

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC.,
Petitioner,

v.

AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED,
Patent Owner.

IPR2021-00303
Patent 8,270,992 B2

Record of Oral Hearing
Held: March 22, 2022

Before MELISSA A. HAAPALA, *Vice Chief Administrative Patent Judge*,
and KRISTEN L. DROESCH and NATHAN A. ENGELS, *Administrative
Patent Judges*.

APPEARANCES

ON BEHALF OF THE PETITIONER:

HARPER BATTS, ESQ.
CHRIS PONDER, ESQ.
SHEPPARD MULLIN
Four Embarcadero Center
17th Floor
San Francisco, CA 94111
(650) 815-2600

ON BEHALF OF THE PATENT OWNER:

DANIEL YOUNG, ESQ.
CHAD KING, ESQ.
ADSERO IP LLC
8210 Southpark Terrace
Littleton, CO 80120
(303) 268-0066

The above-entitled matter came on for hearing on Tuesday
March 22, 2022, commencing at 9:57 a.m., EDT, by video/by telephone.

1 PROCEEDINGS

2 JUDGE ENGELS: Good morning. This is the hearing for
3 IPR2021-00303. The Petitioner is Netflix, Incorporated. The
4 Patent Owner is Avago Technologies International Sales Pte.
5 Limited. The challenged patent is U.S. Patent No. 8,270,992
6 B2.

7 I'm Judge Nathan Engels. The other panel members are
8 Vice Chief Judge Melissa Haapala and Judge Kristen Droesch.

9 This hearing is open to the public. Each side has a
10 total of 60 minutes to present its arguments. Please let us
11 know if you'd like to reserve some of your time for rebuttal.
12 Petitioner will present first, followed by Patent Owner, and
13 we'll repeat the order for any rebuttal time that's been
14 reserved.

15 We have the entire record before us. When referring
16 to demonstratives, papers, or exhibits, please do so clearly
17 and by slide or page and paper number. Please pause a few
18 seconds after identifying the page number so we can find it.

19 Please mute your microphone when not speaking, and
20 please identify yourself when you begin speaking.

21 Who's appearing on behalf of Petitioner?

22 MR. BATTS: Good morning, Your Honor. This is Harper
23 Batts on behalf of Petitioner, and with me in the room is

1 Chris Ponder.

2 JUDGE ENGELS: Would you like to reserve any time for
3 rebuttal?

4 MR. BATTS: Yes, Your Honor. I'd like to reserve 20
5 minutes for rebuttal, please.

6 JUDGE ENGELS: Who's appearing on behalf of Patent
7 Owner?

8 (Pause.)

9 JUDGE ENGELS: I believe you're muted.

10 MR. YOUNG: Sorry, Your Honor. This is Dan Young on
11 behalf of the Patent Owner, and with me is Chad King.

12 JUDGE ENGELS: Do you intend to reserve any of your
13 time for rebuttal?

14 MR. YOUNG: Yes, Your Honor. I'd like to reserve 15
15 minutes.

16 JUDGE ENGELS: And with that, Petitioner, you may
17 begin when you're ready.

18 ORAL ARGUMENT ON BEHALF OF PETITIONER

19 MR. BATTS: Thank you, Your Honor. And, again, this
20 is Harper Batts on behalf of Petitioner Netflix.

21 And I'd like to start with Slide No. 2 this morning.

22 This IPR had a single instituted ground. It's a combination
23 obviousness ground of the combination of Shaw and Barnes.

24 And if we go to Slide 5, I'd like to first go through
25 the art a little bit and the teachings of the art before

1 going into the issues that remain in dispute. So, if we go
2 to Slide 5, what we see is the '992 patent looks at
3 determining bandwidth to switch connections to improve
4 quality, but the '992 patent never defines "quality" or
5 "quality level" and refers to many different examples of how
6 to determine quality that we're going to talk about today.

7 And if we turn to Slide 6, what we have is the Barnes
8 reference. The Barnes reference teaches a portable device
9 with a media player that has an internet connection.

10 And then, if we go to Slide 7, Barnes also teaches
11 the media player being able to use common video encodings.
12 And you see on the right-hand side there, in paragraph 40, it
13 talks about encoding such as MPEG-4.

14 And if we go to Slide 8, importantly, Barnes teaches
15 selecting among different internet connections or network
16 connections, including selection based upon bandwidth.

17 And if we go to Slide 9, here, again, is some other
18 sections of Barnes on the left-hand side. Paragraph 72 of
19 Barnes shows that Barnes looks at the content being requested
20 and then selects an appropriate bandwidth -- bandwidth
21 network for that content. And on the right-hand side, what
22 we see in the highlights there -- and, actually, in a lot of
23 that paragraph 74 -- is it talks about various factors for
24 switching the connection, including the changed conditions of
25 the network and historical and anticipated availability of

1 bandwidth of network.

2 So, if we go to Slide 10, Barnes is being combined
3 with Shaw. And (inaudible) server provides a best quality of
4 service and allows switching to another source to maintain or
5 improve quality, and it has this teaching.

6 And if we go to Slide 11, what we see is -- on the
7 right-hand side of Slide 11, which is identifying column 9 of
8 Shaw, it includes specifically identifying a better source --
9 sorry, Your Honors -- a better source for a stream so that
10 the content being delivered is improved, and I think that's
11 an important thing to note there. So the language that we
12 have highlighted there includes the reference in Shaw to
13 identifying a better source for a stream, not simply a better
14 stream, and the -- and then that the -- so that the content
15 that is being delivered is improved.

16 And that's quite relevant to the claim language, as
17 we back to Slide 3. I'm sure the panel is familiar with the
18 language of Claim 1 at this point, but just as a reminder,
19 the language of the Claim 1 is discussing the content that's
20 being obtained or delivered or sent to the portable system,
21 the media device that's being used by the user. It talks
22 about delivering digital media content, for example, in
23 limitation [1b], and I'll discuss that further today.

24 I think -- going back to Slide 12, I think it's just
25 -- I do think it's notable to point out that -- the

1 inconsistent positions of Patent Owner about the '992 patent
2 in the challenged claims here.

3 In District Court, on the left-hand side there,
4 Patent Owner emphasized that the alleged invention is about
5 the communication network and using bandwidth for selection
6 purposes. And also on the left-hand side, in District Court,
7 Patent Owner noted that it wasn't claiming an abstract idea
8 of switching from lower to higher quality service.

9 Well, we've excerpted on the right-hand side what
10 Patent Owner's positions are in this proceeding, where Patent
11 Owner and its expert have argued that the bandwidth and
12 network aspects of the claims were not important. So there
13 is really a contrast in the positions that they've taken
14 between the two proceedings.

15 So, with that overview, I'd like to go to Slide 13.
16 The first issue we view in dispute is whether the quality
17 level of the digital media content excludes considerations of
18 network conditions.

19 And we have on Slide 14, again, that the claim
20 language -- and similar to what I was mentioning earlier --
21 we have -- for that claim language, we have claim language
22 that clearly associates quality level with the network and
23 delivery of content. It talks about delivering the content,
24 providing the content, obtaining the content. That is how
25 the claim -- the claim was drafted with the claim language

1 that's being challenged here.

2 And so, Slide 15, I guess the -- I just note that the
3 Institution Decision noted precisely this, that the plain
4 language of the claims and the quality level refers to the
5 content that's being delivered -- the digital media that's
6 being delivered, provided, and obtained.

7 So, if we go to Slide 16, what we see now is that
8 Patent Owner has an argument about the quality or what
9 quality level should be, but their argument is somewhat
10 circular, and they still don't define what quality level --
11 what they're asking for a claim construction or a meaning
12 or interpretation of quality level.

13 And on Slide 17, I think you see here where, I think,
14 we've kind of parsed out in the declaration of Patent Owner's
15 expert, in paragraph 82 there, what it looks like to be what
16 they're actually arguing now in sur-reply, what they seem to
17 be arguing for quality level. So while they've never asked
18 for a construction of quality level, they're clearly trying
19 to narrow the claim language and are now arguing that quality
20 level should be considered in isolation, independent of any
21 delivery considerations. And I'm going to walk through why
22 that's incorrect.

23 So, if we turn to Slide 18, we see that Patent Owner,
24 as part of its argument, is pointing to nonlimiting examples
25 in the specification for why quality levels should exclude

1 delivery considerations. But even Patent Owner's examples
2 that they're pointing to that are nonlimiting also don't
3 support their interpretation -- I guess I would say; it's not
4 constructions if they're not asking for a construction --
5 their interpretation of quality level.

6 So, for example, on the right-hand side here, we have
7 the portion of the '992 specification that Patent Owner is
8 relying upon for their argument, and you see that midway
9 through it talks about, as an example, higher quality
10 information may include information encoded utilizing a lower
11 loss encoding technique than used to encode the information
12 to which the first system has access.

13 So it has an example of encoding. But then, if you
14 look at the very next example, it says, As another example,
15 such higher quality information may include information to
16 which the second system has access and to which the first
17 system has no access.

18 So they have an example here of referring to quality
19 of information as being information that -- where you simply
20 have, let's say, a server that has crashed or a server that's
21 suffered a power failure, and you can't access the content
22 anymore, and you're going to another server that has content.
23 So it can't be limited to different encodings, as Patent
24 Owner is proposing. Even their own portion of the
25 specification they're pointing to isn't as limited as the

1 argument that they're making.

2 And so I'd like to turn now to -- I think that's an
3 important point, so I'm pausing there if there's any
4 questions, but I think it's clear that there is a broader --
5 a broader statement in the portion of the '992 spec, which
6 they're pointing to, for -- which is simply one example in
7 the specification that it simply doesn't hold up for the
8 proposition that they're contending it does.

9 Then, on Slide 19, I guess this one's a little
10 perplexing to me, but Patent Owner also argues about a
11 nonlimiting example of a local playback machine, where
12 there's no internet connection. So I'm -- I guess it's a
13 little confusing, perplexing to me because the claims clearly
14 have a network connection. So why are we discussing an
15 exemplary embodiment that doesn't have a network connection
16 for the question of whether quality level has to exclude
17 delivery considerations? That doesn't mean it has to -- has
18 to have delivery considerations. It's a question of whether
19 it's excluding deliver considerations.

20 So the example here does not include streaming
21 digital media content, and, therefore, it can't support
22 Patent Owner's -- I guess their expert's sweeping conclusion
23 that the quality of digital media is always independent of
24 delivery considerations.

25 And I think -- on Slide 20, we merely have the

1 explanation by our expert of, well, when you're talking about
2 an example in the spec where there's no network connection,
3 then it's not surprising that network connection would --
4 would or would not impact quality.

5 But turning to Slide 21, what I do think is important
6 and what we explained in our Petition is that bandwidth does
7 affect media quality, and we have the teachings here in Shaw,
8 which specifically state that.

9 And if we turn to Slide 22, the Institution Decision
10 noted that, you know -- that what we had cited to for both
11 Barnes and Shaw describe bandwidth as one factor affecting
12 streaming quality, and I don't believe there's any dispute by
13 the parties here that both references describe bandwidth
14 affecting streaming quality.

15 So, if we go to Slide 23, what we do have is we have
16 Patent Owner now arguing that claim amendments during the
17 prosecution of the patent, since they amended the claims,
18 quality level refers specifically to the digital media
19 content, and Patent Owner says it has nothing to do with the
20 network conditions. But the prosecution history does not
21 support Patent Owner.

22 The amended claims still put digital media content in
23 the context of a network connection and refer to the digital
24 media content delivered and obtained; thus, the amendment
25 does not isolate digital media content from digital media

1 service.

2 And I think it's also important to note here nowhere
3 in Patent Owner's briefings have they argued, let alone
4 established, some sort of clear disavowal in claim scope that
5 would be required for their argument to say -- and they
6 haven't even asked for a claim construction of quality level.

7 So if we turn to Slide 24, we have the references,
8 the Jagadeesan and Kayama references, which were the
9 references on which the claims were originally rejected. In
10 Kayama -- so -- so basically, what was this amendment? I'm
11 sure you're wondering, What was this amendment really
12 intended to do?

