

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner,

v.

LIONRA TECHNOLOGIES LIMITED,
Patent Owner,

IPR2024-01281
Patent 7,738,471 B2

Record of Oral Hearing
Held: December 10, 2025

Before: WILLIAM V. SAINDON, STEVEN M. AMUNDSON, and
RUSSELL E. CASS, *Administrative Patent Judges*.

IPR2024-01281
Patent 7,738,471 B2

APPEARANCES:

ON BEHALF OF THE PETITIONER:

THEODORE FOSTER, ESQ.
Haynes and Boone, LLP
675 15th St.
Suite 2200
Denver, CO 80202
(303) 382-6200
theo.foster@haynesboone.com

ON BEHALF OF THE PATENT OWNER:

BRETT E. COOPER, ESQ.
JOHN PETRSORIC, ESQ.
BC Law Group, P.C.
200 Madison Avenue, 24th Floor
New York, NY 10016
(212) 951-0100
bcooper@bclgpc.com
jpetsoric@bclgpc.com

The above-entitled matter came on for hearing on December 10, 2025,
commencing at 12:53 p.m., via video teleconference.

P R O C E E D I N G S

- - - - -

JUDGE AMUNDSON: Good afternoon. I'm Judge Amundson.
And with me on the panel are Judges Saindon and Cass. We have our final
hearing in IPR 2024-01281 involving U.S. Patent Number 7,738,471
between Cisco Systems, Inc. as the Petitioner and Lionra Technologies
Limited as the Patent Owner.

Let's get the parties' appearances, please. Who do we have for the
Petitioner?

MR. FOSTER: Hello, Your Honor. For Petitioner, I'm Theodore
Foster with the firm of Haynes and Boone representing Cisco Systems.

JUDGE AMUNDSON: All right. And will you be presenting the
arguments this afternoon, Mr. Foster?

MR. FOSTER: Yes. I will be presenting for Cisco today.

JUDGE AMUNDSON: All right. Thank you. And who do we
have for the Patent Owner?

MR. COOPER: Good afternoon, Your Honor. Brett Cooper from
BC Law Group for Lionra Technologies. And my partner, John Petrsoric, is
here next to me in the room.

JUDGE AMUNDSON: And will you be presenting the arguments
this afternoon, Mr. Cooper?

MR. COOPER: I will, Your Honor.

JUDGE AMUNDSON: All right. Thank you. Because we are
conducting the hearing by video, we wanted to start by addressing a few
items. First, our main concern is your right to be heard. So if at any time

1 during the hearing you encounter technical or other difficulties that you feel
2 undermine your ability to adequately represent your client, please let us
3 know immediately. For example, by contacting the team members who
4 provided you with the connection information.

5 Second, when not speaking, please mute yourself. Third, please
6 identify yourself each time you speak. This will help the court reporter to
7 prepare an accurate transcript.

8 Fourth, we have the entire record, including the demonstratives.
9 When referring to a demonstrative or an exhibit or a paper, please do so by
10 identifying the slide or page number. Also, please pause a little after
11 identifying the slide or page number to give others time to find it. And
12 identifying the slide or page number is going to be important here because
13 Judge Saindon, who's in our Alexandria courtroom, does not have access to
14 the same WebEx screens that we do. So he'll need to follow along when you
15 identify the slide or page number.

16 Fifth, there's a public line for people to call in and listen to the
17 hearing. Sixth, we set forth the procedure for today's hearing in the order
18 granting the request for oral argument, that's Paper 21. But just to remind
19 everyone the way this will work, the order granting the request for oral
20 argument provided that each side will have 60 minutes of total argument
21 time to present arguments.

22 The Petitioner bears the ultimate burden of proof and will go first.
23 And Petitioner may reserve time for rebuttal. Patent Owner will go next.
24 And Patent Owner may reserve time for surrebuttal. But Patent Owner's
25 surrebuttal must be limited to the issues in Petitioner's rebuttal.

1 Also, please do not interrupt the other party when that party is
2 presenting its argument. If you have an objection, please raise it during your
3 argument. Judge Saindon in Alexandria will be using the timer clock. Right
4 now, it's set above him at 60 minutes and that will be keeping time.

5 And so with all that said, are there any questions before we
6 proceed, Mr. Foster?

7 MR. FOSTER: No questions.

8 JUDGE AMUNDSON: Any questions, Mr. Cooper?

9 MR. COOPER: No questions from the Patent Owners.

10 JUDGE AMUNDSON: All right, fine. And so, Mr. Foster, would
11 you like to reserve any time for rebuttal?

12 MR. FOSTER: Yes. If I could reserve 15 minutes for rebuttal,
13 please.

14 JUDGE AMUNDSON: Okay. Very well. You may begin
15 whenever you're ready.

16 MR. FOSTER: Thank you. May it please the Board. The Patent
17 Owner response in this case identified just one claim limitation as being in
18 dispute, and that is the concurrently writing limitation. As the parties have
19 briefed in the papers filed here, there is an agreed construction of that term
20 in the copending District Court litigation. And that construction is on
21 Petitioner's demonstrative Slide 4.

22 That agreed construction clarifies the scope of the information that
23 is being concurrently written to different memories. And in particular, as
24 underlined in red on Slide 4, it clarifies that each packet header is
25 concurrently written with each other packet header to their respective

1 protocol stack layer memories. In other words, that means that all of the
2 headers are written not only to the packet buffer but also to their respective
3 destinations all at the same time.

4 We understand that the Board is not bound by the parties' agreed
5 construction from District Court. But as both parties have stated in their
6 papers, if the Board finds it helpful to evaluate this case by construing the
7 limitation, we all encourage the Board to adopt that agreed construction.

8 If there are no questions about the construction itself, I just want to
9 quickly summarize an aspect of the procedural posture and the relative
10 timing events between this case and the copending District Court litigation.
11 Because I believe it's important in evaluating some of the arguments that
12 were raised in the Patent Owner response and then even more so in the sur-
13 reply.

14 Cisco prepared this IPR petition in the summer of 2024. We filed
15 it in August of 2024. The District Court case continued on in parallel
16 through the fall of 2024. And during that time, a potential dispute regarding
17 construction of the concurrently writing limitation surfaced between the
18 parties in their discussions.

19 And so in December of 2024, and consistent with the District
20 Court's timing and schedule, Cisco proposed that term for construction. And
21 then in January of this year, 2025, the parties exchanged their proposed
22 constructions. The issue was briefed in Markman briefs. And Cisco's
23 Markman brief has been filed in this case as Exhibit 2004. So you can see
24 Cisco was advocating for what became the agreed construction. And we can
25 see at the bottom of page six in Exhibit 2004 what Lionra's position was at

1 that time. Again, this is roughly eight months after the petition was filed.

2 As Cisco summarized Lionra's contention --

3 JUDGE AMUNDSON: This Judge Amundson. Just to make sure
4 we have a clear record here, okay? When you're talking about the page
5 numbers in Cisco's brief, are you talking about the brief numbers or the ECF
6 header numbers?

7 MR. FOSTER: Yes. Thank you for letting me clarify that. I just
8 mentioned Exhibit 2004 and I meant page 6, as the page was marked during
9 editing. It's page 9 of the PDF, and so it's ECF page 9, either at the top or
10 the bottom.

11 JUDGE AMUNDSON: Okay. I got it. Just so we're clear, okay?
12 So all right, I got it.

13 MR. FOSTER: Yes.

14 JUDGE AMUNDSON: And that's the brief with the competing
15 proposals for the concurrently writing requirement.

16 MR. FOSTER: That's correct. And this was Cisco's Markman
17 brief in the District Court. And the last two lines of page 9 in the PDF of
18 Exhibit 2004 have a summary of what Lionra's contention was at the time.
19 So again, this is eight months after the petition was filed. And it was
20 Lionra's contention that the language requires concurrently writing a single
21 header to the packet buffer memory and a single respective protocol stack
22 layer memory.

