question. Just real quickly, if you could, Patent Owner made the point, to your point about the preamble of the claim just says data segments of a data file, it doesn't say anything beyond that, Patent Owner brought up the point if we construe the context-related by its definition in the spec, the definition in the spec actually says the data segment having a syntactical meaning within the respective data file. We can't just read the words of the preamble by themselves and say of a data file and that's it. We have to include the definition from the spec, having a syntactical meaning within the respective data file. Can you respond to that?

MR. BOWSER: Sure, yeah. So what that means, Your Honor, is the fact that there is some identification information within the file. So let's look, and this is the same point I just talked about as with respect to *Sonohara*. Let me go to Slide 34 again. We have syntax within the file, so these data identifying numbers, they come from the original image file and the original data. These don't just appear out of nowhere. This is not some magical assignment. These are segments that are pulled from the image file, so they are syntax within the original file.

We can see the step here on Slide 29. Again, we talked earlier about how that comes from the image file. Then you have that syntax within that

file. If you were to somehow interpret *Sonohara*--and again, I'm on Slide 34—as not having that syntax, where do these numbers come from? What do they mean? Do they just come from out of the blue? The whole point is that you have the syntax, the syntactical information, within the file that they came from.

So what we're trying to do is we are trying to synchronize the image and the sound together. You do that because you use the track identifiers and the data identifiers. That's exactly what's disclosed in *Sonohara*. To answer your question—and by the way, sorry, I want to just say you don't need to actually bring in the first data file and second data file even if you use the definition, because all that's required—sorry, I need to get the slide here that has—this is Slide 12. This is the text. It's understood to mean that the first and second data files have a syntactical meaning within the respective data files.

You don't need the actual first and second data files in order to define the claim term that way. It just means that the segments have a syntactical meaning within that file. That's exactly what *Sonohara* discloses, as I just showed you with Slide 34. With that, are there any other further questions?

JUDGE BOUCHER: It does not appear so, so thank you, Mr. Bowser.

MR. BOWSER: Thank you.

JUDGE BOUCHER: Mr. Cardenas-Navia, I have five minutes on my timer whenever you're ready for your surrebuttal, please go ahead.

MR. CARDENAS-NAVIA: Sure thing. I'll just make one point for *Abbott*. Petitioner was saying that we haven't shown that *Abbott* cannot be used, the indexes in *Abbott* cannot be used other than when jumping and skipping. That's a flipping of the burden, particularly in the context of

anticipation where really it's Petitioner who would need to show that indexes are used other than when jumping or skipping, which they have not shown. In fact, in their petition they essentially conceded that it's only used when jumping or skipping.

Two, to get to this citation to a case that talks about for preambles, the Federal Circuit, I believe it overturned the District Court that it found that only certain limitations within the preamble were limiting because only those certain claim terms provided antecedent basis for the body of the claims. That case was *Bio-Rad Labs v. 10x Genomics*, 967 F.3d 1353, and the pin site, I believe, is 1370-71. Another point I'll make is that because Petitioner in their petition proposed that no term should be construed, Petitioner never analyzed any construction for the term content-related data segments. So the petition has no analysis whatsoever of any kind of syntactical meaning within any kind of data file.

The only time that any type of analysis for that limitation appeared was in Petitioner's reply. Given that, again, everyone agrees that this was an express definition, I don't believe that Petitioner should be allowed to address that for the first time in a reply. I guess now let me ask if there are any further questions.

JUDGE EASTHOM: I have a question. Can we go to Slide 38, please? The negative limitation you propose says we won't exclude any exact timing limitation, and then you pointed out that that means a synchronization time plus a time stamp with respect to *Shin* and maybe the other references. Did I get that right?

MR. CARDENAS-NAVIA: That's correct. What Shin—

JUDGE EASTHOM: So my question is why can't you use the time stamp, because that's not exact. That's part of the time information. You said there would be some delay, right? So you had to do both of those things to exclude exact information.

MR. CARDENAS-NAVIA: Time stamps were known, so *Shin* and *Rosenau* in addition to using, for example, in *Shin*, time stamps plus this delta T time, the default in *Shin* is just having time stamps in the audio and video data segments. The specific rejection in the examiner was on this additional aspect of *Shin*, but *Shin* was overcome. The disclaimer should exclude the use of time stamps as part of assignment rule in addition to broader uses of exact timing information, like time stamps plus the synchronization time.

JUDGE EASTHOM: But I don't think time stamps give you exact timing information, right? According to your explanation?