13 Well, the file history includes the statements by
14 Applicant about what Jagadeesan and Kayama taught and what
15 the claim amendment was doing. And if you look at -- the
16 claim amendment was introduced because Jagadeesan and Kayama
17 taught switching network connections in order to obtain the
18 same content from the same server from the same source. So
19 both of those references were talking about merely changing
20 the network connection but not changing the server, the
21 underlying source or server of the content.

22 And Applicant noted that in their statements about
23 the data being the same data from the same server. So
24 Applicant made the point that when there is a handoff between
25 the mobile stations, the content quality and source remained

1 exactly the same.

2 So the source remains the same, and the content that
3 they're pulling from that source remains the same. There was
4 no second system from which to obtain the content. That is
5 how Patent Owner or Applicant distinguished the claim --
6 their amended claims to overcome the rejection of Jagadeesan
7 and Kayama.

8 And if we turn to Slide 25, what we have is, in
9 contrast to Jagadeesan and Kayama, the combination of Barnes
10 -- the instituted -- the ground here, the combination of
11 Barnes and Shaw does identify a new and better source, a
12 different content server, based on Shaw's express teachings
13 in the highlighted portions that we have here. So it's
14 actually talking about going to a different server to draw
15 the content.

16 So going to the next issue, Slide 26, the next two
17 issues are actually about claim limitation [1c]. And I'd
18 like to touch on -- if we go to Slide 28 -- we set forth in
19 the Petition -- I think we were clear to set forth in the
20 Petition two separate bases on which Shaw's teachings satisfy
21 claim limitation [1c]. So I've highlighted here where in our
22 brief we said first -- first reason, the performing of the
23 test to determine whether there is a better source, and then
24 a second reason about the thinning.

25 So I'm going to address the test portion first here.

1 And if we go to Slide 30, we have Shaw clearly -- and I don't
2 think there's any dispute here from Patent Owner -- that Shaw
3 clearly teaches that content must be encoded before streaming
4 and that content at the time was being encoded at different
5 rates. So this is the reference -- the statement and
6 teaching from Shaw about encoding at different rates content.
7 And this was cited in our Petition.

8 And, actually, I'd like to go to page 36 of our
9 Petition. I think it would be helpful. If you look at page
10 36 of our Petition -- I'll pause as Judge Engels requested.
11 Let me know when -- when you're ready, Your Honors.

12 JUDGE ENGELS: Okay.

13 MR. BATTS: Okay. So if we look at page 36 of our
14 Petition, this is the language that was excerpted on the
15 previous slide where we set forth two different bases for why
16 [1c] -- if you look -- go back to 34, this is the [1c]
17 portion of our Petition.

18 We explain that the first explanation is this
19 teaching of performing the test to determine a better source,
20 and we explain why it would've been obvious, and then we have
21 citations back to the prior section, which include pages 22
22 -- 32 to 33, as well as citations to our expert declaration,
23 and to the portion of the -- the Shaw that I have right here
24 on Slide 30, where -- column 1, 37 to 58 of Shaw, where it
25 talks about the different encodings that Shaw was teaching

1 for content.

2 And if we go back to pages 32 and 33 of our Petition,
3 we laid out for this first argument why a POSITA would've
4 recognized, looking at Shaw's teachings, that you would look
5 at the bit rate at which content is encoded, and there would
6 be different bit rates of encoding, and that Shaw was looking
7 at using bandwidths that would allow you to take advantage of
8 the different bit rate encodings.

9 So this was all set forth in our Petition about
10 teachings of Shaw that specifically had different encodings.
11 So even under Patent Owner's argument about quality level,
12 even if you took their argument of quality level and the
13 construction of quality level, we set forth how Shaw teaches
14 using -- pulling different encodings of content based upon
15 the bandwidth that was available doing the test for what was
16 the bandwidth of an available connection.

17 And so if we go to Slide 33, our expert also
18 explained that in his declaration, in his opening declaration
19 here. We have the explanation that it was known and Shaw
20 taught having different encodings of content.

21 And on Slide 34, we've laid out where Patent Owner's
22 expert also admitted the same, that a person of skill in the
23 art would've already known about having different encodings
24 and media content at the time of the filing in the '992
25 patent.

1 So, if we go to Slide 35, we have, I guess, further
2 explanation by our expert about the fact that a higher
3 bandwidth would then allow for streams with higher encoding
4 rates.

5 And so, on Slide 36, we have Patent Owner's argument
6 on this point, which is Patent Owner argues that Shaw only
7 teaches having identical copies of media stored on the
8 different servers, so it's the same encoding, the same copy
9 across different servers.

10 But that's clearly wrong, and that's clearly wrong
11 because -- I mean, we could turn to Slide 37 here, but as I
12 already showed on the previous slides and in our Petition on
13 page 36 and back to 32 and 33, citing back to the teachings
14 of Shaw in column 1, Shaw clearly teaches having different
15 encodings. And it also has the teaching that we noted in our
16 -- in our Petition and I have on the bottom left-hand side of
17 Slide 37 here, the teaching that each of the servers can
18 handle many streams from multiple providers.

19 And I guess on top of that, I -- I would note that on
20 page 19 of our Petition, we included a detailed explanation
21 of what the knowledge of a person of skill in the art
22 would've been at the time and all the tools and knowledge
23 that a person of skill in the art would've had at the time,
24 and we have all those factors at the bottom paragraph of page
25 19. Patent Owner never contested either pre-institution or

1 post-institution our proposed POSITA knowledge. And that, I
2 think, is also relevant in terms of what a person of skill
3 brought to the table and the knowledge that they already knew
4 about encodings, about switching network connections. All
5 that was never disputed by Patent Owner either
6 pre-institution or post-institution.

7 So that's one basis on which claim limitation [1c] is
8 satisfied.

9 Turning to Slide 38, the second basis on which we
10 argue [1c] was satisfied by Shaw's teachings was Shaw's
11 teachings of thinning.

12 And so, if we go to Slide 40, you know, this is an
13 entirely separate basis for finding limitation [1c] is met.
14 And Patent Owner has argued that the thinning teachings are
15 inadequate because it relates -- thinning relates to the
16 network connection, not the underlying media itself. So,
17 again, this is Patent Owner's -- this is based on Patent
18 Owner's position about what does quality level mean and
19 whether you can take into account the network considerations.
20 But that's actually wrong even under Patent Owner's
21 construction or interpretation of quality level. They fail
22 on this point because thinning does more than that.

23 So, if we go to Slide 41, we see that when thinning
24 occurs, Shaw teaches that -- Shaw looks at switching to
25 another server in order to have an acceptable quality level.

1 See, you have a quality level that's being deteriorated
2 because of thinning, and you look at switching -- Shaw looks
3 at switching to another server to have an acceptable quality
4 level.

5 And if we go to Slide 42, what we see is that, you
6 know -- I'll walk through this because there's a lot of
7 highlighting here. So this is an important point. While
8 Patent Owner's arguments focus on the fact that thinning is
9 caused by bandwidth constraints -- so this is our expert on
10 the left-hand side in the aqua-blue kind of color. The cause
11 of thinning is a bandwidth constraint, and that's agreed upon
12 by the experts in the aqua-blue on the left- and right-hand
13 sides of their declarations.

14 But what's important here for the Board is that
15 Patent Owner ignores that both sides' experts agree that the
16 effect of thinning is that portions of the stream are
17 dropped, and that's what's highlighted in yellow. So the
18 effect of thinning is that portions of the stream are
19 dropped. Frames of the stream are dropped.

20 And, if we go to Slide 43, we see where Patent
21 Owner's expert admitted that thinning results in fewer frames
22 of content.

23 And we've -- and we've shown a graphical
24 demonstration of this on Slide 44. We're visually
25 demonstrating the depiction of thinning, that when you have

1 thinning occurring, you have less frames, i.e., lower quality
2 content, being delivered to the client media device.

3 And so, if we go to Slide 45, that's what our expert
4 explained. Here's a portion of his declaration where he
5 explained that when you have thinning, a thin stream, you
6 have less frames because of that thinning.

7 And so, if you look at Slide 46, what you see,
8 importantly, is that thinning results in the server reducing
9 the media quality before even sending the content. So, even
10 under Patent Owner's interpretation of quality level, Shaw is
11 teaching with thinning that the server is reducing the
12 quality, and then you're switching to another server that has
13 a better quality level of the content when a thinning is
14 occurring Shaw's system.

15 So that's two separate bases for why [1c] is
16 satisfied.

17 And before I move on, I want to make sure I address
18 any questions from the panel on either of those points.

19 JUDGE ENGELS: So, to be clear, does Petitioner
20 advocate an interpretation of quality or quality level?

21 MR. BATTS: I think ours is consistent with the
22 Institution Decision, Your Honor, where quality level is not
23 limited to the quality of the underlying content. It's still
24 taking into account the network considerations.

25 So that's how the -- you know, I don't -- I don't

1 think the -- I don't think there's any dispute from either
2 side that quality level is not defined in the '992 patent.
3 There's no lexicography or statement of what quality level
4 means.

5 But what -- I think Petitioner's position has been
6 clear that if you look at the context of the claims, so if we
7 go back to, I guess -- all the way back to Slide 3, what you
8 see is that when it's talking about quality level, it's
9 talking about quality level within the context of delivering
10 the content. So it's talking about using a network
11 connection to deliver content to a user and that quality
12 level being -- taking into consideration both the content,
13 the -- the underlying content and the delivery -- the
14 network, both.

15 So I guess -- is that clear, Your Honor?

16 I think our main issue is that we're disputing Patent
17 Owner's attempt to narrow it and carve out and say you can
18 only look at the encoding of the underlying media.

19 JUDGE ENGELS: I believe so, yes. And so --
20 actually, one more question. To be clear, you contend under
21 the, I suppose, implicit claim interpretation advocated by
22 Patent Owner that (inaudible) that interpretation with --
23 with both thinning and its encoding disclosures, or -- or
24 just thinning?

25 MR. BATTS: Both, Your Honor. Because if you look at

1 the first section -- let me go to it real quick here.

2 So on our slides, starting at Slide 26, what we
3 walked through -- what I walked through and explained is that
4 our -- for the testing aspect of Shaw, where it's testing for
5 a different connection and for a different server, what --
6 what -- we had laid out how Shaw taught that there is
7 encodings and that both sides' experts agree that there are
8 different encodings already known in the art and that Shaw
9 teaches having different encodings of the content.

10 So even under Patent Owner's interpretation, that --
11 those teachings satisfy quality level as being, I guess,
12 implicitly set forth by that interpretation by Patent Owner.

13 And then, in addition to that, we have the thinning
14 teachings where thinning is clearly showing that you're
15 dropping frames, that the server is actually dropping frames
16 before sending when there is this bandwidth restriction.
17 When this thinning of the connection is occurring, you're
18 dropping frames of the server before even sending them out,
19 and, therefore, you switch to a different server and
20 different higher level content because the quality of that
21 content at the second server is going to be higher because
22 you're not going to have these dropped frames.

23 JUDGE ENGELS: So the discussion of encoding in Shaw
24 that you cite is in the background of the invention. Does
25 Shaw discuss encoding elsewhere?

1 MR. BATTIS: Not that I recall, Your Honor. I don't
2 -- I don't believe it does.

3 So I -- while it is in the background, we clearly
4 identified it. I don't think there is any dispute by either
5 sides' expert that encoding was already known, and we
6 explained how it would be -- it would be obvious to a POSITA
7 for the use of that encoding, and why, and including for when
8 you have a higher bandwidth being -- Shaw's system allowing
9 you then to use a higher encoding.

10 So that's -- that was the explanation that we
11 provided in pages 32 and 33 of our Petition as well as the
12 paragraphs that are cited on page 36 of the Petition from Dr.
13 Myler's expert declaration, Exhibit 1003, paragraphs 63 to
14 65.

15 JUDGE ENGELS: But so the sentence in Shaw's reading
16 -- Shaw, which is Exhibit 1005, column 1, line 54 through 58,
17 states, Content owners typically choose to encode media at
18 multiple rates so that users with fast connections get as
19 good an experience as possible but users with slow
20 connections can also access the content.

