IPR2015-00615, Paper No. 63 IPR2015-00626, Paper No. 64 June 21, 2016

571-272-7822

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SILICON LABORATORIES, INC., Petitioner,

v.

CRESTA TECHNOLOGY CORPORATION, Patent Owner.

IPR2015-00615 (Patent 7,075,585 B2) IPR2015-00626 (Patent 7,265,792 B2)

Held: June 1, 2016

BEFORE: PHILLIP J. KAUFFMAN, GREGG I. ANDERSON, and PATRICK M. BOUCHER, Administrative Patent Judges.

The above-entitled matter came on for hearing on Wednesday, June 1, 2016, commencing at 1:31 p.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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ON BEHALF OF PATENT OWNER:

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1	PROCEEDINGS
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3	JUDGE KAUFFMAN: This is the oral argument for
4	IPR2015-00615 and 00626. I'm Judge Kauffman. Hopefully
5	very shortly you'll be able to see the other judges and I'll
6	introduce them. If I could start with patent owner, please, would
7	you introduce who is going to be speaking today.
8	MR. FLEMING: Yes, Your Honor. I will be speaking
9	Mike Fleming. And Ben Haber is here to assist me.
10	JUDGE KAUFFMAN: Thank you, Mr. Fleming. And
11	would you introduce are you the only speaker today?
12	MR. AYERS: Yes, Your Honor. Peter Ayers, Lee &
13	Hayes, on behalf of petitioner, Silicon Labs.
14	JUDGE KAUFFMAN: Great. Thank you, Mr. Ayers.
15	And Judge Boucher is joining us from Denver. Judge Boucher,
16	are you able to hear me okay? Judge Boucher, are you able to
17	hear me?
18	JUDGE BOUCHER: I can hear you.
19	JUDGE KAUFFMAN: Great. Thank you. And Judge
20	Anderson, are you able to hear us?
21	JUDGE ANDERSON: Yes, I can hear you.
22	JUDGE KAUFFMAN: Great. Thank you. Because
23	there are two remote judges, if you would, please, be careful to
24	tell us you are on slide 6 or you are talking about Exhibit 2012 or
25	whatever it is so that we can follow along with you. We do have

our own electronic versions of the slides. So I don't need hard 1 2 copies from either party. 3 And I have a couple of questions, starting with you, 4 Mr. Fleming. Do you plan today to use any part of your time to 5 discuss the motion to exclude? And I ask you that because if you 6 are, I would allow you to reserve some time and speak last on that 7 issue because you carry the burden on that issue. 8 MR. FLEMING: Yes, Your Honor, I would like to 9 reserve five minutes. 10 JUDGE KAUFFMAN: Now is a good time for me to 11 tell you we do have a timer. And you can see the lights behind 12 me and it will give you a yellow caution as we are nearing the 13 end and it will be on red when your time is up. So I will set that 14 timer for each side. And petitioner, how much time would you 15 like to reserve, if any? 16 MR. AYERS: Yes, Your Honor, I would like to reserve 17 ten minutes. 18 JUDGE KAUFFMAN: So I will set the timer for you 19 for 50 minutes and I'll set the timer for you for 55 minutes, Mr. Fleming. 20 21 I do have -- I tend to ask questions, but I thought I 22 would try something different this time. I have a question for 23 each side that I want to tell you ahead of time and then you can 24 decide when you want to address it in your argument. For patent 25 owner, when I'm looking at your claim construction on claim 26, 26 what is on my mind is, if I understand it right, and maybe I don't,

1 if I understand you right, you are saying that the signal is doing 2 the selecting. And as I read that claim, it sounds like the signal 3 processor is doing the selecting and that that's what the 4 specification says. So I would like to know more about that. 5 For petitioner, in your reply when you are arguing 6 against patent owner's claim construction, you cite a case for the 7 proposition that because of the relationship between the two 8 patents, we have to construe the term the same in the two. And 9 I'm unaware of a relationship between the two patents, and I 10 would like to know if you could explain that when you get to that, 11 please. 12 MR. AYERS: Certainly, Your Honor. 13 JUDGE KAUFFMAN: Any questions from the panel 14 before we begin? 15 JUDGE BOUCHER: I have no questions. 16 JUDGE ANDERSON: Me either. 17 JUDGE KAUFFMAN: Thank you. I'm sorry I forgot 18 to ask -- I just wanted to set the timer there. I forgot to ask 19 Mr. Fleming, are there any objections to the petitioner's 20 demonstratives? 21 MR. FLEMING: No, Your Honor. 22 JUDGE KAUFFMAN: Thank you. And Mr. Ayers? 23 MR. AYERS: No, Your Honor. 24 JUDGE KAUFFMAN: Thank you. All right, 25 petitioner, I'm ready to start when you are ready to start.

MR. AYERS: Your Honor, the clock is reading 55.

26

1 JUDGE KAUFFMAN: That's right. 2 MR. AYERS: I reserved ten minutes, Your Honor. 3 JUDGE KAUFFMAN: I'm sorry. I was told there 4 would be no math. We are ready. 5 MR. AYERS: Yes. May it please the Board, Peter 6 Ayers on behalf of petitioner, Silicon Labs. I know we have a lot 7 of material to cover today with two IPRs, but before I begin, I do 8 want to apologize again to Judge Boucher. I thought it would be 9 in person, but remotely, I want to apologize again for 10 mischaracterizing your order in the Zhongshan v. Nidec case on 11 the motions for observation. As I said, on that call I was actually 12 thinking of another order that came out in Google v. Summit 6, 13 IPR2015-806, paper number 56, where I think it was Judge 14 Begley characterized the patent trial guide as excessively 15 argumentive and had ellipses in there. So again, I know this is 16 not at issue here today, but I do want to apologize to Judge 17 Boucher in person on that. 18 So let me begin first with the '585 patent. As Judge 19 Kauffman noted, there's two patents at issue, the '585 and the 20 '792. While not, I guess, technically related in the sense, Your 21 Honor, you are referring to a Section 120 continuation, we have 22 common inventors, substantial overlap in subject matter. I think 23 in that sense that it makes sense, given that there are common 24 inventors that the terminology would be the same and the claim 25 construction issue would be the same. Now, whether I can cite to 26 you a case for that specific proposition, I don't know that it

1 sounds like the case that I cited stands for that specific of a 2 proposition. But we do believe that it makes sense to construe 3 these claims consistently across both patents, and there's been no 4 argument from the patent owner otherwise. 5 As well, I think there's no basis in the specifications and 6 in fact, in all the written description to construe the claims 7 differently across the patents. But if you have any questions 8 about any particular differences, and I will discuss some, but I 9 think in all cases, you will see that both of those specifications 10 support petitioner's claim constructions, as I'll address initially. 11 JUDGE KAUFFMAN: So to your knowledge, the '585 12 is not a continuation or a continuation in part of the '792? You 13 are citing to that case for its persuasive value but not precendtial 14 value? 15 MR. AYERS: I don't know exactly what the case is you 16 are speaking of, but I believe so, Your Honor, just for the general 17 proposition. 18 JUDGE KAUFFMAN: Thank you. 19 MR. AYERS: And I apologize if I somehow 20 mischaracterized it otherwise. 21 I wanted to talk first about ground 2 and take these in a 22 little bit different order because the claim construction issues 23 arise in connection Zenith. I think it's important to sort of step 24 back and first understand the combination sort of generally. We have Thomson and Harris, which the Board is intimately familiar 25 26 with since those were the predominant grounds in the phase 1

1 IPRs. Thomson, a dual format television receiver capable of 2 receiving both analog- and digital-formatted television signals 3 with a digital processor that is in the form of an adaptive 4 bandpass filter that as an input that is indicated by the TV 5 standard signal. And that input indicates the standard in which 6 the television, the input RS signal is formatted. Thomson does 7 not specifically describe, however, the circuit that's used, the 8 so-called standard selection circuit that's used to generate that 9 signal because that wasn't really a focus of the invention. 10 Harris -- and also I should say that Thomson was not 11 specific about the specific filter that was implemented because those two were well known in the art, as we'll see from Harris. 12 13 And as the Board knows, the use of FIR filters in particular was 14 well known in the art. And there's no dispute in this case that FIR 15 filters are preferable in this application because they produce 16 linear phase, and linear phase is advantageous in television 17 applications. And the Board found that that combination of 18 Thomson and Harris, Harris in particular for its use of FIR filters, 19 was obvious. So that's sort of the baseline that we start from here. 20 We have Zenith for the specific implementation, a 21 specific implementation of the standard selection circuit. Now, 22 there's two principal issues, claim construction issues with respect 23 to Zenith that the patent owner has raised. The first is with respect to select signal. The petitioner's construction, as it's been 24 25 throughout, is that the plain and ordinary meaning of that signal 26 or that term applies. And that is a select signal that serves as a

1 sign or indication of or suggestive of a format of said input RF 2 signal. 3 The patent owner's construction, on the other hand, is 4 vague. It's indefinite and it finds no support, as we'll see in the 5 intrinsic record, including the very own dictionary definition that 6 they have cited in support of it. 7 JUDGE KAUFFMAN: Mr. Ayers, if I could just for a 8 second, for the court reporter, I want to say a FIR filter is F-I-R. 9 It's an abbreviation a finite impulse response filter. 10 MR. AYERS: Thank you, Your Honor. I'm on slide 4. 11 This is where the term "select signal" appears in the claims in the 12 '585. Claim 13, wherein said -- and this depends from claim 10 13 which the Board in the first phase found invalid under Thomson 14 and Harris. Claim 13 adds, wherein the channel filter further 15 comprises a standard selection circuit coupled to said signal 16 processor, said standard selection circuit generating select signal 17 indicative of a format of said input RF signal and said signal processor selecting a finite impulse response filter in response to 18 19 said select signal. 20 Claim 19 is sort of the analog method version which 21 only requires the select signal to be indicative of said format of 22 said input RF signal. 23 What we learn from -- and it's important to note that the 24 term "select signal" only appears in the claims. Does not appear 25 at all in the specification. So it's important to glean what we can 26 from the context of the claims in which it appears. What we find

1 here is that the first is that the select signal is generated by the 2 standard selection circuit. The second is that that signal must be 3 indicative of the format of the input RF signal. As we'll see, 4 "indicative of" is really sort of the key issue here and sort of the 5 lynchpin of the patent owner's argument, and finally that the 6 signal processor performs the appropriate filtering in response to 7 the select signal. And as we'll see, that involves the processor 8 going out and fetching a set of FIR filter coefficients from 9 memory in response to that. 10 That same term appears --11 JUDGE BOUCHER: Let me just interrupt for a second. 12 Should we put any weight on the fact that it says select signal 13 instead of something else? I mean, does that adjective "select," 14 what does that adjective "select" mean? Would the claim mean 15 the same thing if it just said a signal indicative of a format and so 16 forth or does the fact that it says select signal cause it to mean 17 something more narrow? 18 MR. AYERS: Certainly Your Honor, we would not 19 disagree that each term, if at all possible, should be given some 20 meaning. In this case, it refers to the fact that the processor is 21 doing the selecting. As we'll see and as I think Judge Kauffman 22 intimated, the standard selection circuit itself doesn't do any 23 selection. It provides an indication, an input, which is acted upon 24 by the digital signal processor to select. So in that sense there is 25 meaning that's attributed to it. It's an indication that of the format

1 that is acted upon by the signal processor to select. But I don't 2 know that we can -- that it adds any additional significance. 3 And the patent owner's argument that it must perform a 4 selection is just simply wrong. That's not what that signal does, 5 as evidenced by the claim language itself. It says that the signal 6 processor performs the selection. So it certainly can't mean what 7 the patent owner says it means. 8 JUDGE KAUFFMAN: So Mr. Ayers, you are saying 9 that "select signal," as it's used in claims 14, 15 and 20, that it is 10 defined in part by how it's used in claim 26 where it's the signal 11 that's selected by the signal processor that selects the finite 12 impulse response filter? 13 MR. AYERS: In 26, Your Honor? 14 JUDGE KAUFFMAN: Right. 15 MR. AYERS: Claim 26 of the '792 patent? 16 JUDGE KAUFFMAN: Yes. 17 MR. AYERS: Thank you. Yes. And the same is true 18 in the '585 in claim 13, that it's sort of a prelude to how the signal 19 processor acts upon it. That's the significance of the select signal. 20 JUDGE KAUFFMAN: I guess I didn't ask that 21 question well, Mr. Ayers. So in '792, you can point to claim 26 22 and you can say, well, here is some context for the word "select" 23 and "select signal." How do you know that in the '585 patent 24 because it's not used in the specification you said earlier? So is 25 there a claim that gives it a meaning there?