MR. CARDENAS-NAVIA: I think I see what you're saying. You're saying that because it becomes out of sync, the time stamps are no longer exact timing information?

JUDGE EASTHOM: Right, right.

MR. CARDENAS-NAVIA: I see. So the intent is to view, although in practice time stamps in certain scenarios in *Shin* would not provide perfect synchronicity, time stamps still are types of exact timing information because what they represent is a specific point in time at which that piece of the content should be played. The fact that they might get out of sync or there may be some asynchronicity doesn't change the underlying nature of the time stamps. They still are a type of exact timing information.

1	JUDGE EASTHOM: Could you just flip to Slide 38 real fast? Just a
2	quick question—
3	MR. CARDENAS-NAVIA: Yes.
4	JUDGE EASTHOM: You have two arguments there against the
5	reference. I'm looking at the second sentence. "Further there is no assigning
6	of each second data segment to a first data segment." That was a separate
7	argument, right? That's another reason to distinguish Shin apart from the
8	synchronization time business, correct? I don't know what that—it's
9	Petitioner because I think the fact that you made the argument, I think some
10	cases say it's still disclaimer, even though you made two separate ones. I just
11	want to see if you agree that those are two separate arguments.
12	MR. CARDENAS-NAVIA: That's correct, they are. I think they are
13	similar flavors, but there are multiple distinctions. I agree with you that in
14	this instance—there are exceptions—but in this instance the examiner
15	accepted those arguments. The art was overcome, so you don't as the
16	Patentee then get to pick and choose and say this is the disclaimer, this is not
17	the disclaimer. It would apply to the statements that were made to overcome
18	the prior art.
19	JUDGE EASTHOM: I don't have anything. Appreciate that.
20	JUDGE SMITH: I have a question.
21	JUDGE EASTHOM: Just a housekeeping, could you please file the
22	Exhibit 1002 again with the numbering? There's no numbering on the
23	bottom of the pages and it makes it hard to dig into this cite. We don't have
24	any pin cites for this exhibit. That's the prosecution history Exhibit 1002.
25	You can just file that as a substitute exhibit, please.
26	MR. CARDENAS-NAVIA: Okay.

JUDGE EASTHOM: Patent Owner, I don't know if you have any 1 2 objection, is that okay? I mean Petitioner? Oh, I'm sorry. Petitioner needs to file it. Petitioner, can you file that, please? 3 MR. BOWSER: Okay. 4 MR. CARDENAS-NAVIA: And no objection from the Patent Owner. 5 JUDGE EASTHOM: Okay, thank you. 6 7 MR. BOWSER: Yes, we will do that. JUDGE SMITH: Let me just real quickly follow up on *Bio-Rad*. That 8 was actually the case that I cited that said we could split the preambles into 9 disputed portions and undisputed portions. It's true in *Bio-Rad*, the preamble 10 in that case, the court declined to split it up into two portions, but it seems 11 12 like in that case the court was saying that the preamble limitation that the District Court wanted to exclude was intertwined with the rest of the 13 14 preamble. It did more than recite an intended use. It seems like there were facts, but then at the same time it didn't 15 16 overrule its previous precedent that held that—I'm reading it on Page 1371. The Federal Circuit said in citing to a case called *Tomtom*, "we held that the 17 District Court erred in determining that it had to construe the entire preamble 18 if it construed a portion of it." I appreciate your citing to this case. I guess 19 what I was getting at is given this case that says we can either divide the 20 preamble into parts that we construe and parts we don't construe or we 21 won't, applying the holdings from this case, why would we not divide the 22 23 preamble? MR. CARDENAS-NAVIA: I believe our situation is more similar to 24 facts in *Bio-Rad* as compared with the earlier, I believe it was Federal 25 Circuit precedent where there was some splitting that was permitted, because 26

as in *Bio-Rad*, first data file isn't in some distinct separate part of the preamble that maybe it makes sense to not have it limiting. It's directly stated in relation to the first content-related data segments and the second content-related data segments.

Again, we also have the definition of content-related data segments in the spec, and that further ties the two together. So here, if you find content-related data segments limiting, but not the first and second data file, you're actually splitting a relationship that's in the preamble and in the definition of the specification. So that makes our facts more similar to *Bio-Rad*.

JUDGE SMITH: Okay, thank you.

JUDGE BOUCHER: It appears that there are no more questions. We want to thank both parties for your presentations. I know we had quite a number of questions, but the information was helpful in allowing us to understand the parties' positions with respect to the various issues. The case is submitted and we are off the record.

(Whereupon, the above-entitled matter went off the record at 3:15 p.m.)

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