21 MR. BATTIS: Yes, that is correct, Your Honor.

22 JUDGE ENGELS: So, help me understand how in Shaw --
23 This seems to suggest basically two groups of users: one
24 group with a fast connection, one group with a slow
25 connection. I don't understand Shaw to teach that users in

1 the group with a fast connection would become users in the
2 group with slow connections or vice versa. So, help me
3 understand: how Shaw is teaching that a single user would have
4 -- would choose between the media at different encoding
5 levels?

6 MR. BATTS: Sure. So -- so Shaw has the teachings
7 about switching the network connection based upon bandwidth.
8 I don't think there's any dispute there.

9 So the purpose of the bandwidth -- and if we go to
10 page 33 of the Petition, the last paragraph of page 33, we
11 lay out how Shaw teaches those common to encode media at
12 these different bit rates so that users with different
13 bandwidth connections could access the streaming media.

14 And then we go on -- if you read the next sentence of
15 that paragraph, we explain that, Thus, a POSITA would have
16 understood that the quality level of streaming media content
17 varies according to encoding format, encoding bit rate, and
18 the connection speed.

19 And then the last sentence, I think, is answering
20 your question: Furthermore, a POSITA would have found it
21 obvious that a connection with higher available bandwidth
22 supports higher fast-speed connections and streaming encoded
23 at higher encoding rates.

24 So when you're able to switch over to a bandwidth
25 connection at a higher rate, a POSITA would've understood --

1 and that goes back to the POSITA knowledge that was not
2 contested by Patent Owner -- a POSITA would've understood
3 that that allows you, then, to access content that has a
4 higher encoding.

5 JUDGE HAAPALA: Mr. Batts, I understand --
6 thank you for pointing us to that portion of the Petition. I
7 think I'm going to try to ask this question a little bit
8 differently.

9 In the Petition, you say that a person of skill in
10 the art would have understood that the higher bandwidth
11 could have supported a higher quality to a -- higher quality
12 media, but what I don't understand is Shaw actually saying
13 that because -- teaching anywhere that specifically
14 when the network bandwidth is higher quality that it's going
15 to switch to a higher quality media stream. I think the
16 Petition's saying that you could, but I don't -- I'm not
17 seeing where you're pointing to that Shaw would teach
18 actually switching it.

19 Because I think the claim doesn't -- the
20 claim requires specifically that when you have that second
21 connection that you're going to switch to the higher quality.

22 MR. BATTIS: Yes. So I (inaudible) about switching
23 from -- switching from one server to another based upon
24 bandwidth -- bandwidth considerations. And you have Shaw
25 teaching that you have different encodings at the time, which

1 has not been contested by either side, and we have the
2 position here supported by our expert that says it would've
3 been obvious that when you have the (inaudible), then you
4 would then use the higher -- the higher encoding rate.

5 JUDGE HAAPALA: Mr. Batts, I think you -- the
6 Petition says you could use the higher encoding rate, not
7 that you would, that you did -- sorry, not that Shaw would
8 but that Shaw could -- that you could use a higher encoding
9 rate, not that you would make the switch.

10 MR. BATTS: I guess --

11 JUDGE HAAPALA: Unless there's --

12 MR. BATTS: -- that depends on --

13 JUDGE HAAPALA: -- another portion of the Petition --

14 MR. BATTS: All the section of the Petition that I'm
15 reading here says "would." I don't see any "could." So,
16 like -- would have understood this, would have found it
17 obvious, that supports this. I -- I don't believe we said
18 "could" on any of this.

19 JUDGE HAAPALA: Yes, I'm -- Mr. Batts, let me say it
20 again. So, the Petition says a person of skill in the art --
21 let me read the language -- "would have found it obvious that
22 a connection with higher available bandwidth supports higher
23 speed." So, the Petition says the higher bandwidth supports
24 the higher speed.

25 MR. BATTS: Um-hmm.

1 JUDGE HAAPALA: Where in the Petition do you make the
2 connection that you're now making here that because it would
3 support a higher speed that you actually would make the
4 switch as required by the claim?

5 MR. BATTS: I guess -- I'm pointing to the same
6 sections that we just discussed. I'm not seeing a difference
7 in what we're discussing here from pages 36, 32, and 33 from
8 what you're asking me.

9 We're saying that Shaw -- if we go back to 36, we're
10 saying Shaw has a purpose for performing a test to determine
11 whether there's a better source. We explain what a better
12 source would be, including that it would allow for a higher
13 bandwidth -- higher communication bandwidth, and that it's
14 desirable to switch over to a higher communication bandwidth
15 on page 36. And then we're explaining that a higher
16 communication bandwidth allows for the use of a higher
17 encoding rate, and then I think --

18 JUDGE HAAPALA: I guess what I'm -- I see that you --
19 I see that in 36, and then I see 32 says "would,"
20 but I don't see that connection that you're making here in
21 the hearing between those two. I think in 36 you're saying
22 that you make the switch to a higher bandwidth, which I know
23 that you argue that's quality, that that is a quality level,
24 and what I'm asking is if we decide that that wasn't a
25 quality level --

1 MR. BATTS: Um-hmm.

2 JUDGE HAAPALA: -- okay? So I'm premising this on a
3 determination which we haven't decided yet, but if we decided
4 that switching -- just switching to a higher network by
5 itself isn't a quality level. I see here on 36, you say,
6 okay, you're switching to a higher bandwidth and that that
7 would support a higher quality level, but I guess I'm not
8 seeing the actual switch to the media of the higher quality
9 level.

10 MR. BATTS: I don't think there's -- I guess the best
11 way I can answer this, Your Honor, is I think that what we
12 laid out for this, in my view, is pages 32 and 33, the
13 explanation of the encoding was known at the time and that
14 even -- we're not relying on just POSITA knowledge. Shaw
15 specifically states that different encodings were known at
16 the time.

17 We then explain that the quality of the stream
18 depends upon the parameters used -- used to encode the stream
19 as well as the conditions, so that's the sentence that goes
20 from page 32 to 33. So we're tying in the connection of
21 quality meaning not just the stream itself but the encoding
22 underneath. Maybe that's the best answer to your question so
23 far.

24 And -- and I'm sorry. Judge Engels, it looks like
25 you're sharing something. Are you asking me a question?

1 (Pause.)

2 MR. BATTIS: Okay. Well, sorry.

3 So, going back, I think the best answer I have is
4 that switchover from the bottom of 32 to the top of 33 where
5 it's tying in the quality of the stream being based upon the
6 parameters used to encode the stream as well as the
7 conditions for the stream, and then we're laying out that
8 Shaw actually teaches the different encodings, and then a
9 POSITA would've found it obvious -- so at the bottom of 33 --
10 a POSITA would've found it obvious that the connection with
11 the higher bandwidth would then support the encodings at the
12 higher -- at the higher encoding rate.

13 And then, if we go to 34, we're explaining that for
14 this first analysis of [1c], Shaw's media player is teaching
15 periodically looking or pinging and looking for a better
16 source for the stream using the DNS SRV query and then
17 determining what would be a better source for the content.

18 I believe you're muted, Your Honor.

19 JUDGE HAAPALA: Yes, I am. Thank you, Mr. Batts.

20 And to be clear, I do understand that you have
21 several positions here. That one of them is just the
22 switching to the higher network satisfies the limitation by
23 itself, as well as the thinning. So, I'm just focusing on one
24 part of your argument right now. Thank you.

25 MR. BATTIS: Yep. No, understood, Your Honor.

1 I think we have the -- the DNS testing satisfies
2 under our interpretation of quality.

3 Then the one that we're discussing right now is that
4 even under Patent Owner's interpretation of quality only
5 being looking at the encoding of the content underneath, we
6 also -- we just discussed that -- that argument that we have
7 even under Patent Owner's interpretation of quality level.

8 And then we have the other separate argument about
9 thinning at which we've shown that even under -- whether
10 looking at the network considerations for quality level or
11 even under Patent Owner's limiting argument of only looking
12 at quality level based upon the encoding content or the
13 content of the underlying -- the quality of the underlying
14 content, that thinning still teaches the server reducing the
15 content quality when thinning occurs, and then switching over
16 to a server where you don't have that loss of quality.

17 So there's four -- four separate arguments, and what
18 we're saying is we satisfy on -- all four win if we have our
19 claim interpretation of quality level, but even if you take
20 their interpretation of quality level, we should still win
21 under our thinning theory as well as our -- I guess I'd call
22 it the testing theory.

23 Is that clear, Judge Haapala?

24 JUDGE HAAPALA: Yes. Thank you. Thank you, Mr.
25 Batts.

1 MR. BATTIS: Okay. And I believe -- let me check my
2 timer here. Okay. So I've got a few minutes left in my --
3 in my opening time.

4 Any other -- I do think that is the main issue in
5 dispute, so I want to make sure -- are there any other
6 questions from the panel before I move on to the using and
7 second delivering limitation?

8 (Pause.)

9 MR. BATTIS: Okay. So if we go to Slide 47, there are
10 really two lesser arguments in my view from what I've seen of
11 the Patent Owner's arguments that remain, and one of them is
12 whether we've satisfied the using and delivering -- second
13 delivering limitation of the claim.

14 And if we go to Slide 48, we've highlighted the
15 language that's in dispute here from Claim 1, and it's using
16 the network connection to obtain the digital media content at
17 the higher quality and then delivering the digital media
18 content at the higher quality.

19 And so, if you go to Slide 49, Patent Owner argues
20 that it was wrong for us to address this claim language as a
21 single limitation in our Petition, but the -- the -- whether
22 it's viewed as a -- I don't even think there's a requirement
23 to separate out limitations in an IPR petition in any event,
24 but we clearly addressed the full claim language under one
25 heading. That we used a single heading, I don't think -- for

1 efficiency sake -- doesn't address whether the actual
2 limitations are met by the art.

3 And if we go to Slide 50, what we see is that the
4 very purpose of the media players in Shaw and Barnes is to
5 deliver the multimedia content to the user. And we have the
6 Petition points on this as well as Dr. Myler's declaration,
7 for example, paragraph 82, which is noting that you want to
8 continue to deliver the media content without any break or
9 interruption.

10 And if we go to Slide 51, we see that Barnes teaches
11 using both -- teaches both the using and the second delivery
12 limitation.

13 And if we go to Slide 52, we see that there's this
14 argument by Patent Owner about exchanging information for the
15 processing capability of the underlying media player, but
16 that exchange of information isn't in the claims. There's no
17 claim language that's talking about exchanging device
18 capability or processing capability information. They didn't
19 claim the structure, and there's no language in the claim for
20 them to hold on to for this argument.

21 So, if we go to Slide 54, what we do see is, again,
22 similar to the arguments we discussed earlier, Patent Owner
23 is relying on a nonlimiting example that's not present in the
24 claim language to try to argue, well, you have to have this
25 exchange of information take place.

1 But if you go to Slide 55, what we see is that the
2 patent spec isn't limited to what types of information can be
3 exchanged, and this goes back to -- I think the biggest
4 problem with Patent Owner's argument on this -- on this
5 section is clearly both Barnes and Shaw are both systems that
6 are talking about switching network connections to allow a
7 media player to continue to use the content that's being
8 received or retrieved. So it really doesn't make sense that
9 either of those systems would not have the same capability to
10 be able to continue to process that information. So not only
11 is it not in the claim language, but it's kind of nonsensical
12 from the aspect of what Barnes and Shaw were actually
13 teaching for systems and the purpose and the use of those
14 systems.

15 I have one minute of my time remaining; although, I
16 can go over, I know, a little bit.

17 I think I'll go to the motivation to combine. I
18 don't know that there's much here. I think -- this is one of
19 the strongest motivations to combine for references that I've
20 seen, personally.

21 On Slide 57, we have two systems that are both
22 talking about media devices that are both receiving content
23 that are looking at bandwidth considerations to make a
24 determination on the network connection, and Shaw simply
25 includes additional teachings on switching to a better source

1 based upon bandwidth and has explicit -- you know, more --
2 more detail because, again, it's -- this is a IPR challenge;
3 we have to go to the specific claim language. It has the
4 additional teaching of looking at a better source for content
5 based on bandwidth.

6 So, if we go to Slide 58, we have -- both of them
7 have a media player, and we're simply looking at Shaw's
8 improvement for specifically looking at switching to a
9 different source for the stream quality to be better.

