

SCALE VIDEO CODING, LLC., (CAUSE NO. 4:23-CV-803-SDJ
)
Plaintiff, ()
vs. ()
CISCO SYSTEMS, INC., (PLANO, TEXAS
) OCTOBER 16, 2024
Defendant. (10:00 A.M.)

BEFORE THE HONORABLE SEAN JORDAN
UNITED STATES DISTRICT JUDGE

Shawn M. McRoberts, RMR, CRR
Federal Official Court Reporter

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09:41:20 1 THE COURT: Good morning. You can be seated.

2 So we're here today on Cause No.--I have to check our
3 cause number on this one--4:23-CV-803, Scale Video Coding
4 versus Cisco Systems, Inc.

10:03:59 5 And let's go ahead and have appearances of counsel.

6 MR. PUCKETT: Good morning, Your Honor. Donald
7 Puckett for the Devlin Law Firm on behalf of the Plaintiffs.
8 I'm here with Srikanth Cheruvu.

9 MR. PADMANABHAN: Good morning, Your Honor.
10 Krishnan Padmanabhan of Winston & Strawn on behalf of Cisco
11 Systems. And with me I have Christopher Gresalfi, Daniel
12 Marzagalli, and James Kappos.

13 THE COURT: Thank you, counsel.

10:04:27 14 So we have two issues that the Court's going to consider
15 today. We have the 12(c) motion that's been filed and we also
16 have our claim construction hearing. My intent is to proceed
17 with the 12(c) argument first and then move on to claim
18 construction.

19 So for the 12(c) argument, my thought was to give each
10:04:56 20 side 20 minutes. Let me know if you think that's sufficient
21 time.

22 MR. PADMANABHAN: Yes, Your Honor. I think that
23 that works.

24 MR. CHEVURU: Yes, Your Honor.

25 THE COURT: And you know, I probably will have

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1 questions for you, so if we go over time that's not going to
2 be a problem. And we'll start with that, and then once we're
3 finished with the 12(c) we'll move straight to the claim
4 construction discussion.

10:05:25

5 So this is obviously Defendants' motion, so who's going
6 to present for the Defendants on this?

7 MR. PADMANABHAN: Your Honor, I will--Krishnan
8 Padmanabhan.

9 THE COURT: You can proceed.

10 I'll let you know I have reviewed the parties' filings on
11 this, so you can feel free to elaborate on your arguments as
12 necessary.

13 MR. PADMANABHAN: Thank you, Your Honor.

10:05:56

14 THE COURT: And as I've said, I don't know if iVE
15 had you in here before, but we get the best sound from that
16 podium right behind you there, and so when you're presenting
17 argument, it would be best if you did it from the podium.

18 MR. PADMANABHAN: Thank you, Your Honor. We have --

19 THE COURT: Is that on? We need to make sure that
20 is on.

21 MR. PADMANABHAN: Thank you, Your Honor.

22 Krishnan Padmanabhan on behalf of Cisco Systems.

23 May I approach with slide decks for the Court and the
24 court reporter?

10:06:28

25 THE COURT: Sure.

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1 MR. PADMANABHAN: And Your Honor, for purposes of
2 reference, the slides with respect to Cisco's Rule 12 motion
3 are behind Tab B.

4 THE COURT: All right. Tab E for the rule motion.

5 MR. PADMANABHAN: Tab B as in boy.

10:06:58 6 THE COURT: Oh, B as in boy. Thank you.

7 And you can proceed when you're ready.

8 MR. PADMANABHAN: May it please the Court. Krishnan
9 Padmanabhan on behalf of Cisco Systems.

10:07:27 10 Your Honor, as the Court's well aware, the Supreme Court
11 and the Federal Circuit's subsequent case law sets forth the
12 two-step analysis with respect to patent eligibility. Step 1
13 is whether the claim is directed to an abstract idea, and Step
14 2 is whether any of the limitations or the claim as a whole
15 impart an inventive concept.

16 Now, Cisco has identified claim 6 as representative.

10:07:57 17 Claim 6, and each of the other independent claims, has the
18 same essential steps. They are receiving a layered video data
19 stream identifying a bandwidth-limited condition on the
20 network--I apologize, Your Honor; I'm technical difficulty
10:08:26 21 here--forwarding the base layer, and that is the essential
22 information, and then if there's this bandwidth-limited
23 condition, there's something restricting what can be sent on
24 the network sending less than all of what they call the
25 enhancement layers, the extra information. And then it says

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1 that the data's got to have some particular fields in there.

10:08:55

2 Now, this idea of there being a constraint on the
3 ability to send information and making decisions, that's
4 something we do in everyday life. I think the example we used
5 in our claim construction brief is when we present arguments
6 in a brief, if we've got a page limitations, we make sure the
7 essential elements are in. Those are the base layers. And
8 then we have to pick or choose what additional information is
9 going to fit in that space constraint. We're doing the same
10 thing in oral argument today, Your Honor. We do the same

10:09:29

11 thing when we go to the grocery store if we're on a budget--we
12 get milk and eggs; the additional things, like the sugary
13 cereals our kids might like, we have to make some choices
14 about which ones we're going to purchase. And so that concept
15 is abstract.

16 And those same four steps are found in each of the claims
17 at issue here--receiving these layered video streams,
18 identifying the bandwidth-limited condition, forwarding the
19 base layers but less than all of the additional enhancement
20 layers, and then just marking that data with these sequence
21 numbers and layer identifiers.

10:09:57

22 Now, we can go through claims 1 and 11. As we said,
23 they've got the same steps. Now, what SVC, Scale Video, is
24 arguing distinguishes claim 1 and 11 as merely the appearance
25 of the word 'video router' and 'scalable video coding router'.

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10:10:27 1 And those are found in the preambles. But what those devices
2 do is the same four steps we just talked about. Importantly,
3 'video router' and 'scalable video router' are not found
4 anywhere in the specification, Your Honor.

5 If we look at what their expert has said -- now, they
6 rely on their expert -- and now I'm at slide 64, Your Honor.
10:10:59 7 Their expert provides some opinions about what a video router
8 and a scalable video router are and why that distinguishes
9 claims 1 and 11, but he does not rely on any intrinsic or
10 extrinsic evidence. And so, to be clear, nothing in the
11 patent specification or file history--that's the intrinsic
12 evidence; nothing in a textbook or a dictionary
10:11:28 13 definition--that's extrinsic evidence--nothing; it is
14 literally whole cloth, just a written opinion.

15 There is also no claim construction offered for 'video
16 router' or 'scalable video router'. SVC hasn't offered one
17 either during the claim construction process or in opposing
18 Cisco's motion. So they have just said, Well, look, there are
19 these words in there, our -- we have an expert who says they
20 have some meaning, we don't have any support for that meaning,
10:11:59 21 and that means that they're different claims.

22 We'll point out that the Federal Circuit has said these
23 sorts of unsupported expert opinions in opposition of a Rule
24 12 motion, there -- they can be disregarded, and we'll cite
25 the *IBM versus Zillow* case, which is on page 2 of our reply

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1 brief.

2 Now, let's set the stage a little bit. We have this
3 abstract idea which is to identify a bandwidth-limited
10:12:29 4 condition on a network. Identify a constraint. And when you
5 have a constraint, you can't send everything, so you send the
6 essentials and just some of the extras.

7 Was there anything new about that? What was conventional
8 and unconventional? Okay. So Alice Step 1, when you look at
9 the claim to determine whether it's abstract, you can look to
10 see if there's a technological innovation, if there's
10:12:56 11 something in the claim that makes it more than abstract. And
12 in doing that, what the Federal Circuit has said is we can
13 look to what is, admittedly, conventional in the specification
14 or otherwise.

15 Here the provisional file history--so that's the thing
16 that's underlying the patent application--tells us what is
17 conventional. It is an admission regarding what is
18 conventional. This is at slide 65. The provisional file
19 history says under a heading that says "Previous Work" that
10:13:29 20 there was a problem of -- in fixed rate live streams, and
21 that's that packets would be lost, and that there was a
22 solution that had been suggested in the literature--so the
23 previous art--and that solution was something called layered
24 multicast; the data is broken up into these layers.

25 Now, it further says that in these pre-existing

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10:13:58 1 conventional technologies, that a receiver can subscribe to as
2 many layers as the network can support. So when you've got a
3 lot of bandwidth you can send a lot of them, and when you
4 have less than all the bandwidth, you can send some of them;
5 the important stuff like the base stuff, and a lesser set of
6 the extras, a lesser set of the enhancement stuff.

7 So in order to argue against this, SVC says, Well, look,
10:14:27 8 you have to ignore the file history. There's no legal basis
9 -- in their opposition brief they said there's no legal basis
10 to actually look at the file history and determine what is
11 conventional. But that is legally incorrect.

12 So we'll point you to the *Symbology Innovations* case
13 which is cited in our opposition--I'm sorry--our opening brief
14 at page 20 which explains very clearly that you can look to
15 the specification, and actually should look to the
10:14:59 16 specification, for admissions regarding what was conventional
17 in the art.

18 SVC further argues that you shouldn't look at what's
19 conventional at *Alice* Step 1; you should just ignore it; you
20 can only look at that for *Alice* Step 2, and that's also wrong.
21 The Federal Circuit -- and this is at slide 68 in our deck.
22 The Federal Circuit has made clear that you can look at what
10:15:26 23 is conventional at both *Alice* Step 1 and at *Alice* Step 2 And
24 I'll point to the Court to the *Broadband iTV* case where it
25 says that analyzing the conventionality of the claimed system

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1 at Step 1 is proper for the purpose of determining what the
2 claim is directed to.

3 And so here we know that the idea of breaking the data
4 into layers and sending less than all of them when you've got
5 a constraint on bandwidth was already conventional, and that
10:15:56 6 is all the claim is directed to, that abstract idea.

7 Now, a little bit of a pivot, Your Honor. We talked
8 about this expert declaration. They rely on -- SVC relies on
9 it very, very heavily to try and save the claim from an
10 ineligibility filing. I would like to point the Court to the
11 fact that the entirety of the expert declaration, the Adams
12 declaration, cites to only four lines from the intrinsic
10:16:26 13 record and nothing from the extrinsic record. So there's no
14 external evidence. There are only four lines cited from the
15 patent specification. Those four lines are from columns 3:11
16 to 15, found in paragraph 49 of the Adams declaration. And
17 all of this is contained on slide 69 in our deck. And all of
18 those four lines say is -- I'll read it in. "One method is to
19 let receivers tell the network, but not necessarily the
10:16:58 20 source, which data streams they want to receive and let the
21 network compute data distribution paths that deliver just the
22 right packets to each receiver."

23 And Mr. Adams says, Well, this tells him that in order to
24 satisfy the claims or perform the invention, you've got to
25 have particular types of routers that calculate particular

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1 types of things. But the problem is that none of this has --
10:17:28 2 is found in the claims. The claims don't say that you need
3 to calculate data distribution paths to deliver just the right
4 packets; all they say is that when you've got this bandwidth
5 constraint, you send the essential stuff and only some of the
6 extra stuff; send less data. Okay? So it's very different.
7 There's no match between the claims and what Mr. Adams cites
8 to. And we'll actually -- the additional point is Mr. Adams
10:17:57 9 actually never analyzes the claim language itself.

10 So just to close out on Alice Step 1, the
11 failsafe--right?--is if there's some sort of technological
12 solution to the claim. And if you look at what SVC points to
13 as their technological solution, they say that there are
14 several technical elements that provide technical solutions,
15 such as managing video quality in bandwidth constrained
10:18:28 16 environments, ensuring reliable packet delivery, and
17 optimizing network resources. This is on slide 71. This is
18 from their surreply at pages 5 and 6.

19 The problem with this is that these aren't technological
20 innovations in the claim. The claim doesn't tell you how to
21 identify a bandwidth-limited condition, the claim doesn't tell
22 you how to determine which layers to send or not send; it just
10:18:58 23 says, Find the condition, send less than all the data. What
24 they point to as supposed technical solutions are actually the
25 results of just sending less data. If you send less data when

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1 you've got a bandwidth constraint, sure, that will help you
2 manage video quality; sure, it will mean there will be more
3 reliable packet delivery; but none of that is a solution to
4 the problem; it's just a result of sending less data.

10:19:29

5 Now, in our briefing, Your Honor, we point to similar
6 claims that have been held ineligible--for example, the claim
7 in the *Orostream* case. And this is on slide 72 in our deck.
8 In order to distinguish that, what SVC relies on is this
9 argument that there was a certain strain of case law related
10 to *Alice* that had not yet been decided by the Federal Circuit.

10:19:57

11 And this is -- the first case in that line was *DDR Holdings*.
12 And this is the case law that says if there's a technical
13 innovation built into the claims, it's not abstract at *Alice*
14 Step 1.

15 THE COURT: But *DDR* at least was before this. In
16 fact, this case discusses *DDR*.

17 MR. PADMANABHAN: That's exactly right, Your Honor.
18 So while SVC that *Orostream* doesn't discuss *DDR*, it
19 specifically does discuss *DDR*. That's exactly right. You
20 predicted my next slide, Your Honor.

10:20:27

21 So let's talk about *Alice* Step 2. I think we've covered
22 *Alice* Step 1 in some gory detail.

23 In *Alice* Step 2 we're looking for an inventive concept.
24 And in *Alice* Step 2 I'll say that SVC relies very heavily on
25 this concept that it's this special video router and scalable

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1 video router that's in the claims that supposedly saves them.
2 Again, they go back to the same argument and they rely on the
3 Adams declaration, which, again, we would say the Court can
4 disregard because there's no citation to intrinsic or
5 extrinsic evidence to support any particular definition for
6 those terms, and they haven't been proposed for construction
7 even.

10:21:28

8 But if you really look at that, it's a device listed in
9 the preamble, and then the same four sets of steps that's
10 performed by that device. There's nothing in the claim --
11 baked into the claim that makes them inventive other than use
12 of that word.

10:21:58

13 In essence -- if you look at slide 76, in essence what
14 they're doing is they are reading in limitations into the word
15 'video router', this term in the preamble, and 'scalable video
16 router', a preamble of another claim, in order to try to
17 create inventiveness. But there is nothing in the
18 specification to support that, and that's why their expert
19 can't cite anything in the specification to support that.

20 So with that, Your Honor, I think we'll rest and we'll
21 reserve for rebuttal, unless Your Honor has questions.

22 THE COURT: Yeah. You've got about five minutes
23 left, so I may have questions for you, but I'm going to allow
24 your friend on the other side to make his presentation first.

25 MR. PADMANABHAN: Thank you, Your Honor.

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1 THE COURT: All right. So who's going to handle
2 this for the Plaintiff?

3 Mr. Cheruvu?

4 MR. CHERUVU: Yes, Your Honor.

5 THE COURT: All right. Mr. Cheruvu, if you can
10:22:29 6 start with why you believe that claim 6 is not representative.
7 I understand that this is something that you have addressed in
8 your written submissions, but a starting point for the
9 Defendants was claim 6 is representative, and they sort of
10 proceed from there. So maybe you can start with that and then
11 move on to your other points.

12 MR. CHERUVU: Certainly, Your Honor. Thank you for
10:22:59 13 that.

14 MR. PUCKETT: May I approach?

15 THE COURT: Yes. Go ahead.

10:24:18 16 You can proceed when you're ready, Mr. Cheruvu.

10:24:46 17 MR. CHERUVU: Good morning, Srikant Cheruvu on
18 behalf of Plaintiff Scale Video.

19 I will start out by addressing Your Honor's questions
10:24:57 20 regarding representativeness. And here I'll turn Your Honor's
21 attention to slide 20 of our deck where the Federal Circuit
22 has stated that in order to show that a claim is
23 representative, Cisco must show that any differences between
24 the claims are not material to the eligibility analysis, and
25 Cisco simply has not done that.

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1 Let me show a few examples by going through each of the
2 claims and explain why there are material differences and why
3 Cisco has not shown otherwise.

10:25:57 4 Turning first to slide 12, Your Honor, slide 12 shows
5 that a video router specifically performs the claim steps.
6 Cisco argues here that a video router is conventional and it
7 performs the same steps, but Cisco has not really provided any
10:26:26 8 argument that the presence of a video router is not material
9 to the eligibility analysis.

10 And, likewise, with claim 11-- now I'm looking at slide
11 13, Your Honor. Likewise, with claim 11, Cisco has simply not
12 provided any evidence that a scalable video coding router is
13 not material to the eligibility analysis.

14 THE COURT: I do -- I mean, I do note that claim 6
10:26:55 15 references a video router. It is a method claim and it
16 references a video router, does it not?

17 MR. CHERUVU: Yes, Your Honor.

18 The material difference here is that claim 6 is not
19 limited to the apparatus that actually performs the claim
20 steps. On the other hand, claims 1 and 11 recite the specific
21 apparatus that performs these steps. That is one material
22 difference which Cisco simply has not addressed.

10:27:29 23 And when it comes to the dependent claims, Cisco's
24 representing in this arguments are even further removed from
25 the actual limitations of the claims (verbatim).

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1 I'm looking at slide 14 right now, which covers dependent
2 claims 2, 7, 12. Claims 2, 7, and 12 specifically recite that
3 the selectively-forwarding step is based on video processing
10:27:57 4 capabilities of the video receiver. Similarly, on slide 15
5 where we talk about dependent claims 3, 8, and 13, these
6 dependent claims recite even further technical and material --
7 technically material differences between claim 6 and these
8 dependent claims. Similarly, for dependent claims 4, 9, and
9 14 on slide 16 that we reproduced, these claims further recite
10 that the selectively forwarding is based on a request for
10:28:29 11 retransmission of one or more packets from the layered video
12 data stream. Nothing in any of these dependent claims is
13 present in claim 6, and what's even worse, there is nothing in
14 these dependent claims that is present in Cisco's alleged
15 abstract idea of prioritizing information based on bandwidth.

16 Now --

10:28:59 17 THE COURT: I mean, the standard--right?--is that
18 they need to be essentially substantially similar. Right? To
19 be representative, it needs to be substantially similar to the
20 other claims. Is that fair to say?

21 MR. CHERUVU: That's not the entire standard, Your
22 Honor.

23 THE COURT: Right.

24 MR. CHERUVU: The standard also talks about a
25 material distinction between the claims and whether these

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1 distinctions between the claims are actually material to the
2 eligibility analysis. The burden to show that is on Cisco and
3 they simply have not done that here. Instead, their arguments
4 are entirely conclusory.

5 If you look at slide 17, all they say about these issues
6 is the other independent claims are substantially similar and
7 linked to the same abstract idea, which is what Your Honor
8 pointed out is standard, and they haven't provided any
9 evidence of this.

10:29:59

10 Likewise, on slide 18, all they say about the dependent
11 claims is these claims are all linked to the same abstract
12 idea of prioritizing information based on bandwidth. Again,
13 there's no evidence here; no explanation of how these
14 distinctive limitations are not material to the eligibility
15 analysis. They simply have not done that work, and the burden
16 is on them at the Rule 12 stage to explain each step.

17 And because they've failed to explain how each claim
18 is -- how the --

10:30:27

19 THE COURT: Well, maybe we -- let's just -- let me
20 work through this with you for a second just to -- so you can
21 tell me how it is there's some major material distinction.

22 I'm looking at claim 6, and it is a method claim, but it
23 discusses transmitting video signals, the method comprising,
24 receiving a layered video data stream comprising a base layer
25 and a set of enhancement layers, identifying bandwidth-limited

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10:30:58 1 conditions of an internet protocol network between a video
2 router and a plurality of video receivers, forwarding the base
3 layer to at least two of the plurality of video receivers via
4 the internet protocol network, and selectively forwarding one
5 or more of the set of enhancement layers but fewer than all
6 the set of enhancement layers to at least two of the plurality
7 of video receivers through the internet protocol network based
8 upon the identified bandwidth limited conditions wherein the
9 layered video data stream is transmitted according to an

10:31:30 10 internet protocol and wherein each layer of the layered video
11 data stream comprises data packets, each of which is encoded
12 with a sequence number and a layer identifier, and wherein the
13 layer identifier for each data packet is based upon a layer to
14 which the packet belongs. That's the entirety of claim 6.

15 So what about that is -- is there a material difference
16 or something that isn't substantially similar to the other
17 claims? You can pick any of this other ones that you want to
10:31:59 18 use as an example, but I guess -- I understand that that one
19 is -- it's a method, so it's rather comprehensively working
20 through what all is going to happen with this invention, but
21 maybe you can help me out on why that is not substantially
22 similar to these other -- to another claim, because I'm not
23 sure I see that.