1	MR. AYERS: Yes, Your Honor. That's why I referred
2	to slide 4. Claim 13 is the analog of claim 26 in the '792. It says,
3	The said standard selection circuit generating a select signal
4	indicative of a format said input RF signal and said signal
5	processor selecting a finite impulse response filter in response to
6	said select signal.
7	JUDGE KAUFFMAN: Now I understand. I missed
8	that, I'm sorry.
9	MR. AYERS: So the real question is really not so much
10	what select means, although I appreciate that each word should
11	have some significance. It's really what is "indicative of." That's
12	really where the dispute lies in this case. And the patent owner
13	has come forward and said that indicative means provides
14	information about and purports to rely on this dictionary
15	definition since that's what it it was the one that submitted this.
16	But if you look at indicative of, the plain and ordinary
17	meaning of indicative, that's not what it says. It says, Serving as
18	a sign or indication of, suggestive of. And further, indication is
19	the act of indicating something which indicates or suggests and
20	gives some example: A clue, evidence, explanation, hint, inkling.
21	This is important because one of the bases that they are
22	attempting to distinguish Zenith is that in one mode, as we'll see,
23	it infers the digital format in the absence of a signal. And it
24	provides an indication, it provides a suggestion as to that the
25	format is in the digital or the television signal is in the digital
26	format. They're saying, Oh, no, no, you can't infer that because

1 you have to affirmatively determine what the format is and 2 provide information about, although that term "information 3 about" is vague and indefinite and has no basis in the intrinsic 4 record. But that seems to be their argument, that you have 5 definitively determine what the format is. You can't infer it from 6 circumstances. And you have to provide some sort of label or 7 identifier, this, quote/unquote, information about that based on 8 that determination. 9 JUDGE ANDERSON: So what is the claim 10 construction that is being proposed that would provide this 11 distinction that you have discussed? And then tell us a little bit 12 more about why that construction shouldn't apply or even if we 13 applied it, why it would not preclude the use of Zenith in the 14 ground that you are asserting. 15 MR. AYERS: Yes, Your Honor. We've basically just 16 adopted the dictionary definition that the patent owner has 17 proffered as our plain and ordinary meaning. We don't think that 18 indicative of means anything differently than what the dictionary 19 says. And that is that the select signal serves as a sign or 20 indication of or is suggestive of a format. That's all we are 21 suggesting. And it's the patent owner who is trying to impose this 22 very rigorous requirement that the signal provide, quote/unquote, 23 information about. 24 Although it's not clear to me why the signal that Zenith 25 provides, as we'll discuss, doesn't provide information about the 26 signal. That could only mean that because in one situation it

1 infers that, that somehow it's not information about the signal, 2 which we dispute. But we don't think -- we think Zenith does, 3 even under their construction, provide information about the 4 signal or about the format. 5 So let's move forward and look to --6 JUDGE BOUCHER: Actually, if I can go back just one 7 step again. I want to make sure I understood you correctly. I 8 understood you to say that there are indications in Zenith that the 9 signal either has a certain quality or it does not and that you infer 10 from the fact that it does not have that quality that it is indicating 11 a certain format. 12 MR. AYERS: That's correct, Your Honor. It does both. 13 And this is where the confusion lies. As we'll see, this is the 14 circuit from Zenith. And I'm on slide 11. In its default state, it's 15 set up to detect a sync circuit or a sync signal. And that sync 16 signal is correlated with an analog television signal. So that 17 signal, to the extent its presence would indicate that the television 18 signal is in the analog television format, okay. So this circuit 19 detects that. It provides a signal back to the microprocessor 22. 20 And when it detects that there's a sync signal present, it sets this 21 select signal that controls that switch 42 to keep it in that A state, 22 okay. 23 Now, when it ceases to detect the presence of a sync 24 signal, it infers from the absence of that sync signal that the 25 incoming television signal is in the digital television format 26 because those two are mutually exclusive. And that's what the

1 patent owner is trying to latch on to to say, A-ha, you don't 2 provide information about the signal when it's in the digital 3 format. 4 But as we'll see is, it works exactly like the preferred 5 embodiment of their invention. As Dr. Holberg states in his 6 declaration, quoting from the '585 patent at column 5, this is slide 7 13, he notes that the preferred embodiment of the standard 8 selection circuit itself works by, quote, detecting in the baseband 9 signals the presence or absence of carrier signals which uniquely identify the television standard. That's exactly what Zenith is 10 doing. 11 12 JUDGE KAUFFMAN: Mr. Ayers, just for the court 13 reporter, by sync signal, you mean S-Y-N-C, like synchronized? 14 MR. AYERS: Correct. So it both affirmatively detects 15 sync signals when the signals in the analog -- when the incoming 16 RF signal is in the analog television signal and detects the 17 absence of those signals when it's in the digital format. And 18 because the two are mutually exclusive, the thing works. 19 So we think that Zenith, the signal that's generated by 20 the microprocessor is an indication of or at least suggestive of the 21 format of the incoming television signal. Does that answer your 22 question, Judge Boucher? 23 JUDGE BOUCHER: I think so. So is your position, 24 then, that the absence of the sync signal is generation of a signal 25 indicative of a format; or is your argument that the claim 13 or 26 26, depending on the patent, only requires generation of a select

1 signal that indicates a format so you only get an indication of the 2 digital format and whether or not it indicates the analog format is 3 irrelevant? Which of those two is your position? 4 MR. AYERS: I would say the former, Your Honor, that 5 the claims -- and this is another sort of issue that's in dispute, 6 although it's not really clear from the patent owner's argument, 7 but the claims require that the incoming television signal to be in 8 one of a plurality of formats. So two is a plurality. So that select 9 signal has to indicate one of two formats. And this goes directly 10 to your point. It's our position that the select signal that we've 11 identified in Zenith does both. In one state, it identifies an analog 12 television signal. In another state, it indicates the digital 13 television -- it's in the digital television format. Does that answer 14 your question? 15 JUDGE BOUCHER: Yep, thank you. 16 MR. AYERS: Now, this gets into sort of the 17 information about which, again, is extremely vague and I don't 18 think would be proper under any circumstances to incorporate 19 into claim construction because it just adds ambiguity rather than 20 clarity. But I tried to probe in Dr. Opris' deposition, the patent 21 owner's expert, what does he mean by information. What exact 22 information do you need to provide? Because he seemed to be 23 distinguishing between Zenith's, quote/unquote, control signal 24 which is a binary two-state signal and this select signal as used in 25 the patent.

1	But the reality is there's no specificity about what,
2	quote/unquote, information must be included in that select signal
3	in the patent. So there's just no basis to distinguish a control
4	signal which is indicative of the incoming format from the select
5	signal as claimed and described in the patents.
6	So this is a Q&A on page 14 with Dr. Opris trying to
7	pin him down. Well, exactly how many bits would it need to be?
8	The patent is not specific. It depends on the circumstances.
9	Well, the only circumstances that matter is what the claim says.
10	And that claim says one of a plurality, a plurality being two. And
11	there's no dispute that a single bit can represent two different
12	states and two different formats. And that's exactly what Zenith
13	does, and Dr. Opris agrees.
14	So let me turn now to the second claim construction
15	issue that was raised, albeit implicitly, by the patent owner in
16	their response. And that is what are carrier signals. This again
17	goes to Zenith because in some of the claims it recites that you
18	detect you generate the select signal by detecting carrier
19	signals.
20	And here the claim constructions that the parties have
21	proposed, at least what we can gather, the petitioner's
22	construction, again, always being consistent, plain and ordinary
23	meaning applies. And that is a wave having at least one
24	characteristic that may be varied from a known reference value
25	by modulation.

1	The patent owner, as we'll see, doesn't offer a claim
2	construction but yet chides the petitioner for coming forward with
3	an affirmative definition in response to their attempt to
4	distinguish Zenith on this very ground. Just like they tried to do
5	with the select signal, why Zenith doesn't generate a select signal,
6	they now also want to argue that Zenith doesn't detect carrier
7	signals. But surprisingly, they don't offer the Board any help on
8	trying to resolve that issue by offering its own construction. They
9	just say, well, the petitioner didn't provide its own construction
10	and we should then, you know we should exclude all the
11	evidence that's relevant to what the plain and ordinary meaning is
12	of that term.
13	I don't think that's helpful to the Board. And certainly
14	we are not lying behind the log on this issue. We didn't think it
15	was a dispute until they raised it in their patent owner response.
16	There was no mention of it in their preliminary response and it
17	wasn't until their patent owner response that they came forward
18	with this. In there they throw up their hands and just claim like
19	they are so prejudiced and, you know, that we should be barred
20	from presenting any, you know, testimony on this and that we've
21	somehow waived our argument. If anyone has waived their
22	argument, it's the patent owner. They had ample opportunity to
23	raise this issue with the Board and refused to do it, instead
24	wanting to play procedural games to prevent the Board from
25	having the very evidence that it needs to decide this issue.

1	And as you'll see, all that we did was go out and pull the
2	IEEE dictionary, just as the Board would presumably do and did
3	when the original one was instituted on RF signals. So certainly
4	there's no prejudice here. If there is any prejudice, it's by their
5	own making.
6	So let's look at what carrier signals. It appears in claims
7	15 sand 20 of the '585. It also appears in the '792. So when the
8	patent owner raised this issue, you know, consistent with our
9	original petition, we said the plain and ordinary meaning applies.
10	This is it. IEEE, a way of having at least one characteristic that
11	may be varied from a known reference by modulation. Nothing
12	unique. We weren't offering some, you know, unique
13	lexicography. We didn't hide behind the log on this and spring it
14	on them. This is what we understood the plain and ordinary
15	meaning. This is how our expert interpreted it and Zenith, in our
16	opinion, satisfies this plain and ordinary meaning.
17	They have come back and said, Oh, no, no, no, Zenith
18	doesn't satisfy, is not a carrier signal because the carrier signal is
19	in effect a
20	JUDGE KAUFFMAN: If you would hold on for a
21	second, let's make sure they can still hear us. Judge Anderson,
22	can you still hear us?
23	JUDGE ANDERSON: Yes.
24	JUDGE KAUFFMAN: And Judge Boucher?
25	JUDGE BOUCHER: Yes.