10 And I don't think -- if we go to Slide 59 -- Patent
11 Owner really never responded to our rationales for the
12 motivation to combine.

13 We included quite a bit in there, and I think their
14 main argument was that Dr. Myler didn't use the word
15 "quality" in some questions that he was asked during his
16 deposition. And I don't think -- if you go back to the
17 deposition testimony, I -- it is what it is. I think it's
18 clear that he provided testimony about the combination.
19 Their questions weren't really focused on what they're now
20 claiming to be the arguments. So they didn't really complete
21 the questioning of Dr. Myler, and their questions weren't on
22 this exact point.

23 So I don't know that there's -- I guess I leave it to
24 the Board to ask me any questions on motivation to combine.
25 I don't see that as the main focus of the arguments

1 remaining.

2 (Pause.)

3 MR. BATTS: Okay. Well, with that, I will -- I will
4 set aside my remaining time for rebuttal. Thank you, Your
5 Honors.

6 JUDGE ENGELS: Thank you. By my timer, you have
7 about 18 minutes remaining.

8 And, with that, Mr. Young, when you're ready.

9 ORAL ARGUMENT ON BEHALF OF PATENT OWNER

10 MR. YOUNG: Thank you, Your Honor.

11 So let's start out with the claim language itself.
12 That's on Slide 4 of our -- of our demonstratives. And this
13 has to do with Claim 1 and Claim 6. Claim 1 is a method;
14 Claim 6 is a system to perform the method.

15 And I think what's important is if you look at the
16 preamble, it talks about a method for providing a digital
17 media service to a user. Now, there's no question -- and I
18 think we've made it clear in all our briefing -- that the
19 service, the digital media service, that involves both the
20 digital media content itself and the network connection. And
21 there's slides later on in the briefing that we'll get to,
22 particularly Slides 15 and 16 -- or I'm sorry -- 13 and 14
23 that talk about that service. And Petitioner's expert
24 agrees: You have to have the content; you have to have a way
25 to deliver the content. So that's the digital media service.

1 That's important.

2 So there's no question that our claim -- you know,
3 and Petitioner wants to talk about, you know, somehow these
4 inconsistent positions. There's nothing inconsistent with
5 what the Patent Owner has done in the District Court versus
6 meeting before the Board here. It's just that the digital
7 media service, the network connection matters and the content
8 of the quality matters -- or the digital media content
9 quality matters. Those are two components of that service,
10 and the preamble makes that clear.

11 When we get to the file history, it'll be more
12 obvious why the Patent Owner specifically drafted that
13 distinction between a digital media service in general and
14 the digital media content as well as a network connection.

15 And if you look at Slide 5, I think this color --
16 coloring highlight shows -- draws this distinction out
17 clearly. So in the preamble, as we discussed, there's a
18 digital media service to a user. Then in the first
19 delivering limitation, you're delivering digital media
20 content having a current quality level to a user.

21 As we noted in our briefing, when the current quality
22 level is defined in this first limitation, you'll see that
23 the network connection has not even been introduced into the
24 claim at all at this point. And Mr. Batts brought up an
25 example of Figure 5 in the -- in the '992 patent talking

1 about this portable system, and he says, well, there's no
2 network connection there.

3 Well, there is a network connection. The user was
4 initially listening to the digital media content off of a
5 portable device -- it was stored locally there -- and then
6 there was a network connection to a computer where they could
7 download the higher quality song content and -- so they
8 switched from the locally stored version to the version that
9 was on the system through a network connection, but the first
10 quality level is -- the network connection is not required to
11 define that quality level.

12 So and this is important because it speaks to the
13 Petitioner's point where, oh, well, quality level has to
14 consider the network connection and the content itself.
15 That's true for the digital media service. There's no
16 question that that's true. But for the content -- for the
17 current quality level of the digital media content, the
18 network connection is not required, and that's shown here in
19 the very first first delivering limitation where a current
20 quality level is defined without a network connection. Now,
21 a network connection could be used, for sure, but it doesn't
22 -- it's not required.

23 So the next is the determining limitation, and this
24 is where we're -- so we have a current quality level of
25 digital media content being delivered to a user, and now

1 we've got to make a determination if we can get a higher
2 quality level, and that's for the first. A network
3 connection is defined, and it says, With a second system. So
4 you have the portable system and a second system. It's
5 available, and it's characterized by a communication
6 bandwidth that is high enough.

7 That's the determination of the network connection:
8 Is it high enough? And is it high enough to do what? To
9 provide the digital media content -- again, that's antecedent
10 basis to the digital media content first defined in first
11 delivering limitation -- to the user at a -- so this is "a";
12 it's a new definition -- a quality level higher than the
13 current quality level.

14 So there it's -- there you're saying that you have to
15 -- you have -- you're delivering a first content -- media
16 content quality level to the user. Now you're looking at a
17 second system. Is there a network connection? Is it
18 available? And is it high enough to provide a digital media
19 content at a higher quality level than the current?

20 And notice that it just says, Communication bandwidth
21 that is high enough. So, for example, if -- now, it's not
22 required, but if the first content of the digital media
23 content in the first quality level to the user, that first
24 time, was at a very high connection, but there was digital
25 media content at a higher quality level -- let's say it's SD

1 versus HD, right, same movie with different -- different
2 encoding rates -- and the second system has actually a lower
3 network connection than the first one, but it's high enough
4 to still deliver the higher digital media content, it will --
5 it will end up doing that.

6 So the network connection is not what defines the
7 quality level of the digital media content. It just needs to
8 be high enough. You don't have to switch to get a better
9 network connection as long as it is high enough. That's the
10 express language in the claim.

11 And when we're -- and the Petitioner seems to say
12 that we should've suggested a -- you know, a claim
13 construction on quality level, but it's plain from the
14 meaning of the text -- the text of the claims itself -- in
15 the first limitation, first delivering limitation, Digital
16 media content having a current quality level. That's the
17 quality level of the digital media content.

18 And then in the determining limitation, you have a
19 higher quality level than the current quality level of the
20 digital media content.

21 And then we have the using limitation, says, Using
22 the network connection to obtain the digital media content at
23 a higher -- so now you're -- now you've gotten it; right?
24 You've gotten the higher -- the higher quality content from
25 the second system. You have it.

1 But then the second delivering limitation, the last
2 -- the last limitation says, Delivering the digital media
3 content at a higher quality level to the user instead of the
4 digital media content at the current quality level.

5 Now, they're -- you know, Mr. Batts talked about, you
6 know, this requirement to exchange information between the
7 first system and the second system. Well, the answer to
8 that's no. It's not expressly in the claim language.
9 However, as their expert has said, you still -- in order to
10 deliver it, you still need to deliver the content to the
11 user.

12 So, for example, if there was an -- let's take the SD
13 version versus the HD version. If the HD version was
14 available and the network connection was high enough from the
15 first system to the second system, but the portable system
16 doesn't have the capability of playing the HD system, then
17 even though you can use the network connection -- you can use
18 it to obtain that content; you can download it -- there's no
19 way for you to deliver it to the user because the user
20 doesn't have a system in which it will allow it to play the
21 video at the HD version so that the user could appreciate
22 that increase in quality.

23 So there has to be some determination in the second
24 delivering limitation that the user can actually use the
25 higher quality level that's being obtained for it -- in other

1 words, its system will allow it to use that -- use that
2 higher quality.

3 And this kind of speaks to -- this addresses some of
4 the questions that Your Honors had earlier is in Shaw -- and
5 we'll get to this in a little bit, but in Shaw, there is a
6 whole plethora of citations that says you're having -- it's
7 the same -- it's the same copies -- the same copy of the
8 media stream throughout; right? So -- and they always say,
9 well, you're continuing to use -- continuing to show it from
10 the -- from the new system, from the new -- from the new
11 source. But the content's exactly the same. So it doesn't
12 have to be this determination if the user can use it because
13 the user's already using it. Now they're just getting it
14 under a better network connection.

15 So by the way they would interpret the claims, you're
16 essentially reading out this limitation because if you're
17 delivering it the same -- if you're delivering media content
18 to the user initially and then you change servers to get a
19 better network connection with the same media content, you
20 don't need to do any determination. You know they can use it
21 because they've been using it initially.

22 So these are all the limitations, and I think it's
23 important to focus on this claim language because this drives
24 a lot of the questions and a lot of the issues that we have
25 had between the parties.

1 Moving on to Claims 11 and 16, they are similar.
2 Claim 11 is a method, and Claim 16 is the system to perform
3 that method.

4 And on Slide 7, we have a similar annotation of the
5 claim with the claim limitations. And just to note, in the
6 determining limitation, it says the network connection is
7 available and it's characterized by at least a minimum
8 determined communication bandwidth.

9 So, again, you're not -- you're not -- like, so in
10 Shaw, you are switching to get a better network connection.
11 In other words, the media content is the same. You're
12 getting a better network connection. That's the Shaw
13 invention. That's fine.

14 That's not what the claims cover. The claims cover a
15 system where you're looking at the content of -- the quality
16 level of content itself, and you just have to have a network
17 connection that is good enough to get that media content --
18 the higher media content -- quality content to the user.

19 And that again is highlighted in Claim 11 where it
20 says, A minimum determined communication bandwidth. It's not
21 a maximum. It doesn't say we always get to the best
22 bandwidth. It just has to be good enough to get that -- to
23 get that content to the user.

24 Now, it's not that we're saying that a network
25 connection is irrelevant. It's not that it's not important.

1 It is important. It's important for the digital media
2 service as a whole. Digital media service as a whole, you'd
3 have to have the quality of the content and you'd have to
4 have the network connection.

5 In Shaw, you want to get a better network connection
6 all the time. And in these claims, you're going to get
7 better content, and the -- and the network connection just
8 needs to be good enough to get that content -- the higher
9 quality to the user.

10 So, on Slide 8, again, this is for all the challenged
11 claims. You have two systems -- a portable system and a
12 second system -- a digital media service; a user; digital
13 media content with a current quality level and a higher
14 quality level; and a network connection with a communication
15 bandwidth that is high enough, or in the case of Claim 11 and
16 16, a minimum determined communication bandwidth.

17 And this -- this distinction between a service in
18 general and media content specifically is drawn out expressly
19 in the file history of the -- of the patent, and that's shown
20 in Slide 9. Here -- and we highlighted in yellow the word
21 "service" shows up, and we highlight in blue where "content"
22 shows up, and you can see that as initially filed, the claim
23 didn't have -- didn't have any language with respect to
24 "digital media content" in it, initially. It was always
25 "digital media service."

1 And then, after the claim amendment and Claim 38
2 became Claim 1, you'll see that they inserted the content --
3 digital media content, and that "service" was -- it was kept
4 in the preamble but was eliminated throughout the rest of the
5 -- the rest of the patent.

6 So it was clear that they made this distinction
7 between the quality level of the media -- digital media
8 service as a whole that was as originally filed and that the
9 claim -- if the claim had stayed as originally filed, the
10 Shaw patent would have a lot more relevance. But as amended,
11 the claim specifically makes this distinction of the digital
12 media content having a current quality level and a higher
13 quality level, and that's drawn out specifically in the claim
14 amendments.

15 And then if you read through the -- on Slide 10, in
16 the argument section that the Applicant used -- Applicant
17 relied on, they distinguish Jagadeesan. Jagadeesan is
18 interesting because it says that the voice data -- you were
19 having voice data. Then it was you were having problems with
20 the connection. You switch to a better communication link or
21 communication link greater than the link quality of the
22 communication link currently being used by the mobile
23 station, and so but the voice data remained the same.

24 Now, Petitioner tries to state -- tries to get
25 creative and say, well, there's a distinction here because

1 the source of the -- the source is different, but in Shaw,
2 the source between one server and the other is identical
3 copies of the same exact media. So, in here, the voice data
4 is the same, and in Shaw, the media content is the same.

5 However, you are getting a higher network connection
6 -- that's what Jagadeesan talks about -- but with the claim
7 amendments, the Applicant argued, As a whole, Jagadeesan
8 fails to disclose or suggest obtaining voice data from
9 another source. That's the part that Petitioner wants you to
10 focus on. But then it goes on. It says, Let alone obtaining
11 digital media content at a higher quality level from the
12 second system, as recited in Claim 38.