24 MR. CHERUVU: Certainly, Your Honor.

25 Let me direct Your Honor's attention to, for example,

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10:32:29 1 dependent claims 2, 7, and 12.

2 THE COURT: All right.

3 MR. CHERUVU: There is nothing in claim 6 that
4 corresponds to --

5 THE COURT: We can start with 2.

6 MR. CHERUVU: Yes, Your Honor.

7 THE COURT: So that references a video router in
8 claim 1. Claim 6 also references a video router. It says,
9 "wherein the video router further selectively forwards one or
10 more of the set of enhancement layers based on video
11 processing capabilities of the video receiver." And it's --
12 claim 6 talks about also selectively forwarding one or more of
13 the set of enhancement layers based on bandwidth-limited
14 conditions.

15 So is there a particular part of claim 2 that you think
16 is materially different than what's included in claim 6?

17 MR. CHERUVU: Yes, Your Honor.

10:33:28 18 And let me clarify that -- we can discuss claim 7 because
19 it depends directly from claim 6.

20 THE COURT: All right.

21 MR. CHERUVU: So claim 7 here recites that the
22 selectively forwarding happens based on video processing
23 capabilities of the video receiver. And when you compare this
24 specific limitation that we've highlighted in green to the
25 language of claim 6 on slide 11, there is nothing in claim 6

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1 that recites anything about video processing capabilities of
2 the video receiver. At best, claim 6 recites that the
3 selectively forwarding is based upon the identified
4 bandwidth-limited conditions. And that element in claim 7,
5 which is the video processing capabilities of the video
6 receiver, is the material distinction here that Cisco has not
7 addressed.

8 THE COURT: So let me ask you, what is a
9 representative claim here?

10 MR. CHERUVU: Are you asking what is --

10:34:29

11 THE COURT: Yeah. Is there a claim that you think
12 is a representative claim here?

13 MR. CHERUVU: We do not believe so, Your Honor.
14 We believe that Cisco had the burden to show that there was a
15 representative claim; otherwise, they should have analyzed
16 eligibility for every single claim of the patent. We simply
17 don't believe that they've met this standard here.

18 THE COURT: All right. So my question is you don't
19 believe any of these claims are -- there isn't any claim we
20 could pull out, whether it's 1 or 11 or another one, that is
21 representative of the claims?

10:35:00

22 MR. CHERUVU: We don't believe that there is a
23 single claim that is representative of all the claims. That
24 includes the dependent claims, Your Honor.

25 THE COURT: All right.

1 MR. CHERUVU: At best, we can see Cisco's argument
2 as seeking to write out the limitations that make claims 1 and
3 11 distinctive, which is these elements of the video router
4 and the scalable video coding router. At best we can see that
5 Cisco is trying to read these limitations out. But other than
10:35:29 6 that, we don't see any representative claim here.

7 THE COURT: All right. You can proceed with the
8 rest of your presentation.

10:35:57 9 MR. CHERUVU: Turning to the Step 1 analysis under
10 Alice, and here I'm talking about slide 25, Cisco's -- makes
11 -- Cisco's argument includes two fundamental errors. The
12 first error is they clearly violate Federal Circuit guidance
13 that the claim must be considered as a whole in the Alice Step
10:36:28 14 1 analysis, and they failed to do that. Their excuses for not
15 doing that are simply not credible, and legally erroneous.
16 We'll get to that.

17 The next flawed approach that Cisco takes is in asserting
18 that the claimed improvements to technology are simply
19 conventional. Now, I know that Cisco has cited a couple of
10:36:56 20 cases showing that conventionality is an acceptable way of
21 analyzing the claim at Step 1, but we've also cited more
22 recent cases in our briefing that conventionality is not a
23 step for analysis at Step 1. And this comes from Alice and
24 we'll cover that, too.

25 Cisco also seeks to compare the claims of the '372 Patent

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10:37:29 1 to other carefully chosen claims from other cases. But even
2 there their comparisons fail because there are better claims
3 that are more recent that were found not eligible, and we'll
4 get to that, too.

5 Turning to slide 26, the Federal Circuit has clearly
6 stated, as we explained in our briefing, that the character
7 of the claim must be considered as a whole in the Step 1
8 analysis.

10:37:56 9 Turning to slide 27 now, what we understand from Cisco's
10 alleged abstract idea is at best they are focusing on the two
11 features that we've identified in orange and in blue on slide
12 27. We understand Cisco's argument as saying that the
13 selectively-forwarding step is -- can be abstracted to mean
14 prioritizing information, and we also understand Cisco's
15 argument regarding the identifying bandwidth-limited
10:38:30 16 conditions as referring to the based-on-bandwidth portion of
17 their alleged abstract idea.

18 But turning to slide 28, we've clearly highlighted all of
19 the other elements of the claim that they're leaving out. As
20 you can see, we've highlighted in red a substantial portion of
21 the claim that Cisco has not even considered in their abstract
10:38:55 22 idea analysis. We pointed out this fact in our opposition,
23 and in their reply all they say is that these other elements
24 were simply conventional.

25 THE COURT: Well, let me ask you about that, because

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1 it was part of your friend on the other side's presentation to
2 say that what I'm going to call this multicast session,
10:39:26 3 because that's a term that appears, including in this file
4 history, the provisional application, that there was already
5 out there, so-to-speak, an invention of a layered multicast
6 session where you had layers of, if you will, data,
7 information that would be getting transmitted in such a manner
10:39:58 8 that it could be received--however you want to put it--on a
9 prioritized basis to receivers, some of which would get maybe
10 just one layer, some of which would get more than one layer.
11 According to Cisco, this was already out there at the time
12 that the provisional application was submitted, and that,
10:40:27 13 therefore, what we have ultimately in this patent is something
14 that is the same type of invention.

15 And so maybe you can -- you've pulled up the screen that
16 talks about -- that I think is from that '601 provisional that
17 includes, I suppose, some of these other -- I'm just going --
18 I don't know if we want to call them technologies, the
19 Scattercast, Narada, TrafficCore, Overcast, et cetera, and it
10:41:00 20 talks about Terracast. And I think in your written filings
21 you did talk about how Terracast was different, so maybe you
22 can elaborate on that.

23 MR. CHERUVU: Yes, Your Honor.

24 One key issue that -- one key area that we notice Cisco
25 has made is they've selectively quoted paragraphs from the

10:41:28

1 inventor in the provisional, and, in fact, if you look just
2 two or three lines further down from what Cisco has quoted,
3 you can see that the inventor has characterized his invention
4 as something called Terracast, which, as we point out, was a
5 precursor to the claimed inventions.

10:41:58

6 And on slide 58, the inventor has pointed out that
7 although Terracast has many similarities with existing
8 solutions--in other words, conventional solutions, its
9 specific focus on scalability and live data lead to a design
10 that distinguishes itself from related work. So the inventor
11 has explained in great detail why his invention was not
12 conventional. And Cisco has simply overlooked all of this.
13 Instead, they focus on the part that's highlighted in yellow.

10:42:28

14 And the same thing is shown on slide 59 where the
15 inventor goes on to explain additional features of Terracast
16 that made it unconventional and distinguished it from the then
17 existing technologies. Specifically, on slide 59 the inventor
18 says, "An enhanced form of layered multicast." So, in other
19 words, it's different from the conventional type of layered
20 multicast that Your Honor was referring to. This enhanced
21 form of layered multicast can guarantee complete delivery for
22 certain layers to avoid random loss altogether, making it
23 suitable, for example, for market data.

24 THE COURT: All right. I read all that. I'm --
25 I've read all that, but all that sounds like results. All

10:42:57

1 that sounds like descriptors--this is enhanced, and the
2 result--this ensures X result. What I'd like to see if you
3 can point me to is the part that says how Terracast, which is,
4 I suppose, the precursor for this invention, how it does that.
5 How is it enhanced? What is it doing that is some
6 improvement; not telling me here's the result of what
7 Terracast or this invention is going to do, but how or why
8 this is enhanced or this is different.

10:43:28

9 MR. CHERUVU: Certainly, Your Honor.
10 Let me direct Your Honor's attention, then, to the
11 excerpt on slide 60 of our deck where one of the
12 unconventional features that the inventor describes is that
13 Terracast uses layered multicast in combination with a
14 scalable selective packet retransmission mechanism to offer a
15 service that can provide additional benefits. So the how that
16 Your Honor was asking about is in this concept of selective
17 packet retransmission mechanism.

10:43:56

18 THE COURT: So let me ask you, where does that
19 appear in the claims for this invention?

20 MR. CHERUVU: The selective forwarding --

21 THE COURT: The selective packet retransmission that
22 you're saying is what's new and improved, does that appear in
23 the claims in this invention?

24 MR. CHERUVU: Yes, Your Honor, it does. It's the
25 selectively-forwarding limitation of claim 6 that is

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10:44:20 1 conventional. I can pull it up on the slide in a minute here.
2 But Your Honor has seen the selectively-forwarding limitation,
3 and that's the limitation we believe was unconventional. And
4 then the inventor explains why in the provisional and our
5 expert has elaborated on why this particular feature was, in
6 fact, unconventional.

7 THE COURT: Can you elaborate?

10:45:02 8 MR. CHERUVU: Yes, Your Honor.

9 As our expert has explained, in the then conventional
10 technology, packet forwarding was --

11 THE COURT: Well, I mean, you can cite to your
12 expert, but what would be better is if you could cite to
13 something that's in the specification and the claims that
14 indicates how it's an improvement; something in the intrinsic
15 evidence, not your expert's declaration.

16 MR. CHERUVU: Yes, Your Honor.

17 And here I will point you to our slide No. 42 where we
10:45:57 18 cite the portions of the specification that actually teach and
19 describe these unconventional improvements to technology.
20 Specifically, slide 42 cites our opposition brief at pages 15
21 to 16, and in the quoted paragraph we highlight several
22 different sections of the specification that refer to how
23 selectively forwarding is performed and why it was an
24 improvement to the conventional technology.

10:46:33 25 And if Your Honor wishes, I can go in detail on each of

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1 those cited portions of the specification and explain why each
2 of these features was unconventional.

3 THE COURT: That might be helpful. Go ahead.

4 MR. CHERUVU: Yes, Your Honor. Let me grab my
5 notes.

10:47:11 6 In columns 21:25 to 22:5, the specification talks about
7 labeling packets with priority values and ensuring that in
8 congested networks only the highest priority packets are
10:47:27 9 transmitted. This selective-forwarding scheme prevents
10 network congestion from affecting all receivers and ensures
11 that essential information reaches applications without
12 significant delay or packet loss.

13 We go on to cite column 28, lines 37 to 52, and in those
14 lines the specification talks about scenarios where layered
15 multicast is employed and the system employs--excuse me--the
10:47:58 16 system intelligently applies packet recovery only to layers
17 that the current bandwidth can support. Receivers are
18 informed about network capacity, allowing them to decide which
19 layers are reliable for recovery.

20 The -- each packet contains -- carries causality
21 information, including the sequence numbers of it layer,
22 enabling the receiver to maintain the correct order of
23 delivery. And this structured approach to multicast data
24 enhances reliability and efficiency and ensures the packets
10:48:26 25 are delivered in the coherent manner without overwhelming

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1 network resources.

2 Similarly, in column 29 there's a description of how the
3 router uses timeout intervals, out of order delivery, packet
4 monitoring, and packet arrival histories, and maintains a
5 moving average of packet arrival histories to assess reception
6 quality and use a reliable layer list to decide what layers to
10:48:57 7 selectively forward to the receiver at what times, depending
8 on bandwidth limited conditions.

9 In columns 33, line 7 to 19 and columns 34, lines 28 to
10 44, the specification talks about a layered thinning algorithm
11 where the algorithm -- where each layer of the algorithm
12 corresponds to a stream layer with slots for symbols that can
10:49:25 13 store multiple updates. The router uses this pending
14 algorithm to decide what layers to forward to each receiver
15 based on network conditions.

16 Lines--excuse me--column 34, lines 28 to 44 describe
17 using token positions that lead to -- using token positions
18 where the router can detect older updates -- when older
19 updates are delayed longer than newer ones, and then uses a
10:49:57 20 labeling mechanism for incoming updates, so sequential numbers
21 to track their order.

22 In other words, -- I think I've covered --

23 THE COURT: Let me ask you a question.

24 MR. CHERUVU: Sure.

25 THE COURT: Can you distinguish for me what's going

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10:50:26

1 on, for example, in claim 1--it's also in claim 6--but claim
2 11 where all of those have the terminology that you were
3 referencing earlier of selectively-forwarding enhancement
4 layers. Right? And they are talking about according to an
5 internet protocol or selectively forwarding based on
6 identified bandwidth-limited conditions.

10:50:57

7 Some of the other claims you referenced, like the
8 dependent claims, reference selectively forwarding one or more
9 sets of enhancements based on a request for retransmission.
10 And I believe that initially that selectively forwarding,
11 going back to Terracast, talked about retransmission.

12 So here you have some claims that talk about transmission
13 or selectively forwarding, and then you have another one that
14 references selectively forwarding in the context of
15 retransmission.

16 MR. CHERUVU: Yes, Your Honor.

10:51:30

17 And that's a good point, because Your Honor has
18 identified exactly one of the material differences between
19 the dependent claim that recites selective -- retransmission
20 and the independent claim that does not.

21 I -- as we explained in our briefing, and even more so
22 in our claim construction briefing, using this retransmission
23 mechanism is simply one way by which the video router can
24 identify bandwidth-limited conditions and decide what layers
25 to selectively forward to each receiver. And as the inventor

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10:51:55 1 pointed out in his provisional, this was an unconventional
2 feature and this was an improvement to technology.

3 THE COURT: So in terms of the distinction that
4 you're talking about between, for example, let's say this part
5 of claim 1 that talks about selectively forwarding but doesn't
6 have the word 'retransmission' and claim 4 that does have
7 retransmission, I note that in claim 4 it talks about the
10:52:27 8 selectively forwarding of one or more sets of enhancement
9 layers based on a request for retransmission of one or more
10 packets from the layered video. Where is that request coming
11 from? Is that meant to come from a receiver or -- where is
12 the request coming from?

13 MR. CHERUVU: Yes, Your Honor.

14 The request for retransmission is coming from the
15 receiver, as the specification describes in these lines
16 that we cited on slide 42.

17 THE COURT: So help me out with this. So is, then,
10:52:58 18 claim 1 talking about the router forwarding -- there's not any
19 request coming from a receiver; the router is itself
20 selectively forwarding based on its own algorithm. There's no
21 retransmission request in that?

22 MR. CHERUVU: No, that's not quite accurate, Your
23 Honor. Claim 1 recites that the router identifies
24 bandwidth-limited conditions and selectively forwards based on
25 the identified bandwidth-limited conditions. As we explained

10:53:26 1 in our claim construction briefing, receiving a request for a
2 retransmission shows the router that there was a
3 bandwidth-limited condition on the path -- in the path between
4 the router and that particular receiver. In other words, the
5 only way --

6 THE COURT: Well, is there a reason that claim 1
7 doesn't talk about a request for retransmission? Some of
8 these other claims have that reference and some of them don't,
9 and so I'm trying to determine why some of them do and why
10 some of them don't when they talk about selective forwarding.

10:53:59 11 Maybe you can just bring me right to that point.

12 MR. CHERUVU: Yes, Your Honor.

13 Using a request for retransmission to selectively forward
14 is simply one way of selectively forwarding and simply one way
15 of identifying a bandwidth-limited condition. In that sense
16 these dependent claims are narrower than the independent
17 claims because they specifically focus on the request for
18 retransmission. While the independent claim --

19 THE COURT: All right. So then tell me -- I hear
20 your point about those claims are narrower, so tell me about
10:54:29 21 the other ways, then, that are contemplated, for example, in
22 claim 1, the other ways of selective forwarding. And I
23 apologize this is something you already talked about, but I
24 just want to focus on this point.

25 MR. CHERUVU: No, Your Honor. I'm happy to focus on

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1 that some more.

2 Staying on slide 42, I'm quoting from our brief where we
3 cited portions of the specification that relate to real-time
4 bandwidth monitoring, quality and reliability assessment using
10:54:56 5 a packet arrival history. And No. 3 is a moving average
6 calculation is packet loss over time. And No. 4 is the
7 scenario that Your Honor described, which is retransmission
8 requests and responses. And No. 5 is priority and ordering
9 considerations.

10 So the specification teaches several different algorithms
11 and several different methods by which the router identifies
12 bandwidth-limited conditions and selectively forwards based on
13 the identified bandwidth-limited conditions. Retransmission
10:55:24 14 requests are simply one way or doing it, and our argument that
15 we elaborated on -- that we made here in this brief but
16 elaborated on even more in our claim construction briefing is
17 that receiving a request for retransmission is one way to
18 inform -- is one way for the receiver to inform the router
19 that there was some issue receiving certain packets and the
20 receiver would like some packets to be received again, either
21 because it's missing actual content or it's missing quality
22 information or timing information.

10:55:59 23 THE COURT: So what you're saying is under claim 1
24 -- just, for example, under claim 1, then the router itself is
25 also -- when it's selectively forwarding is sending packets --

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1 let's -- I'm just saying sending packets or sending the
2 information, the data, and whether it's the base layer or
3 additional layers based on its own analysis of bandwidth
4 conditions or something like that.

5 MR. CHERUVU: Yes, Your Honor.

6 Claim 1 contemplates -- claim 1 encompasses that scenario
7 that Your Honor described, which is the router may have its
8 own way of identifying bandwidth-limited conditions. It may
10:56:30 9 also rely on feedback from the receiver, because network
10 conditions are constantly fluctuating, and the connection
11 between the router and the same receiver may change from one
12 minute to the next. So the router needs to receive this
13 feedback from the receiver, and one type of feedback that it
14 receives is a retransmission request.

15 Other types of feedback are what we identify on slide 42,
16 which is, for example, a moving average calculation of packet
17 loss over a period of time.

10:56:56 18 And again, one -- the router can identify packet loss by
19 various means, such as by receiving feedback information from
20 a receiver, and the router internally maintains an average of
21 packet loss to determine what is acceptable for the specific
22 -- for the desired quality level or the desired resolution,
23 frame rate, and so on.

24 THE COURT: Let me ask you another question that for
25 me all of this is circling around, and to ask you the

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10:57:29

1 question, I want -- I do want to reference you to something
2 that's in that provisional application. I don't know if you
3 have that to hand or if you want to grab it.

4 MR. CHERUVU: I have a hard copy, Your Honor, but
5 if --

6 THE COURT: You do?

7 MR. CHERUVU: Yes.

10:57:57

8 THE COURT: Okay. The -- what I want from you is
9 it's an illustration that appears I think on -- well, I'm
10 looking at the exhibit from -- I think this was the
11 Defendant's 12(c) motion, so it's on page 16 and it's under
12 the heading of "Unicast Routing Algorithm and Logical Address
13 Summarization." It's Illustration 4.

14 MR. CHERUVU: Let me -- if Your Honor --

15 THE COURT: Yeah. I want to give you a chance -- I
16 just want to give you a chance to -- yeah, if you want to put
17 it up, or -- I have it in front of me, so as long as you have
18 it in front of you, you don't need to worry about putting it
19 up there, but you can.

10:58:28

20 MR. CHERUVU: I did want to confirm with Your Honor
21 that this is the figure that Your Honor --

22 THE COURT: No, it's not that one. I think it's
23 just a couple of pages later. It's -- that I think is
24 illustration -- is it 3? I'm looking at illustration 4. I
25 think that one appears at page -- right. That's the one.

1 So -- and I understand this is from the provisional. So
2 part of what I'm looking at here is that, you know, part of
10:58:56 3 this -- or this illustration is showing router or routers on
4 this illustration. Is that fair? And it's showing how
5 information or data is going between routers.

6 MR. CHERUVU: Your Honor, I haven't -- I think I can
7 answer that question, but I think I may have to go outside
8 what we've argued in our briefing to --

10:59:26 9 THE COURT: Let me just cut to the chase. I want to
10 make sure I understand the technology here, because we talk
11 about a video router and it talks about a scalable video
12 coding router, and what I'm trying to figure out is is this
13 just software programming of a router that -- a particular
14 type of programming of a router, or is this actually some sort
15 of a different actual -- the hardware, is this a different
10:59:57 16 type of router? In other words, is this just something saying
17 here is what routers were doing before--we have a software;
18 we're going to program them to do these other things that's
19 going to allow for scalable video coding.