23 That same month, the Markman briefs were filed in District Court,
24 March 2025, the Board instituted this IPR. And at the end of that month,
25 Lionra abandoned its claim construction position and the parties agreed to

1 the proposed construction that Cisco had put forward. That agreement was
2 fully adopted in May of 2025 by the District Court.

3 And then in May of -- or I'm sorry, in June 2025, Lionra then filed
4 its Patent Owner response in this case. Ultimately then in September of
5 2025, a year and a month after Cisco had prepared and filed the petition,
6 Cisco had its first opportunity to address the claim construction issue that
7 had developed over the preceding year beginning in District Court and then
8 brought over into this proceeding through the Patent Owner response.

9 And so we believe that Cisco's Petitioner reply properly addressed
10 that claim construction since it was Cisco's first opportunity to do so since it
11 was identified during the District Court proceedings. And the arguments
12 that Lionra presents is that Cisco should have anticipated all of those many
13 events that happened over the 13 months following the petition, should have
14 anticipated them, foreseen them, and readdressed them are simply a bit
15 unreasonable in terms of what we could have expected or how the cases
16 would have interplayed and how things would have developed.

17 I just want to clarify that aspect because there have been multiple
18 arguments from Lionra regarding the timing of Cisco's addressing of the
19 claim construction issue. As to Lionra's arguments from the sur-reply, right,
20 alleging that the Petitioner reply was procedurally improper, we have two
21 substantive primary arguments and responses. First, the extent that Lionra --

22 JUDGE CASS: Counsel, before you dive into that -- this is Judge
23 Cass -- I just wanted to ask a question about the timing that you just laid out.
24 So Cisco's position in the District Court, as you said, was a little to this -- I
25 mean, Cisco had this position about the writing the headers concurrently.

1 Was that position developed after the petition was filed or -- you know, how
2 did that come about? I mean, I'm not asking you to disclose attorney work
3 product or anything but just in general and trying to understand, you know,
4 why there's this difference in, you know, at least -- why there's construction
5 proposed in District Court that doesn't at least appear in the petition.

6 MR. FOSTER: Sure. I was intimately involved with the
7 preparation of the IPR petition in this case. And I can say that at the time we
8 were preparing the petition, the ultimate claim construction issue that
9 surfaced later that year and into this year was not on our radar. The
10 possibility that the term might need construction and then ultimately what
11 that construction would be was simply not something on our radar.

12 JUDGE CASS: Was it -- was your -- because I think you had said
13 in the petition that the terms should be given their plain and ordinary
14 meaning. Was it your understanding at that time that the plain and ordinary
15 meaning was what Cisco later proposed to the District Court, or that it was
16 different from that? You know, what was the intent on the construction in
17 the petition?

18 MR. FOSTER: Yeah. At the time of preparing the petition, we
19 didn't think that it needed construction. And so to the extent it was going to
20 be construed, what that construction would be was not something that we
21 had on our radar. So yeah, the position we took in the petition was that plain
22 and ordinary meaning would apply.

23 And, you know, I believe if we look at the court's ultimate
24 construction that was adopted -- and again, that is on Petitioner Slide 4 -- the
25 construction formally begins with plain meaning, but then it says, "i.e.," and

1 it provides a construction.

2 JUDGE CASS: And I take it that Cisco's arguing to the District
3 Court that it doesn't infringe because of this concurrent limitation.

4 MR. FOSTER: That's correct. There is a letter, I believe it is
5 Exhibit 2003, that was provided to counsel for Patent Owner by the District
6 Court litigation counsel for Cisco outlining that once the claim construction
7 issue was settled and resolved and had been agreed to, that the case should
8 be terminated and dismissed because we don't believe the Patent Owner can
9 prevail under that claim construction.

10 JUDGE CASS: All right. Thank you, Counsel.

11 MR. FOSTER: So as I was mentioning, to the extent any of
12 Cisco's arguments were new in the Petitioner reply, we believe that they
13 were properly raised and responsive to the claim construction issue that was
14 surfaced in this proceeding for the very first time in the Patent Owner
15 response. And I'm sure the panel of judges are very aware, a Petitioner is
16 entitled to respond to arguments made in a Patent Owner response, including
17 those that address claim construction, even if it is a claim construction issue
18 that is new, relative to what was -- had been developed at the time of the
19 petition.

20 Setting that aside, right, setting aside the question of whether any
21 arguments were new or not, I want to take a step back and look at what was
22 in the petition itself. And so I would draw the judge's attention to the
23 petition, which is Paper 2 at page 29. And luckily, this time the pages -- it's
24 page 29, no matter how you count them.

25 On page 29, this is part of our analysis with the section that begins

1 in the middle of the page, number 2, this is part of our analysis for the
2 reasons to combine and what the obviousness combination is with respect to
3 all three references together. And in that, you can see that we've talked
4 about how Cornett discloses using DMA to move data efficiently; that
5 Paatela adds in the idea of moving headers into individual headers for each
6 layer, so that provides the disclosure in the claim language of the protocol
7 stack layer memories.

8 But that combination of Cornett and Paatela -- and this is looking
9 at the last three lines of page 29 -- that combination doesn't address timing of
10 when are the packet headers written to their respective memory segments.
11 That timing aspect, which is in the claim language, was not addressed by
12 Cornett or Paatela. And if we turn the page and look at page 30, relying in
13 part on the testimony and supporting declaration from Dr. Mir, we stated
14 that there are only a few options for how the timing of those writing steps
15 could happen.

16 One option would be to write them sequentially, one memory, one
17 header into one respective memory segment one at a time. The other option,
18 right -- another option -- the third sentence here on page 30, another option
19 would be to move the headers to their respective memory segments in
20 parallel, writing all of the headers to all of their respective protocol stack
21 layer memories in parallel. And that parallel writing concept is what Nelson
22 teaches.

23 And so the obviousness position that we took is that a person of
24 ordinary skill in the art, looking at Cornett and Paatela, recognizing that they
25 were both focused on optimizing packet processing speed and trying to get

1 things done as quickly as possible, the person of ordinary skill in the art
2 would appreciate Nelson's parallel writing technique as being consistent
3 with those goals, consistent with the idea of accelerating packet processing.

4 And we see that at the bottom of page 30, right, citing to Nelson
5 itself, we stated by accomplishing both tasks at the same time, right, the
6 writing of the headers to all of their destinations, Nelson seeks to accelerate
7 packet processing and reduce processing overhead. And so that makes
8 Nelson an obvious and logical design choice consistent with the design goals
9 of Cornett and Paatela.

10 If we move on to page 31, we further address the rationale for the
11 combination and the person of ordinary skill in the art having an expectation
12 of success. We noted how -- looking at line 5 on page 31, how Paatela
13 stores individual packet headers in their respective memories, and it does
14 that in order to make those headers available for processing at each layer as
15 quickly as possible.

16 We note that Cornett uses a DMA engine to free up the host
17 processor. So the host processor can be actually doing that header
18 processing, perhaps while the headers or other parts of packets are being
19 written by the DMA engine on behalf of the host processor.

20 And then finally, Nelson seeks to speed up packet processing by
21 performing header writes in parallel to separate buffers and that reduces
22 delays and allows routing decisions to be made more quickly.

23 JUDGE SAINDON: Counsel, if I could jump in, this is Judge
24 Saindon. So I'm looking at Figure 5 of Nelson. And I see the parallel
25 header, but it's parallel with the frame. It's not necessarily showing parallel -

1 - each aspect of the header getting fed in in parallel. So could you respond
2 to Patent Owner's arguments pointing to that?

3 MR. FOSTER: Yes. So in Figure 5, Nelson shows that the
4 received logic is writing the headers to the frame FIFO 42 and the header
5 FIFO 44 and is performing those writes in parallel header. Nelson discloses
6 that in parallel language at the top of column 7, I believe it is. What that
7 teaches is the benefit of performing memory writes and particularly writing
8 of packet headers to separate destinations in parallel, i.e., concurrently.