13 And --

14 JUDGE ENGELS: Counsel, if I may. So -- so among the
15 -- among the amendments shown there on Patent Owner's Slide
16 9, the claim was amended from "providing digital media" to
17 "delivering digital media content." Is there a distinction
18 between "providing" and "delivering" in this context?

19 MR. YOUNG: Yeah. I think -- Your Honor, I think the
20 reason why the delivering works is because you have -- you've
21 added that second delivering limitation; right? So you are
22 -- you are -- so, in the first instance, you are providing
23 digital media content, and then it was changed to delivering
24 because you added the second delivering limitation.

25 And that's where we talk about -- well, I will

1 acknowledge that the claim itself doesn't say you have to
2 exchange information between the portable system and the
3 second system. There has to be a -- some type of mechanism
4 to ensure that the second -- that the media content, the
5 higher quality level can be delivered to the user. So, in
6 other words, can the user appreciate the improvement in the
7 -- in the digital media content, the higher quality level.

8 So, again, (inaudible) delivering, and the reason
9 they made that distinction clear was because they were adding
10 that second delivering limitation.

11 JUDGE ENGELS: And I believe what I -- what I -- more
12 particularly, so in the context of digital media content
13 being saved on -- on the digital media device, the portable
14 system, is it reasonable to suggest that "providing" --
15 changing from "providing" to "delivering" implies use of a
16 network?

17 MR. BATTS: No, I don't think so, Your Honor. I
18 think the -- the -- I think maybe even a better way to
19 describe it is you provide a digital media service, and
20 initially, the claims as were initially drafted, that's what
21 the claims talked about. It talked about a digital --
22 providing -- and the preamble even talks about it -- it says,
23 Providing a digital media service to the user; right? And
24 that term "provided" was -- was kept in the preamble; right?

25 When you exchange -- when you change it to

1 "delivering," you are delivering content. You're providing a
2 service, and you're delivering content.

3 So even in the system where it's -- where you have it
4 stored locally, it's still being delivered to the user
5 through the -- if the user's listening to it on their
6 headphones or viewing it through their screen, it's still
7 being -- the content is being delivered to the user.

8 But you're -- in both cases, you are providing a
9 digital media service. So I think when they changed the
10 limitations from digital media service to digital media
11 content, they changed the term "provide" to "deliver" to make
12 that distinction somewhat more clear. Because "providing" is
13 still used in the preamble where it says, Providing
14 additional media service. Then it was eliminated when you're
15 talking about delivering the digital media content to the
16 user.

17 JUDGE HAAPALA: Mr. Young, does the prosecution
18 history explain why the change was made, or are we
19 extrapolating right now?

20 MR. YOUNG: Well, I think it's -- on Slides -- on
21 Slide 10 -- on Slide 10, it makes it clear why the -- why the
22 change was made, and it's distinguishing the Jagadeesan and
23 Kayama references based on that ground. So I think it's very
24 clear that this is exactly why.

25 And then in the -- in the allowance on claim -- on

1 page -- I'm sorry -- Slide 12, the examiner noted that the
2 claims were allowed for the reasons set forth in Applicant's
3 response, and that response on 3/16/2012 are excerpts of what
4 you see on Slide -- on Slide 10.

5 So I think, yes, they were -- it was expressly the
6 reason -- this distinction between service and content was
7 expressly the reason why it was amended and expressly relied
8 on to distinguish both Jagadeesan and Kayama.

9 JUDGE HAAPALA: Let me ask you a question about --
10 about the specification, in general. Would you agree that
11 the quality level of the experience of what the user is
12 seeing can vary based on the network bandwidth? For example,
13 if it's a low bandwidth, the quality of the content that the
14 user's viewing may be a poorer quality than if the network
15 connection's higher?

16 MR. YOUNG: Your Honor, there is no question that the
17 quality of the digital media service being provided to the
18 user is absolutely impacted by the network quality. And I
19 think if you -- when -- the specification does make that
20 clear when you're talking about the content having a quality
21 level and then the -- because you need both. You need a
22 network connection, and you need the higher media content
23 itself.

24 So when the network connection goes bad -- and this
25 is the example. This goes right back to the file history on

1 Slide 12 -- I'm sorry -- Slide 10. Jagadeesan, the voice
2 data was coming across choppy under the first connection, so
3 the voice -- the voice data was not being heard by the user
4 correctly. So it went to a higher link quality level, the
5 voice becomes clearer, and they can hear it better.

6 So this goes back to Mr. Batts' argument on thinning,
7 and this is exactly what's going on with Jagadeesan. The
8 voice -- the voice data is the same, but the conduit that
9 it's going through is not providing it clearly. So you get
10 to a better conduit, and then the same voice data can go
11 through and the user can experience.

12 So the digital media service as a whole is absolutely
13 improved by the -- by the network connection being -- being
14 improved, but in the Jagadeesan context, the content that
15 you're receiving is still the same, and the same with Shaw.
16 You're getting the same -- let's say an SD video version.
17 You're getting it. Now the network connection is degraded;
18 it's thinning. So you go to a better -- quote, better --
19 source. You get the exact same identical copy, but you get
20 it through a better conduit, and so your digital media
21 service, your experience as a whole, is vastly improved, but
22 the digital media content that you're receiving is identical
23 in both cases.

24 JUDGE HAAPALA: Okay. Let me ask you about column 5
25 of the challenged patent specification. Let me see. I'm on

1 column 5, line 31, and where it states that, "Providing the
2 current service to the user at a higher quality level than
3 the current quality level may require a communication channel
4 to have -- between the first and second system to have a
5 minimum communication bandwidth." Also, for example,
6 "providing the current service to the user at a higher quality
7 level than the current quality level may require a
8 communication channel to have a particular level of
9 reliability."

10 I think that's what we were talking about here. I
11 think, though, you're making an (inaudible). I think you're
12 distinguishing between the service and the digital media
13 content. And I think that one reasonable way to read that is
14 a digital media content is a type of service that you're
15 providing. The digital media content is the service you're
16 providing, but I think you may be reading it a different way.
17 So, if I'm correct and you're reading it a different way, can
18 you help me explain why delivering digital media content
19 isn't your digital service that you're providing?

20 MR. YOUNG: Well, delivering the digital media
21 content is absolutely a service, and you're delivering it
22 through the network connection.

23 So and this -- and this is actually a really good
24 example in column 5, line 31. It says, For example,
25 providing the current service to the user. So getting back

1 to the claim language itself, the preamble says, Providing a
2 digital media service. Right?

3 So that's -- as a service as a whole, when we're
4 talking about the service, the network connection absolutely
5 matters and is part of that service. Because you -- because,
6 again, the service in the preamble. There is -- and then
7 after the preamble, there are limitations on content and
8 limitations on connection, both of which are required for the
9 service. So in all -- in all the instances where you're
10 referred to in column 5, line 31 through 42, it says, The
11 current service to the user at a higher quality level.

12 And that was -- going back to the claim amendments,
13 as amended, that's exactly what the claim -- the original
14 claim was as filed. You're talking about a digital -- it was
15 talking about the digital media service as a whole, and the
16 digital media service as a whole has a quality level --
17 there's no question -- but the claims as amended, the quality
18 level as amended, specifically talks about the digital media
19 content. And that's where there's plenty of examples
20 throughout the specification that talk about getting the --
21 getting the -- getting the media content at a higher quality
22 level.

23 And just to give an example -- it may take me a
24 second to find it because I'm going out of order here.

25 So, on Slide 17, this gives an example. This talks

1 about the '992 patent. It's talking about the specification;
2 right? And in the specification, it talks about -- it uses
3 the term "access" and it uses the term "information." Right?
4 So if you read this section on Slide 17, the last sentence
5 says, For example, access to high quality information -- in
6 other words, digital media content -- over a communication
7 network may be of little value in certain scenarios if the
8 communication network is slow or unreliable.

9 So it doesn't -- if the communication network is slow
10 or unreliable, it doesn't impact the high quality
11 information; it just means you can't access it. Right? And
12 that's -- again, access and information are both part of the
13 service.

14 And then the middle section, which is highlighted in
15 yellow and some underlining in red, says, This type of access
16 to various information sources, as well as the quality of the
17 information, may be considered in determining the
18 utilization, various -- whether utilizing various resources
19 of the second system will provide the current service to the
20 user at a higher quality level.

21 Again, there -- there it is: the current service at
22 a higher quality level. So the current -- the service, as a
23 whole, the digital media service, again, the preamble of the
24 claim, absolutely has a quality level, absolutely impacted by
25 the network connection as well as the content of the

1 information itself, which is what -- exactly what Slide 17
2 talks about with respect to the specification.

3 So, Your Honor, does that answer --

4 JUDGE HAAPALA: But, Mr. Young, I'm not going to go
5 into whether the preamble is limiting or not. I don't see
6 "digital media service" used again in the claim. I don't -- I
7 still -- I think I still don't fully follow why the digital
8 media content isn't the digital media service. That -- that
9 -- where -- can you -- is there a place in the specification
10 that distinguishes between these terms?

11 MR. YOUNG: Well, Your Honor, I think Slide 17
12 distinguishes it expressly; right? I mean -- and, again, the
13 -- whether the preamble is limiting or not is -- is not a
14 material determination for -- with respect to this -- to this
15 proceeding. The -- the --

16 JUDGE HAAPALA: Yes. Right. I don't think we need
17 to go into that. I agree. But on the -- on Slide 17, you're
18 pointing to column 6, 19 to 30 --

19 MR. YOUNG: Yes, Your Honor.

20 JUDGE HAAPALA: -- and I think you're asserting that
21 here there is a express distinction between "digital media
22 service and" -- and "digital media content."

23 MR. YOUNG: It's not that one's different from the
24 other. It's that digital media service is a broader term
25 that includes at least two things. It includes the network

1 connection, and it includes the content of the digital media
2 -- I'm sorry -- the digital media content itself. It
3 requires -- and that goes back to -- and let's --

4 JUDGE HAAPALA: Mr. Young, just to interrupt you, is
5 there somewhere that either your expert -- I'm sorry -- is it
6 Dr. AlRegib? Is that how you say his name?

7 MR. YOUNG: Yes, Your Honor.

8 JUDGE HAAPALA: Is there somewhere in your -- in the
9 briefing that either you say that or Dr. AlRegib says that
10 the digital media service includes a network connection and
11 the digital media content?

12 MR. YOUNG: Yes, Your Honor.

13 JUDGE HAAPALA: I don't want to interrupt your
14 argument. You can feel free to answer my question during
15 rebuttal, if that helps.

16 MR. YOUNG: Yeah. Thank you, Your Honor. And I
17 think that Slide 19 makes that -- makes that clear, and it
18 points to the parts in the Patent Owner Response where we
19 clearly talk about that; right? If you look at Slide 19, it
20 says that each claim requires digital media content having
21 two quality levels and a network connection, both of which
22 are part of the service as a whole.

23 And then, if you look at Slides -- well, I mean,
24 Slide -- as an example, Slide 13 talks about the patent and
25 talks about -- and, Your Honor, page -- page 40 and 41 of our

1 Patent Owner Response expressly addresses what your question
2 is. But on Slide 13 is the '992 patent, talks about what a
3 service is generally; right? And it talks about, like, an
4 audio output service, a video output service -- that's the
5 service; right?

6 And then when we talked about digital media service
7 with Petitioner's expert, on Slide 14, he made that point
8 clear as well. So in the -- you have -- you have digital
9 media content, and then it has to be delivered, and that --
10 the content and the delivery together is the digital media
11 service. And that's -- you know, to quote their expert, The
12 digital media service is the server delivering somehow
13 digital media. In other words, you're delivering the digital
14 media -- digital media content to the users. So service
15 incorporates both the network connection and the content
16 itself.

17 JUDGE ENGELS: Counsel, if I may ask --

18 MR. YOUNG: Yes, Your Honor.

19 JUDGE ENGELS: You make a point that in limitation
20 [1c] the digital media content gets its antecedent basis from
21 limitation [1b]. Limitation [1b] couches the digital media
22 content in terms of delivery. But as I understand it, aren't
23 you arguing that the digital media content has to have two
24 separate quality levels such that if the digital media
25 content in [1c] has its antecedent basis in the digital media

1 content in [1b], if you're saying that the content itself has
2 different quality levels, isn't that -- doesn't that seem at
3 odds with the notion of it finding its antecedent basis in
4 the previous recitation of "digital media content"?