20 MR. CHERUVU: If Your Honor would give me a couple
21 of minutes to look at this paragraph, I can answer your
22 question better.

23 THE COURT: Sure.

11:00:19 24 (Pause in proceedings.)

11:01:29 25 MR. CHERUVU: Your Honor, I think this disclosure is

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11:01:32 1 most directly related to columns 7 through 19 of the patent
2 specification itself. And let me elaborate on what I mean by
3 that.

4 Columns 7 through 19 of the patent specification describe
5 addressing mechanisms for how routers work in general. In
6 other words, the specification and the provisional and the
7 inventor's descriptions with these diagrams relate to, for
11:02:27 8 example, different ways of addressing nodes on a network. And
9 specifically these nodes in Figure 4, the A, B, C, D, and E,
10 are described specifically as nodes. So they could be
11 routers, they could be receivers.

12 More generally, the addressing mechanism that a router
13 uses to address a plurality of receivers on a network can
11:03:00 14 include various mechanisms such as address summarization, as
15 it's described in column 12 of the patent --

16 THE COURT: Well, maybe you're getting to the point
17 that I'd like to clarify, but it's really just -- the question
18 really just boils down to whether the invention here is simply
11:03:28 19 programming it's software, it's an algorithm that you're
20 putting on to a router, any -- a router that would have
21 functioned in a different way before, or whether or not
22 there's something about the router itself that's different.
23 In other words, this term 'video router', 'video stream', is
24 there something about the router that's different from a
25 conventional router, or is it just the programming of that

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1 router that you're -- or the software that you're using on it,
2 the algorithm. Do you see what I'm saying?

11:03:58 3 MR. CHERUVU: Yes, Your Honor. I think I understand
4 Your Honor's question.

5 THE COURT: I mean, what do those terms mean? I
6 mean, do they mean something different than if we -- in other
7 words, do we need to say 'video router' or 'scalable', or just
8 say router with this software or this programming on it?

9 MR. CHERUVU: No, Your Honor. The answer to that
10 latter question is no.

11 Our expert has explained in great detail in his
11:04:27 12 declaration why the use of a video router specifically was an
13 unconventional improvement to technology. Our expert points
14 out specifically that in the prior art -- or in the
15 conventional routing art, routers used the OSI layer 3
16 mechanism where they would simply forward packets without
11:04:52 17 examining the contents of those packets, and, as a result,
18 packet loss was random, the router could not intelligently
19 forward specific packets based on other requirements, and this
20 led to data corruption and increased congestion, increased
21 overhead, and a loss in the quality of the streaming video
22 that the receiver received.

23 In contrast, the inventive video router that is claimed
11:05:26 24 in claims 1 and 11 and also in claim 6 uses the OSI layer 7
25 where -- or the application layer, as the specification refers

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1 to it, where the router is able to examine the contents of the
2 packet itself to determine what packets to forward to what
3 receiver and when and depending on what conditions.

4 So it is that additional layer -- or should I say
5 additional step or additional capability of examining the
11:05:59 6 contents of the packets to determine how to route them that
7 was inventive here.

8 And for that I will cite--excuse me--I'll direct Your
9 Honor to slides 52 through slide 54 where our expert has
11:06:30 10 opined on why specifically the use of a video router was
11 inventive and unconventional when compared to prior routing
12 technology.

13 And if you look, for example, at --

14 THE COURT: Is there something in the intrinsic
15 evidence that says that? I know you're referring to your
16 expert. Is there something in intrinsic evidence that shows
17 that that's not just the result.

18 MR. CHERUVU: Yes, Your Honor.

11:06:56 19 The specification itself refers to the concept of the
20 application layer. So the specification contemplates that all
21 of these claimed functionalities -- or all of these
22 unconventional are functionalities or -- and algorithms are
23 being implemented at the OSI application layer. And our
24 expert takes that in context and contrasts it with OSI layer 3
25 to explain why the specification's use of the application

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11:07:24 1 layer was itself inventive.

2 THE COURT: Just so I can close the circle on this,
3 you and I agree that the router itself is a -- it's a physical
4 piece of equipment. Right? It's an apparatus.

5 MR. CHERUVU: Yes, it's an apparatus. It can be --
6 the specification has some disclosure about software routers,
7 but Your Honor is right--it's an apparatus.

8 THE COURT: So the video router is not a different
9 type of piece of equipment itself, is it?

10 MR. CHERUVU: It could be, Your Honor. It could be
11:07:59 11 a different -- a specifically-designed piece of hardware that
12 all it processes is video.

13 THE COURT: Well, I don't see that in the
14 specifications. I mean, what I -- what it sounds like is
15 that it's programming of a router to do these functions.

16 MR. CHERUVU: The specification does not exclude
17 hardware video routers, as Your Honor was asking about. The
11:08:28 18 specification acknowledges that --

19 THE COURT: Well, let me put it this way. Other
20 than simply saying the term 'video router' or 'scalable video
21 coding router', there's nothing said about the router itself,
22 the piece of equipment of how it -- the router itself is
23 different, improved; it's about how -- it sounds to me like
24 it's how it's programmed, but maybe you can -- maybe I'm

11:08:55 25 missing something, because -- and the reason I say that is,

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1 you know, in looking through all the 34 columns of this and a
2 lot of the descriptions that you've talked about and that I've
3 reviewed in the patent, it sounds like to me it is talking
4 about algorithms, it is talking to me about how the router is
5 programmed to operate. And I didn't see anything about -- I
6 don't recall seeing anything that said this is also just a --
7 you know, this piece of equipment itself has some sort of
11:09:29 8 enhanced feature, capability, something else.

9 MR. CHERUVU: I have two responses to that point,
10 Your Honor.

11 The first response is -- if you turn to slide 64, we have
12 a reproduction of Illustration 6 from the provisional
11:09:59 13 application where the inventor has a detailed diagram of what
14 the router looks like. And if you read the inventor's
15 description of Illustration 6 where he explained what exactly
16 this router kernel is, what the ROLM is, and the exemplary
17 components we described in our briefing were this concept of
11:10:26 18 the PRI and the CCI. The CCI stands for the congestion
19 control interceptor, and the PRI stands for packet
20 retransmission interceptor. So the inventor has gone into
21 great detail on the design of this router, which is consistent
22 with Illustration 6 in the provisional.

23 And Figure 2 in the patent provides further description
11:10:55 24 on what the router actually looks like. I have not excerpted
25 Figure 2 from -- in our deck, but if Your Honor has a copy of

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1 figure 2 in front of you.

2 THE COURT: I've got the patent here.

3 MR. CHERUVU: Figure 2 of the patent also describes
4 the architecture of a router, and in Figure 2 the inventor
5 clarifies that -- Figure 2 describes the architecture and
6 operation of an overlay multicast system's router demon which
11:11:29 7 manages data, packet forwarding, and routing. The router's
8 core component is the kernel which handles packet switching,
9 and it also includes various interface modules using PCP
10 connections, it uses routing tables. And then it goes -- the
11 specification goes on from there to talk about address
12 summarization and routing tables and the like.

13 My point is both Illustration 6 in the provisional and
11:11:56 14 Figure 2 of the patent demonstrate that the inventor certainly
15 contemplated that a video router can be a piece of hardware
16 equipment.

17 THE COURT: You know, I guess on the provisional I
18 have a different -- I'm not sure which document you're working
19 off of, but that slide, do you know which document in the
20 electronic records -- the reason I ask that is that the
11:12:27 21 provisional one I have Illustration 6 looks different, so I
22 wonder if it's a different illustration number than the one I
23 have.

24 MR. CHERUVU: Yes, Your Honor.

25 I'm pointing to -- I apologize. The citation is cut off

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1 by the bottom -- it's at the bottom of this slide where it's
2 Docket --

3 THE COURT: Docket 44-2. Huh. That's the same one
4 that I have, but maybe it's --

5 MR. CHERUVU: And I'm looking at page 110 of the --

6 THE COURT: Page 110. Okay. All right. Well,
11:12:59 7 we'll figure it out. We'll find it.

8 MR. CHERUVU: Yeah. I don't know if that answers
9 Your Honor's question. But the point I wanted to get to is
10 that these various disclosures in the provisional and the
11 corresponding disclosures in the patent specification
12 certainly demonstrate that the inventor viewed the design
13 of the hardware router as falling within the scope of these
14 claims.

11:13:27 15 THE COURT: So there's a lot of references in --
16 including in your expert's submission but also elsewhere to
17 this particular -- I'm thinking of it as a scalable video
18 coding standard, H.264 scalable video coding standard. You
19 know what I'm --

20 MR. CHERUVU: Yes, Your Honor.

21 THE COURT: Obviously you're very familiar with it.

22 I mean, would it be fair to say that is the substance of
23 what you're saying is being infringed--that your client
11:13:59 24 invented that standard and that's what's being infringed here?

25 MR. CHERUVU: No, Your Honor. That's not what we're

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1 saying.

2 What the patent is actually directed to is not the H.264
3 SVC standard; instead, the patent is directed to this improved
4 layered multicast approach -- layered multicast and routing
11:14:25 5 approach. The annex G of the H.264 that we are accusing of
6 infringement came after our patent disclosure. In other
7 words, the teachings of our patent and the claimed inventions
8 were subsequently standardized by the H.264 SVC standard, so
9 our patent cannot be directed to --

10 THE COURT: And that's -- and you're kind of
11 getting -- you are getting my point. But thank you; you
12 answered a question that I think I knew the answer to, which
13 was did that standard or annex G particularly as being
14 referenced come after, and looking at the documents it looked
11:14:59 15 like it did, and you're saying it did come after.

16 But let me follow up on the point you just made, though.
17 It comes after, but is that standard that's being described in
18 annex G, is that essentially derived from essentially what
19 your invention is and what you're saying is being infringed,
20 or does it not entirely encompass it or encompass something
21 partially covered by the invention?

11:15:29 22 MR. CHERUVU: We have not taken a position on that
23 specific question, Your Honor. That's something we'd have to
24 consider a little more in consultation with our expert.

25 THE COURT: All right. Did you have anything else

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1 you wanted to say at the moment?

2 MR. CHERUVU: If Your Honor wants to -- if Your
3 Honor would like me to proceed on the Step 1 and Step 2
4 analysis, I have a couple of key arguments.

5 THE COURT: Yeah. You can proceed on -- and say
6 anything else you want to on Step 1 and Step 2.

7 MR. CHERUVU: Thank you, Your Honor.

11:16:09 8 Now, one of the approaches that Cisco is -- has been
9 taking in their motion is to compare the claims of the '372
10 Patent to claims that were found eligible or ineligible in
11 previous cases, but what better case to compare it to than a
12 case that came out just a month ago? And here on slide 36 of
11:16:28 13 our deck, we've highlighted using different color-coding --

14 THE COURT: Is this *Contour*? Is this the *Contour*
15 case?

16 MR. CHERUVU: Yes, Your Honor, it is.

17 THE COURT: All right.

18 MR. CHERUVU: I apologize, again. The resolution
19 is -- yes, Your Honor.

20 THE COURT: I mean, so I'm very familiar with
21 *Contour*, so maybe -- you can make your points maybe through a
22 couple of questions I have for you on *Contour*.

23 MR. CHERUVU: Certainly, Your Honor.

11:16:59 24 THE COURT: And I want to make sure I understand,
25 you know, where your case is on all fours or close to all

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1 fours, which I take it is your client's belief.

2 So in *Contour* you have -- I guess this is a POV camera,
3 and the invention, at least in part--let me just say in
11:17:25 4 critical part here--is that it's going to provide two
5 different video streams in parallel. One is lower quality;
6 one is higher quality. And the Court -- the claim
7 construction was that the generation of those two -- basically
8 the lower quality and higher quality video streams, that they
9 were done in parallel, and because that was the claim
10 construction that they were done in parallel, that, therefore,
11 the district court's decision that failed under *Alice* needed
11:17:58 12 to be overturned because this was actually a technological
13 improvement, and in that sense it distinguished it from the *Yu*
14 case. Right? Does that sound correct?

15 MR. CHERUVU: That's fair, Your Honor, yes.

16 THE COURT: I note that in -- you know, in that
17 case, though, you know, in the *Contour* case you have claims
18 that are very descriptive, very precise about that invention.
19 I mean, there it's a pretty detailed claim description that
11:18:30 20 goes through generating video image data, a first data image
21 stream and a second image data stream, wherein the second
22 image data stream is a higher quality than the first image
23 data streams, et cetera, et cetera, et cetera. It's very
24 detailed when you compare it to the Court's conclusion. So,
25 you know, the Federal Circuit is able to point to the exact

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1 language in the claim that it is concluding absolutely passes
2 the *Alice* test.

11:19:00

3 And so when I read *Contour*, the question I wanted to ask
4 you is let -- take your claim language here, or whatever
5 language you want to say, and say this is the language that
6 puts it in the same category as *Contour*.

7 MR. CHERUVU: Yes, Your Honor.

8 And on slide 36, we've actually highlighted in different
9 colors what the specific limitations --

10 THE COURT: It's a lot of colors.

11:19:29

11 MR. CHEVURU: --of our claim that we believe are
12 more analogous -- I apologize if the distinction --

13 THE COURT: No, no, no; it's not. I'm impressed
14 that there are that many colors there. You can proceed.

15 MR. CHERUVU: The fact that we were able to identify
16 analogous limitations to the *Contour* case to almost every
17 limitation of our claim actually says something.

18 For one, it shows that *Contour* is a much more analogous
19 case to our patent than the cases that Cisco has cited. And
20 let me go into that in a little more detail.

11:19:59

21 For the first limitation, which is -- of our patent which
22 is "receiving the layered video data stream comprising a base
23 layer and a set of enhancement layers," this is analogous, as
24 Your Honor recognized, to an image sensor configured to
25 capture light propagating through a lens and representing a

1 scene and produce real-time video image data of the scene.

2 The *Contour* claim also recited, "receiving control
3 signals or data signals by a wireless data transmission," and
11:20:28 4 further in the claim it recites "adjusting one or more
5 settings of the video camera based, at least in part, on a
6 portion of the control signals received from the personal
7 portable computing device."

8 And this is directly on point to what our claim is doing
9 where the video router identifies bandwidth-limited conditions
10 between a video router and a plurality of video receivers, and
11 based upon those identified bandwidth-limited conditions takes
12 further action.

13 And even the further action that the -- our claimed
11:20:59 14 router takes is analogous to the further action that is
15 recited in *Contour*. And specifically, the *Contour* claim talks
16 about "generating from the video image data a first image
17 stream and a second image data stream where the second image
18 data stream is a higher quality than the first image data
19 stream." And this is, again, right on point with the
20 teachings of an enhancement layer in our patent.

21 The whole point of using enhancement layers is that you
22 could have different streams of different qualities, and
11:21:27 23 depending on the receiver's capabilities and depending on the
24 network bandwidth, you forward one or more of those.

25 And similarly, the last --

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1 THE COURT: So I do note you're using claim 6 here
2 as one that should be compared to the *Contour* case. Correct?

3 MR. CHERUVU: Yes, Your Honor.

4 And this is not an acknowledgement from us that claim 6
5 is representative. What we were doing is we were trying to
6 contrast Cisco's comparison of claim 6 with other cases to
11:21:57 7 Cisco's to compare -- a comparison of claim 6 with the more
8 analogous case.

9 THE COURT: All right. If the Court were to be
10 persuaded that, generally speaking, this technology, if you
11 will, this invention of saying -- of sending layers of data
12 based on -- whether we want to call it bandwidth limitations
13 or limitations of particular receivers, was an existing
11:22:28 14 technology, assume with me that that scenario where the Court
15 is viewing that as not the invention, then of this can you
16 tell me what part of the invention here, then, is left that we
17 can compare to *Contour*?

18 Do you see what I'm saying? If you presume with me that
11:22:54 19 the technology existed of a router sending layers of
20 information--and your friends would say prioritizing
21 information--but let's just say sending layers of information
22 based on bandwidth or other limitations, limitations that the
23 receiver, limitations of bandwidth, if we assume that
24 technology existed, then what part of this is the invention
25 that compares to *Contour*?

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1 MR. CHERUVU: Your Honor, I would push back on that
2 assumption. And it appears as if some of the issues that Your
11:23:27 3 Honor is bringing up are more accurately the subject of a
4 § 102 or § 103 argument. But that aside, for § 101 purposes,
5 the inquiry is whether the claim as a whole is directed to
6 improvements to technology. And here we have to look at the
7 claim as a whole.

8 So it's not just the selectively forwarding step that
9 Your Honor was alluding to; it's all these other steps, which
10 is, for example, each layer of the layered video data stream
11:23:57 11 comprises data packets encoded with a sequence number and a
12 layer identifier. This particular mechanism is what the
13 router uses to selective forward. So the router may use a
14 sequence number or a layer identifier in its determination of
15 how to selectively forward.

16 In other words, the claim when viewed as a whole, as it
17 must be under Federal Circuit law, is directed to improvements
18 to routing technology or video streaming technology. To the
11:24:30 19 extent you can isolate out different elements of the claim and
20 say this was known, this was conventional, this was obviously,
21 we note that Cisco has filed an IPR petition at the PTAB where
22 these issues of § 102 and § 103 will come up, but we don't
23 believe that that's a question for § 101 purposes, and
24 specifically at the Rule 12 stage, because there are disputed
25 factual issues on --

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11:24:58

1 THE PANEL MEMBER: Well, do you disagree with your
2 friend on the other side that the conventional aspect of this
3 is part of the analysis for *Alice* at both Step 1 and Step 2?

4 MR. CHERUVU: Yes, Your Honor, we do. And as --

5 THE COURT: That's what my question is going to.

6 MR. CHERUVU: Got it.

7 THE COURT: You and I can agree that that is an
8 *Alice* question.

9 MR. CHERUVU: No. I misunderstood Your Honor's
10 question. We disagree that it's a Step 1 question.

11:25:27

11 THE COURT: I suppose -- I could have used the word
12 'conventional', but that's what I meant. What I meant was if
13 you presume with me that those parts of it, just the idea of a
14 router, you know, sending base layers, enhancement layers of
15 information based on whether it's bandwidth limitations,
16 receiver limitations, if that was conventional technology,
17 then what is -- if you presume with me that hypothetical--I
18 understand you don't agree with that, you know, and you've
19 made arguments as to why you don't think that's the case--but
20 hypothetically if that was conventional technology, then

11:25:56

21 what -- because I think your argument is even if I assumed
22 that, there would still be an invention here, but I may be
23 wrong about that.

24 MR. CHERUVU: Yes, Your Honor.

25 And we elaborate on this argument at our Step 2 -- in

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1 our Step 2 analysis where we explained how the use of a video
2 router to perform all these steps was itself an inventive
3 concept because, as I was explaining a few minutes ago, the
4 video router, the inventive video router specifically relies
5 on the OSI layer 7, which is the application layer, which was
6 different from what was conventional at the time of this
11:26:29 7 invention. So the use of a video router to perform all of
8 these steps as recited in the claim was the inventive concept
9 of the claims.

10 THE COURT: All right. You can continue. Thanks.

11 MR. CHERUVU: If Your Honor wishes, I can describe
12 -- I can talk some more about how the claim recites
13 improvements to technology, but I'm not sure if we've already
11:26:57 14 covered that aspect in the discussion so far.

15 THE COURT: I think you have, and you'll have a
16 chance to respond some more. I'm going to let your friend on
17 the other side, once you're done--and you may be done
18 now--once we've heard from Cisco again, I'll give you an
19 opportunity to -- for one more -- we'll call it a sur
20 rebuttal. So I don't want you to feel like this is the last
21 time you're going to get to speak on this.

11:27:30 22 MR. CHERUVU: If Your Honor will excuse me, I need
23 to get my notes.

24 THE COURT: Sure.

11:27:56 25 MR. CHERUVU: I wanted to quickly focus on slides 37

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1 onwards where we -- we've covered some of the improvements to
2 technology, but I specifically wanted to highlight for the
3 Court that each of these limitations of claim 6 was itself an
4 improvement to computer technology and video streaming
5 technology.