9 That teaching, right, that concept is what we rely on in the
10 obviousness combination. We are not relying on a literal incorporation of
11 Nelson's received logic, of Nelson's frame FIFO or its header FIFO into
12 Cornett or Paatela. We're relying on Nelson's teaching of the advantage of
13 performing header writes in parallel.

14 And so the arguments that Patent Owner is making, we believe are
15 -- in many respects, they're arguing the references individually. They've
16 identified a sufficiently large portion of claim text for which we have an
17 obviousness argument. And Patent Owner's position is, well, this
18 sufficiently large block of claim text is not disclosed in any one single prior
19 art reference in its entirety. And that is fundamentally arguing the references
20 individually when the ground of unpatentability here is based on
21 obviousness. We don't believe that it's properly addressing the obviousness
22 combination that we put forward in the petition.

23 JUDGE SAINDON: So as a follow-up then -- this is Judge
24 Saindon again -- I guess, let's say I buy that Nelson teaches to process a
25 header in parallel with a packet or the body of the packet. And there's

1 reasons you want to do that, the packet's larger, so it's going to take longer,
2 so you don't want to wait for that. You can work on the header ahead of
3 time.

4 But I don't know if that necessarily teaches to then take the header
5 and then split all of those parts up, like in Paatela, and then work on each of
6 those in parallel or concurrently. So it seems to me that there's a second
7 kind of leap there more focused on the header in parallel versus just the
8 header versus the body. So could you speak on that a little more?

9 MR. FOSTER: Sure. And again, the concept that we take from
10 Nelson is that there are advantages to processing headers and performing
11 memory writes in parallel. And Nelson's specific example is with respect to
12 parallelizing the writing of headers to both a header specific memory and to
13 a broader whole frame or whole packet memory.

14 The aspect of splitting headers up and writing each header to a
15 discrete memory, as you acknowledge, we rely on Paatela. And Paatela has
16 a memory 716 that we show on our demonstrative Slide 8, and that memory
17 716 has discrete locations for each of the distinct packet header portions.
18 The obviousness combination, right, is based on combining these teachings,
19 right?

20 The idea of having separate memories from Paatela and the idea of
21 having concurrent memory writes of headers to different header locations
22 from Nelson, you know, it relies in part also on the idea expressed in all
23 three references that the goal is to accelerate processing and to eliminate
24 delays. And if eliminating delays in Nelson means performing parallel
25 writes between two destinations that Nelson has, then we believe the

1 obviousness position -- or the obvious thing to do when you have many
2 different header destinations like in Paatela, the obvious thing to do is to
3 write to all of those destinations also in parallel so that you're not holding up
4 any of the substantive header processing steps that follow, you know.

5 Part of that analysis, I think, comes through in the testimony of Dr.
6 Mir. Looking at, you know, demonstrative Slide 7, we have a portion of Dr.
7 Mir's testimony on the obviousness and of how the references and their
8 respective teachings would come together.

9 Looking at Dr. Mir's testimony in paragraph 67, he talked about
10 how Cornett and Paatela together suggest having the DMA engine move
11 headers into their respective header memories and then have it -- you know,
12 relying on Nelson and Nelson's disclosure, having those write operations be
13 performed in parallel because that accelerates packet processing. And so
14 we're relying on the combined teachings of the three references, not -- we're
15 not relying on Nelson to teach the idea of writing to multiple memories, nor
16 are we relying on Paatela in the petition, as it's disclosing the concurrently in
17 writing.

18 JUDGE SAINDON: Thank you.

19 MR. FOSTER: Sure. Again, you know, looking back at the
20 petition, I believe we were around page 30 or 31. If we look at page 31,
21 right, kind of the summary of our analysis on the reasons to combine bring
22 all three references together. We conclude that -- at the top of -- or at the
23 bottom of page 31, citing again to Dr. Mir's testimony at paragraph 67 that I
24 was just mentioning.

25 And so that, again, ties back to demonstrative Slide 7, where Dr.

1 Mir clarified the write operations in question are the write operations of
2 writing to the respective memory segments. It's not simply writing in
3 parallel, as Nelson discloses to one header memory and one packet buffer.
4 It's writing to all of the destinations as in Paatela, in parallel.

5 That was further clarified and we cited this in the petition reply.

6 Dr. Mir clarified, you know, his understanding of what his testimony is and
7 what his position was with respect to the obviousness of the three references
8 together. Again, looking at demonstrative Slide 7 and Dr. Mir's summary of
9 his testimony in paragraph 135, there, in paragraph 135, he eliminates any
10 ambiguity that there might have been about what he meant in paragraph 67
11 by bringing all of the elements, all of the concepts together into one
12 sentence, right, and so that the combination renders obvious, saving
13 individual encapsulated headers of a packet to their respective memory
14 segments and doing that in parallel, i.e., concurrently.

15 And so we believe that the arguments put forward in the petition
16 are sufficient and stand on their own to show the obviousness of the claim
17 language, even as construed as requiring parallel header writes to their
18 respective header memories. But, you know, again, we had an opportunity
19 to respond to this issue in the Petitioner's reply.

20 If we look at Petitioner's Slide 8, again, we pointed out that Paatela
21 again has multiple header memories for the multiple different packet
22 headers. And then paragraph 78, which we discussed in the Petitioner reply,
23 paragraph 78 explains that that same memory 716 the petition relied on may
24 in fact be a dual port memory that allows for multiple simultaneous write
25 operations.

1 Paatela goes on and explains that it could have even more than two
2 ports; it could have four ports. It could have -- Paatela just calls it multiport
3 in fact, an unlimited number of ports that might be necessary for whatever
4 design goal an implementer might have.

5 And so I would point out a couple of things here. We're relying on
6 additional disclosure in Paatela regarding memory 716, which is the
7 component in Paatela that we relied on as teaching the discrete protocol
8 stack layer memories in the petition. And so paragraph 78 is not describing
9 some radically different embodiment or some, you know, unrelated
10 disclosure or teaching compared to what the petition was identifying. It's
11 just providing additional description and disclosure of this memory
12 component that we were already relying on.

13 And then I want to address also the arguments from the sur-reply
14 about, you know, alleged tension between the dual-ported memory disclosed
15 in Paatela and the dual-ported memory discussed in Nelson. And the
16 discussions that we had in the petition and the Petitioner reply are not
17 inconsistent between those two.

18 If we look at the petition on page 44 -- so page 44 of the petition,
19 we address the limitation in the independent claims of the packet headers
20 being written into their respective memories in a way that makes them,
21 quote, "available for immediate processing within a protocol stack layer,"
22 close quote. For that, you'll see that our initial analysis begins with
23 discussing Paatela and how Paatela describes processing packets and storing
24 them in memory in time for subsequent processing.

25 And so that -- completing the storage step in time renders obvious

1 making them available for immediate processing, right, because the -- again,
2 time is of the essence with all of these packet processing systems. And so
3 the header is being written to the respective memories in time to be
4 processed makes them available for that immediate processing as claimed.

5 We discussed Nelson only after that, right, to supplement and show
6 that Nelson's dual-ported RAM would, if necessary, facilitate that
7 functionality. Because again, Nelson was just writing the headers to one
8 destination and the entire packet, including the headers to a second
9 destination. The entire packet or the entire frame is going to be much larger
10 than just the headers.

11 And so Nelson's dual-ported RAM would facilitate making the
12 headers available for immediate processing because they could be read out
13 from where they've been written to while Nelson's dual-ported RAM
14 continues to write the packet itself into the packet buffer. And so that's not,
15 you know, pointing to reading and writing headers at the same time, it's
16 pointing to writing the packet itself, the payload of the packet, while the
17 headers get written out or read out as part of the immediate processing.