5 MR. YOUNG: Your Honor, I'll make this very important
6 point. So let's make sure we're -- we're all on the same
7 page.

8 On Slide 5, there are -- in the first delivering
9 limitation [1b], it says, "Digital media content" -- that's,
10 like, in the yellow or tan color -- having a current quality
11 level. That's the antecedent basis for the current quality
12 level, and that current quality level shows up again in [1c]
13 at the very end, where it says, The current quality level,
14 and then it also shows up at the second delivering limitation
15 at the very end, The current quality level.

16 Now, the -- and that's the current quality level.
17 That's where the -- that's the antecedent basis for the
18 current quality level.

19 Now, in the determining limitation [1c], it says, in
20 the darker green, A quality level higher than the current
21 quality level. So a current -- so a higher quality level,
22 that's where it has, A quality level higher. That's the
23 antecedent basis for the higher quality level, and then that
24 shows up again in the using limitation where it says, The
25 higher quality level, and then also in the delivering

1 limitation, The higher quality level.

2 So there are two quality levels for the digital media
3 content. The first one, the current quality level, is
4 defined in the first delivering limitation; that's the
5 antecedent basis for that. The second quality level, a
6 quality level higher, that antecedent basis is first
7 established in the determining limitation.

8 So I hope that answers your question, Your Honor. If
9 not, I can clarify.

10 JUDGE ENGELS: Well, I think I understand your
11 position, but it seems that in the first instance, so
12 limitation [1d], it seems your argument would effectively
13 take the “delivering” portion out of that -- out of that
14 limitation to define “digital media content” by its current
15 quality as opposed to the notion that it's being delivered to
16 the user at a current quality level. And then, in [1c],
17 again, it's “the digital media content” that's being -- you're
18 determining whether it's possible. And then, in [1b], you're
19 using it and delivering it.

20 MR. YOUNG: Your Honor, that -- no. The first
21 delivering limitation, you're delivering -- so you are
22 providing or delivering; you're transmitting -- that -- that
23 digital media content having a current quality level. So
24 let's say it's an SD version of a movie. You're delivering
25 it to the user. The user is watching that movie. It's being

1 delivered to the user. The user is -- is -- is viewing it.

2 And just to make sure we're clear on this -- and I'm
3 skipping ahead. I'm going to go back to this in just a
4 second. But if you go to Slide 45, this is their expert, and
5 when I asked -- you know, when it says, You're delivering
6 digital media content to a user, and what does that mean? He
7 says, Delivering means that you're providing the content in a
8 form that the user can use.

9 So in the -- now, going back now to Slide 5, in the
10 first delivering limitation, you're delivering the digital
11 media content to the user at a current quality level -- let's
12 say the SD version of a movie. And then you are -- in the
13 determining limitation, you're saying, well, I can get a
14 better version, the HD version of this movie, from a second
15 source, and I have a connection that's high enough to get it.
16 So, in the user limitation, I use that limitation -- use that
17 network connection to get that HD version of the movie. And
18 then in the second delivering limitation, I'm again
19 delivering that HD movie -- HD version of the movie to the
20 user, and the HD version is a higher quality level than the
21 current quality level. And in that delivering -- second
22 delivering limitation, you're making sure that the user can
23 actually use it, as it would -- Dr. Myler just said on Slide
24 45.

25 For example, does -- is the user on a system that can

1 show an HD version? Is the -- is the pixilation on his or
2 her screen high enough that they can actually see the HD
3 version and see it in a better way?

4 So you're still delivering -- in the first instance,
5 you're delivering the SD version of the movie to the user.
6 And in the second delivering limitation, you're delivering
7 it. You're showing the HD version to -- of the movie. But
8 in both instances, the current quality level is talking about
9 the digital media content itself, and the network connection
10 simply has to be high enough to allow the better quality
11 level -- in this case, the HD version -- to be obtained from
12 the second system and then provided or delivered to the user
13 in that version.

14 So I don't think we're reading out the delivering --
15 the delivering -- the word "delivering" or "determining" or
16 "using" in any of the claim language. I think it's
17 completely consistent.

18 JUDGE ENGELS: So help me understand, then. In the
19 first instance, you're delivering content where some of the
20 frames have been thinned out. You realize there's a second
21 source available that would not thin the frames. Help me
22 understand why that would not satisfy these limitations.

23 MR. YOUNG: Well, it's exactly the same reason -- and
24 going back to Slide 10 -- it's exactly the same reason that
25 Jagadeesan didn't -- didn't render this -- didn't -- while

1 the examiner allowed the claims as amended over Jagadeesan.

2 In Jagadeesan, the voice data was being transmitted
3 and it was coming in broken. And so you went to a higher
4 link quality, a better network connection, and then that same
5 voice data, the exact same voice data, was then being
6 received through a better network connection, but it's still
7 the same voice data. So then, as the Applicant said, As a
8 whole, Jagadeesan fails to disclose or suggest obtaining
9 voice data through another source, let alone obtaining
10 digital media content at a higher quality level from the
11 second system, as recited in Claim 38.

12 So, in the -- and this goes back to the Shaw -- the
13 Shaw reference. You have identical copies of the same movie
14 on two different servers. In the first instance, where it's
15 being thinned, the network connection is bad. It's not high
16 enough; right? So you move to another network connection
17 that is high enough; right? But you're still -- you're not
18 delivering digital media content to the user at a higher
19 quality level.

20 All you're -- now -- now, there's no question,
21 there's no question that the digital media service has
22 improved if you've gone from a network connection that's
23 being thinned to a nonthinned network connection. The
24 overall quality of the digital media service has been
25 improved. There's no question about that.

1 But you still haven't -- you have not delivered the
2 digital media content at a higher quality level. In other
3 words, it's still an SD version of the movie, or in this
4 case, in the Jagadeesan reference, in the file history, it's
5 still the same voice data, but you're getting it through a
6 better conduit.

7 Does that make sense, Your Honor?

8 JUDGE ENGELS: I think I understand, but so looking
9 at, for example, Petitioner's Slide 44, they depict a stream
10 of six frames and then the thinned frame having four frames.
11 Isn't that a different content?

12 MR. YOUNG: It's certainly -- it's certainly less --
13 less of the same content has been delivered. There's no
14 question about that. Less has been received by the user.

15 So the digital media service, as a whole, has
16 definitely been degraded; right? There's no question about
17 that. But the content has not improved.

18 And the way to look at this is if you look at Slide
19 24 of our -- of our claim -- of our -- of our demonstrative
20 set, and this talks about the quality service metrics that
21 are discussed in the -- in the '992 patent, some of which
22 relate to the network connection and some of which relate to
23 the -- to the content itself.

24 And before we go to Slide 24, just going back up to
25 Slide 21, and this might be -- this might -- talks part of

1 the confusion. This is in the -- this is from the
2 specification itself, and the actual quote is on Slide 20,
3 and then Slide 21, it shows how some of these deal with
4 digital -- the digital media -- the quality of the digital
5 media content, and some of them deal with the network
6 connection.

7 And let's look at -- to go to your thinning question,
8 let's look at the seventh one, the rate at which information
9 be -- may be accessed; right? How fast can you get the
10 information?

11 And when I asked Petitioner's expert about this --
12 and this is on Slide 24 -- and I said, What would a person
13 understand the rate of which the information may be accessed?

14 He brought up thinning. Right? And that's on the
15 bottom of Slide 24. Dropping frames. So that has to do with
16 a network connection issue, not the underlying quality of the
17 content itself. And, again, that goes back to the Jagadeesan
18 example of why the claims were amended to deal with that
19 specific issue.

20 So, Your Honor, are there any other questions on that
21 particular issue?

22 JUDGE ENGELS: I think I understand your argument. I
23 suppose it -- to me, I'm still a bit unsure how one version
24 of digital media content that's thinned, how that is
25 different than an SD versus HD version of the same digital

1 media content. I understand it's encoding and that sort of
2 thing, but --

3 MR. YOUNG: Well, Your Honor, and this goes back to
4 the specification as a whole and as reflected in the claim
5 language. The -- the idea behind the '992 patent, which is
6 very distinct from the Shaw patent, is that in the '992
7 patent, you're trying to get a better experience to the user,
8 better quality.

9 In other words, is it a higher -- you know, is it a
10 -- is it a higher encoded version of a movie or better song
11 quality or whatever, and it's always -- it's saying you're
12 delivering it to the user at a certain -- digital media
13 content at a certain quality level, current quality level,
14 and then you're seeking to get better quality level from
15 another source. And, again, that current quality level is
16 defined without talking about a network connection at all.

17 And then, when you're finding a better source -- and
18 that's why there's a whole discussion in -- you know,
19 basically, it's three columns' worth of text in columns 4, 5,
20 and 6, and 7 in the Shaw -- of the '992 patent that talks
21 about this exchange of information to see if the new -- the
22 user can experience and use the digital media content at the
23 higher quality level in that exchange of information.

24 Now, again, that's not expressly required in the
25 claim language itself. I acknowledge that. But in the

1 second delivering limitation, you still have to be able to
2 deliver it to the -- to the -- to the user.

3 So going back, then, to the thinned example, if
4 you're on a network connection where your quality or your --
5 the movie is being streamed at a certain quality level, and
6 then, all of a sudden, the network connection gets better,
7 and then -- Barnes talks about that. Sometimes the network
8 connection degrades or it gets crowded, this and that, and
9 there might be reasons to switch; right? To get a better
10 conduit; right? You're still not getting -- the media
11 content itself is not a better quality. You have a better
12 vehicle to receive it, but the quality level -- each frame is
13 encoded exactly the same.

14 And so, going back, then, to the Petitioner's slide,
15 even though -- like, on Slide 44 -- like, Frame A in the
16 digital media content delivered without thinning is exactly
17 the same as the frame delivered with the thinning. That
18 frame is identical. It's not like one is HD and one is SD,
19 as an example. These are exactly the same thing.

20 And so -- and this, again, if you go to Slide 32 of
21 our slide deck, and this goes from the Petitioner's expert's
22 own declaration, he says, There's an -- he says, In other
23 words, when a server detects that -- underlined in black text
24 in yellow -- there is an insufficient communication bandwidth
25 between the server and the client, then the server may be thinned.

1 So, again, that has to do with the network
2 connection. And the network connection is addressed in the
3 claims. There's no question it is. But it's in the -- it's
4 in the determining limitation to see if the network
5 connection is simply high enough to get the content at the
6 higher quality level.

7 So the thinning -- so just so we're very clear,
8 thinning absolutely impacts the digital media service quality
9 as a whole. There's no question it does. It absolutely
10 does. So if we're talking -- and then what Petitioner wants
11 do is -- is -- is combine digital media service and digital
12 media content in one and the same. And so we're talking
13 about quality levels. It's just quality level of the service
14 as a whole, not quality level of the content.

15 And so, just by way of example, if you look at Slide
16 10, which -- of their slide deck -- this talks about Shaw.
17 It actually brings this out. In the two yellow highlighted
18 texts, it says, The player may then optionally perform one or
19 more tests to determine which of the set of servers provides
20 a best quality of service -- right? That's the preamble,
21 digital media service -- for the stream.

22 And then the next highlighted section, A better
23 stream on the fly if appropriate to maintain or enhance the
24 quality of service.

25 So when Petitioner's talking about quality level,

1 they're talking about quality level of the service as a
2 whole, and that's where thinning comes in. But when you're
3 talking about the quality level of digital media content
4 itself, thinning's not applicable. Thinning deals with the
5 -- deals with the network connection, not the content of the
6 quality itself. It's just how that content is being
7 delivered.

8 And those are the limitations that were expressly
9 done in the file history to get around the Jagadeesan and
10 Kayama references. So it's not like we're making a
11 distinction that the -- that the Applicants didn't envision
12 and rely on in the prosecution of this patent. We're relying
13 on the exact reason why the patent was allowed in the first
14 instance by the examiner.