11:28:30 6 On slide 38, we described why receiving a layered video
7 data stream was an improvement to technology. On slide 39, we
8 described why the identifying bandwidth-limited conditions was
9 an improvement. On slide 40 we explained why the forwarding
10 the base layer and selectively forwarding one or more
11 enhancement layers was independently an improvement to routing
12 and video streaming technology. And on slide 41, we explain
13 why the last limitation of the claim regard -- that recites
14 the sequence number and layer identifier was also an
11:28:59 15 improvement to technology.

16 Taken as a whole, when you take the claim as a whole,
17 which Cisco again fails to do, all of these improvements to
18 computer technology satisfy *Alice* Step 1. At minimum, Your
19 Honor, these issues -- this raises a disputed factual issue
20 which precludes dismissal under Rule 12.

11:29:27 21 And at the Step 2 analysis, there was one point that I
22 wanted to bring up. Cisco's counsel kept saying over and over
23 again how none of the improvements that we identify in the
24 claims -- whether it's a video router or any of these other
25 features are not in the claims, and they criticize our expert

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11:30:00 1 declaration for not identifying where in the claim they
2 criticize the concepts itself. But as the Federal Circuit has
3 held in *Uniloc*--and Cisco does not agree with--excuse
4 me--Cisco does not disagree with this holding in
5 *Uniloc*--claims need not articulate the advantages of the
6 claimed combinations to be eligible, and the Court there went
7 on to explain why.

8 And as the Federal -- as this case confirms, the
11:30:30 9 advantages can be found elsewhere in the evidence, as they are
10 here, specifically in our complaint, in the specification, in
11 the provisional, and to the extent the Court considers our
12 expert declaration in the expert declaration as well. So we
13 think that Cisco is just wrong in the law regarding whether
14 something is or is not in the claims.

15 THE COURT: Let me ask you a question, coming back
11:30:54 16 to this issue of 'video router' and--I'm sorry--in the claims.
17 Claim 11 is 'scalable video coding router'. Do those terms
18 appear anywhere in the specification?

19 MR. CHERUVU: We don't believe so, Your Honor. The
20 specification talks about --

21 THE COURT: So when we're talking about the
22 advantages that comes from a video router or the scalable
23 video coding router and we're looking at intrinsic evidence to
24 support, you know, what that is, I mean, if those terms don't
11:31:29 25 appear in the specifications at all--in other words, those

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1 particular terms--is there another term that you think goes to
2 that in the specifications, which is the description of what
3 the invention's doing.

4 MR. CHERUVU: Yes, Your Honor.

5 The specification does talk about routers and software
6 router demons, for example. The specification also talks
7 about the fact that these routers operate at the OSI
11:31:59 8 application layer, which is layer 7. Based on these
9 disclosures of how the router functions and the architecture
10 of the router, as shown in figure 2 of the patent and in
11 Illustration 6 of the provisional that we discussed
12 previously, we think that a POSITA would understand that the
13 video router claimed in the claims encompasses these inventive
14 and unconventional types of routers that are described
11:32:28 15 throughout the patent.

16 THE COURT: I notice references to
17 software-implemented routers in column 3, about lines 28 to
11:32:58 18 30, and a similar reference in column 21 to software router
19 demons or priority value of a packet is relative to the stream
20 and becomes relevant when a decision to discard data at a
21 congested router is made. And I notice some other references
22 in there to software for these routers. So --

23 MR. CHERUVU: And let me specifically point Your
11:33:29 24 Honor to column 5, lines 33 to 55, where the specification
25 talks about this application layer and how the software router

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1 demons function at the OSI application layer. And this is
2 exactly the OSI layer 7 that our expert was describing in his
3 declaration.

11:34:00 4 THE COURT: Yes, I'm looking at it--that the routers
5 execute a routing algorithm that computes the shortest paths
6 that allows each router to send data packets to any other
7 router in the overlaying multicast system, as well as any
8 machine in communication with these routers.

9 I'm just looking at the references about how the routers
10 are executing this invention, and it looks like -- I see
11 algorithms, I see software repeatedly referenced. Does that
12 sound right to you?

13 MR. CHERUVU: That sounds correct, Your Honor.

11:34:23 14 But as I explained, the invention, neither the claims,
15 nor the specification, nor the provisional excludes
16 hardware routers.

17 THE COURT: I mean, at your column 5 at -- starting
18 about line 25 or 26, it says, "The system is characterized as
19 controlling two primary activities. The first activity is
20 running and managing a robust and scalable overlay network
21 that uses its own routing algorithms and supports multicast,
22 while the second activity is managing flow control and
11:34:59 23 congestion when live streams overload the network, and
24 ensuring layered multicast can be offered with guarantees."

25 So my point is just that the terminology that's -- I

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1 think is used throughout the specification and describing what
2 the routers are doing talks about software, talks about
3 algorithms. Is that a fair description?

11:35:27

4 MR. CHERUVU: That is a fair description, but again,
5 it does not exclude the possibility that these functions could
6 be performed by a dedicated hardware router. And --

7 THE COURT: Well, that's why it's interesting to me
8 that, for example, these terms don't even appear. 'Video
9 router' doesn't even appear. 'Scalable video coding router'
10 doesn't even appear. I understand the explanation -- that
11 there's some explanation of why they don't appear, but they
12 don't appear, and I don't see anything that amounts to a
13 description, you know, for example, of why it would be
14 important to call something a video router -- the scalable
15 part I understand and the coding part I understand.

11:36:00

16 But do you see my point? I mean, that -- those terms
17 appear in the claims. In the specifications they don't
18 appear, and I don't see anything descriptive of how that --
19 their -- that's an improvement other than the language about
20 the software, the algorithms that are being run by these
21 routers.

11:36:27

22 And so, in other words, it appears to me that those
23 terms, if we're going to relate them to the specifications
24 when we talk about something being a scalable router or a
25 video router, it's describing -- it's simply describing

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1 functions that router is doing based on software and the
2 algorithms it's running. Is that -- I mean, do I have
3 something -- is am I missing something there?

11:36:58

4 MR. CHERUVU: Your Honor is correct in what -- in
5 the characterization so far, but I would add to that that --

6 THE COURT: Right.

7 MR. CHERUVU: I would add that the functionality
8 that Your Honor just described that the router does was
9 unconventional, because as the provisional points out that
10 was -- this entire combination of steps was not previously
11 done.

11:37:27

12 And as to the use of the term 'video router', this was
13 simply the inventor's succinct way of characterizing what the
14 router that he invented can be labeled. It could have been
15 called anything else, but he chose to call it a video router
16 in claim 1; he chose to call it a scalable video coding router
17 in Claim 11. Either way, it's the inventor's description,
18 it's the inventor's use of words that must be given weight --

19 THE COURT: Right. And as you can hear, I'm trying
20 to determine the significance of those terms, particularly in
21 light of the specification that doesn't use those terms, and
22 how we match those up. So I wanted to get your thoughts about
23 how we matched those up in terms of what that means when we
24 see it in the claim.

11:37:57

25 So as you've said, the inventor uses that term, but then,

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1 you know, for the Court's purposes like, Okay, well, what is
2 that referring to, what makes that special, what makes that
3 different than just saying 'router' that executes this or that
4 function, if you see what I'm saying.

5 MR. CHERUVU: I get your question, Your Honor.

11:38:27 6 The -- what makes this -- to the question of what makes
7 this inventive, it is -- first of all, the term 'video router'
8 -- or the terms 'video router' or 'scalable video coding
9 router' must be understood according to their plain and
10 ordinary meaning, and a POSITA reading these terms in the
11 context of the specification would know that a video router or
12 a scalable video coding router is a router that performs the
13 functions that are claimed and described in the specification.

11:38:58 14 There is no explicit disclaimer of hardware routers, nor
15 is there a specific disclaimer of software routers, so under
16 the *Continental Circuits* case you cannot exclude either of
17 those possibilities. So the term 'video router' or 'scalable
18 video coding router' alone are broader than simply a software
19 router demon, as it is used in the specification.

20 THE COURT: All right. Is there more you wanted --
11:39:27 21 I think you've hit on *Alice* 1 and *Alice* 2 at this point, but
22 if there's something else you want to say, you can proceed.

23 MR. CHERUVU: I believe so. I believe I have hit
24 them, Your Honor, those two points, but in -- to end this
25 portion of my presentation, I'd like to really direct the

1 Court towards Cisco's burden here at Rule 12, which is Cisco
2 has the burden at Rule 12 to show that there are no disputed
3 issues of fact based on the pleadings, and that Cisco is
4 entitled to a judgment that the claims are invalid under
5 § 101.

11:40:00

6 As -- we've spent several minutes talking about all of
7 the issues that are, in fact, disputed between the parties,
8 and all of these genuine disputes of fact should by themselves
9 preclude dismissal under Rule 12. And specifically let me
10 direct Your Honor's attention to some of the paragraphs of our
11 complaint where we make these -- where we identify these
12 allegations.

11:40:27

13 If I could direct Your Honor's attention to slide 67
14 where we cite some exemplary paragraphs of our complaint,
15 which are paragraphs 15 to 20 generally, and for the
16 limitation that we've been discussing, which is the
17 selectively discarding packets, we have explained that --
18 we've provided factual allegations in paragraphs 11, 17,
19 and 18 of our complaint; slide 68 shows plausible factual

11:40:56

20 allegations in paragraph 15 of our complaint; and, similarly,
21 slide 69 shows more plausible factual allegations in
22 paragraphs 17 and 18 of our complaint.

23 The Court must take these well-pleaded factual
24 allegations as true. And Cisco is simply trying to sidestep
25 these allegations by calling them conclusory, but for purposes

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1 of a Rule 12 motion, the Court has to assume that these facts
2 are true. And Cisco has not provided any basis to claim that
3 these allegations are conclusory in any way, so that alone
4 precludes a dismissal under Rule 12.

5 That's all I have for now, Your Honor.

6 THE COURT: Thank you, Mr. Cheruvu.

11:41:56 7 Okay. All right. We can have rebuttal from Cisco.

8 So I had a long colloquy with Mr. Cheruvu and a good
9 discussion with him about these issues, and so you can
10 proceed, Mr. Padmanabhan.

11 MR. PADMANABHAN: Thank you, Your Honor.

12 What I will -- I'll try and promise for everyone's
13 benefit is I -- subject to Your Honor's questions, I'm going
11:42:27 14 to try to be succinct. I'm going to aim to be, hopefully.
15 But that being said, we obviously want to answer any and all
16 questions the Court may have.

17 So let me start with -- I think there was a lot of
18 discussion from SVC about 'video router' and 'scalable video
19 router'. Your Honor had a lot of questions about those. We
20 -- certainly Cisco's position is that if you look at the
11:42:57 21 specification, it's just talking about algorithms.

22 Now, those words do not appear in the specification, as I
23 think the Court noted. We would also say they are not the
24 inventor's words. And we want to just add a practical gloss
25 to this, which is that this patent is a continuation, it left

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1 the owner's hands, left the original assignee's hands, and
11:43:29 2 these terms 'scalable video coding router' and 'video router'
3 do not appear in the claims of the parent applications. This
4 is something that showed up for the first time in this
5 patent -- in the claims of this patent. We suspect that's
6 because they intended to accuse the SVC standard, the same
7 reason the Plaintiff's probably named Scalable Video Coding.
11:43:56 8 And so, you know, just -- I want to disassociate it from the
9 inventor or the invention. That's why it doesn't appear in
10 the specification.

11 Now, I'm going to try to go as orderly as possible, but
12 in a rebuttal fashion, Your Honor. So I'm going to try to
13 point back to things that were discussed during Mr. Cheruvu's
14 argument, during Scalable Video Coding's argument.

15 So one was this idea that there's something inventive
11:44:27 16 about this because there is an application layer multicast
17 solution, or the video router is an application device. And
18 Your Honor, we would point the Court back to the intrinsic
19 record again, specifically the provisional, once again. And
20 I'll go to the --

11:44:55 21 So, Your Honor, this is at the provisional application on
22 page 8 -- or page 6 of the -- at the bottom it's labeled page
23 6. This is Docket --

24 THE COURT: I have it. I have it.

25 MR. PADMANABHAN: -- 44-2. Thank you, Your Honor.

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1 And here, again, they're talking about what pre-existed,
2 and they -- and the provisional says, "Over the last decade or
11:45:26 3 so, research in this area has led to an impressive number of
4 application layer multicast solutions." So, again, the
5 inventor is acknowledging that whatever this application layer
6 multicast approach may be, that's conventional; that already
7 existed.

8 What there is in the specification above and beyond that
11:45:56 9 are algorithms. Now, those algorithms are nowhere in the
10 claims. That's really -- at bottom that's the problem here.
11 The claims are directed to nothing more than what we've called
12 this --

13 THE COURT: Right. So when your friend on the other
14 side points to -- I think he talked about information that
15 comes lower down on that page --

16 MR. PADMANABHAN: Sure.

17 THE COURT: -- that's talking about what was
18 Terracast and the advantages Terracast is going to bring that
11:46:26 19 the -- those other prior, if you will, multicast -- multicast
20 technologies did not have, that those are in the algorithms
21 purportedly for Terracast.

22 MR. PADMANABHAN: Correct, Your Honor. And they're
23 not reflected in the claims. And I think that Mr. Cheruvu as
24 a pivot tried to say -- this is a different part of the
25 discussion. He said, Well, your -- the things that are

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1 inventive don't need to appear in the claims, and that's not
2 really what that *LG v. Uniloc* case says. What that case said
11:46:59 3 is that the advantages -- if you're going to rely on a
4 supposed -- an alleged advantage, it doesn't need to be--and
5 the words 'explicitly' appear in that order from the Federal
6 Circuit--don't need to explicitly appear in the claims. There
7 what the Federal Circuit found is that there was a
8 technological innovation in the approach taken to handling
9 data. Okay? There was a different ordering of the handling
11:47:27 10 of data, basically a different field was added at a different
11 point in data transmission such that -- and it resulted in
12 advantages. They said the technological improvement is what
13 makes it non-abstract; you figured out a better mouse trap.
14 And then, by the way, that yields advantages in reductions in
15 latency.

16 Here if you look at the claim--again, that's what the
17 Federal Circuit says you need to start with; that's the core
18 of the analysis--the claim itself doesn't say anything more
11:48:00 19 than identify the bandwidth-limited condition, and when that
20 happens you know you can't send all of the non-essential data,
21 you can't send all of the non-enhancement data, crank that
22 back. That's really the core of this claim.

23 Now --

24 THE COURT: Now, your friend on the other side I
25 think--just to hit this point, though--has pointed to aspects

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1 of these claims that, at least as I understood them, would say
11:48:27 2 these are improvements from what the -- even whatever the
3 existing multicast technology was. And so he can tell me when
4 he has an opportunity if I'm getting this wrong at all, but
5 just, for example, the part that talks about this selective
6 forwarding, it appears in a number of claims, the language is
7 I think similar but not always identical, but it gets to that
8 point of the selective forwarding of certain enhancement
11:49:00 9 levels based on -- in some cases it references
10 bandwidth-limited conditions; in some cases it references
11 the receiver. And I think that's one of the things that your
12 friend on the other side would say this is reflecting an
13 improvement of what was out there.

14 MR. PADMANABHAN: Your Honor, so that was the
15 limitation that Mr. Cheruvu focused on was selectively
16 forward. Let's read the limitation. It does appear
11:49:27 17 effectively the same in claims 1, 6, and 11. So I'm just
18 going to point to claim 1--"selectively forward one or more of
19 the set of enhancement layers, but fewer than all of the set
20 of enhancement layers, to at least two of the plurality of
21 video receivers through the internet protocol network based
22 upon the identified bandwidth-limited conditions." And where
23 it's -- it's done using an internet protocol.

11:49:59 24 So let's go work backwards. Okay? We can agree that
25 'internet protocol' is conventional. People were sending

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1 packets using that previously.

2 Going back, "based upon the identified bandwidth-limited
3 condition," that is that abstract concept that you find
4 something that says you can't send it all, there's a problem,
5 let's send less than all. Okay?

6 Go further up, you're saying "selectively forward one or
11:50:26 7 more of the set of enhancement layers but fewer than all of
8 the set of enhancement layers to at least two of the plurality
9 of video receivers." So all it's saying there is send less
10 than all of this additional data. That's nothing different
11 than what was in that portion of the provisional that we
12 cited. Okay?

13 So if you use the provisional to identify what was the
14 conventional technology, what's left is just this abstract
11:50:59 15 idea. You know there's a problem; don't send everything.

16 The other thing that Mr. Cheruvu pointed to, Your Honor,
17 was he talked about dependent claims, and in doing that he
18 pointed to, Your Honor, claim 7. And to be clear, just for
19 purposes of reference, Your Honor, the independent claims,
11:51:26 20 each of them, 1, 6, and 11, they mirror one another, and the
21 dependent claims that follow also mirror one another. So
22 claim 2, which is one claim after claim 1, is mirrored by
23 claim 7, which is one claim after claim 6.

24 And so let's just look at claim 7, which is the one that
25 Mr. Cheruvu discussed, and there it says, "The method of claim

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11:51:58 1 6, wherein the selectively forwarding step comprises
2 selectively forwarding the one or more of the set of
3 enhancement layers based on video processing capabilities of
4 the video receiver." Okay?

5 It's even worse because if you look back at that portion
6 from the provisional, what that says is the receivers say, I
7 don't know if I can get all of the data and let the sending
8 point know, Hey, don't send it all. That's exactly what claim
11:52:26 9 7 is talking about. So how can that be inventive? That was
10 clearly the conventional technology.

11 THE COURT: You know, I note that in the
12 provisional, the portion that you're talking about, and then
13 also in the specifications, it appears that there is very much
14 a focus on financial data. In the provisional the description
15 of here is what Terracast is going to do that's going to be
11:52:58 16 better is going to have to do with the unique, if you will,
17 aspects of financial data and how that would optimally be
18 delivered. And that page that you were pointing to, if we
19 keep going down, it has a rather lengthy description of how
20 Terracast is going to improve the receipt, if you will, of
21 financial data in a more optimal way. That's also described,
11:53:28 22 as you know well, I'm sure, in several -- in at least two or
23 three parts of the specification where it talks about
24 financial data.

25 So let me ask you, from Cisco's perspective is there

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1 anything to that--that if we even just said, at least as to
2 financial data, there is something here that's being done
3 better than the technologies that were available, you know,
4 when this -- when -- let's say when the precursor Terracast is
11:54:00 5 being conceptualized.

6 MR. PADMANABHAN: So I say two things, Your Honor.
7 One, I would say that, if anything, that's just technological
8 context, and obviously technological context doesn't make
9 something non-abstract; it just sets the context. And there
10 is plenty of Federal Circuit precedent on that.

11 But setting that aside, if there's some magic sauce
12 there, it's in an algorithm that may be geared towards the
11:54:26 13 financial data, but that doesn't find itself reflected in the
14 claims. And that's the real problem here at bottom is that it
15 doesn't find itself reflected in the claims.

16 As Your Honor noted, with a case like *Contour*, the Court
17 was able to find -- the Federal Circuit was able to find
18 something specific in the claims that was inventive. In that
19 case it was this parallel processing concept. Okay? And
20 further, the Court said, Look, there's a specific claim
11:54:55 21 construction, there's a term here in the patent that the court
22 construed to lend that inventiveness, and here it's quite the
23 opposite. There is no such term, and SVC hasn't offered any
24 such construction. So --

25 THE COURT: And, of course, in that case it was that

1 term in the context in which it's used. Right? Because the
2 term was 'generate' --

3 MR. PADMANABHAN: That's right.

4 THE COURT: -- which, standing alone, could mean --
5 could have -- you know, some -- more -- some breadth of
6 meanings, but it was 'generate' in the context of those two
11:55:30 7 video streams.

8 MR. PADMANABHAN: Exactly right, Your Honor. And so
9 what the court said is, Look, here in this specification,
10 'generate' means 'in parallel'.

11 THE COURT: Right.

12 MR. PADMANABHAN: That overcame the hurdle that
13 existed.

14 THE COURT: Right. Effectively simultaneous --

15 MR. PADMANABHAN: Right.

16 THE COURT: -- rather than sequence, because that
17 was the comparison to *Yu*. Right?

18 MR. PADMANABHAN: Exactly, Your Honor.

19 THE COURT: All right. Keep going.

20 MR. PADMANABHAN: No, please, if Your Honor has
21 questions.

22 THE COURT: Well, no. It was -- so maybe what would
11:55:58 23 help is if you take a look at that -- I just want to make sure
24 I have your argument on this, because I'm going to ask
25 Mr. Cheruvu more about it again when he gets up. But this --

1 when I referenced that financial data, this is obviously the
2 originally the inventor at the time trying to talk about how
3 Terracast is going to do something that's a technological
4 improvement, and at a minimum maybe that's Step 2 of Alice.