1	JUDGE KAUFFMAN: Thank you. We have video
2	back.
3	MR. AYERS: Okay. We are back up. Last hearing
4	someone dialed in from an outside line.
5	Anyway, back to carrier signals, this construction that
6	we propose is also consistent with both the '585 and the '792
7	patent. There should be no surprise here. But the patent owner
8	comes back and argues that no, no, carrier signal has to refer to
9	the transmission carrier. And there's a whole Q&A that they went
10	through with Dr. Holberg about this trying to get him to basically
11	concede that a transmission carrier is a carrier signal. No dispute
12	about that. The only question is, is that the only one? And their
13	argument is apparently it is. And yet if you look at the
14	specification in both cases, and this is from the '585, this is slide
15	20, it says that the auto detection, and this is how the select signal
16	is generated, by detecting the format in the carrier signals, it's
17	implemented by detecting in the baseband signals the presence or
18	absence of carrier signals which uniquely identify the television
19	signal television standard. And this is precisely what Zenith
20	does.
21	JUDGE KAUFFMAN: Mr. Ayers, I thought, and
22	maybe I misunderstood you, you were saying that you were
23	reading from the '585 patent, but I think on slide 20, that's the
24	Balaban patent.
25	MR. AYERS: No, Your Honor, this is the '585 patent.
26	This is at column 5, lines 12 through 22.

1	JUDGE KAUFFMAN: Do you see on the slide that it
2	says Balaban in the background on the patent there?
3	MR. AYERS: On slide 20? Maybe I'm looking at the
4	wrong slide. You are right. I apologize, Your Honor. You are
5	absolutely right. That's my mistake.
6	JUDGE KAUFFMAN: Thank you.
7	MR. AYERS: I apologize for that. This is actually an
8	excerpt from the '585 patent. So their position
9	JUDGE BOUCHER: I would like to interrupt for a
10	moment. Would you agree that under normal circumstances the
11	appropriate place for the petitioner to set forth its claim
12	construction positions is in the petition and not the reply?
13	MR. AYERS: Yes, Your Honor, if there is really an
14	issue that is in dispute or anticipated to be in dispute.
15	JUDGE BOUCHER: So your position here is that this
16	is permissible in the reply because it is properly responsive to an
17	argument made by the patent owner?
18	MR. AYERS: Yes, Your Honor. Precisely like we did
19	with select signal. And it's perplexing to me why the patent
20	owner didn't just proffer its own construction and presumably
21	could have resolved this whole issue if there was, in fact, a
22	construction of carrier signal that would have excluded Zenith.
23	But the reality is there is not. And that's why they didn't offer
24	their own claim construction, because when you look at the plain
25	and ordinary meaning of carrier signals, Zenith fits comfortably
26	within that. So they made the tactical decision to try to exclude

1 our evidence and exclude our argument on this point knowing 2 that they didn't have a really good argument. 3 And this is where Balaban comes in because -- and they 4 also make sort of a similar argument to the -- they point to the 5 '792 patent and it doesn't say detecting in the baseband signals. It 6 says detecting in the first and second output signals. Again, that's 7 a smokescreen because if you read the '792, it's clear that the 8 signals that appear on those first and second output signals are, in 9 fact, the baseband signals. So there's no difference really in this 10 respect. 11 And this goes back to your point earlier, Judge 12 Kauffman, even though there are differences in the specifications, 13 there's no material differences when it comes to claim 14 construction. They both stand for the same proposition in this 15 respect that the carrier signals can be in the baseband signals. 16 And this is what we see from Zenith. 17 You know, again, this is a picture of that our expert 18 came forward with that shows a typical television set. Again, it's 19 not in dispute, they don't dispute that this is a typical television 20 signal, and we show that the sync signal satisfies the plain and 21 ordinary meaning of carrier signals. And then we also came 22 forward, and this is where Balaban comes in, we say Balaban 23 itself claims that the carrier signal includes detecting at least a 24 picture carrier, a sound signal and a synchronization signal. So 25 Balaban, another piece of prior art, identifies a carrier signal as 26 including the synchronization signal that's used in Zenith.

1 Now, they cry foul, oh, how could you come forward 2 with Balaban. We are so prejudiced. Well, first we did it in 3 direct response to their argument that Zenith's sync signal is not a 4 carrier signal. It was directly responsive to that. We are not 5 presenting a new combination here. We are just saying this 6 rebuts that argument, but we are still relying on the same 7 combinations, Thomson, Harris and Zenith. We are not 8 introducing a new -- so all the cases that they cite about 9 presenting new grounds, that's not on point. 10 And moreover, Balaban was a piece of prior art that the 11 inventors themselves brought to the attention of the Patent Office. 12 We see that on the face of the '565 [sic]. We also see it in the 13 '792. There's actually a description of Balaban in the '792. If you 14 look, column 2, lines 15 through 20, it actually describes Balaban 15 as, quote, an alternate implementation of a prior art dual format 16 television receiver. How is it possible that they could be 17 prejudiced by us citing to the Balaban? 18 JUDGE KAUFFMAN: Which patent were you reading 19 from? 20 MR. AYERS: From the '792, Your Honor. 21 JUDGE KAUFFMAN: Thank you. 22 MR. AYERS: They say, our expert, Dr. Opris, was 23 blindsided by this Balaban reference. He never even saw it. 24 Well, shouldn't an expert who is offering claim constructions on 25 the meaning of terms read the references that are actually recited 26 in the background of the invention? That's why their claims are

1 prejudiced and their motion to exclude and whatnot have no 2 merit. 3 Let me turn now to Grumman, the combination with 4 Grumman. Again, this is an obvious combination. We are 5 talking -- again, we need to go back and start from the baseline 6 here, and that is claim 10, which the Board found invalid in light 7 of Thomson and Harris. And that is the dual format television 8 where signal processor applies one of a plurality of finite impulse 9 response filters who said digital representation of said 10 intermediate signal, each of said plurality of finite impulse 11 response corresponding to a format of said input RF signal. 12 This is the baseline. This is already invalid, this 13 combination where you have a digital signal processor that 14 processes the incoming television signal according to different 15 FIR filters. That's what the combination of Thomson and Harris 16 taught us, and the Board so found. JUDGE KAUFFMAN: You are referring to slide 30 17 18 right now? 19 MR. AYERS: Yes, Your Honor. My apologies. So 20 now let's go to claims 11 and 12 which are in dispute in this case. 21 These are just incremental steps beyond that. It says claim 11, 22 Wherein said plurality of finite impulse response filters are stored 23 in memory and said signal processor indexes said memory to 24 retrieve one of said plurality of finite impulse response filters. So let's stop there for a minute. It's undisputed that 25 26 filters are stored in memory. It's hard to imagine constructing a

1 FIR filter, particularly in light of Harris without storing those 2 filters in memory in some way, shape or form. The power goes 3 off, the FIR filter still needs to run. It's got to be stored in some 4 manner. Okay. 5 Twelve adds to 10 wherein said signal processor 6 includes two computing units, one for processing the real and one for processing the imaginary. Again, well known, Harris 7 8 described that specifically. 9 JUDGE BOUCHER: Does that language in claim 12 10 suggest that the real and imaginary parts are subcomponents of a 11 single finite impulse response filter? 12 MR. AYERS: I know that the patent owner has raised 13 this distinction between single and multiple filters, but I think this 14 is semantics, with all due respect, Judge Boucher, because I think 15 when you talk about a single filter, what you are really talking 16 about is, at least in the patent, it's a single signal digital processor. 17 The only thing that's different between processing one format and 18 another is a set of filter coefficients. So it's hard to answer that 19 question specifically about whether it's a single filter or multiple 20 filters because in both cases you have the same hardware that's 21 processing different sets -- or using different sets of filter 22 coefficients. 23 That's true in the patents and it's true, as we'll see, in 24 Grumman. So I don't want to -- I'm trying not to be coy or 25 evasive here, but to me this whole distinction about a single and 26 multiple or two filters is a bit semantic because the only

1 difference that's described in the patent is really multiple sets of 2 filter coefficients. It's still the same hardware, and that hardware 3 can take the form of a single digital processor or two computing 4 units, whatever those are. There's nothing in the specification 5 that says they have to be separate integrated circuits or on the 6 same. They just have to form the same part of the digital signal 7 processor. And that term, which is not disputed in this case, has 8 been given a very broad construction that we think would 9 embody both. 10 So let's, as we said, this is Thomson. It has an adaptive 11 filter that has a TV standard input that changes its filter function 12 in response to that television standard. Harris, exemplary FIR 13 filter for a wideband receiver, channelized receiver can be 14 implemented with individual FIR filters or can be implemented 15 with a single FIR filter that is reprogrammable using a standard 16 microprocessor interface. Harris teaches that it's stored in 17 memory. 18 Grumman --19 JUDGE KAUFFMAN: We are on slide 35? 20 MR. AYERS: Yes, Your Honor, my apologies, is 21 complex, let's say, but it has all the elements. And to answer your 22 question, Judge Boucher, I would encourage you to read, as I'm 23 sure you've done, is Dr. Holberg's declaration because he goes to 24 great length to sort of break this down and make it accessible to 25 even someone like me. But if you sort of step back, first of all, 26 what you have in Grumman is an adaptive filter, right, and that's

1 exactly what you see in Thomson. It's described as an adaptive 2 filter. And that is because an adaptive filter is one that changes 3 filter coefficients based on some input. 4 In this case we have, Grumman describes a typical 5 application where you have a feedback signal that is the 6 difference between two signals and it adapts to that to try to 7 converge on a single filter. But why this is important is that it 8 demonstrates that the filter coefficients -- that there are two sets 9 of filter coefficients in here. And in effect, although Dr. Opris 10 wouldn't admit it, he effectively did, because if in this application, 11 if that error signal goes to zero, then Grumman will no longer be 12 toggling back and forth between one set of filters in memory and 13 another set of filters. It will finally go to steady state and it will 14 just be taking the filters out of one memory bank. 15 That's why that's important. That's why this quote from 16 Dr. Opris' deposition, page 90, lines 2 through 7, is important, 17 because he in effect admits that eventually this application is 18 going to go to zero and at which point it will no longer be 19 swapping between these. That demonstrates that each memory 20 bank has a complete set of filter coefficients and therefore, has a 21 separate filter in there. And we know this because, as I said, 22 Dr. Holberg went to great lengths to sort of break this down and 23 try to kind of cut through all of the technical jargon and provides 24 a very simple, easy to understand block diagram of Grumman. 25 And this is in contrast to Dr. Opris. When I deposed 26 him, I tried to ask him questions about how the circuit works, the