15 JUDGE ENGELS: I guess one -- one last question, and
16 then we can move on. So, again, in limitations [1c], [1d],
17 it refers to "the media content," which you say has its
18 antecedent basis in [1b]. And so in [1c], we're going to
19 determine that this can be done to provide the digital media
20 content to the user at a higher level. Again, it's "the media
21 content."

22 MR. YOUNG: Right. So the -- so, in this example,
23 like, a movie or a song, that's the digital media content.
24 And whether you can get it at a higher quality level or a
25 lower quality level, it's still the same digital media

1 content. It's still the same movie or the same song or, you
2 know, whatever the -- whatever the viewer is looking at.
3 It's just in a higher quality level -- in other words, HD
4 versus SD, as an example.

5 So, yes, the digital media content itself, that
6 movie, has two quality levels in the claims -- the current
7 quality level being delivered to the user and a higher
8 quality level that we are trying to determine whether it can
9 be delivered to the user. So that content -- digital media
10 content itself absolutely has two different and distinct
11 quality levels.

12 JUDGE ENGELS: Except that in [1c], "the digital media
13 Content" is defined with -- or characterized by a
14 communication bandwidth.

15 MR. YOUNG: Well, it says -- it says -- if you go
16 look at Slide 5 as an example, it says, Determining that a
17 network connection with a second system is available and
18 characterized by the communication bandwidth having a --
19 having a bandwidth high enough; right? So the network
20 connection high enough to provide the digital media content
21 to the user as a higher quality level than the current
22 quality level.

23 So, yes, the network connection, the -- the
24 description of the network connection, is it -- is it a
25 communication high enough to then deliver the -- just as an

1 example, we -- we have -- we're playing an SD version to the
2 user. They go out and they find a second system that has an
3 HD version. We can establish that network connection. It's
4 available, and it's characterized as high enough, so I can
5 actually get that HD version of the movie.

6 That's the determining limitation. I can actually
7 get it. That's Step 150 of Figure 1 of the specification.
8 There's all kinds of disclosures as various ways to do that.

9 Then you use that network connection to obtain that
10 HD version of that same movie but in a better quality level,
11 and then you now actually have to deliver it to the user in a
12 way that the user can actually use it. So, in other words,
13 you have to make some kind of determination that the user
14 actually has a system where the HD version of the movie can
15 be viewed by the user, so the pixilation is high enough, the
16 processing's high enough.

17 But -- but, yes, that digital media content has two
18 different quality versions, and then the network connection,
19 you're determining if it's high enough in order to get it so
20 that the user can use the -- and view the quality level at
21 the higher HD version in this example.

22 JUDGE ENGELS: Is there anything in the specification
23 that gets into more detail about, for example, the HD versus
24 SD --

25 MR. YOUNG: Yes, Your Honor.

1 JUDGE ENGELS: -- version?

2 MR. YOUNG: Yeah. So just by -- there's many
3 examples, but one example is in column 4, line 49, where it
4 says an exemplary example, scenario 500 illustrated in Figure
5 1, PDA 515 may be communicating with audio information to
6 headset -- may be communicating information to headset 520
7 over communication link. This is where it could be
8 potentially just loaded on the -- or stored locally on the
9 system. The current service communicating the audio
10 information to the user may be, for example, audio obtained
11 through 64 kilobits per second MP3 encoded information
12 residing on the PDA.

13 But then it says that -- so that's the first --
14 that's where it's initially being provided. But then if you
15 go now -- and, again, this -- it goes back and forth to
16 Figure 5 a number of times. So if you go to column 6, which
17 is exactly the same scenario, and you go to line 40, it says,
18 then -- and it talks about the same 64 kilobits, but then you
19 can also get it at a CD-quality level music stored in a local
20 memory on device 560.

21 This is where you -- so you go from this MP3 version
22 at 64 kilobits per second to then the CD-quality level, and
23 that's where in Figure 5 you're listening to it locally, but
24 it's not as good, but you need the storage space, so you're
25 listening to it in not as good a version, but then the

1 CD-quality level is available. You go to the second system.
2 You establish that network connection. It's high enough to
3 get the CD quality of the same song but in a better quality,
4 and you can get that and provide that to the user.

5 So that's one example of where that distinction is
6 made, Your Honor.

7 JUDGE ENGELS: Thank you. And we are into your
8 rebuttal time that you'd like to reserve, if you --

9 MR. YOUNG: Yes, Your Honor. I guess just to
10 summarize -- and these are all set forth in the slides and
11 dealt with in detail in the briefing, but, again, this --
12 this idea of the -- of the prior art that Petitioner's
13 relying on versus the claims themselves, there is a very
14 clear distinction.

15 And to Your Honors' questions earlier with
16 Petitioner, there is no -- there's no -- at the end of the
17 day, when you look at Shaw and Barnes, there is no disclosure
18 anywhere in either reference where you are switching from one
19 source to another to get a better version of that song,
20 movie, whatever that digital media content is. It's never
21 done. It always talks about switching to get a better
22 network connection. And that's exactly why the claims were
23 amended to get around Jagadeesan and exactly why the claims
24 were now -- now still valid and -- and novel and nonobvious
25 over the Shaw and Barnes reference. And so, when we're

1 looking at those references, that's the distinction, and it's
2 not made.

3 And when we say that there's not a motivation to
4 combine, we're not saying there's not a motivation to combine
5 Shaw and Barnes generally. We're not going to argue that
6 there's -- they're not both talking about a media player.
7 But there's no motivation to combine them to get a higher
8 quality of the digital media content itself.

9 And that's what we talk about in Slides -- in Slides
10 53 and 54, where I asked their expert, Dr. Myler, and I said,
11 Well, you know, why would you combine these two? And he gave
12 five pages of testimony, and the term "quality of digital
13 media content," that was never brought up.

14 You can definitely switch to get a better network
15 connection, and there's merits to doing it that way. The
16 Akamai -- the Akamai, which is the underlying company that
17 owns the -- owns the Shaw reference, was talking about ways
18 that you do this CDN, this content delivery network. And you
19 distribute these identical copies throughout the network, and
20 you try to -- then the viewer, if they're getting a bad
21 connection, they switch and get the exact same copy of the
22 movie from a different -- from a better source. A better
23 source just means a source with a better network connection,
24 not a source with an HD version.

25 And so -- as an example -- and so where our patent,

1 the '992 patent, gives all this detail to why you need to
2 exchange information between the two -- the two systems, so
3 the user can appreciate -- determine whether the user can
4 appreciate the higher quality of the content, none of that is
5 in either Barnes or Shaw. And, again, that speaks to the
6 exact reason why the claims were amended in the prosecution
7 history, the exact reasons why the claims were allowed by the
8 examiner, and the exact reasons why the claims are now still
9 valid over the Barnes and Shaw combination.

10 So, with that, Your Honor, I -- unless there's any
11 more questions, I'll save the rest of my time for rebuttal.

12 JUDGE HAAPALA: Mr. Young, actually, I do have one
13 more question, and I know we're eating into your rebuttal.
14 In the prosecution history, when the Applicant distinguishes
15 over Jagadeesan obtaining voice data, let alone obtaining
16 digital media content, I'm wondering if voice data is digital
17 media content.

18 MR. YOUNG: Oh. Absolutely, Your Honor. Voice data
19 is certainly digital media content. And, you know, digital
20 media content is generally -- it can be visual. It can be
21 audio. There's all different ways that -- and I don't think
22 there's any dispute between the parties that -- that voice
23 data can absolutely be considered digital media content. I
24 mean, I think that's -- that was well known by any POSITA of
25 the art during that time.

1 JUDGE HAAPALA: Okay. Thank you.

2 MR. YOUNG: Thank you, Your Honor.

3 JUDGE ENGELS: Thank you.

4 Mr. Batts.

5 REBUTTAL ARGUMENT ON BEHALF OF PETITIONER

6 MR. BATTIS: Thank you, Your Honor.

7 I'd like to first go back to Judge Haapala's

8 questions to me about our two separate theories about Shaw

9 and where we had set forth that argument in our Petition and

10 our underlying papers. I'm not going to repeat the

11 explanation I already gave from pages 36 and then back to 32

12 and 33.

13 I do think, though -- I looked back at this during

14 the argument, and I want to point out that our initial

15 argument was that quality level was based on a variety of

16 factors, including the network considerations as well as the

17 underlying encoding. And I think that's made clear from the

18 portion that I pointed out to on the bottom of page 32, going

19 to page 33.

20 But I also want to point the Board to -- on page 36,

21 we also cited to the Myler opening declaration in paragraphs

22 63 to 65, and we provided additional explanation there by Dr.

23 Myler about how the encoding of the underlying content that

24 Shaw teaches, that we look at a variety of factors -- this is

25 paragraph 63 -- that the quality is dependent upon a number

1 of factors. And then he points to Shaw's teachings about
2 that quality varies depending upon, and then he talks about
3 network conditions as well as the bit rate at which the
4 content is encoded in the format that's used. And he goes on
5 and provides further explanation there. So I'm just -- I'm
6 not going to read it all to the Board -- on paragraphs 63,
7 64, and 65.

8 In addition to those paragraphs, Dr. Myler also
9 provided a reply declaration, and paragraphs 11 to 15 of the
10 reply declaration also address this same argument and issue.
11 And Patent Owner has made no allegation that those paragraphs
12 to the reply declaration were new argument.

13 So I think we fairly set forth the teachings of Shaw
14 that are set forth in the Petition for this specific claim
15 limitation as to how the encoding teachings of Shaw were one
16 of the factors for quality and how Shaw was teaching that
17 exact issue.

18 So I wanted to touch on that first before I jumped on
19 to the next points.

20 So I think -- I believe that all of Patent Owner's
21 arguments here today were predicated on the narrowing
22 interpretation of quality level. So in order for Patent
23 Owner to prevail, Patent Owner must now prevail on quality
24 level being limited to not -- to excluding network
25 considerations.

1 And I think -- I want to go back to the claim
2 language because the claim -- the clear claim language of the
3 patent is always within the context of delivering the digital
4 media, of providing the digital media, and obtaining the
5 digital media. And I believe Patent Owner's counsel said,
6 it's, quote, Clear meaning from the claim language what the
7 plain and ordinary meaning is. But if we go back to the
8 Institution Decision, even the Institution Decision noted --
9 did not agree with Patent Owner as to this supposed clear
10 meaning from the claim language, and that's slide 15 of our
11 slides.

12 And so I want to go to the file history because a
13 fair amount of the argument here was dedicated to the
14 prosecution history. And even Patent Owner's own slides show
15 that Jagadeesan was grabbing content from the same server, so
16 it was just using different paths to obtain content from the
17 same server.

18 So the amendments that were provided still associate
19 the digital media content with the network and the delivery:
20 the delivering, the providing, and the obtaining. So network
21 conditions can still impact the quality of the digital media
22 when the content is being streamed over the network. So the
23 amendments do not make the quality of the content independent
24 of network considerations.

25 And I believe one of the judges basically asked,

1 well, aren't you basing -- you're extrapolating a lot from
2 what happened in the file history with the Applicant, and
3 Patent Owner pointed, well, it's clear from the specification
4 what is meant by digital media content.

5 Well, there's a problem with that argument. Where is
6 digital media content ever stated? Where is that word ever
7 in the specification? It's not. The only -- the only place
8 that word shows up is in the claims. There is no clear
9 explanation in the specification of digital media content.
10 It's simply absent from the specification.

11 So what we have is we have the context of the claims,
12 where it's talking about providing the digital media content,
13 obtaining the digital media content -- that's -- that's what
14 we have to work on.

15 And if we go to Slide 14 of Patent Owner's slides,
16 they pointed to Dr. Myler's testimony here as somehow
17 supporting their argument about the digital media content
18 somehow being -- supporting their interpretation of digital
19 media content, but if -- I think it's clear from the
20 questions and then the answers of what he says. He's saying
21 the digital media service is a server delivering somehow
22 digital media.

23 That's exactly what we're talking about in the
24 context of how these claims were drafted. The claims were
25 drafted as they were drafted, which is about delivering,

1 providing, and obtaining. So that's actually supporting our
2 position on the claims.