5 So is there something -- and we -- and so maybe if you
6 have that page in front of you--I think you do--if you would
11:56:28 7 take a moment to just go through the bottom of that where he's
8 talking about, particularly in this context of financial data
9 here's what it's going to do, and tell me, you know, your
10 thoughts on how, you know, this is not really doing anything
11 -- this is not really going to accomplish anything that is an
12 improvement to technology, necessarily.

13 And I'm starting at the point where it says -- you could
14 begin at the part, "Although Terracast has many similarities
11:56:56 15 with existing solutions, its specific focus on scalability and
16 live data lead to a design that distinguishes itself from
17 related work on a number of important points."

18 Then it goes on to talk about it being -- that "Terracast
19 was designed to offer an end-to-end solution to efficiently
20 multicast live stock market data to potentially anyone
21 connected to the internet." And then it goes on from there.

22 And so part of this to me is this talking about, you
11:57:27 23 know, not just the result but, you know, how it's doing it,
24 and does this match up with something that we see ultimately
25 in the specifications and this -- and this invention, and, by

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1 the way, the claim language.

2 MR. PADMANABHAN: I think this is the point you're
3 talking about, Your Honor, and I'm going to put a little star
4 here.

5 THE COURT: Right. It starts from there and goes to
6 the bottom of that page and just the top of the next page.

7 MR. PADMANABHAN: So "its specific focus on
8 scalability and live data lead to a design that distinguishes
11:57:59 9 itself from related work on a number of important
10 points." Okay? "An end-to-end solution --

11 THE CLERK: Can you pull that microphone to you?

12 MR. PADMANABHAN: I'm so sorry. Thank you. I
13 apologize.

14 "Although Terracast has many similarities with existing
15 solutions, its specific focus on scalability and live data
16 lead to a decision that distinguishes itself from related work
17 on a number of important points. As discussed in the previous
11:58:29 18 chapter, Terracast was designed to offer an end-to-end
19 solution to efficiently multicasting live stock market data to
20 potentially anyone connected to the internet." I'll stop
21 there for a moment.

22 Now let's look at the claim. I'm going to use claim 6,
23 Your Honor, since we've been focusing on that one. Actually,
11:59:00 24 if you don't mind, Your Honor, just for -- because the elmo is
25 easier to work with on claim 11 -- I'm going to use claim 11.

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1 Claim 6 cuts across the bottom and the top of the page.

2 So claim 11, "a scalable video coding router comprising;"
3 it has some hardware components--memory, a processor, et
4 cetera--and then it's intended to do the following. And then
11:59:27 5 come the four steps we talked about--"receive a layered video
6 data stream with the base and enhancement layers, identify the
7 bandwidth-limited conditions of an internet protocol network
8 between the video router and a set of video receivers, and
9 forward the base layer to at least two of the sets of video
10 receivers." And then it goes on and talks about sending some,
11 but not all, if you will, which we've talked about. And then
12 marking the data.

11:59:57 13 So if we go back to the portion that Your Honor was
14 talking about where it talks about this favorable end-to-end
15 solution, first off, it's not clear what that means, but I
16 don't think it's reflected in the claims. And even if it's
17 reflected in the claims, the language, as it's read here,
18 where it's identifying a bandwidth-limited condition of an
12:00:24 19 internet protocol network and then talks about sending --
20 "selectively forwarding one or more of the set of enhancement
21 layers but fewer than all the sets of enhancement layers"
22 doesn't tell you anything about it being an end-to-end
23 solution, it doesn't tell you anything about there being live
12:00:58 24 data; it literally just -- it could be static or it could be
25 live. It could be -- you know, it could be for a portion; it

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1 could be end-to-end. It doesn't -- this -- it doesn't focus
2 on that.

3 THE COURT: Right. I do read that portion. And
4 when you get to sort of what I think are the -- I would say
5 the aspirations of what Terracast is doing, it does sound like
6 it's talking about results of what Terracast is going to do.
7 And I don't need you to elaborate on that.

8 But I did have another question for you, because --

9 MR. PADMANABHAN: Yes, Your Honor.

12:01:30 10 THE COURT: -- both sides are very familiar with
11 this provisional application.

12 And one part in -- if we're looking at the claims of the
13 invention, if you look at claim 1, and that part of claim --

14 MR. PADMANABHAN: Let me switch to this, Your Honor,
15 if it's okay.

16 THE COURT: Yeah.

12:01:45 17 MR. PADMANABHAN: Success. Apologies, Your Honor.

18 THE COURT: Yeah. So it's the last part of claim 1
19 that talks about -- we've been talking about sending layers,
20 the base layer, the enhanced layers, and then it says,
21 "wherein each layer of the layered video data stream
22 comprising data packets, each of which is encoded with a
23 sequence number and a layer identifier, and wherein the layer
12:02:30 24 identifier for each data packet is based upon a layer to which
25 the packet belongs."

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1 And let me ask you, where is that -- you know, where in
2 the provisional app is there a discussion of this, this
3 portion that's -- then appears in -- it appears in claim 1, it
4 appears in claim 11, and it appears in claim 6, and probably
5 elsewhere.

12:02:58

6 MR. PADMANABHAN: You know, Your Honor, it appears
7 -- it does appear in the provisional, but I believe it also
8 appears in the specification as acknowledged prior art, so
9 both places. I'm going to find it for you. If you don't
10 mind, Your Honor, give me one moment.

12:03:21

11 My colleague Mr. Gresalfi is always one step ahead of me.
12 Okay. One second. So here, Your Honor, we're looking at
13 the provisional again at pages 50 and 51, and it says, "At the
14 time of the writing, most of the applications of this type
15 work with these thin data streams. Aside from end user
16 products, at least one major data vendor even thins this
17 stream before broadcasting them to their customers." They're
18 talking about basically pulling out data you don't need.

12:04:01

19 "For now, we will suffice to say that the process
20 involves inspection of the individual stock quotes, encoding
21 them in individual data packets, tagging each with a priority
22 value. As long as all packets labeled with the highest
23 priority number are received, the partial stream can be
24 considered intact."

25 So I don't think that it's saying that this new. It

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12:04:29 1 certainly didn't invent layer numbers, because we saw in the
2 provisional in the earlier part this idea of breaking data
3 into layers existed. And packet sequence numbers is something
4 that the TCP protocol, the internet protocol already had.
5 Every packet -- internet packet that's existed since the
6 internet existed has had a sequence number.

12:04:59 7 If you go to the next slide, Your Honor, slide 81, this
8 is the section that I was recalling. Again, Mr. Gresalfi is
9 one step ahead of me. So it's talking here, again, about the
10 prior art. Okay? In the provisional this is at Docket 44-2
11 at 51/52, and on slide 81 of our deck. And he's referencing a
12 layered multicast scheme from McCanne and Van Jacobson. And
13 they recognize that in this multicast scheme -- first off, "as
14 long as bandwidth is available, the receiver is subscribed to
15 more and more layers until packet loss is detected." So this
16 is, again, this idea that the receivers are saying, Give me
17 more data that there's enough bandwidth, or don't give me more
18 data, there isn't enough bandwidth.

12:05:27 19 But "Loss of packets is detected by appending incremental
20 sequence numbers." So this, again, was conventional; it
21 existed beforehand. The layer numbers, the sequence numbers,
22 that's all conventional technology. And I don't think at any
23 point SVC has claimed that that was their invention because
12:05:59 24 that wouldn't hold water. So...

25 THE COURT: All right. Thank you. You can

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1 continue.

2 MR. PADMANABHAN: Thank you, Your Honor.

3 So I will try to quickly discuss -- so Mr. Cheruvu
4 pointed to a number of sections in the specification as
5 being -- well, actually, Your Honor -- yeah. Let's go to
12:06:27 6 that. A number of portions of the specification as being
7 potentially or supposedly inventive. And, you know, there
8 really is -- if you look at those sections, they really don't
9 tell you much, if anything, but they certainly don't help on
10 this particular point.

11 So the first section was in columns 21 and 22, and the
12:06:58 12 portion that Mr. Cheruvu talked about essentially just says
13 that when you've got this bandwidth limitation, that essential
14 packets are sent. We talked about that. That's part of what
15 we say is the abstract idea.

16 Next, Mr. Cheruvu pointed to a section in column 28,
12:07:23 17 beginning at line 37, beginning "in one embodiment where
18 layered multicast is combined with localized packet
19 retransmission." Ahh. It's not visible. Thank you very
20 much.

21 Your Honor, as an aside, I will say that yesterday in
22 preparing for the hearing, I asked some of any younger
23 colleagues if they knew what an elmo was because I said we may
24 need to use the elmo. I received blank stares. So I said,
25 I'm going to show you tomorrow, but the reality is I'm proving

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1 myself as being less than competent.

12:07:59

2 THE COURT: It's not a completely dead technology.

3 MR. PADMANABHAN: Not completely dead.

4 So this section here at column 28, line 37, beginning,
5 "In one embodiment," all this discusses really is that you
6 only send the packets that the bandwidth can support and the
7 concept of packet numbering, which we just discussed

12:08:26

8 sequencing, which is conventional technology.

9 You know, as I heard this portion of the presentation, I
10 thought to myself none of this is reflected -- is either
11 non-conventional or, in the alternative, it's not reflected in
12 the claims, and so none of this seems to move the ball.

12:08:56

13 I think, Your Honor, I could probably save you some time
14 and just let you know that all of this really relates to the
15 specific algorithm. So, for example, Mr. Cheruvu cited a
16 section in column 33, beginning at line 7, I believe, and this
17 is a layer-thinning algorithm. That's a specific method by
18 which you decide which layers you're going to drop or not
19 drop. Again, the claims don't tell you that; the claims just
20 say send less than all of the enhancement layers.

12:09:26

21 And similarly, in column 34, beginning at line 29, it
22 begins, "While new updates for a symbol are queued," that
23 talks about something called token updates--another algorithm
24 for deciding which data you're going to send or not send;
25 again, not reflected in the claims in any way, shape, or form.

12:10:11 1 You know, the reality is, Your Honor -- and I think I can
2 try and be brief here. The reality is the focus has got to be
3 on the claims. Right? And we can cite many cases that talk
4 about this, but, you know, one that we were looking at, this
12:10:26 5 *Hawk Technologies*, 601 F.4d 1349.

6 THE COURT: Can I ask you a question before you get
7 to that?

8 MR. PADMANABHAN: Yeah.

9 THE COURT: Because it goes to the point you were
10 just making, which is that -- is there something here --
11 because you say you have to focus on the claims. If we went
12 through the specifications and you're pointing out some of the
13 aspects of the specifications that were alluded to by your
14 friend on the other side, would you agree with him that any of
15 those, if they were in the claims--I know you're saying where
12:10:58 16 -- if there's anything inventive, it's not in the claims--but
17 did you see anything there that you think went beyond what was
18 already conventional technology? Did you see anything like
19 that in the specifications but say, Well, that might be, but
20 it's not in the claims.

21 MR. PADMANABHAN: Correct. Yes, Your Honor; for
22 example, the queuing algorithm. The queuing algorithm, I
23 would have to look for other things to find out whether that
24 was conventional or not. It certainly wasn't admitted
25 conventional prior art.

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1 And by the way, Your Honor, that is why this is a Rule 12
2 motion. That's why we didn't defer this to a later date in
12:11:28 3 the case, because if -- you can look at the intrinsic record,
4 the four corners of the patent and the underlying application
5 and provisional, and get the admissions regarding what's
6 conventional.

7 So, yeah, things like the queuing algorithm, you know,
8 that doesn't -- that's not admitted conventional technology,
9 and we would have to look elsewhere to figure that out. As it
10 stands, though, Your Honor, none of that is in the claim.

11 THE COURT: So your point being that this is, you
12 know -- obviously your argument is at Step 1 this is an
12:11:58 13 abstract concept, and at Step 2 the only items referred to in
14 the claims are referencing conventional technology; not
15 anything that, you know, could get over the hurdle of *Alice*
16 Step 2.

17 MR. PADMANABHAN: That's right, Your Honor. I think
18 that there's one takeaway from a lot of these *Alice* cases,
19 which is that it's not that hard. So if there is an inventive
20 concept, you should be able to explain it pretty easily. And
12:12:29 21 you'll find that in all the cases, including the case -- the
22 *Contour* case that they cited. There was something
23 fundamental--they said, Look, we did this and nobody else did
24 this, and this is what's in the claim; it's right here. SVC
25 tries -- they might can't do that. And so looking at the

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1 claim, it's nothing more than this idea of when you've got the
2 limited condition, bandwidth-limited condition, sending less
3 than all the data.

4 So thank you, Your Honor.

5 THE COURT: All right. Thank you.

12:13:00

6 All right. I promised sur rebuttal, Mr. Cheruvu, and I
7 think it will be helpful for me to hear your response to a
8 couple of -- particularly a couple of points there, and then
9 anything else you want to say will be fine.

10 But let me start with -- and by the way, take your time.
11 Even if I'm asking a question, take your time. I'll let you
12 get set up there.

12:13:29

13 But let me just ask you, to the last point made by your
14 friend on the other side, how would you succinctly describe
15 the invention here, you know, that we have from this patent,
16 '372?

12:13:58

17 You know, and maybe what may be the framework for that is
18 we keep going back to that *Contour* case. And I agree that --
19 I think in that case at least the invention that
20 mattered--because I know there were other aspects to that
21 particular technology--but the invention that mattered was the
22 generation of two parallel data streams that were going to be
23 available to the user as something that was -- that made it
24 patent eligible.

25 And here, you know, if you were going to put to me in

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12:14:27 1 a -- the 30-second elevator speech or whatever, what's the
2 invention here that goes beyond conventional technology? And
3 that's going to -- I'm just -- so you know where I'm heading,
4 I'm going to want your response on a couple of those slides
5 that we just talked about; have your response on that. But
6 what would your succinct description be of the invention here?

7 MR. CHERUVU: Your Honor, to answer the question,
12:14:55 8 let me direct you to columns 3, lines 6 to 25 and further,
9 actually all the way through columns 4 and 5 of the patent
10 where the patent itself describes that --

11 THE COURT: Did you say column 3? I have it right
12 in front of me. I can follow with you. What did you -- where
13 were you pointing me to?

14 MR. CHERUVU: Column -- first we want to start with
15 column 3, lines 6 to 25, which talk about sending data from a
12:15:29 16 source to multiple receivers efficiently, and the
17 specification goes on to talk about different multicast
18 strategies involving allowing receivers to specify desired
19 data streams, having the source encode all receivers, and then
20 it goes on to describe scalability and using broad-based
21 mechanisms--excuse--me broadcast-based mechanisms.

22 And in column 3 all the way through column 4, the
12:16:00 23 invention goes on to describe this unconventional overlay
24 multicast network. And it has all these advantages so the
25 testing packet loss, deterministically forwarding packets

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1 based on network conditions.

2 So to answer Your Honor's question about what does the --
3 what is the invention succinctly, it is this improved
12:16:25 4 multicast system that uses bandwidth-limited conditions -- an
5 identification of bandwidth-limited conditions to selectively
6 forward video packets to receivers based on the identified
7 bandwidth-limited conditions, based on various types of ways
8 of identifying what these conditions are, and different ways
9 of determining how to selectively forward packets.

10 But the goal of these inventions, as the specification
12:16:55 11 points out, is to reduce data corruption received by the
12 receiver and to improve the -- to reduce overhead of video
13 streaming at each receiver, and just overall improve the
14 quality of what a receiver receives; at the same time to --
15 at the same time, the focus should be on scalability, which,
16 the inventor pointed out in the provisional, was something
17 that was lacking in the prior art.

18 And by 'scalability', what we're talking about is this
12:17:27 19 concept of increasing the number of receivers such that the
20 same video router should be easily able to scale to a great
21 -- to however many receivers there are on the network such
22 that each receiver with its own capabilities, with its own
23 video processing capabilities and network conditions, whether
24 one is receiver on a mobile network and one receiver might be
25 on a fiberoptic network, let's say, they all have different

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1 capabilities in terms of the network and what they can
2 receive.

12:17:57 3 So the point is to easily scale streaming video to all
4 these different types of receivers that may further increase,
5 and still do it in an efficient manner, reducing overhead and,
6 importantly, reducing corruption -- data corruption.

7 THE COURT: All right. Thank you, Mr. Cheruvu.
8 That's helpful.

9 So let me move, then, because I think it's a good segue,
10 to getting your response on the points that were made by your
12:18:29 11 colleague on the other side about what was already out there
12 in conventional technology at the time.

13 And so I don't know if you have a copy, or I'm sure they
14 would lend you a copy, of the two slides that they were
15 referring to from the provisional. I mean, we could go to the
16 pages, but since the language is all highlighted -- I believe
12:18:55 17 we were looking at slides 80 and 81 that go to what the
18 conventional technology looked like at the time the
19 provisional is being submitted. And let me get your response
20 to that, because it seems to point to a lot of the specific
21 content that we see in the specifications about what the
22 algorithms are having the router do for this invention. But I
12:19:29 23 did want to get your response on that to see if, you know,
24 what you think of that.

25 And these are obviously highlighted portions from the

1 provisional. So this is -- you have -- I don't know if you
2 have in front of you slides 80 and 81. So, for example, on 81
3 your colleague pointed to one of the pioneers of layered
4 multicast schemes, and it references two individuals who in
5 1996 divided data stream in layers that were sent to separate
12:20:00 6 IP multicast addresses, et cetera, et cetera. That's at 81.

7 And then 80 talks about, "For now it will suffice to say
8 that the process involves inspection of the individual stock
9 quotes and encoding them in individual data packets, tagging
10 each with a priority value," you know, et cetera, et cetera,
11 "labeling them with a priority number."

12 So those slides are pointing to portions of the
12:20:27 13 provisional that look -- you know, that sound like the same
14 kind of technology that is being discussed in the patent, and
15 so I wanted to get your response on where there's differences
16 or where there is -- you know, this is a different and an
17 improvement than what's being discussed in the portions of the
18 provisional.

19 MR. CHERUVU: If Your Honor would give me a minute
12:20:57 20 to look at the provisional itself, I can answer your question
21 better.

22 THE COURT: Sure. And, in fact, if you need a
23 couple of minutes, our court reporter could probably use a
24 break.

25 MR. CHERUVU: I can answer one of your questions,

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1 Your Honor, right now.

2 THE COURT: Sure.

3 MR. CHERUVU: And it's -- I have it up on the
4 screen. In response to Cisco's argument on slide 81 regarding
5 this -- regarding what Steven McCanne and Van Jacobson did,
12:21:30 6 they included this argument in their brief. And as we
7 highlight in green on slide 60 of our deck, if you just look
8 a few lines past what Cisco has cited, the inventor himself
9 points out what was unconventional compared to what McCanne
10 and Van Jacobson did. And specifically, the inventor points
11 out that layered multicast in combination with a scalable
12 selective packet retransmission mechanism was what was
13 unconventional here. And Cisco conveniently excludes this
14 latter portion from its presentation and its briefing.

15 THE COURT: But does that mean that the only
16 invention part is the retransmission part?

17 MR. CHERUVU: No, Your Honor.

18 The provisional goes on -- the provisional spends several
19 pages, and in each of these pages the inventor points out
20 several distinctions between what was conventional and what
21 Terracast did. This is just one example.

12:22:27 22 THE COURT: Well, I guess -- and maybe there is not
23 more, but, you know, I see that sentence that says "scalable
24 selective packet retransmission," but that's -- and -- that's
25 pretty conclusory. I mean, what's the description of what

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1 that actually is that's different than the conventional
2 technology?

12:22:56 3 And obviously the related question is, if you're getting
4 to the description of what that is, is that just to do with
5 retransmission, because that raises other questions.