1 timing of diagrams, and he just threw up his hands and said, That 2 wasn't necessary for me to understand. It's like he had his 3 position. It was a single filter and not two filters, and that's what 4 he stuck with. 5 But if you read patent owner's response, it's mostly 6 attorney argument. It's asking this Board to take their word on 7 what Grumman says in the face of Dr. Holberg breaking this 8 down line by line and showing you exactly how Grumman works. 9 So when the Board is making its decision, I would encourage you 10 to weigh the testimony of Dr. Holberg against that offered by the 11 patent owner. 12 I'm getting short on time. I have got a lot of ground to 13 cover, so I want to quickly go to ground 3, which is Birleson. We 14 don't really see this as a big issue. All that claim 13 requires is --15 actually, claim 14 adds to claim 13 that the standard selection 16 generates said select signal in response to an input from a user. 17 Birleson, again, another example like Thomson, like 18 Zenith of a dual format television receiver circuit. In this case it 19 has an automatic carrier detection circuit 30, I'm on slide 42, that 20 detects the presence of -- determines the format of the incoming 21 television signal and then this switch 108 is switched to route the 22 signal to the appropriate amplifier, either 112 or 111. 23 And Birleson says that this testing that it does, this 24 so-called signal testing is done in response to a channel change, 25 an input from a user. So a user can change the channel. It 26 describes a remote control where you can change the channel. In

1 response to that input, it goes through this signal testing where it 2 determines whether or not there's an analog signal or a digital 3 television signal. And so we think that that Birleson teaches 4 claim 14. And in fact, it even says that there can be a test button 5 on the remote control. 6 Their only argument here is, no, no, it can't be any sort 7 of mode. There can't be any automatic testing. It has to be 8 completely manual. But that, we think, would require some form 9 of disclaimer in the specification to exclude some combination of 10 manual and automatic testing. And there's no such disclaimer 11 present in the specification. There's no basis to put some kind of 12 negative limitation in the claim. 13 Let me turn now in the remaining time to the '792. 14 JUDGE BOUCHER: Actually, I just have one, what I 15 hope is a simple question just to help me understand something. 16 MR. AYERS: That's my hope too. 17 JUDGE BOUCHER: Do you agree that the patent 18 owner's characterization of Thomson, that it discloses parallel 19 analog and digital paths and that each of those acts just on the 20 signal if it is -- or maybe it acts on the signal, in any event, but in 21 one case will produce meaningful input and in the other case 22 won't produce meaningful output. Is the patent owner's 23 characterization with respect to Thomson that way something the 24 petitioner agrees with? 25 MR. AYERS: Absolutely not. We think this is an easy 26 question, Your Honor, because there's a couple of clear

1 indications that it's not. The first of all, is that the bandpass filter 2 in Thomson, I can bring that up here, this is from slide 32, has an 3 input labeled TV standard. And you see that there's that arrow 4 there and it's described as an adaptive filter. If you have two 5 parallel paths, that's their whole theory in this case, that Thomson 6 really describes two parallel paths that don't -- you know, they are 7 completely separate. There would be no need for a TV standard 8 selection signal to go into that because you are providing that as 9 an indication of what the standard -- so that the circuit can adapt. 10 That's how it's described. It adapts. It changes its filter function 11 in response to that input. There would be no need for that signal 12 if they were literally two parallel paths. 13 The second point, look at the output of that circuit. 14 Again, if there were two parallel paths there, and I apologize it 15 doesn't show the whole circuit, but what you have coming out of 16 there, that feeds both the demodulators, the analog and digital 17 demodulators. So again, you would not have a single output of 18 the bandpass filter if literally there were two parallel paths there. 19 There would be two outputs, one for the analog going to the 20 analog demodulator and separate digital output for the digital 21 demodulator. 22 This is completely manufactured by the patent owner. 23 There is no support in this. And the Board even found in the first 24 phase that Dr. Opris essentially ignores the TV standard input 25 signal in order to reach his conclusion. And so, no, we do not 26 agree that Thomson describes two parallel paths.

1 Let me move quickly to the '792. I have got two 2 minutes left here. Fortunately, grounds 2 through 4 are 3 essentially identical and stand and fall with the '585. And as I 4 just said, there's no reason to construe select signal and carrier signal differently. 5 6 Claim 29 is kind of a curious claim because it purports 7 to claim the input -- the format of the input signal without 8 changing anything about the circuit itself. And their theory is, 9 well, actually, no. That has these big ripple effects through the 10 circuit and that the circuit must be able to process, must have the 11 capability of processing all three. Even if that is true, that's 12 obvious. And they essentially admit as much when they describe 13 the background of their invention. And interestingly enough, this 14 is the only place in the patents where it describes a signal being 15 received from all three sources, terrestrial, cable or satellite. 16 When it comes to describing their own invention, on the 17 other hand, it only refers to terrestrial and cable. So we find it 18 quite disingenuous now for them to come forward and say, well, 19 there are these really significant differences from processing 20 satellite from these other two and ours does all three. And that's 21 what's patentably distinct from Thomson, when in fact, the patent 22 owner's own expert admits that there is no discussion at all in the 23 specification about how -- what differences there are in the 24 circuitry between in processing these different things, because in 25 his opinion, it's obvious. So we would ask the Board to find that 26 obvious for the same reasons that their own expert does.

1	I see my time is expiring. I will reserve the remainder
2	of my time and rest on our briefs with respect to the other issues,
3	unless there's any questions.
4	JUDGE KAUFFMAN: None for me. Judge Boucher,
5	Judge Anderson?
6	JUDGE BOUCHER: I have nothing else at this time.
7	JUDGE ANDERSON: Nothing at this time.
8	JUDGE KAUFFMAN: Mr. Fleming, before you start, l
9	want to point out I thought that the new clock would turn yellow
10	towards the end, but it apparently doesn't. You can see the time,
11	but the color doesn't change until it expires.
12	MR. FLEMING: Your Honor, I wouldn't be able the
13	see the color anyway. I'm colorblind. If Your Honor is ready?
14	JUDGE KAUFFMAN: We are ready.
15	MR. FLEMING: Your Honors, good afternoon. I
16	would like to preface this to say that during this oral hearing, all
17	the arguments are on the record and if I don't get time to get to
18	them, it's not an indication of a waiver of any of those arguments.
19	It just means that we didn't get a chance to talk about them. I say
20	that so that it's clear on the record that we did not waive any
21	arguments in case there's a need for appeal.
22	JUDGE KAUFFMAN: We understand.
23	MR. FLEMING: So as you know, the invention is
24	directed to a multiformat processor to be able to process
25	television signals from a variety of different sources. Some of
26	them are analog and some are digital. And the '585 patent deals

- 1 with this by showing that the prior art was -- the problem was that
- 2 it had individual channel filters for each format. So there would
- 3 be a channel filter for a digital format, there would be another
- 4 channel filter for an analog, and it's much more complicated than
- 5 that because there also is different standards.
- 6 And the way that the '585 patent solved that was by
- 7 providing a single signal processor that had a memory. And that
- 8 memory has stored in there many FIR filters. And what occurs is
- 9 that the signal processor, faced with an input of an RF signal
- 10 having a particular format, would then retrieve from memory one
- 11 complete FIR filter and then act and process that signal.
- 12 JUDGE KAUFFMAN: And that was slide 4,
- 13 Mr. Fleming?
- MR. FLEMING: I'm sorry, slide 4. I also want to make
- 15 clear that the '792 also has the same invention. And you can see
- that there in the signal processor 131 and the memory 132. In
- that memory, just the same, there is a plurality of FIR filters.
- 18 Each of those FIR filters correspond to a different format.
- So let's look at the claims. In the '585 patent, the claims
- set forth a tuner for receiving input RF signals. And that input
- 21 RF signal is one of a plurality of formats. And the signal
- processor processes in accordance with the format of the input RF
- signal. Claim 10 further limits claim 1 by requiring that the
- signal processor apply one of a plurality of finite impulse
- 25 response filters corresponding to that particular format of said
- 26 input RF signal.

1	Claim 11 which is before you further limits the claim to
2	require two things, one that the plurality of finite filter response
3	I'm sorry, finite impulse response filters are stored in memory.
4	So in the memory there is many different FIR filters having
5	different functions corresponding to all the possibilities of
6	formats that could be arriving on the input of the tuner.
7	And then the second limitation that 11 provides is that it
8	has a signal processor that retrieves from that memory that one
9	finite filter of the many finite filters stored in that memory that
10	corresponds to processing the input of the RF signal coming in
11	that corresponds to that format. I want to point out that the '792
12	also has similar claim language.
13	So to save time, I want to talk about claim 11 of the
14	'585. And clearly claim 11 adds the feature of retrieving one
15	complete FIR filter from memory that stores a plurality or
16	multiple FIR filters. And then referring back to claim 10, that
17	claim 11 also requires that the one FIR filter corresponds to the
18	format of said input RF signal.
19	And the Board has construed previously regarding
20	claim 1 that the processing occurs exactly one format. So it's
21	only it's retrieving one format that corresponds to the exact
22	input format that's being received to the tuner.
23	JUDGE BOUCHER: My impression, and I think it's
24	accurate, is that the parties don't dispute that claim 11 requires
25	retrieving?
26	MR. FLEMING: I believe that there is a dispute on

1	JUDGE BOUCHER: There is a dispute on that?
2	MR. FLEMING: There is a dispute on that, and I'll
3	explain why.
4	Also, claim 11 requires a signal processor processing as
5	incoming RF in accordance with its format by retrieving from
6	memory the FIR filter that corresponds to the format of the
7	incoming data. So this precludes the parallel processing by a
8	signal processor. There is only a single processor that is
9	processing the signal according to the retrieved FIR filter.
10	And in your preliminary institution in your institution
11	decision you cite to our preliminary, quote us and agree with us
12	that that is the case, that the claim is precluding parallel
13	processing. Also I want to point out that that was what you found
14	in the final decision in the 728 IPR.
15	So let's look at this. What does that mean graphically?
16	If have an analog format input signal coming in RF 52, this is
17	what it would look like.
18	JUDGE KAUFFMAN: We are on slide 11 now?
19	MR. FLEMING: I'm sorry, we are on slide 11. And
20	there the signal will go through to the signal processor. The
21	signal processor then will retrieve the FIR filter that is the analog
22	FIR filter and then process that signal using that analog FIR filter.
23	Similarly, if in fact, it's changed and that the input now
24	is a digital formatted data of an input signal RF, it will go to the
25	signal processor. The signal processor then will retrieve a
26	different, completely different FIR filter for a completely

1 different function. And that FIR filter is the digital FIR filter. 2 And when that's retrieved, it processes the signal and goes on to 3 the demodulators. 4 So the petitioner's grounds on rejecting claim 11 is 5 flawed because there are fundamentally these two claim elements 6 that are not met by the combination. There is no teaching of a 7 signal processor retrieving one of a plurality of FIR filters to the 8 format of the input RF and processing in accordance with the 9 format of the RF. 10 And also, there is no teaching of the memory having 11 sets of FIR filters that correspond to different functions, i.e., they 12 have different FIR filters for different formats so that it can 13 retrieve that. That's not present in any other combination. 14 This is key structural claim elements where they don't --15 have not shown in the record meet these limitations. So let's look 16 at what the combination does teach. It's important to understand 17 what the gaps are. 18 JUDGE BOUCHER: Well, you said, though, that you 19 are indicating that it requires a single signal processor to do this, 20 correct? And how do you reach that conclusion? I mean, I know 21 we said that in the construction of claim 1 that -- I can't find the 22 language, but it refers to one particular format and uses the word 23 "one" and that refers to a format. How are you getting to the 24 construction of claim 11 that it requires a single signal processor? 25 MR. FLEMING: Your Honor, in your institution 26 decision as well as in your previous IR, you are saying that only