18 The other aspect that I would point to, right, with respect to all of
19 these issues around Paatela's 32-bit memories and the dual-ported RAM in
20 Nelson and Paatela, I want to point out that this is a level of implementation
21 detail that is present in the prior art, but it's missing in the '471 Patent
22 specification. So the '471 Patent is presuming the person of ordinary skill in
23 the art has the technical capability and the knowledge base to understand
24 how to implement a memory to facilitate parallel writes and immediate
25 processing availability.

1 There's no discussion in the '471 specification about how wide the
2 memory bandwidth needs to be. Is 32 bits enough to handle an Ethernet
3 packet frame header? Is 32 bits long enough to handle an IP packet header?
4 There's no discussion of how to handle those scenarios. That level of detail
5 was within -- was presumed to be within the ordinary skill and the art by the
6 patent itself. And so Patent Owner's attempt to fault the prior art for giving
7 examples that would be sufficient for some protocols but not -- might not be
8 sufficient for all protocols, I think is a little bit disingenuous and is not
9 respecting the level of skill that the patent itself recognizes.

10 JUDGE AMUNDSON: This is Judge Amundson. With regard to
11 Cisco's arguments about Paatela, paragraph 78 and Exhibits 1028 through
12 1036, as I understand Lionra's argument is that you don't have an expert
13 saying anything about those disclosures and that it's just attorney argument,
14 and attorney argument is not evidence. How would you respond to that?

15 MR. FOSTER: So we believe that Exhibits 1028 through -- I don't
16 remember what the latter number you had there was, but those exhibits,
17 those are evidence. And so we don't believe that it's purely attorney
18 argument. We do have the evidence showing, for example, how long is an
19 MPLS header, how long is a PPP header. We have prior art patents
20 disclosing and describing that very consistently, you know. It's not like we
21 have just one reference showing that.

22 And I would also point out the Patent Owner presumably went
23 searching to try to find if they could identify any evidence to suggest that
24 our understanding of the technology, our understanding of MPLS, or our
25 understanding of PPP headers was incorrect. And I don't think they found

1 anything to show or suggest that our understanding was incorrect, which is
2 why they're -- they didn't file any responsive, you know, evidence or point to
3 anything to suggest that it was wrong.

4 JUDGE AMUNDSON: All right. Thank you.

5 MR. FOSTER: With respect to that, I'd also like to address the
6 statement from Patent Owner in their sur-reply on page 10, about eight lines
7 up from the bottom of page 10 in the sur-reply -- and apologies, that's page
8 10 is numbered in the pages, it's page 14 in the PDF. Patent Owner stated,
9 quote, "Petitioner's conclusion that writing each of the protocol headers to its
10 respective protocol header memory in parallel would have been obvious
11 because doing so would accelerate packet processing is nothing more than
12 unsupported attorney argument and should be disregarded by the Board,"
13 close quote.

14 I want to go to where we made that statement in the Petitioner
15 reply. And that was in the Petitioner reply on page 15, it's the first full
16 paragraph on that page. And I just want to identify that this is not
17 unsupported attorney argument. We cited to both -- Exhibit 1006, which I
18 believe is Nelson.

19 We also cited to the supporting testimony of Dr. Mir, paragraphs
20 58 and 65 to 66, which included Dr. Mir's explanation that the reason Nelson
21 is performing header writes in parallel is to accelerate packet processing.
22 And so the contention that this is unsupported attorney argument is simply
23 inconsistent with the statements and the citations we made in the Petitioner
24 reply.

25 If there are no further questions about the dependent claims -- I

1 think I've addressed the question of the dependent claims with the Ethernet
2 and the internet protocol headers and whether they would fit into 32 bits. I
3 think the answer there is the detail of how wide the bus bandwidth needs to
4 be to facilitate that is within the ordinary skill in the art because those are
5 details absent from the '471 specification.

6 If there are no other questions about the dependent claims or
7 anything else, I'll reserve the remaining time for rebuttal.

8 JUDGE AMUNDSON: All right. It looks like -- well, I have no
9 further questions for you. It looks like the same for my colleagues. So all
10 right. So we'll turn it over to Mr. Cooper.

11 MR. COOPER: Thank you, Your Honor.

12 JUDGE AMUNDSON: Before you start, let me just ask if you
13 would like to reserve any time for surrebuttal?

14 MR. COOPER: I will, Your Honor. Fifteen minutes, please.

15 JUDGE AMUNDSON: All right. So you may begin whenever
16 you're ready.

17 MR. COOPER: Thank you. May it please the Board. Brett
18 Cooper from BC Law Group on behalf of Patent Owner Lionra. I want to
19 turn to Exhibit 2010, which is Lionra's demonstratives. Slide 2, this is the
20 claim language. We have bolded the operative language that we've talked
21 about a lot today already: Concurrently writing (1) each of said plurality of
22 headers to a packet buffer memory and (2) each individual one of said
23 plurality of headers to respective protocol stack layer memory. But
24 importantly, the claim continues where it is available for immediate
25 processing within a protocol stack layer. We'll see in a moment why that's

1 quite important here.

2 If I turn to Slide 3 of Exhibit 2010, the petition fails. In the
3 original petition, there was a combination of Cornett, Paatela, and Nelson. It
4 didn't teach concurrent writing. And then in the reply, because of what
5 Patent Owner wrote in opposition, the Petitioner shifted gears, highlighting
6 Paatela. We'll get into the impropriety of the reply argument on Paatela.

7 But actually, it does contradict -- the reply argument does
8 contradict what the petition argument is. And as we wrote in our brief and
9 I'll repeat again in a little bit, you can't have it both ways. You can't have
10 Paatela and Nelson and use their teachings together in the way that they
11 want to.

12 And I'm going to turn to Slide 5 of Exhibit 2010. And I'm going to
13 reiterate what my colleague stated. There is an agreed construction. It is the
14 plain meaning, and it is the words of the claim with the addition to clarify in
15 parenthetical each concurrently with each other. That was to clarify that the
16 concurrent nature of this applies. And Cisco knows this. There is -- I think
17 what I heard my colleague say was quote, "not on their radar," quote.

18 But as they've been arguing from the get-go, middle school
19 grammar dictates this. This is a piece of their claim construction brief.
20 They can't claim surprise. They can't claim that this wasn't the way it was
21 going to happen. They claimed a middle schooler could figure this out. And
22 frankly, Lionra, while it may have taken a different position before,
23 ultimately agreed and said, you know what, Cisco, you're right, middle
24 school grammar does dictate.

25 Turning to Slide 6, this is more on the construction of concurrently

1 writing. And by the way, this is important, which I'll get into in a moment
2 on the prosecution history. But here -- and this letter was already mentioned
3 that's on this slide -- Cisco knew what construction it was going for. Cisco
4 well understood the fifth-grade grammar. Cisco stated general grammatical
5 principles. And then we got a letter stating, well, with this agreed
6 construction, there's no infringement.

7 We strongly disagree with that. Our expert has disagreed with
8 that. And so that's an argument, like we'll get in front of a jury and argue
9 that out. But that -- we strongly disagree. All we know is that's been Cisco's
10 belief on claim construction the whole way.

11 JUDGE AMUNDSON: Oh, this is Judge Amundson. But on that
12 point, on the point you're making, what evidence do we have in the record
13 that that was Cisco's belief when it filed the petition as opposed to later on
14 when it filed its claim construction brief?

15 MR. COOPER: Thank you, Your Honor. Well, we don't have any
16 attorney work product from Cisco's lawyers saying this is what we were
17 thinking the whole way. I agree with you, Your Honor. What we have is
18 circumstantial evidence. We see what they've written. It couldn't be written
19 in a stronger fashion than the way it was written. And frankly, you know,
20 basic grammar would dictate what the claim construction was going to be.

21 Now, we were going to fight about it in the past, maybe, but it's not
22 really -- the issue is not really what Lionra thought. Lionra may have
23 thought something different. Cisco thought the same thing the whole way
24 through. They knew what their claim construction was going to be, and they
25 basically -- we agreed with them. So it's not -- whether or not Lionra took a

1 different position in the past doesn't matter, it's what Cisco's positioning has
2 been.