6 You see the question. I see that sentence, but then I'm
7 looking for more description than that.

8 MR. CHERUVU: Yes, Your Honor.

9 This sentence is just the starting point for what the
10 inventor describes as conventional going forward.

11 THE COURT: Sure.

12:23:29 12 MR. CHERUVU: And if you continue looking at -- the
13 rest of this page talks about localized packet retransmission,
14 and the provisional goes on for several other pages on what
15 the inventive features were. The -- for example, I'm looking
16 at the unconventional features regarding restoring global,
17 local, or no packet order. And this is on page 62 of the
12:23:57 18 provisional -- or page 60 of -- at the bottom; 62 of the PACER
19 stamping. The inventor then goes on in other paper to talk
20 about -- and I'm looking at pages 69 onwards of the docket
21 entry --

22 THE COURT: All right.

23 MR. CHERUVU: -- where the inventor talks about
24 stream resource allocation algorithm on page 70 of the -- of
12:24:28 25 Docket 44-2, dequeueing packets for transmission, packet

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1 queueing and removal packet prioritization.

2 So to answer Your Honor's question, retransmission is not
3 the only unconventional feature of what he invented.

4 THE COURT: Let me, then, just switch for a second,
5 because I think I have the pages you're saying to look to in
6 that -- those pages of the provisional, I think we have them.

7 But then I come back to your colleague's second point,
8 which is once we're talking about dequeueing and things like
12:24:59 9 that, do we see those in the claims?

10 MR. CHERUVU: Your Honor, this goes back to the case
11 law again from *Uniloc* where it says that -- where the Federal
12 Circuit stated that the advantages themselves need not be in
13 the claim. And it sounds like, from Cisco's argument, they're
14 sort of conflating the word with 'advantages' with the
15 inventive concept itself. They acknowledge that the Federal
16 Circuit said the advantages need not be in the claim, but
17 they're sort of misapplying the law.

18 And it sounds, from what they're saying, that they are
12:25:29 19 expecting that the inventive concept -- it sounds from their
20 argument that they're arguing that the inventive concept
21 itself is not in the claim, and we disagree with that point.
22 As we mentioned in our briefing, the inventive concept is the
23 use of the video router to perform all these steps, and that
24 is explicitly recited in the claim. The fact that how the
25 video router functions and how it identifies bandwidth-limited

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12:25:56 1 conditions or selectively forwards based on these various
2 algorithms, the fact that those are not in the claim is not a
3 basis that the Federal Circuit offered to -- under *Alice*
4 Step 1 or Step 2.

5 THE COURT: Yeah. I mean, because I do know -- I
6 mean, even if we're just talking about retransmission, that's
7 only appearing in the dependent claims. Right?

8 MR. CHERUVU: No, Your Honor. We disagree with --
9 that retransmission is only in the dependent claims.

12:26:27 10 THE COURT: I mean, the term, does it appear in one
11 of the independent claims? Does the term 'retransmission'
12 appear in one of the independent claims?

13 MR. CHERUVU: The term itself does not appear in the
14 independent claim, but the claim -- independent claims are
15 broad enough to cover retransmission.

16 And Your Honor, at this point I'll take you up on your
17 offer to -- for a short break so I can look at --

18 THE COURT: Yeah. We'll take about a five-minute
19 break.

12:26:58 20 MR. CHERUVU: Thank you, Your Honor.

12:47:00 21 (Brief recess.)

22 THE COURT: Be seated.

23 All right, counsel. Mr. Cheruvu, I think when we took a
24 break you were just going to take a couple of minutes to look
12:47:10 25 at the materials we were referencing. Was there something

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1 more you wanted to say about that --

2 MR. CHERUVU: Yes, Your Honor.

3 THE COURT: -- issue regarding the provisional?

4 MR. CHERUVU: Yes, Your Honor.

5 I wanted to clarify one point. I misunderstood Your
6 Honor's previous question where you were asking about what we
7 believe the inventive concept is in the claim, and I explained
12:47:57 8 what was taught by the specification in the provisional, but
9 now I understand that Your Honor was asking about what the
10 inventive concept or the point of novelty is in the claim.

11 My colleague Mr. Puckett was going to speak on this a
12 little more, but I wanted to point Your Honor -- to direct
13 Your Honor's attention to a slide in my colleague's slide
14 deck, but this is from the notice of allowance in the patent.
12:48:25 15 It's also at -- it's also filed on the docket as Docket
16 No. 50-2.

17 Specifically, in the notice of allowance, the examiner
18 noted that "none of these references disclose a video router
19 selectively forwarding one or more of the enhancement layers,
20 but fewer than all of the set of enhancement layers to at
21 least two of the plurality of video receivers to the internet
22 protocol network based upon identified bandwidth-limited
23 conditions according to the internet" --

24 THE COURT REPORTER: I'm sorry. If you could slow
25 down when you read, please.

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1 MR. CHERUVU: Apologies.

12:48:57

2 "...according to an internet protocol wherein each layer
3 comprises data packets, each of which is encoded with a
4 sequence number and a layer identifier."

5 The examiner viewed the combination of all of these
6 elements as inventive over the prior art.

7 And to clarify, because we've highlighted on this slide,
8 it's not only the selectively-forwarding limitation that we've
9 been discussing so far; it is the selectively-forwarding

12:49:26

10 limitation in conjunction with using a sequence number and a
11 layer identifier. The examiner specifically noted that this
12 was the point of novelty over the prior art.

13 THE COURT: All right. Anything else you want to
14 say, Mr. Cheruvu?

15 MR. CHERUVU: Yes, Your Honor.

16 I wanted to clarify a couple of minor -- a couple of
17 smaller points from Cisco's discussion.

12:49:55

18 With the discussion of the distinction between video
19 streaming and financial data, Cisco never made the argument
20 that the provisional or the specification or anything does not
21 enable the claims, and certainly the provisional and the
22 specification all have several descriptions of video streaming
23 itself, so we think that it is not appropriate to limit the
24 specification -- or the understanding of the invention to just
25 something to do with financial data. The provisional

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12:50:28 1 certainly has several disclosures of using these inventive
2 ideas in the context of video streaming as well.

3 And the other point I wanted to make is that Cisco keeps
4 using this word 'conventional', but that's not the proper
5 legal standard. The Federal Circuit's exact phrasing was
12:50:57 6 "routine, well-understood and conventional." Cisco talks
7 about these so-called admissions of the inventor when he
8 compares his invention to something that was previously
9 existing as conventional, but there's just no evidence of it
10 besides their attorney say so. The inventor certainly never
11 admitted anything was conventional, and neither Cisco nor the
12 inventor said anything was routine or well-understood either.
13 Certainly all this was an area of emerging technology. As the
12:51:29 14 inventor pointed out, it was an area of active research.

15 Nothing was routine or well-understood either.

16 Those are the points I wanted to make, Your Honor.

17 THE COURT: Okay. Thank you, Mr. Cheruvu.

18 MR. CHERUVU: Thank you.

19 THE COURT: Well, I appreciate counsel's arguments
20 on this issue, and I think I've heard everything that I need
12:51:56 21 to hear today on the 12(c) motion, so we can move to claim
22 construction.

23 I sent you-all our preliminary constructions, and they're
24 exactly that--preliminary. They're -- you know, the Court's
25 tentative constructions of the terms at issue. And we did go

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1 ahead and ask which terms you were still going to argue, and
2 helpfully we got responses from both sides.

12:52:27 3 As you would expect, I'm going to have Cisco go first on
4 each of these. My thought on this is, because we're down to
5 really just three terms, I was thinking something like 20
6 minutes total for each side, but let me know if you think
7 you're going to need more time than that. This is
8 particularly for you, for Cisco. If you think you might need
9 more than 20 minutes, let me know. Do you think you do?

10 MR. PADMANABHAN: Your Honor, I don't think so. I
11 think the Court has been very generous with its time this
12:52:55 12 morning, and we're going to endeavor to be efficient.

13 So just give me a moment to set up.

14 Just to set a little context, I intend to -- this is
15 Krishnan Padmanabhan, for the record. I intend to address the
16 first term, which we can, for shorthand, call the 'bandwidth-
17 limited conditions' terms, and Mr. Gresalfi intends to handle
18 the other terms.

12:53:28 19 THE COURT: So he's going to handle 'bandwidth-
20 sufficient conditions'?

21 MR. PADMANABHAN: Yes, Your Honor.

22 THE COURT: All right.

23 MR. PADMANABHAN: Okay. So we're going to skip over
24 some of the preliminaries. I think we've discussed what's the
25 patent-in-suit and we know what the parties' respective

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1 constructions are.

2 It's worth noting that there is a fundamental sort of
3 difficulty with 'plain meaning', which is that Cisco's
12:53:59 4 position is it does not know what the meaning of the terms is,
5 and, you know, 'plain meaning' has a particular sort of
6 difficulty with it because, effectively, we feel like we may
7 end up, again, fighting over claim construction at summary
8 judgment. But that being said, it's just something worth
9 noting for the Court.

10 As Your Honor has already heard in the Rule 12 argument,
12:54:30 11 this claim term of 'identifying bandwidth-limited conditions
12 of an internet protocol network between a video router and a
13 plurality of video receivers' is in each of the independent
14 claims, and really the crux of this is identifying
15 'bandwidth-limited conditions'. And the reason we focus on
16 that, Your Honor, is because that's where the real confusion
12:54:58 17 is--what is or is not a bandwidth-limited condition.

18 So just to take a moment and talk about why we seek
19 definiteness, why is there a requirement of definiteness in
20 the patent statute, and that is, Your Honor, as the Federal
21 Circuit has explained and as the Supreme Court has explained
12:55:29 22 in *Nautilus*, because that -- because there is a notice
23 function that claims are required to perform. And that notice
24 function is this idea that a person of skill in the art should
25 be able to read the claim and with some reliability from one

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1 person of skill to the next be able to say what falls within
2 and what falls outside. There should be what they call a zone
3 of uncertainty is the problem. When there's a zone of
12:56:00 4 uncertainty which enterprise and experimentation may enter
5 only at the risk of infringement claims, that raises a
6 problem. And here with 'bandwidth-limited condition', we
7 really do have that zone of uncertainty.

8 I'm going to go to slide 10, Your Honor. There's kind of
9 a -- we talked about a two-step analysis with respect to *Alice*
10 this morning. There's actually a little bit of a two-step
12:56:27 11 with respect to this as well, with respect to definiteness.
12 And Step 1 is kind of is there a customary meaning. Okay?
13 Because if there is, then it kind of ends the inquiry and we
14 don't need to go further. And so that's Step 1.

15 If there is not a customary meaning, then we really got
16 to look at the intrinsic record and determine if it gives us
17 guidance; does it give us objective boundaries.

12:56:59 18 So here this is one thing that both experts agree upon is
19 that there is no customary meaning. Our expert says--Doctor
20 Wenger--Look, there's no meaning for this, and Mr. Adams says,
21 Well, I certainly didn't provide any extrinsic evidence
22 regarding a customary and known meaning for 'bandwidth-limited
23 condition'. And so we know that we've got to go to Step 2 of
12:57:29 24 the analysis, which is what does the specification, what does
25 the intrinsic record tell us.

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1 If we look at the intrinsic record, we'll start with what
2 our expert says which is he says, Well, I don't know. When I
3 look at the specification, it doesn't tell me what qualifies
4 as a bandwidth-limited condition. He says they talk, the
5 specification talks about a lot of things that are
6 bandwidth-related, like congestion, connection quality,
7 capacity, but he -- but it does not provide any guidance or
8 boundaries regarding what constitutes a bandwidth-limited
9 condition.

10 Now, I'm jumping to slide 28, Your Honor, and this -- we
11 obviously made our deck before we got the tentative, so I'm
12 jumping from slide 12 to 28, because slide 28 in our deck
13 summarizes what Mr. Adams, who is SVC's expert, says. He says
14 a number of things which are inconsistent and also do not
15 provide guidance--both.

16 First he says, Bandwidth-limited conditions implies
17 situations where the network's available bandwidth is
18 restricted or insufficient to transmit the entire layered
19 video stream without potential issues, such as packet loss,
20 delay, or degradation in video quality. Potential issue.
21 Again, it is a subjective indicator. What someone decides is
22 a potential issue or not is a subjective issue. There's
23 nothing in the specification to say what is or is not a
24 potential issue.

25 Next he says--it's in red--"Bandwidth-limited conditions

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12:59:29 1 can occur due to various factors, including network
2 congestion, router crashes, change in routing policies." So
3 there are things that can create the bandwidth-limited
4 conditions.

5 But he also says you might have congestion, hardware
6 failures, all these same things, and they need not create a
7 bandwidth-limited condition. So the things that may be
8 associated with the bandwidth-limited condition don't tell you
9 that you actually do have a bandwidth-limited condition.

10 Does that make sense, Your Honor?

12:59:57 11 THE COURT: Well, I see the various quotes you have
12 from his --

13 MR. PADMANABHAN: Right. Right. And so the same
14 thing comes up with corruption. Okay? He says that
15 corruption can be an indicator of a bandwidth-limited
16 condition, but when asked if there is a certain level of
17 corruption that would indicate a bandwidth-limited condition,
18 he says no.

13:00:27 19 And then there's the issue of packet loss, and he
20 provides an opinion saying you can have packet loss, but that
21 doesn't necessarily imply a bandwidth-limited condition. At
22 other places he said the loss of even one packet implies a
23 bandwidth-limited condition. So completely contradictory
24 opinions from the person of skill in the art that was offered
25 to provide a clear definition of what the bandwidth-limited

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1 condition is.

13:01:01

2 So we've got one expert who says, I don't know because
3 the specification doesn't tell me; we've got another expert
4 who provides contradictory opinions or opinions that do not
5 provide any contours.

6 So that's the fundamental problem here--which
7 metrics--congestion, packet loss--are exactly tied to this
8 bandwidth-limited condition. And because these are things
13:01:28 9 that you have more or less of, how much do you need of them to
10 qualify as a bandwidth-limited condition?

11 Well, when pressed, for example, with respect to network
12 congestion, Mr. Adams says -- well, let me read the question
13 and -- because it's helpful. When asked, At what level of
14 network congestion would you need for there to be a baud
15 condition?

13:01:59

16 His answer was, It depends.

17 And that really sums up the problem.

18 Now, if the specification gave us some guidance saying
19 loss of 10 percent of data, et cetera, then we could rely on
20 that and say, Well, that implies a bandwidth-limited
21 condition. And it may not be so specific as to a particular
22 metric even, but some guidance. There is none. There is
13:02:30 23 none.

24 Now, the case law is clear on this. Right? When there
25 is a term of degree, something that's subjective like this,

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1 for example, you -- something needs to be large or small or
2 you need -- whether something's large, for example, it's
3 subjective, and so you need some guidance in the
4 specification.

5 So whether you consider the network to be
6 bandwidth-limited, it's subjective--how much of an imposition,
13:02:59 7 how much of a reduction in available bandwidth do you need.
8 It's a term of degree. So that's what the Federal Circuit
9 tells us over and over, in that scenario--requires some
10 subjective criteria in the specification.

11 Now, one of the things that SVC points to is they say,
12 Well, what -- if a single link is congested so you can't send
13:03:24 13 the data over it, well, that's an example; that could be it.
14 But during prosecution -- I'm sorry. One of the things they
15 say is congestion could be bandwidth limitation. But during
16 prosecution, they replaced 'congestion' with
17 'bandwidth-limited'.

18 So, first off, there's a presumption under the Federal
19 Circuit's case law on claim interpretation that different
13:03:55 20 claim terms have different meanings, but on top of that they
21 explicitly replaced 'congestion' with 'bandwidth-limited', so
22 we know they are not synonymous.

23 Another opinion--and we talked about this a moment
24 ago--from SVC's expert is that the loss of a single packet
25 indicates a bandwidth-limited condition. Okay? And this is

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13:04:27

1 actually a really good one to fixate on for a moment because
2 it is inconsistent with the specification itself.

3 So here is Mr. Adams' testimony. He says, If I transmit
4 a million packets and 999,999 of them arrive, that is a
5 bandwidth-limited condition. This is some of the testimony he
6 provides that's actually -- it's clear as to what his opinion
7 is.

13:04:57

8 But if you look at the specification, one of the few
9 things the specification does tell us is that packet loss is
10 unavoidable. And here we're quoting column 2, lines 12 to 20.
11 Packet loss is unavoidable. Even when you have no bandwidth
12 limitation, you're going to have loss of that single packet.

13:05:29

13 So why is that important, Your Honor? You know, that's
14 important because, according to Mr. Adams' opinion, that would
15 mean you always have a bandwidth-limited condition. There is
16 nothing to identify. Right? If the loss of a single packet
17 is a bandwidth-limited condition, and you will always lose at
18 least one packet because that's an unavoidable condition in a
19 network, which the specification admits, concedes, that means
20 you always have a bandwidth-limited condition. Their view of
21 the claim term effectively writes the claim term out of the
22 claim; it renders the claim language meaningless. Again,
23 problematic. It's so undefined they can read it out of the
24 claim.

13:05:55

25 So, Your Honor, at that point -- this point I'm actually

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1 going to -- I don't know if you want to go term-by-term or if
2 you want us to do --

3 THE COURT: Yeah. I think we'll go term-by-term,
4 and if you've finished your initial remarks, I'm going to let
5 -- is it going to be Mr. Puckett?

6 MR. PUCKETT: It is, Your Honor.

7 THE COURT: Okay. Go ahead.

8 MR. PADMANABHAN: Thank you, Your Honor.

13:06:32 9 MR. PUCKETT: Your Honor, we have an additional
10 slide deck for claim construction that we can pass up.

11 THE COURT: Yes, that's fine.

12 MR. PUCKETT: I promise not to present all of these
13:07:05 13 slides.

13:07:31 14 So, Your Honor, I'll begin by saying that there are
15 actually some very simple answers and responses to the points
16 that were just made and some very simple things that I can
17 point to in the case law that are going to resolve the
18 indefiniteness questions.

19 And so I just want to point Your Honor to a trio of cases
20 that we cited in our briefs, one in particular that I think
21 provide legal standards that make it somewhat easy to resolve
13:07:57 22 the indefiniteness disputes. And those cases in particular I
23 would point the Court to *Sonix Tech versus Publications* that
24 we cite on page 5 of our reply brief, and also the *Niazi*
25 *Licensing* case cited at the same place, and also the *Enzo*

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1 *Biochem* case that is cited by all the parties -- or by both
2 parties in their briefs.

13:08:26 3 And, in particular, these cases--and I would point to
4 *Sonix* in particular--but these cases are all saying that in
5 instances where a patent uses descriptive terminology or terms
6 that signal some sort of range or degree, that what is
7 important--and this is what we didn't hear in counsel's
8 argument--is that the claim must provide an objective baseline
9 by which a person of ordinary skill would understand what is
10 inside the claims or what is outside the claims. So that's
11 really what we need to be looking at is is there an objective
12 baseline. And that baseline just needs to be understandable
13 to a person of skill in the art. And so I just want to give
14 examples of what the court in these cases found as being an
15 objective baseline. Okay?

13:08:57 16 So, for example, in the *Sonix Tech* case, the claim term
17 at issue was the term 'visually negligible'. And in that case
18 the court found that the objective baseline was whether or not
19 something would interfere with a user's perception that
20 involves what can be seen with the human eye. And the court
21 found there that a person of skill in the art would understand
22 the characteristics of what a person's normal range of vision
13:09:27 23 could be, and so a person of skill in the art, even though
24 there weren't specific portions of the specification that
25 provided definition or a numerical range or something like

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1 that, a person of skill would understand that people have
2 generally uniform ranges of vision, and the court specifically
3 found there that the defendants in that case had not shown
4 that variations in human vision are such that it prevents this
5 from being an objective baseline.

13:09:57 6 Just as another example, and I won't belabor it, but in
7 the *Enzo* case, we were -- the -- that was a DNA-related patent
8 claim. The claim term there was 'not substantially
9 interfering'. And the objective baseline that the Court found
10 there was that it had to do with the actual chemical
11 properties of various molecules and what a person of ordinary
12 skill would understand about when those are modified. Right?

13 So the court -- you know, it's okay to rely upon the sort
13:10:28 14 of knowledge or something that would be within the realm of
15 the person of ordinary skill's knowledge that they would
16 understand from the claims and the specification and the
17 intrinsic record.

18 So what's the objective baseline here? What's -- and
19 this is very simple. In the claims--and the expert testimony
20 sort of fleshes this out--the claims are all dealing with
21 video stream data that's being received that the video router
22 knows needs to be passed on to receivers, and if the bandwidth
13:10:58 23 is not sufficient to allow all of that video to go through,
24 then you have a bandwidth-limited condition.