1 exactly one format is being processed. So that requires -- and that 2 the claim requires a processor that is retrieving from memory one 3 of the plurality of FIR filters to process that signal. So that is one 4 processor operating not in parallel to process that signal. 5 So let's step back and look at what the record does 6 show. Thomson does not teach FIR filters. And the experts 7 agree Thomson does not teach FIR filters. There's no dispute. 8 JUDGE KAUFFMAN: You are on slide 15 now? 9 MR. FLEMING: I'm sorry, that was slide 15. I'm now 10 on slide 16. The experts also agree that Harris does not teach a 11 memory stored in a plurality of FIR filters. When we asked 12 Dr. Holberg this specific question here of does it teach more than 13 one format in a single system, he says, I don't recall that teaching. 14 And Dr. Opris also says that the memory does not 15 disclose a memory concerning a plurality of FIR filters. And 16 that's because when you look at Figure 6 of Harris, it's amazingly 17 similar to the prior art of Figure 1 in both patents. You see there 18 is a parallel signal processors. There are parallel channels on a 19 board that are processing different formats. 20 So when faced with different formats, Harris solves that 21 by having parallel signal processors. And on each of those cards, 22 each of those channels, there is one memory with one FIR filter 23 on it. So there isn't any retrieving of FIR filters from a memory 24 loading in to a signal processor to process the signal. And 25 Dr. Holberg points this out. And also when asked in their reply,

1 they cite Dr. Opris, and Dr. Holberg then agrees that that's 2 correct. That's slide 17. 3 Moving to slide 18, okay, now they are faced with a 4 problem. They don't have two memories or they don't have FIR 5 filters in two memories being retrieved by a single processor. So 6 they rely on Grumman and they say that Grumman teaches 7 different FIR filter functions. That is false. 8 I want to point to Grumman. And I'm on slide 19 now. 9 Grumman teaches a complex adaptive filter. And in the face of it 10 they have the figure, and on element -- on line 12 is the incoming 11 signal. And what Grumman is attempting to solve is how to 12 provide updated coefficients to filter that same incoming signal. 13 They are not switching between signals of different formats. It's 14 the same signal all the time coming in there. And what they are 15 trying to solve is in realtime how do you process this signal so 16 that we don't have an interruption. 17 And let's look at Grumman. It clearly says in column 2, 18 lines 1 and 2, that the idea here is it's a filter that's adaptive in that 19 a host computer can update by using an updated algorithm. So an 20 offline host computer is going to use the air detection correction 21 algorithms, which are very complicated, to be able to tweak these 22 coefficients so that they can then update that. 23 So the point of this is, again, not to interrupt the signal 24 processor and continue to be able to filter this incoming signal. 25 So what this underlying signal really is, is disclosed in column 5, 26 line 41 and 42, is a pulse radar return signal. So they are dealing

1 with a pulse radar return signal that they want to process. That 2 signal doesn't change. There is not a new signal coming in. What 3 they are trying to solve in this patent is, well, we know we have 4 drift and that we need to tweak these coefficients because of the 5 error due to the drift to update the FIR filter. But the FIR filter is 6 for the same function, the same function of being able to filter 7 this incoming pulse radar return signal. 8 If we turn to slide 20, so what's going on here? Well, if 9 you look at what is going on here is that the way they are able to 10 process this thing in realtime and not have an interruption is that 11 you see the incoming signal is coming in at 12 up at the top. And 12 what you have is you have two processors, a real processor, that's 13 the signal processor, and an imaginary processor. Those 14 processors have no clue that the memory is being swapped. They 15 are using the exact same addresses for those registers. 16 So what's controlling the swap? What's controlling the 17 swap is the swap circuit 30. And what's controlling that swap is 18 that host computer. So the host computer is simply updating 19 those coefficients in those registers to be able to correct for error. 20 But bank 1 and bank 2 are for the same function, the function of 21 being able to process that same incoming signal. There isn't a 22 different format being put in each of these registers. 23 So let's go to slide 21. That is evident by Figure 3, 24 which is showing on a high level how this would be implemented 25 by detecting the error and then using this host computer to

1 calculate what is the necessary coefficients to tweak it, but it's 2 still operating to do the same function. 3 So when probed, Dr. Holberg, we asked, well, is there --4 does it teach more than one television format? He says that's 5 correct, it doesn't teach more than one television format. 6 Then probed even further we asked, so the signal is --7 maybe the information on the signal is changing, but the signal is, 8 the underlying structure of the signal is the same. He said that's 9 correct, because it's the same signal coming in that's being 10 processed. 11 If we can go to slide 24, so what are the gaps left on the 12 record? The gaps are that Thomson doesn't teach FIR filters. 13 Harris doesn't teach a signal processor retrieving from memory, 14 one FIR filter from a plurality of FIR filters. Harris doesn't teach 15 a memory for storing a plurality of FIR filters that have different 16 functions. And Grumman doesn't teach a memory having a 17 plurality of FIR filters having different functions. The separate 18 memory locations each include coefficients for the single RF 19 function for a single format. And more importantly, none of the 20 references have a signal processor for processing incoming RF in 21 accordance with its format by retrieving the memory, from 22 memory, the FIR filter that corresponds the format of the 23 incoming data. 24 If we can go to slide 24, in their reply they seem to be 25 shifting their position and running away from Harris and then 26 saying, no, that's just general teachings. And I quote that for you

1 here. It's in the reply on pages 11 and 12. And by then going to 2 Thomson and Grumman, it even highlights that the combination 3 fails to meet all the structural limitations of the claim. 4 So in sum, the claim -- none of the references teach in 5 combination a memory for storing a plurality of FIR filters, each 6 FIR filter having different functions and the functions 7 corresponding to one of a plurality of RF signal formats. And 8 none of the references in the combination teach a signal processor 9 processing incoming RF in accordance format by retrieving from 10 memory the FIR filter that corresponds to the format of the 11 incoming data. 12 If we can go to slide 27, the Federal Circuit has held 13 that skill in the art can't bridge these substantive limitations. You 14 have to have some type of showing for these limitations. Holberg 15 has just provided opinion but has not provided substantive 16 evidence that this existed in the art. This is their invention. 17 Furthermore, just very recently in 2014 the Federal Circuit has 18 said considering important structural limitations, the Federal 19 Circuit held that the determination of patentability of claims with 20 its limitations require a core factual finding and as such requires 21 more than conclusory statements from either the petitioner or the 22 Board. 23 The other problem is, okay, we have huge gaps that we 24 need to bridge here. So the question is, did the petitioner be able 25 to establish there is reasons for making these leaps or filling these

1 gaps. And clearly that's what is required by the Federal Circuit, is 2 to provide reasons or motivations for making it. 3 So what are their reasons? Well, their reason is that it's 4 the idea that you want to minimize delays between switching 5 between different FIR filters. And in result, they want to 6 minimize the interruption. That's their reason. 7 Well, when probed, Dr. Holberg, we asked, well, 8 Thomson -- we ask -- I'm sorry. We are on slide 32. 9 JUDGE KAUFFMAN: Thank you. 10 MR. FLEMING: When questioned, Thomson does not 11 teach that there would be an interruption in television signal 12 during a contact switch from one television format to another. 13 The answer is from Dr. Holberg, Thomson is silent on whether 14 there would be or would not be. It doesn't discuss that. 15 And then the question was, So it doesn't have a 16 particular teaching? He says, Yes, it doesn't discuss it. 17 Also on slide 33, we asked Dr. Holberg, So Thomson 18 doesn't teach specifically there is a problem between switching 19 from one format to the other, right? And he said he did not recall 20 that. 21 Well, the reason is this reason makes no sense. 22 Thomson is not concerned with interruption. And for that matter, 23 the '585 patent isn't concerned with interruption. That's not the 24 issue. The issue is when someone wants to switch to a different 25 format, cable versus satellite, you are expecting an interruption. 26 What happens there is during the initialization, the signal

1 processor pulls out a memory, the proper FIR filter, and then 2 starts processing, and voila you have your picture. Interruption is 3 not a concern. So there would be no reason to take the Grumman 4 teachings to use it in any way for something that is solving a 5 problem that doesn't exist. 6 The other issue is the Federal Circuit requires and KSR 7 requires, of course, that there has to be some reasonable 8 expectation of success. And what is the record that you have 9 before you? You have no evidence from the petitioner that there 10 would be a reasonable expectation of success. And the only 11 evidence that you have before you is Dr. Holberg's evidence that 12 says that there would be a mismatch because it's solving a 13 completely different problem. 14 The petitioner just stood before you and said this is a 15 very complicated -- Grumman is a very complicated system. I 16 agree. The reason it's very complicated is because it's solving a 17 completely different problem and it has nothing really to do with 18 the Thomson situation whatsoever. So of course it's complicated 19 and of course there isn't a reason to make the combination. 20 The other thing is I will take notice of the petitioner's 21 characterization of Dr. Opris. He is a very studied man and I 22 don't believe ever that during the deposition he threw up his 23 hands and said I can't explain it. That just didn't happen. And I 24 thought it was interesting he couldn't point to the record where 25 that happened. I think you need to look at Dr. Holberg's 26 declaration and give credit where credit is due.

1	So is there any questions on what I have here so far or
2	should I move on to the next issue?
3	JUDGE KAUFFMAN: Mr. Fleming, I wonder, as you
4	are pointing out how these things are not in Thomson, what
5	would you say to the comment that you are making a strict TSM
6	kind of argument against Thomson and KSR says we don't do that
7	anymore?
8	MR. FLEMING: Well, KSR didn't say that you can just
9	ignore claim language. And I pointed to you that there is serious
10	claim language here, that positive limitations of requiring the
11	memory that has more than one FIR filter, each FIR filter has a
12	different function. And you have a signal processor that has to
13	retrieve that to process an incoming television signal. Those are
14	claim limitations that cannot be ignored. So KSR didn't say you
15	ignore claim language.
16	Furthermore, KSR didn't say that you can just use an
17	expert to fill in those gaps. What KSR said is that, you know, you
18	need to have substantive evidence to show where core limitations
19	are found in the art. What KSR was saying is, okay, once you
20	find these elements in the art, then you have more flexibility in
21	putting them together. But we have missing pieces here that are
22	not in the art. There isn't a combination or any kind of art that
23	says, hey, let's put a bunch of FIR filters with different formats
24	and have a single processor retrieve them. That's I understand
25	that that's the limitation that's there and they are not shown to be
26	in the prior art that's before you.