3 Turning to Slide 7 --

4 JUDGE CASS: Counsel, this is Judge Cass.

5 MR. COOPER: Yes, Your Honor.

6 JUDGE CASS: As you may know -- you probably do
7 -- consistency of claim constructions between District Court and petitions et
8 cetera has been somewhat of a big topic. Are you aware of any Board or
9 Federal Circuit decisions that raise a fact pattern that's somewhat similar to
10 this one? I mean, we all know there's a lot of cases where Petitioner says
11 plain and ordinary meaning, Patent Owner comes up with a construction,
12 Petitioner responds to that construction, you know. Generally speaking, that
13 is usually okay.

14 But as you pointed out, it's a little bit different situation here
15 because Petitioner is the one that themselves came up with the construction
16 in District Court. And, you know, now we have to figure out how we deal
17 with that. So yeah, are you aware of any cases that have dealt with this
18 particular set of facts?

19 MR. COOPER: Your Honor, I am not, as I sit here now, aware of
20 a case in this fact pattern. But this fact pattern is not entirely different from
21 a fact pattern where a party takes a position -- and takes a consistent position
22 in IPR and in the District Court and then ultimately wins that position. So
23 this has been their position. I'm not sure if there's anything special about the
24 fact Lionra was trying to take a different position in the District Court and
25 ultimately backed away from that position.

1 JUDGE AMUNDSON: This is Judge Amundson. If I could
2 follow up on this. I think what you're trying to do -- and correct me if I'm
3 wrong -- is you're trying to distinguish our case, the present case, from what
4 happened in Axonics v. Medtronic. Am I right about that?

5 MR. COOPER: Yes, Your Honor.

6 JUDGE AMUNDSON: Okay. Let's make a shortcut. In your
7 view, could you tell us how you think the facts here or the circumstances
8 here make this case different from what happened in Axonics v. Medtronic?

9 MR. COOPER: Well, I think the big difference here -- and this is
10 why it's so important to focus on the words of fifth grade grammar and all
11 these -- all this rhetoric, frankly. It's foreseeability. What could Cisco
12 reasonably expect to happen in this case? And whether or not Lionra took a
13 different position or was trying to take a -- broaden the claim or not, that's
14 not really what's at issue here. The issue is, was it foreseeable by Cisco that
15 at the time they filed the IPR petition and later had some claim construction
16 issues in the District Court, what was foreseeable by them?

17 They say it's fifth grade grammar and everyone knows this. And
18 ultimately, we agreed. So foreseeability would be the big issue, Judge.

19 JUDGE AMUNDSON: All right. Well, on that foreseeability
20 point here, I'm going to quote from pages 1380 and 1381 in the Federal
21 Circuit's Axonics decision. And there, the Federal Circuit noted that there is
22 no rule requiring a petition to describe all possible or reasonable claim
23 constructions to present invalidity -- and present -- and to present invalidity
24 theories under those constructions. So how does your argument, your theory
25 about foreseeability relate to what the Federal Circuit said there in Axonics?

1 MR. COOPER: Well, Judge, thank you. Here, we have a fact
2 pattern where it's strongly suggested by Cisco that everyone knows this
3 claim construction. And so that is the position they took. And so what
4 -- you know, claiming that later, hey, Lionra was trying to make a slightly
5 different argument in District Court. It doesn't really -- you know, claiming
6 it's not on our radar is a long way off from foreseeability.

7 So I agree with you that the Federal Circuit made those statements.
8 But this is not a situation where, you know, they had to foresee something
9 that was very unlikely to happen. This was the plain language of the claim.

10 JUDGE AMUNDSON: All right. Thank you. I think I
11 understand your position.

12 MR. COOPER: Thank you, Your Honor. I want to turn to Slide 7.
13 And this is why this -- yet another argument why this construction was
14 foreseeable, for instance. In the prosecution history of the '471, the
15 examiner specifically looked at the reference, the references cited during
16 prosecution, and stated that this Boucher reference does not teach the step of
17 concurrently writing. And so this is yet another reason why the claim
18 construction should have been known to Cisco that this is where it was going
19 to ultimately wind up.

20 I'm going to turn to Slide 8 and address the prior art combination,
21 at least at the petition level before the reply went in. And here -- and my
22 colleague did a good job explaining what their positions were. Cornett and
23 Paatela together disclosed some elements, and that's clear in their petition.
24 Cornett and Paatela together -- and if we turn to Slide 9, they said, well,
25 okay, but Nelson is going to be our reference for the timing element.

1 The problem that they face is when -- Nelson does not teach the
2 concurrent writing the way it's described in our patent. Nelson lacks the
3 concurrent writing element. Nelson -- and let me just quickly turn to Slide
4 10 to talk about Nelson's lack of concurrent writing. And it's kind of evident
5 in the Nelson reference why it's lacking concurrent writing.

6 And I think one of Your Honors already asked a question along
7 these lines. Nelson discloses a split, if you will, of the packet as it comes in.
8 It puts the header in one place and at the same time starts writing the
9 payload, if you will, into another location. That's true. But nowhere in
10 Nelson does it envision multiple headers concurrently writing. We know
11 this because of the technology area that Nelson's in and Nelson's disclosures.

12 If we turn to -- and before I turn off of Slide 10 of Exhibit 2010,
13 this is a figure that we've already looked at, it's Figure 5 of Nelson. And you
14 can see the frame FIFO and the header FIFO highlighted there is what that
15 split is. That's not split among headers. That's split among this header and
16 payload. So that's very different.

17 If we turn to Slide 10 -- or I'm sorry, Slide 11 of Exhibit 2010,
18 Slide 11 is some examples of Nelson's disclosure. Nelson's disclosure could
19 not be more clear that it's talking about a single header in the Fibre Channel
20 operation. Figure 3 has got the single header. Figure 21 has got the frame
21 header called out. And nowhere, if you look at the Nelson reference
22 carefully, does it use the plural form of the word header.

23 Turning to Slide 12 of Exhibit 2010, this is again about Nelson.
24 And this references our expert, Mr. Brooks. Mr. Brooks explained Nelson's
25 sequential writing. Nelson was a sequential writing system. So it took 4 bits

1 at a time. And so it stated, well, you need multiple cycles to write this full
2 header into memory. It didn't say, hey, I've got a bigger packet here, let me
3 write all of these things in parallel. There was no parallel. There's no
4 multiple headers mentioned.

5 As I turn to Slide 13, again, on Nelson and our expert, Mr. Brooks,
6 he talks about the chain of cascaded flip-flops. Again, this is not parallel.
7 This is a sequential writing technique.

8 Turning to Slide 14, Exhibit 2010, so once we submitted in our
9 opposition Mr. Brooks declaration, what did Petitioner do? Well, they didn't
10 take any issue with Mr. Brooks' statements. They did not come back and
11 say, well, Dr. Mir believes differently, or you're wrong or the things you're
12 saying just aren't right. Instead, what they did was in the reply, they cited to
13 Dr. Mir's original declaration about a different claim limitation. And I think
14 we've already seen that in my colleague's presentation.

15 Well, that claim limitation is something different. It's true that Dr.
16 Mir made statements, but those statements are not relevant to this claim
17 limitation. So at bottom, we've got a conclusion of obviousness by
18 attorneys.

19 And as I turn to Slide 15, I want to explain some reasons why the
20 new reply theory from Petitioner doesn't work. Okay. First off -- and we've
21 talked a bit about the procedural problem, about not expecting what the
22 arguments were going to be and how the reply should be rejected on a
23 procedural basis. But putting that aside, the next real issue that Petitioner
24 has is Dr. Mir did not testify about Paatela in the reply. And it would have
25 been simple for him to submit a declaration and say, okay, well, the

1 argument's shifting here.