25 And we'll get to all the different ways that are enabled

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13:11:28

1 for how the video router can detect that--right?--but the
2 objective baseline there is do I have enough bandwidth to
3 deliver the video stream that I need to deliver. And so a
4 person of ordinary skill would understand that the router
5 would be able to see the characteristics of the data stream
6 and would be able to make determinations as to whether there
7 was a limitation or not.

8 Now, the primary one that's being discussed in the
9 specification in here today is when there are dropped packets,
10 and so there are various techniques that a router can use to
11 say, Hey, I'm having to replace packets, I'm receiving
12 requests, that means there must be something going on
13 downstream; I have a bandwidth-limited condition that I need
14 to deal with now.

13:11:59

15 But there are other ways that are enabled by the
16 specification to make that same determination. For example,
17 just knowing characteristics--and there's a dependent claim
18 that specifically deals with this--about the graphics
19 processing capabilities of a downstream receiver. Right?
20 Just knowing what types of devices that the router is talking
21 to would be information from which the router could discern
22 that I have a bandwidth-limited condition that I now need to
23 deal with. Okay?

13:12:28

24 And so it's the claims themselves that provide that
25 objective baseline based upon the video stream data itself

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1 that a person of ordinary skill would understand that if the
2 bandwidth is not sufficient to deliver that data in full, now
3 I have a bandwidth-limited condition.

4 And so I wanted to respond directly to the last point
5 that was made by counsel where they're saying that the way
6 that we're reading this now sort of reads the claim out
7 because our specification says that when you're communicating
8 over an internet protocol you'll always have packet loss. But
9 that's a portion of the specification that is only discussing
10 sort of the general characteristics of an IP network.

13:12:59

11 And the guaranteed packet loss that's being talked about
12 there are not packets that are related to the video stream
13 data that the video router is interested in ensuring there is
14 sufficient bandwidth to deliver; that's just saying that, Hey,
15 IP protocol, IP networks, will have packet loss, this is a
16 problem that will happen in networks, but that -- but just
17 because an internet protocol network is losing a packet of
18 some sort some time does not make it a bandwidth-limited
19 condition; but a person of skill would understand from the
20 objective baseline that's provided in the claim that only if
21 you're receiving packet loss from the video packets that
22 you're trying to deliver, that, then, is a sign that there can
23 be a bandwidth-limited condition. Okay?

13:13:26

24 So it's very easy here. The claims themselves certainly,
25 as read in light of the specification, provide that objective

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13:13:59 1 baseline that cures any potential indefiniteness problem.

2 Now, I've said that these cases provide standards that
3 are -- that make these issues fairly easy to resolve. I would
4 like to ask the Court's indulgence for just a moment to kind
5 of step back just a bit and provide a bit of context here,
6 because for purposes of claim construction--and we kind of
7 thought this might go first before the § 101 argument, Your
8 Honor--but when we have -- when we acknowledge that we're
13:14:28 9 dealing with claim terms here that cannot be found directly
10 in the specification, that as a lawyer -- you know, I think
11 that Your Honor knows I came into this case after the claim
12 construction briefing and that sort of thing, so when I come
13 into a case like this I want to understand how that happens.
14 Right? You see that in prosecution and you see that in
15 patents, but you don't see it everyday. And we all know that
16 every patent is, you know, a product of the prosecution from
17 which it resulted, and so I want to provide Your Honor an
18 explanation of that.

13:14:59 19 And I think -- and I want to put on the elmo one of the
20 cases that I just mentioned. It's the *Niazi* case. And the
21 court notes -- I'm trying to zoom out, Your Honor.

22 THE COURT: Sure.

23 MR. PUCKETT: See where I kind of have the star
13:15:30 24 here, that patentees often use descriptive words to avoid a
25 strict numerical boundary to the specified parameter. In this

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1 case it's talking about a strict numerical limitation is what
2 was -- whether that was required in this case was what was
3 being discussed here. And the court just a little bit later
4 on says that, you know, When you're using true descriptive
5 words that can result in what are, you know, broad -- claims
6 that are broad in scope, but that itself doesn't lead to a
7 finding of indefiniteness.

13:15:58

8 And I want to just spend just a moment talking about this
9 point of using sort of--I'll leave it on the screen if Your
10 Honor is looking--the broad descriptive words intentionally in
11 patent prosecution for a purpose, and that purpose being to
12 make sure that the claims are not strictly limited to the
13 disclosed embodiments, but because you are choosing words that
14 are not tied to the specification, you are specifically asking
15 the Patent Office for something broader. And we have that
16 going on here in this prosecution. Okay?

13:16:29

17 The specification here ultimately resulted in a couple of
18 divisional applications where there was a determination at the
19 Patent Office that there were separate distinct inventions
20 contained within the same application. There was -- there
21 were three patents that were issued--there are slides, but we
22 don't need to bring them up--but that -- where the examiner
23 allowed claims that were much more closely tied to specific
24 embodiments and disclosures in the specification.

13:16:59

25 And the application that we're dealing with that led to

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1 this particular patent wasn't filed until 2016. And you can
2 see by looking at the prosecution history and by looking at
3 sort of the successive claim amendments that led to this that
4 at this point, now a full 10 years after the provisional
5 application has been filed, after three cases had been fully
13:17:28 6 examined and patents allowed, that the patentee here, the
7 applicant is asking for broad claims with -- that uses
8 descriptive language in the claims that are intended to cover
9 a full range of disclosed embodiments and more. That's what's
10 being asked here.

11 And I do want to put up on the screen just for a moment
13:18:00 12 -- if I could go to slides 10 and 11 very briefly. And I
13 won't spend any time on this, but in this particular -- just
14 in this one case--not in the others from the divisionals and
15 the previous continuation application--just in this case
16 there's a long series of rejections--not a final, final
17 rejection, even to the point of an appeal brief being filed,
13:18:29 18 the examination being reopened.

19 I say all this only because the examiner here was very
20 active. The transaction history goes over to the next slide.
21 This examiner was very active in asserting grounds of
22 invalidity § 102, § 103, asserting references on and on and on
23 until you get to the notice of allowability which was on the
24 screen during the previous argument.

25 I'll skip down to 19.

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13:18:58 1 Where finally this examiner, who has gone so -- gone
2 very, very far out of his way to not allow these claims is
3 finally convinced through the last series of amendments that
4 as a combination, as a whole, and in particular in light of
5 the particular claim elements that we've highlighted on the
6 screen, that that combination was allowable. And it was
7 allowable with claim language that was broad enough to cover
8 very -- specific language on certain terms that are at issue
13:19:28 9 here and that we'll talk about, but for those broad,
10 descriptive terms, there are multiple embodiments that enable
11 those. But this claim is not even tied to those embodiments.
12 The broad descriptive language is given with respect to
13 certain terms.
14 And I want to highlight here as well that something
15 that's not highlighted on the right-hand side, something that
16 is not within the examiner's statement of the reasons for
17 allowance is the claim term about identifying bandwidth-
13:19:58 18 limited conditions. That's something that the gist -- the
19 idea of identifying when there is a bandwidth-limited
20 condition is something that was known in the art. It's not
21 part of the sort of the core invention; it's a part of the
22 claim as a whole. So I don't mean to minimize that element or
23 any other, but it's not the claim elements that the examiner
24 was identifying here as being the reason for the allowance or
25 the point of novelty. Okay?

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13:20:25

1 And so there's several points that I kind of want to draw
2 from this. The first is that I want the Court to understand
3 that by taking the position that the claim terms should be
4 given their plain and ordinary meaning, the Plaintiff here,
5 we're not dodging the question, we're not kicking the can down
6 the road. Okay? There's a reason that terms that have a
7 plain and ordinary meaning are being used in prosecution here.
8 It's because if the applicant were to use words that are

13:20:58

9 specifically found or concepts that are specifically found in
10 the specification, that would be a signal that perhaps that
11 claim term should be limited to that embodiment; whereas, the
12 applicant's intention here is very clear--to ask the Patent
13 Office for something broader than strictly what is disclosed
14 in the invention.

13:21:29

15 So that kind of provides a grounding in the prosecution
16 history that in 2016 when an applicant and an examiner are
17 trying to find words that broadly describe a range of
18 embodiments, they need to use words that would be -- have been
19 plainly understood by persons of skill at the time.

20 THE COURT: Well, what do you -- how do you respond
21 to your friends on the other side's argument that your own,
22 you know, expert, who I presume would be a person of skill in
23 the art, they're pointing to two things. One is what they
24 would I think characterize as confusion on your own expert's
25 part about what that word means, and then they have the

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13:21:58 1 example at the end of the loss of one packet out of one
2 million as sufficient to qualify as a bandwidth-limited
3 condition.

4 I figure you will want to address both aspects of that
5 argument, which is, one, it appears that he's confused about
6 what it means; and two, that, you know, is that your
7 position--his ending quote that they have, I suppose, about if
8 you lose one packet, that would be sufficient; and I think
13:22:28 9 from your earlier argument I understand that's certainly not
10 your position, or it doesn't appear to be your position. So
11 maybe you can address that.

12 MR. PUCKETT: Let me address the second point first
13 and then move to the first, if I may, Your Honor.

14 THE COURT: Yes.

15 MR. PUCKETT: So on that specific point about if you
16 lose one packet now it's bandwidth-limited; if you lose one
17 packet of the video stream data that you're interested in,
18 then you do have a bandwidth-limited condition. So they're
19 pointing to a portion of the specification that just says,
20 Hey, when you have an internet protocol network, packet loss
13:22:58 21 is unavoidable, it will happen. Okay? But that just means
22 that you might lose some overhead data that goes to some
23 system information, or you might lose some packets that you're
24 trying to stream by looking at the news on the internet or
25 whatever. None of that matters for purposes of these claims.

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1 What matters is the data that you're trying to transmit--the
2 video stream data. And when you lose a packet of that, then
3 you do have a bandwidth-limited condition. Okay?

13:23:27

4 So it's not a contradiction in the specification; it's
5 just that they're reading too much into this disclosure about
6 describing internet networks generally. Okay?

7 If that answers your question there, backing up, then, to
8 the first question about the deposition testimony and what was
9 shown on the screen where the expert says, you know, Do you
10 have a bandwidth-limited condition here, and his answer is it
11 depends. The reason it depends is because the questions that
12 were asked of him were not tied to the objective baseline of
13 the video stream data itself. So when they ask him, How much
14 congestion results in a bandwidth-limited condition, and his
15 answer is it depends, the reason that's the answer is because
16 it depends upon the size and the characteristics of the video
17 stream data. So in their questions they're not supplying him
18 that input.

13:23:58

19 A person of ordinary skill would understand, as Mr. Adams
20 testifies in his declaration, that you have to be looking at
21 whether there is sufficient bandwidth to transmit the data
22 that you are interested in transmitting. And if that isn't
23 there or if there's packet loss of the data you're interested
24 in, then you have a bandwidth-limited condition.

13:24:28

25 So they want to put -- point to these sort of gotcha

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1 questions from depositions where they say that he didn't have
2 an answer, but, you know, ask that question you get an
3 inconclusive answer. Right? They weren't asking him, When
4 you have a video stream with certain characteristics, then how
5 much congestion would it take to create a bandwidth-limited
6 condition, or something along those lines, if that makes
7 sense, Your Honor.

8 THE COURT: All right. Go ahead.

13:24:57 9 MR. PUCKETT: So I think with respect to the
10 specific term, Your Honor, that's -- I don't want to back up
11 too much more. I think I made the points I wanted to make
12 about the prosecution and about how this -- there's a reason
13 that you see these claims the way that you see them.

14 I'll just say very briefly before I pass it back, we put
13:25:29 15 into the record yesterday--it's Docket No. 62--we put in some
16 of the IPR materials that they have filed reflecting on some
17 of these same issues. In particular, I wanted to point the
18 Court's attention to Docket No. 62-6, which is the expert
19 declaration of their expert Doctor Chatterjee in the IPR, and
20 I put a couple of slides in, but I will -- in a moment I'll

13:25:59 21 provide Your Honor with some specific citations to paragraphs.
22 But in that document their expert goes through the claim terms
23 in full and maps all of the terms that are in dispute
24 here--'bandwidth-limited condition', 'bandwidth-sufficient
25 condition', 'the video router'--uses all these terms and

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1 provides extensive paragraphs and paragraphs of testimony
2 where he maps that that onto the prior art for purposes of the
3 IPR.

13:26:28

4 And the test, and this is made very clear in the *Sonix*
5 case that I pointed Your Honor to and it's -- and this is all
6 discussed in the *Niazi* case, is that the key here--and we
7 don't have any disagreement on the standards; it's whether the
8 claims, read in light of the intrinsic record, would provide
9 guidance to a person of skill in the art for understanding
10 what's inside the claim and what's outside the claim. And in
11 the *Sonix* case, as noted in the *Niazi* case, that the fact that
12 experts are able to take the claim language and are able to

13:26:57

13 without any problems make -- provide opinions and provide
14 testimony about whether or not something is inside the claim
15 or outside the claim is highly relevant in this context. It's
16 not always conclusive, but it it's highly relevant evidence.

17 And I would submit to Your Honor that the best evidence
18 that we have in this case that these claims are not
19 indefiniteness [sic] is their expert's IPR declaration where
20 he provides paragraphs and paragraphs of testimony on all of
21 this where he says that he can easily map this on the prior
22 art.

13:27:29

23 I'll just stop on this point by just -- or stop right now
24 and pass with just this last point, which is that, you know,
25 we acknowledge that these are broad, descriptive claim terms,

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1 the Patent Office gave us this claim, allowed this claim with
2 those broad claim terms, and they have put this patent back in
3 front of the Patent Office to decide whether under § 102 or
4 § 103 that the claims are, in fact, novel and patentable in
5 light of the prior art. That is where those determinations
6 should be made. The patent allowed the claims with this broad
7 claim language. We're going to be -- we're going to have to
8 live with, you know, our construction, plain and ordinary
13:28:00 9 meaning, at the Patent Office, as we should. Right? And
10 so --

11 I'll just stop there. Their expert's IPR declaration is
12 the best evidence I think that we have that these claims are
13 not indefinite.

14 THE COURT: All right. Thank you, Mr. Puckett.

15 Any rebuttal on that? I know you've got about seven
16 minutes left.

17 MR. PADMANABHAN: Your Honor, we are going to be
13:28:30 18 pretty brief.

19 So first off, I think that was productive. You heard
20 Mr. Puckett say repeatedly that the claims are intentionally
21 broad; they intend them to be broad. And breadth should not
22 be mistaken with indefiniteness. Okay? That's a guiding
23 principle from the Federal Circuit. But the question is not
24 if the claims are just broad; the claim -- the question is do
13:28:59 25 we know where they end. That's really the question.

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1 I'm going to start backwards which is -- with
2 Mr. Puckett's reference to the *inter partes* review. Right?
3 That is a -- what I'd say a is a misapplication of the law.
4 Right? Because just because you can hit the center of the
5 bullseye--you know something is a bandwidth-limited
6 condition--doesn't mean you know the contours or extent or the
13:29:27 7 end of what the term means. Right? And that's why you see
8 this very regularly; you see parties can say I can invalidate
9 this claim, but it doesn't mean that it's not -- and it
10 doesn't have indefinite claim terms because I don't know what
11 the contours or the limits of the claim term are.

12 I want to also take a second and I want to really put to
13 task and focus on what Mr. Puckett offered, which I think is
13:29:58 14 effectively a new construction--not effectively--I think it's
15 a new construction here today. He said you can't transmit the
16 entire video stream; that's the bandwidth-limited condition.
17 Okay? You can't transmit the entire video stream. That is
18 his definition.

19 As an initial point, there is a question of how fast.
20 Right? Because really when you think about transmission of
21 data on a network, it's like cars driving on a network of
13:30:28 22 roads. The question isn't are you going to get there; it's
23 maybe how fast. Okay? So that part's not discussed.

24 But more importantly, if you look at what his expert says
25 -- This is in paragraph 62. This is the thing that most

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13:30:59 1 closely mirrors what Mr. Puckett just referenced, which is
2 this idea of not being able to transmit the entire video.
3 This is Mr. Adams' declaration, SVC's expert, and he says
4 "Here, bandwidth-limited conditions imply situations where the
5 network's available bandwidth is restricted or insufficient to
6 transmit the entire layered video data stream to all video
7 receivers." That is where Mr. Puckett left off just now when
13:31:28 8 he just explained SVC's position to the Court. That is not
9 what his expert said.

10 It continues and says, "without potential issues, such as
11 packet loss, delay, or degradation in video quality."
12 Potential issues. That opens it up to the point where it is
13 subjective; you do not know what qualifies as this potential
14 issue. And there is no guidance in the specification.
15 Mr. Puckett didn't point you to any. Okay?

13:31:57 16 So I wanted to point that out, Your Honor.

17 I think that that's it. I think the only other thing
18 we'd say is if Your Honor looks at the *Sonix* case, the case
19 law they rely upon, it actually is to Cisco's benefit here,
20 and let me explain why.

21 I can't find the cord, unfortunately, so I'm just going
22 to read it into the record.

13:32:31 23 In the *Sonix* case, there was that term 'visually
24 negligible', as Mr. Puckett referenced, but the point was that
25 the Federal Circuit found that there was, quote, considerable

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1 detail in the statements in the specification that provide
2 guidance on how to create visually negligible indicators, and
3 specific example that provide points of comparison for the
4 result. So there was something in the specification.

5 Here all there are are references to things that either
6 are the result of or may have some relationship to a
7 bandwidth-limited condition but don't tell you how much is a
8 bandwidth-limited condition--for example, congestion or packet
9 loss.

13:33:29

10 THE COURT: Let me -- two things I just want to
11 raise with you quickly is, I think everyone agrees that you
12 look at the context to the claim itself. So when we look at
13 bandwidth-limited condition, we look at the language around it
14 in the claim. So, for example, just in claim 1 it speaks to
15 "identifying bandwidth-limited conditions of an internet
16 protocol network between the video router and a plurality of
17 video receivers." There's other points where it appears.

13:33:59

18 And then I think there's some, you know -- I'm not really
19 looking at their expert; I'm looking at the information in the
20 specification of somebody who has skill in the art to say what
21 do we mean when we're talking about limitations on bandwidth
22 and are -- or a condition of limitations on bandwidth, and I
23 see, for example, in column 4, I don't know, it's around lines
24 5 through 20 that talks about the way this overlay multicast
25 routing system manages flow control and timely delivery, it

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13:34:29 1 talks about managing congestion -- "To manage congestion--I'm
2 sorry--"the network manages the available bandwidth to allow
3 for fair, equal division among the streams. Without
4 management, high volume screams are assigned a larger capacity
5 percentage on overloaded links resulting in little benefit in
6 keeping the bandwidth requirements of a stream low as the
7 packet loss percentages is determined by how much the network
8 is overloaded by all streams combined and not by the
13:34:59 9 requirements of the individual streams." It goes on and on.
10 But that's a discussion that talks about the significance of
11 bandwidth and how that can lead to issues.
12 There's another portion -- that's not the only -- I
13 identified several portions in the specifications that talk
14 about this, so these are just two.
15 At column 21 it talks about -- this is around -- starting
16 around 38 saying, quote, "To software routing demons, a
17 priority value of a packet is relative to the stream and
13:35:28 18 becomes relevant when a decision to discard data at a
19 congested router is made. The priority value has no meaning
20 other than as a criterion for discarding packets on congested
21 links. When an outgoing link of a router has insufficient
22 bandwidth to transmit all pending packets, it forwards only
23 those packets with a designated priority or the highest
24 priority. This technique is also applied to any data type,
25 including," et cetera, et cetera, "financial data." This is

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13:35:58 1 another section that is talking about what happens when you
2 have limitations on bandwidth.

3 So there's a number of places in the specification that
4 talk about that. So part of this to me is the point you just
5 made. There's breadth versus indefiniteness, but there's
6 another point which is what amount of precision do we have to
7 have in a term. Must it be exactly precise? Do I have to
8 know to the nth degree exactly what the limit of that term is,
13:36:30 9 precisely the limit of that term. I don't think you do.

10 And so part of this to me is two things. One is we look
11 at the language around it in the claim, we look at language in
12 the specification that talks about limitations on bandwidth
13 and conditions that arise from that, which include congestion
14 and the other terms that have been used. And then we say
15 would somebody--not just a layperson, like poor old me or
16 somebody else here--but would a person of ordinary skill in
13:36:59 17 the art who, as far as I can tell, you-all agree on what that
18 person's qualifications are, at least essentially, would they
19 have no idea what that is; would they really not understand
20 what that term means. And I have to say, it seems to me,
21 based upon what I saw, that I tend to think they would.