1	The other aspect is that KSR didn't say that once you
2	have this combination that voila there's always a way in which
3	they are going to be combined after looking at the invention.
4	What KSR is still concerned about is guarding against hindsight.
5	And with being guarded against hindsight, how do you guard
6	against hindsight? Well, you need to be able to point to in the
7	prior art reasons of why you would be wanting to make this kind
8	of combination. And also would one of ordinary skill in the art
9	expect success. That's not present. We don't have those elements
10	met.
11	So is there any other questions, Your Honors?
12	JUDGE KAUFFMAN: None from me. And it looks
13	like none from the rest of the panel.
14	JUDGE ANDERSON: Now I have one as long as we
15	have a brief moment here. So what is the specific language of
16	which claim that you think is not shown in these references?
17	Maybe it's in a slide, but what is the specific claim language,
18	please?
19	MR. FLEMING: The specific claim language is
20	looking at claim 11 you don't have said plurality of finite
21	JUDGE KAUFFMAN: Could you point us to a slide?
22	MR. FLEMING: I'm sorry, slide 6. If we look at
23	claim 11, claim 11 requires said plurality of finite impulse
24	response filters stored in a memory. And since that is dependent
25	on claim 10, that means that it's one of a plurality of finite
26	impulse filters that correspond to a format of the input RF signal.

1	Furthermore, there is the other limitation where it says
2	that the signal processor retrieves from memory one of these FIR
3	filters. Those limitations are not present. And in the '792, I
4	believe that's going to be slide 7, same language. If you look at
5	claim 24, it's the same language. It requires a plurality of finite
6	impulse filters that are stored in a memory. And since that is
7	dependent on claim 1, the FIR filters have different formats. So
8	they are different functions. Not the same function.
9	And also you have a signal processor retrieving from
10	memory one of these finite FIR filters. And since it's dependent
11	on claim 1, the signal processor is processing the signal, the
12	incoming input RF signal encoded information in one of the
13	plurality signals. It's going to process it based upon that FIR filter
14	that's retrieved. Your Honor, did that help?
15	JUDGE ANDERSON: Yes, thank you.
16	MR. FLEMING: So the Zenith combinations fail
17	because they fail to meet two limitations. One is they don't teach
18	detecting carrier signals. And secondly, they don't teach
19	indicative of format.
20	So let's look at the claims. For the '585, we have a
21	signal a select signal by detecting carrier signals. And then
22	claim 20 we also have detect a select signal by detecting carrier
23	signals in the input RF signal. And similarly in the '792,
24	claim 28, and I'm on slide 41, we also had similar language.
25	So I want to be able to address this, but I don't want to
26	address this right at this point. But I want to point out that the

1 petitioner did not provide claim construction for carrier signals in 2 the petition. And it is not in response to our putting that claim 3 construction in our response. He just decided he needed to have 4 claim construction as a brand new argument. That's not in 5 response to any of our arguments in the sense of claim 6 construction. And he admitted that we didn't do so. 7 Also, he's relying on Balaban for a limitation not 8 present in --9 JUDGE KAUFFMAN: Could I pause you there for a 10 second, please. You say that petitioner admitted it. Do you have 11 a citation for where --12 MR. FLEMING: He just did in front of you. 13 JUDGE KAUFFMAN: You mean here. Thank you. 14 MR. FLEMING: I'll come back to this, please, and talk 15 about it further, but I thought you would appreciate me at least 16 addressing a substantive issue even though I view it as a new 17 argument. Because I'm addressing it does not mean I'm waiving 18 our argument it's a new argument. I just thought you would 19 appreciate that I would address the substance of it. 20 JUDGE KAUFFMAN: We don't see your failure to 21 make an argument today as withdrawal of anything that was in 22 the patent owner response. 23 MR. FLEMING: Thank you, Your Honor. So let's look 24 at what their new construction is. First of all, it's interesting that 25 they go to the extrinsic evidence, not the intrinsic evidence, for 26 this claim construction. That's problematic in itself. They just

- 1 jump to the extrinsic evidence. If you were going to start with
- 2 claim construction, you should begin with the intrinsic evidence
- 3 because in a recent Federal Circuit case, it just came out, and it's
- 4 David Netzer versus Shell Oil, the Federal Circuit has ruled -- and
- 5 this just came out yesterday, May 27th --
- 6 JUDGE KAUFFMAN: Does it have a Westlaw
- 7 citation?
- 8 MR. FLEMING: If you like, I can give you this copy.
- 9 It does have a slip opinion. It's 2015-2086. And it was decided
- 10 May 27, 2016.
- JUDGE KAUFFMAN: That's all I need. Thank you.
- MR. FLEMING: In that opinion, it said that you cannot
- use extrinsic evidence to trump intrinsic evidence. You cannot
- 14 contradict, you cannot use extrinsic evidence to contradict what
- 15 the intrinsic evidence teaches.
- And that is the very thing that the petitioner is doing
- 17 here. What they want for you to --
- JUDGE BOUCHER: Before you dissect the petitioner's
- 19 proposed construction, does the patent owner propose
- 20 construction of carrier signals?
- MR. FLEMING: Your Honor, we believe that just the
- 22 plain language of the claim should be enough in view of the
- 23 specification. So a carrier signal is clear for what it is. A carrier
- signal is something other than bandpass signals -- baseband
- signals. Sorry. They want you to believe that carrier signals are
- 26 baseband signals. That goes counter to how the claim is

1 constructed as well as what the spec says. A carrier signal has to 2 be something different. 3 What they are arguing is a carrier signal is a way of 4 having at least one characteristic that may be varied from a 5 known reference value by modulation. Wow, that means any 6 way, any characteristic at any known reference by any type of 7 modulation. 8 If I go to slide 44, the claim by itself has to mean that 9 it's limited to something other than their claim construction. 10 Claim 15 by itself is limited to RF modulation. By itself claim 15 11 is -- well, let me explain. There is a slight difference between the '792 and the '585 in claim construction as far as understanding the 12 13 claim just by what it says. And here is one of them in that the 14 claim in '585 is limited to a signal inputted to a tuner. Whereas, 15 in the '579 the preamble says it's limited to a television receiver. 16 So it at least has to be in the context of a tuner. 17 And then also it's limited for sure for modulation as 18 removed by a plurality of TV modulators. So their construction 19 is unreasonably broad in light of the intrinsic evidence. 20 JUDGE KAUFFMAN: Mr. Fleming, by intrinsic 21 evidence you just mean the language of the claim or is there 22 something in the specification that supports it as well? 23 MR. FLEMING: Yes, Your Honor, I'm on slide 45, 24 which is -- you're foreshadowing what I'm about to say. From the 25 claim construction I also -- before I leave the claim, this is true 26 with the '792 but I will address it in the '585. Claim 1 requires

- 1 that the demodulators generate video and audio baseband signals.
- 2 And then claim 15 is further limited. So if you looked at claim
- 3 13, it talks about a select circuit and it's not limited to carrier
- 4 signals. And then when you go to claim 15, claim 15 then says
- 5 that the select circuit generates said select signals by detecting
- 6 carrier signals. So just by normal claim construction
- 7 differentiation, the claim has to be narrowed to be more than
- 8 baseband signals.
- 9 So they make a big deal about one mention of how you
- might detect or the auto selection might be detected. But reading
- 11 the spec as a whole and in particular the paragraph as a whole, the
- next sentence clearly says that each demodulator in bank 66
- generates a signal which is fed back to the standard select circuit
- 14 68 indicating that the television standard, the input signal is
- 15 encoded.
- So looking at that paragraph in view of the drawing,
- 17 what you would have is you would have a carrier signal that is
- 18 carrying the information, which is the baseband signals, through
- 19 the tuner until it got to the demodulator. And then notice that the
- demodulator has outputs of baseband signal and then they have
- another output, something other than baseband signals so that the
- other is the carrier signal that goes up to the standard.
- So by their argument, then the spec would have that line
- connected to the output of the baseband signals. It does not. So
- clearly it has to be something other than baseband signals.

1	If we move to slide 46, the petitioner argued that Opris
2	distances himself on this. And the problem was Opris wasn't
3	being asked the correct questions. When asked about the auto
4	detect circuit in column 5, what Opris said is, It's my
5	understanding that any person will understand that the auto detect
6	circuit works to detect the carrier signals that are uniquely
7	identifying the television standard.
8	Going to slide 47, when trying to be probing on maybe
9	one of the other kind of embodiments but not asking him whether
10	or not the claim is requiring something other than baseband
11	signals, he just simply is repeating that the auto detect television
12	standard by detecting the presence or absence of carrier signals is
13	what it's saying in that one sentence. That's not running away
14	from it. The petitioner never questioned head on. The real
15	question is based upon the claim construction, does the claim,
16	isn't the claim requiring something other than baseband signals in
17	this particular claim 15. That was not asked of him.
18	Furthermore, in the 728 IPR, the Board had adopted the
19	construction that the video and audio baseband signal may
20	correspond to a signal that encodes both video and audio
21	information without transmission modulation. So clearly there's a
22	recognition that there's something other than baseband signals in
23	the signal, and that is the carrier signal. So that limitation is not
24	met.
25	When further asked of Dr. Holberg, he admitted that, So
26	carrier signals is part of the transmission modulation? He said

1 yes. And when asked, So the output of an analog demodulator 2 and a digital demodulator, they do not include transmission 3 modulation? He said, Yes, that's correct. 4 So then the question is how does this have an impact on 5 the claim? The real question is, the output of that sync detector 6 20, is that detecting, is that a carrier signal? That's the real 7 question. And when we ask Dr. Holberg about that, what he said 8 is that -- we asked, The sync detect 20 operates on that 9 demodulated underlying analog information? He said yes. 10 Dr. Opris further explains that what's going on here is 11 that the sync detect is coupled to the output of the analog 12 demodulator which outputs baseband signals, i.e., CVBS in 13 Thomson. 14 So let's look at that. Let's look at what we have in 15 Thomson. Sure enough, not only in Figure 1 shows CVBS, but in 16 column 3, line 19 and 20, it discloses that the demodulator 9 17 converts the IF signal into CVBS signals. 18 So if you go to the '585, it also discloses that the 19 baseband signals are CVBS. Bear with me. It's in column 5, 20 line 43 through 44 in which it discloses that it generates video 21 and audio baseband signals. And then later in the same column, 22 column 5, line 60, it says the analog demodulator 66A provides 23 composite video base signal, CVBS. 24 So Zenith is also producing a sync signal that is part of 25 the baseband signal. And Dr. Opris explains that, but they also 26 provided in the record evidence that that is true. In Exhibit 1017

- 1 that was filed in the 626 IPR, and if you look at column 3, lines
- 2 50 through 57, it explains what's going on here, that the tuner
- 3 allows the demodulation of primary broadcast video signal and
- 4 after being demodulated, the components as well as the horizontal
- 5 and vertical synchronization components of the primary broadcast
- 6 video signals are separated to go to the decoder.
- 7 It further explains what that means. And I'm sure, Your
- 8 Honors, that you are familiar with this, and that that is the
- 9 information that is part of the baseband signal because it's
- 10 necessary to produce the TV picture. It's providing the sync
- signal of the beginning and end of the line on the screen as well
- 12 as the beginning and end of the frame. That's how TV works. So
- it is a necessary part of the information that is being carried
- through. That's baseband signals. Not carrier signals.
- So if we can go to slide 51, they want you to believe the
- output of that demodulator is a carrier signal. That goes counter
- 17 to what is in the record. What's coming out of that demodulator
- is baseband signals. Not carrier signals.
- 19 If we could go to slide 52, please, so they know this. So
- what did they do? They come up with Balaban to meet the
- 21 missing piece in response to our argument. That's improper. So
- 22 that's where it is not in response to our argument. It is clearly -- I
- 23 need to go to slide 67. The Federal Circuit has recognized that
- these IPRs are different animals. This is not an examination. It's
- 25 not District Court. And it's because the Congress set these up to
- be a speedy process, so the whole point of this process to be fair