2 I need to explain that Paatela could be used in the way that it's
3 being used in the reply. We don't have that. And as I'll explain in a
4 moment, these arguments actually do contradict the petition. Fourth, Paatela
5 itself does not expressly -- and this is very important, expressly include the
6 concurrently writing limitation. And then lastly, and as my colleague
7 mentioned, I will address the longer headers of the dependent claims. Okay.
8 So --

9 JUDGE AMUNDSON: This is Judge Amundson- -- go ahead.

10 MR. COOPER: No, sorry, Your Honor.

11 JUDGE AMUNDSON: This is Judge Amundson. On the point
12 about no supplemental expert declaration, so, okay, I did a little research.
13 And I looked at the Belden v. Berk-Tek case, it's at 805 F.3d 1064, a Federal
14 Circuit 2015 case where the Federal Circuit says that no rule requires an
15 expert guiding the Board as to how it should read prior art. So with that as
16 background, can you explain why the Board -- we're not persons of ordinary
17 skill in the art, but we do have technical backgrounds, why we would need a
18 supplemental declaration from Dr. Mir to assess Paatela, paragraph 78 and
19 Exhibits 1028 through 1036?

20 MR. COOPER: Yes, Your Honor. I'm not familiar with that
21 Federal Circuit decision. But without reading it here on the fly, what I'd say
22 to Your Honor is I'm sure it's not absolutely required that the Board have an
23 expert declaration to rely on. But it is, in this case, required because the
24 reference doesn't contain explicit language. And instead, what -- we're
25 going to wind up in the world of inherency. And because we're in the world

1 of inherency, we need to understand from an expert how exactly you would
2 interpret the reference.

3 The Board can, of course, take -- I call it judicial notice of what a
4 reference says, using technical skills in addition to legal skills. But the
5 Board cannot go so far as to make inherency findings.

6 JUDGE AMUNDSON: Oh, all right. I think I understand your
7 position. Thank you.

8 MR. COOPER: Turning to Slide 16, the reply is unjustified.
9 We've spent some time already discussing this. The claim construction was
10 foreseeable. I'm not going to speak any further on that.

11 Turning to Slide 17, this is a very important point here, Your
12 Honor. This is maybe the most important part of the argument today. So the
13 new reference in Paatela, and assuming that it was not foreseeable
14 -- although we disagree with that - the question is, what does the dual port
15 memory of Nelson and Paatela do and how do we use all this together?

16 And I think I heard my colleagues say, well, you got to look at all
17 these references together. So the issue that they face is, in the petition, Cisco
18 argued the dual port RAM of Nelson would be used to satisfy that last little
19 piece of the claim element that I identified at the beginning about immediate
20 processing. So that's fine. They say, okay, this dual port memory could do
21 that.

22 And now in the reply, the Petitioner is stating, well, actually,
23 Paatela -- and this is the inconsistency, Paatela's dual port memory can be
24 functioning as simultaneously reading and writing, satisfying the
25 concurrently writing piece of the claim. So it can't, in our mind -- and I

1 think this is borne out by logic, you can't use the same dual port memory to
2 both satisfy concurrently writing and also reading and writing at the same
3 time. So you're doing too many functions with the same dual port memory.
4 And it doesn't matter if it's dual port, quad port, or any number of ports.

5 I would just point Your Honors to paragraph 78 of the Paatela
6 reference where it says quad port or any number of ports. That's an eight-
7 word disclosure. It does not provide any detail about how actually you'd
8 implement a multi read-write situation.

9 JUDGE AMUNDSON: This is Judge Amundson. On that quad
10 port point you're making, what I don't quite understand is why if you had a
11 quad port memory with four ports that -- were each one you could
12 independently read or write, why couldn't two ports be used to
13 simultaneously write and then a third of those four ports be used for a
14 simultaneous read operation? What is wrong with that?

15 MR. COOPER: Okay. So Your Honor, first off, we're in expert
16 territory. I'm not a person skilled in the art, and we don't have a declaration
17 from Dr. Mir that talks to that issue. We don't even have a disclosure in
18 Paatela saying what you just said, articulating, hey, you've got quad ports
19 now, you could read, you could write, you could read-write, you could do all
20 these things simultaneously.

21 It says, you know, a mere possibility is not enough to satisfy the
22 inherency law. And it's not -- I mean, I think everyone admits it's not
23 literally present in the language of Paatela in paragraph 78.

24 JUDGE AMUNDSON: All right. Thank you.

25 MR. COOPER: Thank you, Your Honor. And just further on the

1 point, turning to Slide 18 of Exhibit 2010, I think the law inherency is very
2 clear. It's not probabilities or possibilities. It's that -- the reference, the
3 Paatela reference, had to phrase it in a way where you necessarily had to do
4 it that way. And if your -- as Your Honor's example is quad port, two read,
5 one writes, the fourth one we don't know.

6 Well, that's the whole point, we don't know. And there's nothing in
7 the Paatela reference that would say, this is -- when you had a quad port, this
8 is how you'd use it. And if it did, we'd be in a very different procedural
9 situation here.

10 Briefly, Your Honors, on the longer headers in the dependent
11 claims. So Dependent Claims 2 and 14 require a media access control layer
12 protocol header. That header combined with the PPP header and the MPLS
13 header -- I think we're in agreement with our adversary on this -- would be
14 144 bits. That is beyond what is contemplated in the references, which at
15 best are 2 by 32 bits or 64 bits. So they're much larger, they work
16 differently, and that makes these dependent claims different.

17 And turning to Slide 20, Dependent Claims 5 and 17, regarding the
18 network layer protocol header, it's a very similar situation. Those headers
19 are 160 bits or 320 bits plus the PPP and the MPLS headers brings them up
20 to 192 bits and 352 bits. So clearly, again, that's much larger than 2 by 32
21 and is not within what is contemplated in the known prior art asserted in this
22 petition.

23 JUDGE SAINDON: Counsel, this is Judge Saindon. I have a
24 question on this topic. So ultimately, computers are 32-bit, 64-bit. There
25 are some width on the bus and there's some width on the processor. So I

1 don't think in any realistic sense these are all getting processed in one clock
2 cycle. Are you requiring one clock cycle or you just -- or are you requiring
3 something different? Because what you just talked about sounded like one
4 clock cycle. But I'm not entirely sure that's what is required here.

5 MR. COOPER: Yes, Your Honor. We are referring to one clock
6 cycle. And that's why the patent has all the language about concurrently, et
7 cetera. This is a single clock cycle. This is not -- and Nelson for instance,
8 even though it's a single header, that's multiple clock cycles, it's feeding it in
9 four by four. So we're -- the '471 is talking about single clock cycle.

10 JUDGE SAINDON: And I'm assuming that level of specificity
11 isn't in the spec but it's -- I'm assuming your position here is that that's what
12 concurrent means.

13 MR. COOPER: Yes, Your Honor. That is correct. It's not
14 explicitly in the '471 Patent about the single clock cycle language.

15 JUDGE SAINDON: Okay. Thank you.

16 MR. COOPER: Thank you, Your Honor. Lastly, I do need to
17 spend a moment to refer back to Mr. Brooks, who's credible and unrefuted.
18 Mr. Brooks -- well, first off, Petitioner did not submit anything from Dr. Mir
19 about Mr. Brooks' declaration. So we can assume they agree with his
20 language. I mean, certainly, it would be simple to -- if he's wrong, Dr. Mir
21 would say he's wrong and here's why he's wrong. We don't have any of that.

22 At Mr. Brooks' deposition -- and this is in the reply briefing -- they
23 took aim at him for previous standards that they asked him about -- beyond
24 the scope of his declaration from earlier versions of standards from when he
25 was much younger -- much, much younger in education. So asking him

1 about that or asking him to analyze technology is not an issue in this case,
2 just is not relevant to whether or not he's right about what he said. What
3 would be relevant is a declaration from Dr. Mir where he'd say, Mr. Brooks
4 is wrong and here's why. We don't have any evidence like that.