22 And I understand that -- I look at, you know -- we all
23 know what happens in depositions, and I see that there are
24 answers that, you know, you could match up and say this one
13:37:26 25 versus that one, but candidly, you know, I'm focused on the

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1 intrinsic evidence here, I'm focused on what the
2 specifications say, I'm focused on what the claims say. And
3 so those are points that to me were significant. I'm not
4 saying you need to respond to that. I mean, I think I got
5 your argument on this.

6 MR. PADMANABHAN: Your Honor, in 30 seconds I think
7 I can do it. I think I's helpful.

8 So we're all agreed on one thing, which is that the
9 specification doesn't use the terms anywhere, and it was added
10 in order to increase the breadth.

11 THE COURT: Right.

12 MR. PADMANABHAN: Okay. Much of the specification,
13 13:37:59 as Your Honor noted earlier during the previous section of
14 argument, is focused on algorithms to avoid this issue.
15 Right? We're going to queue data certain ways, we're going to
16 -- now, what there isn't much discussion of is detecting the
17 problem. It says there can be issues like congestion, there
18 can be issues like packet loss. They refer to these things in
19 general terms and say, We've got all of these algorithms to
13:38:29 20 try and address or avoid, but there isn't that explicit
21 discussion on the identifying step, on the detection of this
22 condition, and that's the problem.

23 And I think if you focus on the language that is used,
24 Your Honor, you'll notice that there is a problem, which is
25 that the inventor had the language at his disposal to be more

13:38:58

1 precise. For example, you pointed to language in the
2 specification talking about if all packets in the stream can't
3 be transmitted. They explicitly chose not to use those
4 words -- even though they had them in the specification, chose
5 not to use those words in the claim. And different words are
6 intended to have different meaning. And so that's the
7 inherent problem.

8 It's sort of a double edged sword, Your Honor. They've
9 acknowledged they tried to introduce breadth. There's some
10 real doubt as to what the limits of that breadth are.

13:39:28

11 So I'll leave it at that Your Honor. Thank you very
12 much.

13 THE COURT: Thank you.

14 All right. Let's move to the next term, and I think --
15 is that 'bandwidth-sufficient conditions', I think? Is that
16 it?

17 MR. GRESALFI: Yes, it is.

18 THE COURT: All right.

19 MR. GRESALFI: I'll be very brief because our
20 arguments on this term are largely the same as the
21 'bandwidth-limited conditions' term.

13:40:04

22 I would like to point out some nuances with that specific
23 term.

24 Sorry. One second.

25 THE COURT: Sure.

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13:40:30 1 MR. GRESALFI: Right. So the term 'bandwidth-
2 sufficient conditions' only appears in claim 11. You know,
3 our position is that it's indefinite.

4 Now, unlike the term 'identifying bandwidth-limited
5 conditions, which is in all the independent claims, the claims
6 specify that you have to "identify bandwidth-limited
7 conditions of an internet protocol network." So just looking
8 at the claim language, 'the bandwidth-limited conditions' is
9 an adjective of -- it's describing a characteristic of the
13:40:58 10 internet protocol network. In contrast, the claims -- you
11 know, claim 1 says that, you know, you are selectively all --

12 THE COURT: You know what it is? You may be a
13 little too close to the microphone. That's why -- sometimes
14 it gets that feedback if you're too close.

15 MR. GRESALFI: Okay. So you're selectively --
16 you're forwarding all of the set of enhancement layers based
13:41:25 17 off of the (unintelligible) with bandwidth-sufficient
18 conditions. So in claim 11, the bandwidth-sufficient
19 conditions is describing a characteristic of the video
20 receivers. And now we think that this adds an extra, you
21 know, additional uncertainty to this term.

22 THE COURT: Take a look. She's going to take a look
23 at the microphone, because I don't know why -- you're getting
13:41:55 24 a little bit of feedback.

25 THE CLERK: This came off. You may want to use a

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1 lapel mic.

2 THE COURT: Just make sure it's flashing green. If
3 you push that once it should be flashing green, and that may
13:42:30 4 pick you up better.

5 That's better. Thank you.

6 Thank you, Bonnie.

7 MR. GRESALFI: And again, SVC and its experts say
8 that, Well, you know, in the context of claim 11,
9 'bandwidth-sufficient conditions', it's describing the network
10 as well as 'bandwidth-limited conditions'. But that's not
11 what the claim says.

12 And again, there's nothing in the specification which
13:42:58 13 describes how do you ascertain what the bandwidth -- when a
14 video receiver has bandwidth-sufficient conditions.

15 So again, I'll -- you know, I will -- I could -- on this
16 slide I have up some of the citations that SVC points to in
17 its reply and I'll -- you know, we don't think any of these
18 have anything to do with determining what the metes and bounds
19 of when there are and aren't bandwidth-sufficient conditions.

13:43:29 20 And just focusing on one in particular, we think that
21 this example that SVC points to on page 7 of their surreply
22 only supports that, you know, that this term is indefinite.
23 Here the specification says, you know, despite the fact that
24 the network has insufficient capacities, it has dropped
25 packets from every layer and delivered the packets out of

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1 order, you know, the user can still receive a subset of the
2 stream that is uncorrupted.

13:43:57 3 So I think there's some tension because SVC's expert, you
4 know, says that, you know, you could still have bandwidth --
5 what sounds like bandwidth-sufficient conditions, but then,
6 you know -- you know, even if there's insufficient capacity,
7 but you could still receive the full set of the video stream.

8 So, you know, we think that the way that 'bandwidth
13:44:26 9 sufficient conditions' is phrased is -- in the claim language,
10 we think that it's just kind of grammatically inconsistent.

11 And in addition to the reasons that we set forth for the
12 'bandwidth-limited conditions' term, we think that this adds
13 extra uncertainty to the claim.

14 So that's it.

15 THE COURT: All right. Thank you.

16 Do we have a response, Mr. Puckett?

17 MR. PUCKETT: I'll make it extremely brief, Your
18 Honor, because I don't want to belabor this point.

19 We essentially think it's the flip-side of
13:45:00 20 'bandwidth-limited condition'. Again, there's an objective
21 baseline that is in the claim, and that is the characteristics
22 of the video stream itself. And so we provided expert
23 testimony that a person of ordinary skill would understand
24 that if the bandwidth is sufficient to transmit all of the
25 video stream that you're interested in, then it's a

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1 bandwidth-sufficient condition.

2 I'll respond directly to the portion of the specification
3 that was just on the screen. There's a portion of the words
13:45:27 4 there that counsel glossed over, which is it says that the
5 user received a deterministic subset of the stream that is
6 uncorrupted. So in this portion of the specification it's not
7 talking about in this network having insufficient capacity
8 that you're delivering all of the data stream; it's
9 specifically saying that the user is able to receive a
10 deterministic subset of the stream. So, in other words, it's
11 being restricted in some fashion by providing less than a full
12 set of enhanced layers, or something of that sort. So we just
13:45:58 13 don't see that that really supports a different position on
14 this term.

15 With respect to the grammatical argument in the claim and
16 the difference between claims 1 and 6 versus claim 11, I don't
17 see that it's really grammatically any different; it's still
18 -- the term is being used there in a way that's still being
19 used as a descriptor with respect to the network. So we think
20 that it's functionally the same as the 'bandwidth-limited' set
21 of arguments.

22 Does Your Honor have questions?

23 THE COURT: Thank you, Mr. Puckett.

24 MR. PUCKETT: Thank you.

13:46:29 25 THE COURT: If you'd like to make any rebuttal, you

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1 can.

2 MR. GRESALFI: I'm ready to go to the third term.

3 THE COURT: All right. Let's go to the third term.
4 I think this is 'video router'.

5 MR. GRESALFI: Yes. So the video -- so claims 2
6 and 7 both recite selectively forwarding, you know, the
7 enhancement layers to the video -- I'll show you the claim
13:46:59 8 language. Sorry. This is not up.

9 THE COURT: The video receiver. I'm sorry.

10 13:47:17 MR. GRESALFI: It's only showing my desktop.

11 So both claims 2 and 7 recite that, you know, you're
12 selectively forwarding the enhancement layers based on the
13 video processing capabilities of the video receiver. Now, the
13:47:59 14 word 'the' here is connoting an antecedent basis so that you
15 have to look at an earlier portion of the claim to know what
16 'video receiver' is referring to.

17 Now, there is three distinct instances of 'video
18 receivers' recited in the independent claims. So in the
19 'identifying bandwidth-limited conditions' limitation in
20 yellow highlighting, you know, the claim first says that there
13:48:27 21 is a plurality of video receivers; next, when the base layer
22 is forwarded to at least two of the plurality of video
23 receivers, so this is a different subset of video receivers;
24 and finally, the claim specifies that when you're doing the
25 selectively forwarding of the enhancement layers, that this is

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1 going to a different at least two of the plurality of video
2 receivers.

3 So there is at least three different video receivers
4 that -- there is at least three different instances of 'video
13:49:00 5 receiver' that 'the video receiver' in claim 2 could be
6 referring to.

7 And I won't repeat that process, but the same is true for
8 claim 7 as well.

9 Now, the case law is pretty clear, and that's in this
10 *Bushnell versus Hawthorne -- Bushnell versus Cisco* case in
13:49:22 11 813 F.App'x 522, that when you have a term that has an
12 antecedent -- when it has 'the' or 'said' recited in front of
13 it, you know, it has -- you have to know which of the earlier
14 prior recusitations [sic] of that term it's referring to.

15 And, you know, the Court can correct an error in a
16 patent, especially when it's -- you know, the intrinsic
13:49:58 17 evidence makes it clear that, you know, it was -- it's
18 referring to one or the other.

19 And I will highlight the claim language in the *Sensor*
20 *Electronics Technology* case, which is 2019 WL 4645338. In
21 that case the independent claim recited 'a material' two
22 different times, and a dependent claim said that 'wherein the
23 material', and it specified what the material is. The court
13:50:28 24 in that case found that this claim was indefinite. And this
25 is the same exact situation that we have here. And, in part,

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1 the Court's reasoning was that, you know, the intrinsic -- the
2 specification did not clarify which of the material that the
3 dependent claim was referring to.

13:50:56 4 And, you know, SVC points to disclosure and they say
5 that, Ahh, they say that -- so just turning back to the claim
6 language, they say that 'the video receiver' is referring to
7 "one of the at least two of the plurality of video receivers
8 in the selectively forwarding step" shown in teal, but they
9 don't provide any rationale why it has to be this instance of
13:51:24 10 'video receiver' and not the other two.

11 And again, at least -- our brief points this out.
12 There's at least six different options for what it might be,
13 because you could have -- you could be referring to at least
14 two of the plurality of video receivers in each step or all of
15 -- or --

16 And I'll also add that claim 12 does have a proper
17 antecedent basis. So claim 12 specifies that you're
13:51:58 18 selectively forwarding one or more set of the enhancement
19 layers based on the video processing capability of each of the
20 set of video receivers, but that's actually referring to the
21 first resuscitation of a set of video receivers in the
22 'identifying bandwidth-limited conditions' term. So, you
23 know, SVC's contention that, you know, it's referring to the
13:52:26 24 selectively forwarding step is arbitrary and it's contradicted
25 by claim 12.

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1 THE COURT: Okay. So, yeah, I just want to make
2 sure I understand your argument, because it's -- you were
3 talking about -- I am just looking at claim 2 right now --

4 MR. GRESALFA: Gotcha.

5 THE COURT: -- which talks about "the video router
6 selectively forwarding the one or more of the set of
7 enhancement layers based on video processing capabilities."

13:52:59 8 So that is focused on where enhancement layers are being sent.
9 Correct?

10 MR. GRESALFI: Right.

11 THE COURT: So it seems that that is -- if you were
12 looking back at claim 1, that it's that portion where it says
13 "selectively forwarding one or more of the set of enhancement
14 layers, but fewer than all through the internet protocol" --
15 is that what you see it referencing?

16 MR. GRESALFI: I think you're saying that you think
17 that claim 2 is referring to the third resuscitation, the
18 selectively forwarding step?

19 THE COURT: Well, it looks -- I'm trying to look at
20 claim 1 and see which part of claim 1 is talking about the
21 sending of enhancement layers --

22 MR. GRESALFI: Right.

23 THE COURT: -- because claim 2 is not referencing to
24 base layers; it's -- you know, it's just talking about those
13:53:56 25 enhancement layers.

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1 MR. GRESALFI: I understand where you're coming
2 from, but I would like to turn again to claim 12.

3 THE COURT: So my thought was just that that is,
4 then, referring to the ones that can get the enhancement
5 layers.

6 Anyway, go ahead, yeah.

7 MR. GRESALFI: But again, looking at claim 12, you
8 know, again, claim 12 is also talking about "selectively
9 forwarding one or more of the set of enhancement layers based
13:54:29 10 on the video processing capabilities of each of the set of
11 video receivers." And if you look at where -- what -- which
12 instance of 'video receivers' it's referring to in the claim,
13 it's actually referring to a set of video receivers that's in
14 the 'identifying bandwidth-limited conditions' claim term, and
15 it's not referring to 'the remaining video receivers in the
13:54:56 16 set of video receivers' in the selectively forwarding step.

17 THE COURT: So you're looking in claim 11 at two
18 references to 'video receivers' getting enhanced layers? Is
19 that correct?

20 MR. GRESALFI: I'm sorry. Can you repeat that?

21 THE COURT: "Wherein the scalable video coding
22 router forwards all of the set of...to at least two of the
23 video receivers and the set of video receivers with
13:55:29 24 bandwidth-sufficient conditions," and then, "the
25 scalable...selectively forwards one or more of the set of

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1 enhancement layers, but fewer than all to at least two of the
2 remaining video receivers in the set based upon the identified
3 bandwidth-limited conditions."

4 So you're looking at those two --

5 MR. GRESALFI: Yeah.

6 THE COURT: --references and then comparing that to
7 12 which talks about the video router -- claim 11,
8 "wherein...of each of the set of video receivers." Okay.

9 MR. GRESALFI: Okay. Thank you.

13:55:59 10 THE COURT: Yep.

11 Mr. Puckett?

12 MR. PUCKETT: Again, Your Honor, I'll try to be very
13 brief here, and I think that our short response on this is
14 that the words of the claims provide all the guidance that you
15 need to sort out this puzzle.

16 So as Your Honor correctly noted, that in claim 2, as an
13:56:29 17 example, that that dependent claim begins by saying, "wherein
18 the video router further selectively forwards," so that is
19 clearly pointing back to the selectively forwarding step of
20 the previous claim. And so that sort of excludes the idea
21 that it's referring to the previous recitation of a plurality
22 of video receivers in the identify step. Okay?

23 But then, importantly, some words that are being ignored
24 here is the words having to do with "forwarding based on the
13:56:58 25 video processing capabilities of the video receiver." Okay?

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1 So this language about the "based on the video processing
2 capabilities" is something that's not explicitly in claim 1;
3 it's -- as we sort of looked at before, it's one of those
4 specific embodiments of how the selectively forwarding is
5 enabled. So now we're limiting that claim term; we're
6 limiting 'selectively forwarding' to doing that based upon the
7 video processing capabilities, and then it says "of the video
8 receiver," so the language that we're going to talk about now.

13:57:29 9 But -- so the expert testimony that we've provided here
10 is that a person of ordinary skill in the art would understand
11 that the more than -- the two or more of the receivers that
12 we're talking about here would have different video processing
13 capabilities, and that when it's using the phrase immediately
14 after that "of the video receiver," that it would be talking
15 about doing the selective forwarding based upon the video
13:57:57 16 processing capabilities of each individual receiver that is
17 going to receive this, the video stream data.

18 And so that's we arrive at, to use the language in their
19 brief, sort of option 4 of the menu options that they leave
20 out, that essentially that the selectively forwarding is being
21 done to each of the two or more receivers based upon the video
22 processing capabilities of that particular receiver and doing
23 that for each in the set, so that essentially you arrive at --
13:58:28 24 that a person of ordinary skill would read this essentially to
25 mean the capabilities of each of the receivers, each video

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1 receiver.

2 THE COURT: And what about claim 12?

3 MR. PUCKETT: So I just feel like they're making a
4 little too much out of this sort of differentiation argument,
5 if you will, with respect to claim 12, and this is the reason.
6 Because I want to point out to the Court that in claim 1 in
7 the identifying limitation, that the language that's used
8 there at the end of that is "a plurality of video receivers."
13:58:59 9 Okay? And then in claim 11 with respect to that same step, we
10 have a slightly different set of words being used here; that
11 we have now "a set of video receivers" rather than "a
12 plurality of video receivers." Okay?

13 And so I think that that's the explanation why we're
14 using slightly different language in claim 12, for now we're
15 saying "forwards the one or more of the set of enhancement
16 layers"--I'm sorry--towards the end of claim 12 where it's
13:59:28 17 saying, "the video processing capabilities of each of the set
18 of video receivers" is that there's a need in claim 12 here to
19 use that different language because there's slightly different
20 language that's being used in the identifying step of claim 11
21 as compared to claim 1 and claim 6. Okay?

22 So I think that this -- that they're just sort of making
23 a little bit too much out of this by saying, like, that --- if
24 they wanted to have this construction where it really means
13:59:57 25 'each' they could have used the word. Okay? There was a

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1 reason they used that term in claim 12, because claim 11 from
2 which it depends is using slightly different words talking
3 about the set of video receivers instead of talking about the
4 plurality.

5 Apart from that as an explanation, Your Honor, I don't
6 really see how -- as I understand their argument, they're
7 basically just saying, like, Well, you knew how to use this
8 language if you wanted to use it. Right? And I don't --
9 that's just not what I see happening here.

10 THE COURT: I mean, it does look like, you know, as
11 I'm looking at claim 11 as opposed to claim 1, I mean, there
12 14:00:28 is the different word using 'set' versus -- but there are
13 also -- you know, there are two recitations there about the
14 enhancement layers, one of which is "all enhancement layers to
15 at least two," and then there is "selectively forwarding one
16 or more of the set but fewer than all of the enhancement
17 layers to at least;" whereas, I think in claim 1 there -- I
18 don't think there's a discussion of something -- of a
19 14:00:59 recitation of all enhancement layers.

20 So I don't know if that's part of what I think your
21 colleague was pointing to is that you have the additional
22 recitation in 11. And I don't know if that changes anything
23 that you have to say about that.

24 MR. PUCKETT: I don't know it does. Like, at the
25 end of it, I just see that I'm saying, like, you could use

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14:01:30

1 this the language if you wanted to--right?--but the point is
2 that the person of ordinary skill would understand, based upon
3 the reasons that we've discussed, because we're talking about
4 here forwarding based upon the video processing capabilities
5 of the receiver that they -- that each receiver is unique;
6 it's going to have, you know -- in a set of receivers, they're
7 going to have different video processing capabilities. And so
8 this claim limitation in claim 2 only sort of makes sense if
9 you read this in the based on the characteristics of each of
10 the receivers.

14:01:58

11 THE COURT: And as long as I have you up here, I'm
12 just -- I'm come back to the prior terms just for a moment,
13 because we have, you know, 'bandwidth-sufficient condition'
14 and 'bandwidth-limited condition', and just to get your
15 understanding of -- are those terms that you think are
16 mutually exclusive or not, meaning could you have something
17 that's bandwidth-sufficient but that also is in some ways
18 bandwidth-limited?

14:02:29

19 MR. PUCKETT: So if you're judging it from a
20 particular moment in time and you're judging it with respect
21 to a defined set of receivers that are not varying--okay?--
22 then I do think that the -- my understanding is and the way
23 that we're interpreting this is that the -- it is a binary
24 season--you're either bandwidth-sufficient or you're
25 bandwidth-limited.

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I HEREBY CERTIFY THAT THE FOREGOING IS A
CORRECT TRANSCRIPT FROM THE RECORD OF
PROCEEDINGS IN THE ABOVE-ENTITLED MATTER.
I FURTHER CERTIFY THAT THE TRANSCRIPT FEES
FORMAT COMPLY WITH THOSE PRESCRIBED BY THE
COURT AND THE JUDICIAL CONFERENCE OF THE
UNITED STATES.

S/Shawn McRoberts 10/26/2024

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