1 to patent owners is that they need to bring their case up front, all 2 the claim construction up front, all the art that they are going to 3 rely on and make it clear what the grounds are up front. And it's 4 not like District Court where as you move through the trial you 5 realize, you know, they have a point. I need to change my 6 position and bring in new evidence. That's not the purpose of the 7 IPR. The purpose is a speedy determination and that the 8 petitioner needs to lay down all his cards up front and give the 9 opportunity to the petitioner to respond. So we are prejudiced. They are asking you to set a 10 11 dangerous precedent. By allowing them to do this, this allows 12 them to have a second bite at the apple, because by their 13 definition of being responsive, everything is responsive. Of 14 course when we show that their prima facie case that they provided for in the petition fails, sure it's responsive to our 15 16 argument. But that's not the issue. The issue is did they provide 17 up front all the information that's necessary for the patent owner 18 to be able to defend their patent. They have not. They are 19 choosing to hide the ball and bring it in later or they just didn't 20 understand it at the time they filed the petition. Either way, that's 21 not the purpose of an IPR. 22 So 53, let's look at the last issue. And I have just a short 23 amount of time. The claim is requiring a signal, a select signal 24 indicating the format of the input RF signal. So what is required? 25 And I'll cut to the chase because I'm only three minutes. The 26 claim requires that it has to be able to indicate the format. Their

1 claim construction is such that they are using extrinsic evidence 2 that's counter to our intrinsic evidence. We have shown that in 3 the claim, plain language requires it to be able to tell you what the 4 actual input RF signal is. And in the specification it clearly says 5 that the signal which is fed back to the standard select circuit 6 indicates the television standard and the input signal that's 7 encoded. 8 We have provided intrinsic evidence that supports the 9 intrinsic evidence. They are only providing counter extrinsic 10 evidence. It's improper. Furthermore, they are asking you to buy 11 into a clue or you know, well, maybe there is a correlation, but 12 maybe there isn't a correlation all the time. 13 So we have provided you a line of questioning of 14 Dr. Holberg. And what Dr. Holberg admits is that a sync detect 15 signal is only detecting what is being outputted from the analog 16 demodulator. So it's determining whether or not those sync 17 signals that I read you before which is telling you the beginning 18 of the line and end of the line or the beginning of a frame and end 19 of the frame is present or not. That's what all that is determining. 20 And it does not. And we have in the record and as well in the 21 slides that show that Dr. Holberg also admits that that sync signal 22 has not a clue of what this digital demodulator is doing. 23 So to go to the chase since I only have one minute left, 24 if, in fact, the switch is at D and it's a demodulator --25 JUDGE KAUFFMAN: What slide is that?

1	MR. FLEMING: I'm sorry, slide 60. If the switch is on
2	D so that the digital demodulator is selected, okay, the sync detect
3	20 is going to say absent of a signal. So that's fine if that
4	demodulator is receiving a digital signal. But if the input is all of
5	a sudden switched to analog, it's going to detect the same thing
6	because it's not indicating the format of what the RF input is. It's
7	only indicating whether or not the analog demodulator is working
8	or not. That's why they want you to have it as a clue, because
9	there's not a correlation. Sure sometimes that makes sense, but
10	sometimes it doesn't. That's not what the claim requires. The
11	claim requires it's an indication of what is actually on the input.
12	JUDGE KAUFFMAN: Mr. Fleming, I think I
13	understand your argument on the art and what the art shows. I'm
14	still trying to understand what you are saying about intrinsic and
15	extrinsic evidence. To go back to slide 57 for a second, you cited
16	a case to us that I think you are saying says you can't go use
17	intrinsic when you have intrinsic that says something else. For
18	me with regard to a dictionary definition, that's a lot like the
19	canon of claim construction that you can't use a dictionary
20	definition that's inconsistent with the spec. What is it about this
21	definition of indicative that you think is inconsistent with your
22	disclosure?
23	MR. FLEMING: Their construction of indicative
24	serving as a sign or indication of is the definition that we
25	provided that is consistent. I believe it's slide 58 that you are

1 requesting me to go to. And slide 58 they are quoting from a 2 dictionary where it says indicative is a clue. 3 JUDGE KAUFFMAN: So I misunderstood you. You 4 are saying your dictionary definition on 57 is consistent and theirs 5 on 58 is not? 6 MR. FLEMING: That's correct. 7 JUDGE KAUFFMAN: And what about their definition 8 on 58 is inconsistent with your specification? 9 MR. FLEMING: Because a clue is not an indication of 10 the actual format. A clue means that, you know, it might be a 11 probability or a possibility or a likelihood. It's a clue that 12 sometimes it might happen or sometimes it won't. But the fact 13 remains when we asked Dr. Holberg --14 JUDGE KAUFFMAN: I'm trying to --15 MR. FLEMING: Why don't I go to the next slide. Let's 16 look at what I asked Dr. Holberg. I asked Dr. Holberg, Okay, 17 what is the scope of a clue? Actually, Mr. Haber asked. 18 JUDGE KAUFFMAN: This is slide 59? 19 MR. FLEMING: Slide 59. And Mr. Haber asked, The 20 select signal may or may not be actually indicative of a format? 21 Dr. Holberg says, Yes, based on that definition that's true, it does 22 not require it to be the actual format. It's a clue but not the actual 23 format. 24 JUDGE KAUFFMAN: I guess what I'm wondering, to 25 go back to the claim language which is on slide 55, the select 26 signal has to be indicative of a format of the input RF signal.

1 Whether you call it information or a clue, it has to have some 2 content that tells you the format; is that correct? And then the 3 question is, does the art have some content that tells you the 4 format of the input RF signal? And you are saying that it doesn't 5 because it doesn't change when you go from digital to analog. 6 MR. FLEMING: Right. That's right, Your Honor. 7 JUDGE KAUFFMAN: Okay. Are there any other 8 questions from the panel before I allow the petitioner their 9 additional time? 10 JUDGE BOUCHER: I don't have any. 11 JUDGE ANDERSON: I have one and it may be 12 difficult to answer, and that's fine if you can't. I would 13 understand because of the nature of the question. My question is 14 in the prior final decisions we did on these two patents in the 728 15 case and the 809 case, is there anything about what was 16 determined in those or found as a factual matter that you are 17 asking us to go against in taking the positions you take here that 18 you can recall? I understand it's a very broad question. 19 MR. FLEMING: No, Your Honor. I was hoping that I 20 was trying to convey to you that when I went through the claim 21 construction, that claim 11, for instance, is requiring a further 22 limitation that you did not have to consider and that those further 23 limitations have to do with that the memory includes having a 24 plurality of FIR filters of different functions. And you have a 25 signal processor that retrieves one of those to process an 26 incoming signal that corresponds to that format of that FIR filter.

1 That's -- you have not ruled on that and it doesn't go counter to 2 what your argument is. 3 And what I was trying to explain, Your Honor, is that 4 you agreed with our claim construction that the claims do 5 preclude parallel processing. What you ruled, though, is that, yes, 6 if the adaptive filter that's in Thomson very well is two different 7 filters, but you ruled that the select signal is selecting that 8 somehow. We obviously disagree, but that doesn't go counter to 9 what we are talking about here because we don't have a single 10 signal processor in the art that's processing the signal. And we 11 don't have that signal processor retrieving from memory different 12 FIR filters corresponding to the format. 13 JUDGE ANDERSON: Thank you. 14 JUDGE KAUFFMAN: Mr. Fleming, my last question, 15 earlier I talked to petitioner about whether the '585 was a 16 continuation or a continuation in part of the '792. What is your 17 opinion on that? Is that true or vice versa? 18 MR. FLEMING: Your Honor, I don't want to comment 19 on that until we talk about that tomorrow in the -- because that 20 has impact on tomorrow's case. 21 JUDGE KAUFFMAN: I understand what you are 22 saying. Okay. Thank you. 23 Petitioner, do you need a minute to set up? 24 JUDGE ANDERSON: We are talking about Friday, 25 right? Not tomorrow?

1 MR. FLEMING: Yeah, you are right, Your Honor. It's 2 Friday. 3 MR. AYERS: Thank you, Your Honors. Let me take 4 these in sort of reverse order, starting first with the questions that 5 you posed to patent owner's counsel regarding the construction of 6 select signal. What I heard Mr. Fleming say is that the select 7 signal must always correspond to the format of the input RF. So I 8 think that's sort of the crux of his argument. 9 The problem with that argument is that's not even true 10 in the patent. First of all, just like in Zenith, it says that the 11 standard selection circuit in the preferred embodiment can 12 generate the select signal by detecting the presence or absence of 13 a carrier signal. Well, any time -- and Dr. Holberg explains, any 14 time you are relying on the absence of something, you are 15 inferring something. You are making an educated guess about it. 16 And the result of that is an indication. It's not -- it may not be 17 conclusive, but it is an indication based on the intelligence that 18 you considered that what the format of the signal is. 19 The other example that I think just nails this shut is in 20 the manual there's two different examples of generating a select 21 signal. There's the auto detect capability where it detects the 22 carrier signal and also the manual selection. In that case it also 23 selects -- it also generates the select signal response to a user 24 input. Well in that case, and I posed this scenario to Dr. Opris 25 and he agreed, imagine where you select the analog format using 26 your remote control device. You provide an input, a user input

1 that selects the analog format source, if you will. And the 2 standard select circuit receives that input, generates the select 3 signal, the filter selects the appropriate coefficient. 4 But let's assume that that signal input is not connected. It's not connected to the antenna. What about in that situation? 5 6 Well, guess what. The select is signal has been set. It's an 7 indication of the input RF signal being in the analog television 8 format. But guess what. It's not. So even the preferred 9 embodiment doesn't always require a one-to-one correlation 10 between the input RF signal and the select signal. That's why it 11 uses the word indication. It's indicative of. It's not conclusive. 12 It's indicative of. 13 And to suggest that we are bringing in this extrinsic 14 evidence that's inconsistent with the specification is just not right. 15 We are relying on the very dictionary that the patent owner 16 proffered in this case. We are not introducing any extrinsic 17 evidence. We are relying on the very evidence that it introduced. 18 And that evidence is fully and entirely consistent with the 19 specification. 20 Do you have any questions about that? I know, Judge 21 Boucher, that you had some interest in that particular point. 22 JUDGE BOUCHER: No, I think what you have 23 addressed is fine. Go ahead. 24 MR. AYERS: Thank you. Now let's turn to carrier 25 signals. So what we heard today for the first time is that despite 26 the fact that the specification says detecting the carrier signals in

- 1 the baseband signals, in fact, it doesn't generate, it doesn't detect
- 2 the carrier signals in the baseband signals. That's what we heard
- 3 today. What do they offer for that? They offer Mr. Fleming's
- 4 argument here today.
- Well, I think the more persuasive, the more
- 6 authoritative evidence in this case is what the patent actually says.
- And it's quite clear in both the '585 and the '792 that in the present
- 8 embodiment, auto detection, this goes to this generating the select
- 9 signal, is implemented by detecting in the baseband signals the
- presence or absence of carrier signals which uniquely identify the
- 11 television standards.
- They can't get away from that. And no matter how
- much Mr. Fleming wants to argue that it doesn't say -- the
- baseband signals, it does. So this whole argument about Zenith
- detecting in the baseband signals is a complete red herring
- because that's precisely what their specification describes.
- 17 The same thing is true in the '792. As I mentioned, it's a
- 18 little bit -- you have to sort of connect the dots because they
- 19 introduce this output circuitry in the '792, but the same thing is
- true there. It says that it detects on the first and second output
- signals. And those output signals are baseband signals. They just
- 22 can't get away from it. No matter how fancy their graphics are,
- 23 no matter how persuasive Mr. Fleming's argument is, the
- 24 controlling evidence here is what the specification says.