5 JUDGE AMUNDSON: This is Judge Amundson. On your Slide
6 21, your second bullet point about Petitioner did not attempt to refute Mr.
7 Brooks' declaration. Here's my question, I mean, what if Cisco thought that
8 Mr. Brooks' declaration, they didn't do anything to us, they haven't made a
9 dent in our position, they haven't laid a glove on us, so we're not going to do
10 anything. Why should we infer what you want us to infer that we should
11 accept his testimony as opposed to the inference that, well, they thought that
12 he didn't do anything to undermine our position?

13 MR. FOSTER: Well, Your Honor, actually, it's very clear from
14 the direction the reply took that there was a major hit. The major hit was
15 Nelson didn't address the timing, so they had to shift gears to Paatela and
16 claim that the claim construction caused them to do all this. So I think
17 what's fair to say is, okay, maybe they didn't care what Mr. Brooks said or
18 didn't say.

19 But it's also fair to say that there's a big shifting of positioning
20 here. So it has to be that they tacitly, at least, agreed with what Mr. Brooks
21 was saying. So they had to find a different way to go about the petition.

22 JUDGE AMUNDSON: Oh, all right. Thank you.

23 MR. COOPER: And just the last point on the inconsistency
24 between a patent Mr. Brooks has and his testimony. First of all, he's the fifth
25 named inventor on that patent, got added later in the prosecution process.

1 But, really, it's a red herring. It has nothing to do that patent has nothing to
2 do with memories for protocol layer processing that we're talking about here.
3 That patent's unrelated. So whatever that patent says -- and it's certainly not
4 a piece of prior art in this case. It's just irrelevant and a red herring.

5 With that, I reserve the rest of my time. And I'm open to answer
6 any questions should the judges have that.

7 JUDGE AMUNDSON: I have no further questions. And it looks
8 like my colleagues are similarly situated. So let's turn it back over to Mr.
9 Foster.

10 MR. FOSTER: Thank you, Your Honor. There are just a few
11 things that I'd like to address. Judge Cass, I believe you asked about the
12 importance for the Board to maintain consistency regarding -- especially
13 claim construction with parallel District Court litigations and if there were
14 any relevant cases that were similar to the facts here.

15 The closest case that I'm aware of -- and it's not necessarily
16 entirely on all four squares, but it does have some striking similarities, it's
17 the case of Micron v. Godo Kaisha IP Bridge; it was IPR2020-01007. And I
18 believe the final written decision there was Paper 36. There's a footnote 10
19 on page 24 of that decision where the Board addressed claim construction
20 issues from a parallel case.

21 I believe -- I do not have the full context of the scenario in my
22 notes -- I believe it was a similar scenario with an agreed construction from
23 the District Court case that was then being, you know, encouraged to the
24 Board. And the Board in that case noted that they're not bound to a District
25 Court construction and especially not bound when the court has not been

1 provided any opinion -- I'm sorry, when the court -- the District Court did
2 not provide any opinion, reasoning, or explanation for its construction, right?

3 And so that scenario is somewhat similar here. The District Court
4 accepted the parties' agreed construction. But the court order adopting that
5 construction did not itself adopt the analysis from Cisco's Markman brief or
6 any of the briefing. It just accepted the construction. And so I would point
7 you to that as the closest example I know of to a fact scenario like we have
8 here. And then I just mentioned, again, that was a Board decision. The
9 claim construction issue was appealed and the Federal Circuit affirmed with
10 a Rule 36 ruling.

11 Judge Amundson, I believe you asked about the Medtronic-
12 Axonics case. And the question of -- you know, I guess the answer to that
13 case that we heard from Mr. Cooper was that it was distinguished because
14 the Patent Owner believes that Cisco should have foreseen the development
15 of the claim construction fight over the 13 months that followed the petition.
16 There's nothing about foreseeability that I see in the Axonics decision, right?

17 What matters is, is it a new issue -- is claim construction a new
18 issue in the IPR proceeding here? It was. It was first introduced in the
19 Patent Owner response. And so Cisco is entitled to respond to that issue.

20 I'd like to also address Mr. Cooper's argument relating to Patent
21 Owner's Slide 7 of their demonstratives. And with respect to Slide 7, Mr.
22 Cooper stated that Cisco should have foreseen a claim construction fight
23 because the concurrently writing limitation had been one that was argued
24 during the file history. And I just want to, you know, have us take a moment
25 to pause and think about the implications of that argument.

1 That would seem to suggest that for every limitation ever argued in
2 prosecution, the Petitioner is obligated to perform formal -- propose a formal
3 claim construction position. I don't think there's any legal support anywhere
4 in the case law for that kind of interpretation of file histories and their
5 interplay with claim construction.

6 Regarding Nelson, Mr. Cooper said at one point, there is no
7 parallel. And so I just want to take us to Exhibit 1006. If we go to column
8 7, the top of column 7, which is on PDF page 8 in Exhibit 1006, this is the
9 Nelson reference. And the first full sentence which begins at the end of the
10 first line reads, quote, "The copying of a header to header FIFO 44 occurs in
11 parallel with the storage of the corresponding frame in frame FIFO 42,"
12 close quote. So yes, Nelson does teach the parallel writing of headers to
13 multiple destinations. And that is the teaching we've cited Nelson for and
14 relied on.

15 Judge Amundson, you also asked Mr. Cooper about the Belden v.
16 Berk-Tek case. And I believe part of his answer -- if my notes are consistent
17 here in terms of the history of the previous discussion, his answer was in part
18 that -- you know, arguing that Cisco is relying on an inherency position.
19 And that is not correct.

20 Apologies that I did not address that in my presentation in chief.
21 The Petitioner -- I'm sorry, the sur-reply raised that issue on page 16, which
22 is PDF page 20 of the sur-reply. And there, Patent Owner stated, Petitioner
23 couches this argument as one of obviousness, but it is in reality substantively
24 one of inherency. I would like to wholeheartedly embrace the reality that
25 Petitioner's position is indeed couched as an argument based on obviousness.

1 That is what we articulated in the petition, we relied on 35 U.S.C
2 Section 103, obviousness, that's in our grounds. It's the basis that we relied
3 on. And it's the combined teachings of the prior art that render the claims
4 obvious. We did not articulate an inherency position. And I'm not sure
5 where the idea that we had exactly came from. But I just want to clarify that
6 our position is based on obviousness.

7 And then finally, regarding the fact that Dr. Mir did not submit a
8 supplemental declaration to help explain what Paatela means in paragraph
9 78, I believe as the judges will know -- the judges of the Board are highly
10 qualified, very skilled, and in many cases might even meet or exceed the
11 person of ordinary skill in the art standard themselves.

12 And so the suggestion from Mr. Cooper that paragraph 78 can't be
13 interpreted, read, or understood for anything other than its literal word-for-
14 word disclosure by the judges, I think, does a little bit of a disservice. And I
15 think Paatela explains what it means for a dual-ported memory, you know.
16 Had Paatela not explained what a dual-ported memory was, perhaps there
17 would be some rationale for some external source of meaning to explain
18 what a dual-ported memory is.

19 But Paatela does explain what a dual-ported memory is. And in
20 paragraph 78, it says that what a dual-ported memory allows is it allows for
21 data to be simultaneously read and or written by two different data sources.
22 And so that means you can have two parallel writes, two parallel reads, or
23 even as Paatela goes on to explain, data can be concurrently written to and
24 read from the memory, right, so you can have one of each.

25 I don't think that it requires an expert to explain what the

1 functionality of a quad-ported memory is. We have -- from our general
2 understanding what the prefix quad means, Mr. Brooks even agreed that
3 quad means four, and so that means there are four ports. And those four
4 ports of a quad-ported memory could be used independently, just as Your
5 Honor suggested, is the plain understanding of anybody reading paragraph
6 78 and the relationship between what a dual-ported memory is and then how
7 many ports would a quad-ported memory have.