3 And even I think, you know, when Patent Owner wants
4 to point back to the specification of the patent, I think
5 it's important to note that even the title of the patent is
6 about automatic quality of service based on resource
7 allocation, and then the abstract is talking about quality of
8 service based on network resource allocation.

9 So Patent Owner is certainly trying to morph its
10 claims into something different, but it's clear from the
11 patent specification to the limited extent it can provide
12 guidance to us here that it does not support Patent Owner's
13 attempted disavowal of claim scope, apparently, now, in terms
14 of this quality level of digital media content.

15 And I think, then, the Patent Owner spent some time
16 discussing thinning and some questions from the Board, and I
17 think as a preliminary matter, I want to object on the record
18 that Patent Owner made numerous arguments about Jagadeesan in
19 the context of thinning, and nowhere in its papers has it
20 made arguments or had any expert testimony about Jagadeesan
21 in the context of thinning.

22 So, first off, it's objectionable as being a new
23 argument at oral argument; second, there's no expert
24 testimony supporting that argument; and, third, it's
25 factually wrong.

1 Jagadeesan had nothing to do with thinning. You look
2 through Jagadeesan, there is nothing that discusses thinning
3 in Jagadeesan. It was about connections that have failed,
4 connections that didn't work. And Jagadeesan, I don't think
5 either party's contesting now that Jagadeesan was still going
6 back to content on the same server. It wasn't talking about
7 switching servers in response to events that were occurring,
8 such as a thinning event.

9 So, but Patent Owner's counsel did admit during the
10 argument that thinning does provide less content. So he did
11 -- when he was asked by Judge Engels about our graphic, he
12 said, well, yes, thinning results in less content, which
13 means less frames. Well, if we go to Patent Owner's Slide
14 24, that's exactly what Dr. Myler explained, and what they're
15 pointing out here is that thinning results in dropping of
16 frames, and that's a lower quality.

17 So the server, as we explained in our affirmative
18 evidence, the server -- and I think that's Slide -- sorry, I
19 don't want to jump around too much -- but Slide 45 of
20 Petitioner's slides -- we explained that a thinning stream
21 has less frames, and the frame quality is -- then the quality
22 is reduced. And the quality is reduced at the server because
23 when it's recognized that thinning is occurring, the server
24 actually sends less frames and, therefore, lower quality.

25 And I think this is a very important point, is that

1 all of these arguments on quality level are being predicated
2 to limiting quality level to -- Patent Owner's argument is
3 quality level now has to be different encodings. So he used,
4 I think, the HD-SD example repeatedly with the panel here.

5 But, again, he never addressed that the portion of
6 the specification -- and I want to go back to my Slide 18 --
7 the portion of the specification that Patent Owner is
8 pointing to, which is -- is -- you know, broad examples and
9 nonlimiting examples -- he never addressed the fact that --
10 yes, there's an example here halfway down of such higher
11 quality information may include different encodings, but the
12 very next example is not encodings.

13 The very next example is providing a higher -- what
14 is stated here is higher quality information is where one
15 system has the information and another system doesn't, or
16 there is simply an encoding available, so -- such as where
17 you have a server rebooting. You no longer have the content
18 available. You go to a second server to obtain that content.

19 So even the evidence that they're pointing to can't
20 limit the claims the way that they're trying to limit the
21 claims. It's simply not supported even in their own
22 specification where they don't have a lexicography -- they're
23 trying to ask, I guess, now for a disavowal even though
24 they've never argued a clear disavowal -- and the standard
25 that's required for a disavowal of claim scope. But beyond

1 that, the specification language that they're pointing to
2 isn't as limiting as they want it to be.

3 So I think for all those reasons they've failed to
4 satisfy even their construction, but also we -- we set forth
5 four different ways in which claim limitation [1c] is met.

6 And so I think -- unless I have any further questions
7 on this from the Board, I just wanted to briefly walk through
8 those in the couple minutes that I have remaining.

9 (Pause.)

10 MR. BATTS: So I think the first point I would say is
11 that the Patent Owner can't avoid the fact that all of its
12 arguments about quality level are narrowing arguments that
13 were never even briefed about a disavowal of claim scope, so
14 that can't be appropriate. And as I mentioned, the
15 specification here clearly has a broader definition or
16 explanation of what quality level can mean, even the portion
17 that they're pointing to, than simply being different
18 encodings.

19 And Patent Owner has provided no response for why
20 thinning doesn't result in a lower quality content from --
21 with a switch to a higher quality content. That's what Shaw
22 says is happening, and Patent Owner's arguments instead are
23 focusing on why thinning occurs, because of a network
24 constriction, not the result that occurs in terms of the
25 server transmitting -- changing the frames that are being

1 sent to the media device.

2 And, lastly, Patent Owner has no response for what
3 Shaw indisputably teaches, which is switching the sources
4 based upon bandwidth. So it's teaching switching from a
5 different server to -- from one server to a different server
6 based upon bandwidth, and Shaw teaches having multiple
7 encodings of content to which to be able to switch from and
8 which -- which they have not disputed -- their own expert
9 admits was known in the art, and we included in our POSITA
10 knowledge level.

11 So for those reasons, Patent Owner's arguments fail.

12 That's -- that's the end of my presentation absent
13 any questions from the Board.

14 (Pause.)

15 MR. BATTS: Thank you, Your Honors.

16 JUDGE ENGELS: One question, briefly, Mr. Batts.

17 MR. BATTS: Yes.

18 JUDGE ENGELS: Claims 14 and 19, they were left out
19 of the Petition, it seems. Is that correct?

20 MR. BATTS: I don't believe I'm allowed to argue
21 them, Your Honor, because I'm limited to what's in the -- in
22 the Petition, so -- and what's there is there; what's not
23 there is not there.

24 JUDGE ENGELS: Fair enough. Thank you.

25 MR. BATTS: Thank you, Your Honor.

1 JUDGE ENGELS: Mr. Young, I believe you have about
2 seven minutes remaining.

3 SUR-REBUTTAL ARGUMENT ON BEHALF OF PATENT OWNER

4 MR. YOUNG: Thank you, Your Honor.

5 Try to go through these as quickly as I can, but if
6 I'm going too fast, obviously, please let -- stop me, and
7 I'll answer any questions that you have.

8 So, first, you know, Mr. Batts said that there was no
9 disclosure of digital media content at all in the -- in the
10 specification of the patent, and, you know, Slide 15 of our
11 presentation deals with that. The specification says, Higher
12 quality information, and as I mentioned earlier, there's
13 information and then access to the information. In other
14 words, higher quality information is digital media content.
15 Access to that information is network connection. And there
16 specifically is an example where they're talking about
17 information, and this is a lower loss -- this particular
18 example, lower loss encoding technique.

19 Nothing in our argument is ever -- we ever argued
20 that quality level is solely limited to -- to encoding
21 levels. That's just not correct. Encoding levels is one way
22 to discuss quality level of digital media content, but it
23 certainly isn't the only way.

24 And in Slide -- in Slide 17, there is that -- again,
25 that distinction between access to the information as well as

1 the quality of that information. Information is what's being
2 delivered. Now, information is a broader term than digital
3 media content; right? Information could be, I suppose, you
4 know, other things -- like, analog, as an example. But in
5 this case, information generally was disclosed in the
6 specification.

7 Then the claims, which they're totally allowed to do,
8 focused on digital media content specifically, but that
9 distinction between access and quality information is made
10 very, very clear throughout the specification, and Slides 15
11 to 17 are just two of those examples, as well as the others
12 that are -- that are discussed in the -- in the Patent Owner
13 Response.

14 With respect to the claim amendments, looking at
15 Slide 10, and it makes this -- makes this -- I'm sorry --
16 looking at Slide 9 makes this clear. There's no -- there's
17 no -- there's no dispute that the claim as a whole talks
18 about digital media service and then quality of service
19 metrics matter.

20 And as we -- as we showed in the -- in the -- in
21 Slide 21, those quality of service metrics are laid out, some
22 of which talk about network connection -- those are the ones
23 in blue -- and the other ones in green talk about the quality
24 of the digital media content.

25 So digital media service, quality of service metrics

1 are absolutely applicable, some of which impact the network
2 connection, which is what Shaw discussed -- Shaw and Barnes
3 disclosed, and some of them deal with the quality of the
4 content itself, which is what our patent focused on. In
5 these claim amendments where it shows that digital media
6 content, that term digital media content was not there as
7 originally filed. It was added to make this -- make this
8 distinction.

9 And in the first claim amendment -- again, I'm on
10 Slide 9 -- it says, Delivering digital media content having a
11 current quality level to the user. There's nothing ambiguous
12 or no -- there's no narrowing or claim disavowal or anything
13 like that. This is what the claim says, is delivering
14 digital media content having a current quality level, and
15 they amended it to get around the prior art.

16 Now, the Petitioner made some argument that we made a
17 new argument about Jagadeesan and thinning. That's not the
18 case. This is analogous to thinning. It's -- the voice data
19 was not being received correctly, and they switched to a
20 higher -- a higher link quality.

21 There's a whole long discussion, numerous pages in
22 the file -- in the Patent Owner Response that deal exactly
23 with this issue, and the point -- the point that matters is
24 that in Jagadeesan you had -- and this is straight off of
25 Slide 10, which is cited extensively in the Patent Owner

1 Response -- the voice data is being received, and it's not --
2 the link -- the link is not sufficient enough to deliver it
3 at an acceptable quality level. So you go to a better link
4 quality to get the same voice data.

5 And Petitioner's counsel is right that they do make a
6 distinction -- this is again on Slide 10 -- it says, As a
7 whole, Jagadeesan fails to disclose or suggest obtaining
8 voice data from another source. There's no question.
9 There's no question. But then it also says, Let alone
10 obtaining digital media content at a higher quality level
11 from the second system, as recited in Claim 38.

12 So there is this distinction between two different
13 sources, but there's also this distinction that in Jagadeesan
14 you're getting the same voice data, and that's not a higher
15 quality level as required by the claims as amended, and that
16 exact distinction is -- is why Shaw does not disclose what
17 the claims as amended cover, and that is, there again,
18 identical copies of the system -- of the -- of the -- I'm
19 sorry -- of the digital media content, and it's from various
20 servers. So if you switch from one to a better source,
21 you're still getting the same version of the movie.

22 Now, Petitioner's counsel talked about there's this
23 encoding disclosure in Shaw, but as Your Honors have already
24 noted, that encoding disclosure is in the background section
25 of the patent. There's no dispute that people knew of

1 encoding techniques when Shaw was filed or as when the '992
2 patent was filed. There's no question about that.

3 But there was no disclosure in Shaw, no teaching, no
4 suggestion, no whatever of trying to have two different
5 systems where you're delivering it at one level, you look to
6 see if you have it at the higher -- the higher -- in this --
7 in this example -- a higher encoded version of the movies
8 available in a second source, determining that the network
9 connection is high enough to obtain it, using the network
10 connection to then obtain it, and then delivering it to the
11 user. That's not disclosed.

12 Only disclosed in Shaw is you're not getting --
13 you're not getting the current version of the movie using a
14 good enough connection, so then you switch to a better
15 connection. There's nothing wrong with that disclosure.
16 That's a different teaching, and that's something that is
17 distinguished in the file history of the patent and is
18 exactly why the claims were allowed and exactly why the
19 claims were -- should be allowed over the combination of Shaw
20 and Barnes.

21 So, Your Honor, I think that's about my hour, so I
22 don't want to go over, but if there's any questions, I'm
23 happy to answer them.

24 (Pause.)

25 JUDGE ENGELS: I see no questions. We appreciate the

1 presentation from both parties, and we will take the case
2 under advisement.

3 MR. YOUNG: Thank you, Your Honor.

4 JUDGE ENGELS: We're adjourned. Thank you.

5 (Off the record at 11:55 a.m.)

IPR2021-00303
Patent 8,270,992 B2

PETITIONER:

Harper Batts
Chris Ponder
Jeffrey Liang
SHEPPARD, MULLIN, RICHTER & HAMPTON LLP
hbatts@sheppardmullin.com
cponder@sheppardmullin.com
jliang@sheppardmullin.com

PATENT OWNER:

Daniel Young
Chad King
ADSERO IP LLC d/b/a
dyoung@adseroip.com
chad@adseroip.com