1	JUDGE KAUFFMAN: Mr. Ayers, I did not understand
2	patent owner to argue that the input baseband signal does not
3	include carrier signal. I understood him to say that a demod
4	JUDGE BOUCHER: Could you please turn on your
5	microphone, Judge Kauffman.
6	JUDGE KAUFFMAN: I'm sorry. I'm too far away
7	from it. A demodulated signal, a CVBS signal no longer includes
8	a carrier signal. That's what I understood him to be arguing. Can
9	you address that?
10	MR. AYERS: Well, the baseband signals have the
11	transmission modulation removed. So whatever is in that is the
12	baseband signals as it's been defined in this. And that includes
13	not only the carrier signal, not only the examples that they give
14	which are also in the baseband signals, in the signal that has had
15	the transmission modulation removed, but just so too is the sync
16	signal. It is also in the signal that has the transmission
17	modulation removed.
18	And that's what that's the same is true in Zenith. The
19	transmission modulation has been removed. We don't dispute
20	that. And we are not pointing to the transmission modulation as
21	the carrier signal. But the sync signal satisfies the plain and
22	ordinary meaning of carrier signal. And what I didn't hear from
23	Mr. Fleming was that that's not true, that he what you didn't
24	hear him dispute is that the sync signal satisfies the plain and
25	ordinary meaning of carrier signal. And that definition, while he
26	says that we are relying on extrinsic evidence that's inconsistent

1 with the extrinsic, that's not true. Both of the examples, the visual 2 carrier and the pilot carrier, are fully consistent with our 3 definition. So all the intrinsic evidence and extrinsic evidence is 4 consistent that Zenith discloses detecting the carrier signal. 5 Let me turn in the remaining time that I have to 6 Grumman and Harris, again, because I think there is maybe some 7 misunderstanding about what the art teaches and about what these 8 supposed gaps are. There's no gaps in the prior art. As I said, 9 Thomson describes an adaptive filter. Doesn't specify the exact 10 implementation details of that. Harris quite clearly describes a 11 single reprogrammable FIR filter. 12 I would point the Board back to its final written 13 decision in the earlier cases where it quotes this passage from 14 Harris. It says in systems where the second IF filter stage 15 consists of a bank of filters. And that's the example that 16 Mr. Fleming wants to point to. It goes on to say the first filter 17 stage consists of a bank of filters to support various operational 18 modes, cost and board space can be saved by reconfiguring a 19 single DDF to implement the filter required by each operational 20 mode. 21 What does that mean? It means you have a single 22 programmable filter with different sets of filter coefficients that 23 are stored in memory that are loaded into the filter as needed 24 based on the different operational modes. That's what Harris 25 teaches.

1	Then you move to Grumman, again, there is no question
2	that Grumman describes two memories. That's essentially all we
3	need is two memories with different filter coefficients. There's no
4	structural gaps in Grumman. And as Dr. Holberg explains, that is
5	ideally suited for this application because of its limited switching
6	time.
7	And we are not using hindsight reconstruction. He's
8	using the Grumman reference itself which teaches that this is an
9	advantageous implementation for an adaptive filter just like is
10	required in Thomson. And the fact that it doesn't speak directly
11	to television formats is completely irrelevant. It's a red herring
12	because Thomson teaches that. And a person of ordinary skill in
13	the art would know it needed to implement an adaptive filter. So
14	it would look to Grumman for that as describing an adaptive
15	filter with switching efficiently.
16	So I know I'm over my time and I thank the Board for
17	its consideration. And I certainly will answer any additional
18	questions you might have.
19	JUDGE KAUFFMAN: Judge Boucher?
20	JUDGE BOUCHER: No, I'm good. Thanks.
21	JUDGE KAUFFMAN: Judge Anderson?
22	JUDGE ANDERSON: Nothing further from me.
23	JUDGE KAUFFMAN: Thank you, Mr. Ayers.
24	Mr. Fleming, if you would, please, keep your remarks
25	only to the motion to exclude. And we agreed on five minutes, if
26	I remember correctly.

1	MR. FLEMING: Your Honor, I don't know if it's
2	appropriate for me to speak because I didn't get to bring up and
3	argue my motion to exclude. So then there wasn't time for him to
4	rebut that. So I'm not sure if I can go forward.
5	JUDGE KAUFFMAN: Well, I hate to make a decision
6	in front of everyone, but I think the petitioner could have
7	mentioned the motion to exclude if he had wanted to and I'm
8	comfortable with patent owner using five minutes to talk about
9	the motion to exclude. Judge Boucher?
10	JUDGE BOUCHER: That's fine. I think actually
11	Mr. Fleming did make some remarks that alluded to some of the
12	arguments in the motion to exclude in his initial presentation.
13	JUDGE ANDERSON: Right.
14	MR. AYERS: I don't object, Your Honor, if he wants to
15	spend a few minutes.
16	JUDGE KAUFFMAN: I appreciate that, Mr. Ayers.
17	MR. FLEMING: Thank you, Your Honors. I just
18	wanted to be sure that we are all fair and everyone understood.
19	JUDGE KAUFFMAN: I appreciate you wanting to
20	play by the rules.
21	MR. FLEMING: Yes, Your Honor, we have brought
22	forth a motion to exclude the Balaban reference because it wasn't
23	timely. And it was also not relevant and it is prejudiced against
24	the patent owner because we were not able to respond to what we
25	understood to be the ground that was presented.

1	JUDGE KAUFFMAN: Mr. Fleming, to be blunt so I
2	can hear what you think about this, I understand your three ways
3	that you are attacking this reference. I am unaware of the Board
4	excluding information based on timeliness. Rather, they would
5	say we are not going to consider that because it should have been
6	part of the petition. But I'm not aware of the Board ever having
7	excluded information on that basis. Are you aware of a case
8	where we have done that?
9	MR. FLEMING: No, Your Honor, I'm not aware of
10	one. However, I would say from the patent owner's point of view
11	we feel we have to bring forth a motion to exclude to bring it to
12	your attention. And if you choose to say that the motion to
13	exclude is moot because you didn't consider it, in our minds that
14	sets the same point. So it's a matter of procedure that you have
15	your choice of doing. But the end result is that the reference
16	should not be considered and the motion to exclude implements
17	that or what you suggest that you make clear in the record that
18	you didn't consider it and you didn't weigh it in on your decision.
19	JUDGE KAUFFMAN: I think a lot of the same logic
20	applies to your contention that it's not relevant. I mean, it has to
21	do with a limitation at issue, right. So in that sense it is relevant.
22	It has some tendency to prove a fact that's in dispute before us.
23	The real question is whether it should have come sooner. The
24	relevance is sort of built on the timeliness issue as well, this
25	should have been in the petition instead of coming later.

1	MR. FLEMING: It's not relevant to the ground that was
2	presented is our point and that the ground was not using that
3	reference as a reference so that you know, to meet a limitation
4	in which they are doing so now.
5	And the bigger issue clearly is timeliness. And it's
6	clearly not timely. And the whole scheme of the AIA statute
7	insists on timeliness. Also, Your Honor, there's plenty of art out
8	there and to allege that somehow we are obligated that because I
9	bring up the petition, we have to scour the earth for all of the
10	possibilities of why this is unpatentable. It seems to be placing
11	the burden on the patent owner to prove patentability. And
12	clearly the statute is directed to the petitioner to prove true
13	unpatentability. So when he alleges that this might be in the
14	record or that it might be available, that's not the point. The point
15	is that the statute makes clear that they are supposed to bring
16	forth the grounds in which they are relying on to prove
17	unpatentability. This was not part of the record until very late.
18	JUDGE KAUFFMAN: And from your perspective,
19	how does Balaban change the originally asserted ground of
20	unpatentability? What does it change about it?
21	MR. FLEMING: They are trying to use Balaban for the
22	teaching of a carrier signal and say that that carrier signal is
23	something other than what meets the claim. That's just not
24	proper.
25	JUDGE KAUFFMAN: Where would you draw that
26	line? One way to rely on a reference is I'm getting this limitation

1 from Balaban. Another way to use a reference is to say this 2 shows what carrier signal means. 3 MR. FLEMING: Your Honor, what needs to be done 4 and what properly to be done is to focus on the references before 5 you. And if you used another reference to say that it supports 6 what that reference is teaching and that one of ordinary skill in 7 the art would understand that, that's a different animal. But when 8 you are using it to meet a limitation that is not in that reference, 9 that's crossing the line. 10 JUDGE KAUFFMAN: I understand you to say that if 11 the reference is used to explain a term, that's not the problem. 12 The problem is if it's being used to disclose a limitation? 13 MR. FLEMING: Your Honor, it's not proper also to 14 have new claim construction which was not contemplated. The 15 claim construction, they chose that claim. They understood that 16 carrier signal limitation was in there. They also understood the 17 claim differential principle which said that you had baseband 18 signals and then you have carrier signals and they must be 19 separate. 20 The claim clearly makes that clear. The drawings make 21 it clear that something other than baseband is coming out of the 22 demodulator. And then to say that now we have claim 23 construction that somehow what comes out of a demodulator is 24 carrier signals is improper. That's the other thing that we want to 25 be excluded is all the declaration that's directed to that as well. 26 That's highly prejudicial to the patent owner. We should have

1 been apprised of what their claim construction that they were 2 seeking up front. When we were reading the claim and in our 3 response, we were reading it in terms of it had to be something 4 other than baseband signals. 5 JUDGE KAUFFMAN: I understand your position. 6 Judge Anderson, anything else for the patent owner? 7 JUDGE ANDERSON: No. 8 JUDGE KAUFFMAN: Judge Boucher? 9 JUDGE BOUCHER: No, I have nothing else. JUDGE KAUFFMAN: Thank you, Mr. Fleming. I 10 11 would like to tell the parties I know that because of the 12 bankruptcy issues that we had to rush at the end, there's a lot of 13 things to agree on, I really appreciate that you were able to settle 14 your objections on the demonstratives. I know that's sometimes 15 difficult to do and I appreciate that cooperation that we've seen 16 between the parties. 17 Is there anything the court reporter needs before we 18 end? Anything further from either member of the panel? 19 JUDGE ANDERSON: No. 20 JUDGE KAUFFMAN: That concludes our hearing. 21 Thank you. 22 (Whereupon, the proceedings at 3:55 p.m., were 23 concluded.)