8 If there are -- I guess, the one other aspect, right, the question of
9 whether Mr. Brooks' testimony was unrebutted. I believe at the end of our
10 Petitioner reply, we addressed Mr. Brooks' testimony rather extensively. We
11 showed that he was, for the most part, not focused on the arguments that we
12 had raised. An enormous amount of his testimony related to Fibre Channel,
13 which is the specific protocol used in Nelson.

14 Nelson itself is not limited to Fibre Channel, you see that in
15 column 1 of Nelson. It discloses, you know, just being generally applicable
16 to packet-based communications. The other references, Cornett and Paatela,
17 are not focused on Fibre Channel. Our analysis in the petition of the
18 combination was not focused on Fibre Channel.

19 And so the long discursion into how Fibre Channel works, how
20 many headers Fibre Channel has, et cetera, how many bytes are in those,
21 how many clock cycles it would take to write a Fibre Channel header out to
22 different memories, we view all of that as not really addressing or grappling
23 with the obviousness grounds that are based on Cornett, Paatela, and Nelson,
24 all in combination.

25 And Mr. Brooks made very clear -- and we make this point in the

1 last two pages of our Petitioner reply, Mr. Brooks made very clear that none
2 of his analysis considered the three references in combination. When we
3 asked him, did he consider Nelson in combination with the other references?

4 His answer -- this is Petitioner reply, page 35, citing to the
5 transcript Exhibit 1027, Mr. Brooks' answer about did he consider Nelson in
6 combination with the other references? His answer was, I did not consider
7 other references in combination with Nelson. So Mr. Brooks' testimony was
8 entirely focused on Nelson in isolation, which is not what the ground of
9 obviousness is. He did not address the arguments raised by Cisco.

10 If there are no further questions from the panel, I'll cede the rest of
11 my time.

12 JUDGE AMUNDSON: All right. It looks like the panel members
13 have no further questions. And thank you. So let's go back to Mr. Cooper.
14 And so please begin whenever you're ready.

15 MR. COOPER: Okay. Thank you, Your Honor. Let me address
16 the last point first, that's usually easy to understand best. Mr. Brooks only
17 addressed Nelson because Petitioner expressly stated that was the only
18 reference that they were utilizing for concurrently writing. So when they
19 asked him at his deposition, did you -- you know, you're an expert, did you
20 think about all three of these references together?

21 That's an immaterial question to the content of his declaration. His
22 declaration was just aimed at the fact that Nelson didn't contain concurrently
23 writing. And we know Cisco was impressed with that because they went
24 and shifted everything and went over to Paatela. So that's what Mr. Brooks'
25 declaration was about.

1 I mean, they exceeded the scope of his declaration asking him
2 about other things. The fact he didn't testify about something is true. He
3 didn't testify about a lot of things.

4 I want to take a step back about the explicitly written and
5 inherency argument, because it's very important here. Paragraph 78 of
6 Paatela does not contain the explicit disclosure that Your Honor, Judge
7 Amundson raised earlier, which is quad could be read, read, read-write, or
8 some other combination or multiport could have more in it. That's all true.

9 And so if you shift to the world of inherency, we did some research
10 last night anticipating this is kind of where it would go. There is a Federal
11 Circuit decision called LBT v. Apple that's dated June 9th, 2023, coming out
12 of the IPR proceedings. And in that -- from Chief Judge Moore, she states
13 that petition was Apple. Apple stated, hey, we're not relying on inherency.

14 And the Patent Owner there said, no, this is inherency. And
15 ultimately, the Federal Circuit agreed and said, it's not explicitly in there.
16 You can't go and find the reference if it's not explicitly contained there. As I
17 was saying earlier, it has to be necessary. It has to happen the way you want
18 it to happen in the reference. And that's the big difference here.

19 In that case -- I don't know if I gave the cite, I'm sorry, it's 2023
20 Westlaw 3914920 and that's at page 3 of that reference, so -- of that case. So
21 the law of inherency does support what our position is here. I also wanted to
22 talk very briefly again about Nelson. That reference in the Fibre Channel
23 context -- and even if it was broader than the fiber content -- is very clear
24 that it's writing to the header.

25 There might be two different pieces of the header, but there's not

1 multiple headers. And it's also writing to the payload. It's not writing to
2 multiple headers at the same time; and it's just not. And if you go to the
3 reference that my colleague -- the lines he pointed to, that's not what they
4 say. And the reference and the figures, they all point to single header. And
5 so Nelson cannot satisfy the claims here.

6 I didn't have anything specifically to address unless Your Honors
7 have any questions.

8 JUDGE AMUNDSON: This is Judge Amundson. I have no
9 further questions. I don't know about my colleagues. It looks like they have
10 no further questions either. But here, you talked about your legal research
11 from last night, and I think it was the Elbit (PHONETIC 01:25:08) versus
12 -- was it Google case or what?

13 MR. COOPER: Yeah. I'm sorry, Your Honor, let me repeat that
14 reference. It's L, L as in Larry, B as in Boy, T as in Tom, IP against Apple.
15 And it's 2023 Westlaw 3914920. The date is June 9th, 2023. And it's -- the
16 operative language is on page star 3.

17 JUDGE AMUNDSON: Well, okay. It seems to me we need to get
18 both sides' perspective on this new position or -- well, new argument, this
19 new case that you're citing here. I'm just kind of thinking and talking, but
20 what if we asked for, like, an email sent within the next day or two, limited
21 to 50 words or less, where you, you know, give us your understanding or
22 argument as to what that case relates to? You know, maybe 50 words for
23 each side.

24 Maybe Patent Owner goes first and gets us something tomorrow,
25 that's Thursday. Petitioner can go the next day, Friday, get us something on

1 Friday. Would that be acceptable -- what about that Mr. Cooper?

2 MR. COOPER: Yes, Your Honor. We're happy to do that. If it
3 would help, I can meet and confer Mr. Foster and make sure that we submit
4 something succinct, 50 words each, to the Board and perhaps even in a joint
5 submission.

6 JUDGE AMUNDSON: Okay. If you guys can do that and it'd be
7 a joint commission -- joint submission, that'd be great. If you need to do it
8 separately, that'll be okay, too. But I think we'd -- the panel would prefer if
9 it didn't drag on until next week. Okay.

10 MR. COOPER: Yes, Your Honor.

11 JUDGE AMUNDSON: Mr. Foster, any input on this right now?

12 MR. FOSTER: Yes, Your Honor. We'd be happy to provide our
13 perspective on that case. I'm not familiar with that case, and so I will be
14 happy to look it up myself. I think it would be helpful if Patent Owner, who
15 raised this case and raised this as being relevant here, if they went first so
16 that we could understand their perspective, and then we could respond to
17 that with our own 50 words. That would be my preference. But we will, of
18 course, coordinate however the Board orders.

19 JUDGE AMUNDSON: Well, all right. As long as it -- I don't
20 want to make this any more complex than it has to be. Why don't we just do
21 it with Patent Owner submitting an email, 50 words or less tomorrow,
22 Thursday, and Petitioner submitting an email, 50 words or less, on Friday?
23 Would that be okay?

24 MR. COOPER: Yes, Your Honor. On behalf of Patent Owner,
25 yes.

1 MR. FOSTER: Yes. Cisco agrees to that, Your Honor.

2 JUDGE AMUNDSON: All right. Very well. All right. With that
3 taken care of, that concludes our hearing. Thank you to both parties for your
4 time and helpful presentations. The case is submitted. And the hearing is
5 adjourned.

6 (Whereupon, the above-entitled matter went off the record at 2:29
7 p.m.)

IPR2024-01281
Patent 7,738,471 B2

PETITIONER:

Theodore Foster
David McCombs
Calmann Clements
HAYNES AND BOONE, LLP
ipr.theo.foster@haynesboone.com
david.mccombs.ipr@haynesboone.com,
calmann.clements.ipr@haynesboone.com

PATENT OWNER:

Brett Cooper
Seth Lindner
BC LAW GROUP, P.C.
bcooper@bc-lawgroup.com
slindner@bc-lawgroup.com

Robert Auchter
robert@auchterlaw.com