

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACTIVISION BLIZZARD, INC.,
ELECTRONIC ARTS INC.,
TAKE-TWO INTERACTIVE SOFTWARE, INC.,
2K SPORTS, INC.
and ROCKSTAR GAMES, INC.,
Petitioner,

v.

ACCELERATION BAY, LLC,
Patent Owner.

Case IPR2016-00747
Patent 6,732,147 B1

Held: May 17, 2017

BEFORE: SALLY C. MEDLEY, LYNNE E. PETTIGREW, and
WILLIAM M. FINK, Administrative Patent Judges.

The above-entitled matter came on for hearing on Wednesday,
May 17, 2017, commencing at 10:39 a.m., at the U.S. Patent and
Trademark Office, 600 Dulany Street, Alexandria, Virginia.

Case IPR2016-00724

Patent 6,920,497 B1

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1 P R O C E E D I N G S

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3 JUDGE MEDLEY: Good morning. This is the hearing
4 for IPR2016-00747, Activision Blizzard, et al. versus
5 Acceleration Bay. Each side has 30 minutes to argue. Petitioner,
6 you'll proceed first to present your case with respect to the
7 challenged claims and grounds for which the Board instituted
8 trial. Thereafter, Patent Owner will respond to Petitioner's
9 presentation. Petitioner, you may reserve rebuttal time. And,
10 again, if you discuss your Motion to Exclude and they address it,
11 then you can have a little rebuttal time.

12 We'd like to remind the parties that this hearing is open
13 to the public. A transcript will be entered into the public record
14 of this proceeding.

15 At this time we'd like the parties to, please, introduce
16 counsel, beginning with Petitioner.

17 MR. MURRAY: Good morning, Your Honors.
18 Michael Murray, lead counsel for Petitioners. With me is my
19 partner Andrew Sommer, who's backup counsel. Also with us
20 today is our client, Linda Zabriskie, who is Vice
21 President/Associate General Counsel of Take-Two Interactive.

22 MR. LEE: Michael Lee from Kramer Levin
23 representing Patent Owner, and with me is Jeffrey Price.

24 JUDGE MEDLEY: Thank you. You may proceed.

1 MR. MURRAY: Good morning. May it please the
2 Board, I'd like to jump right into Claim 6. This is the only
3 independent claim that we're going to be addressing with respect
4 to this IPR and I want to make -- I want to start with an overall
5 observation about Claim 6.

6 Claim 6 is about a method for healing a disconnection
7 of a first computer from a second computer. It is not a claim
8 about disconnecting those computers. So the method of this
9 claim has to do with healing a disconnection that has already
10 occurred, and this is a distinction between Claim 6 and Claim 1.

11 Claim 1 of the '147 patent is "a method of disconnecting
12 a first computer from a second computer." So the main
13 distinction between Claim 1 and Claim 6 is that Claim 1 is about
14 disconnecting a computer in a particular way. Claim 6 is about
15 healing a disconnection. There is no disconnection step, and this
16 is an important claim construction issue as we'll address.

17 So I'm on slide 3 now -- sorry, slide 5 of our deck. This
18 is the instituted grounds for the '147 patent. It's a combination of
19 four references, really very straightforward, 103 combination.
20 Shoubridge is the primary reference. This is a broadcast channel
21 that has a 4-regular graph. The Denes reference shows a method
22 for disconnecting a node in an M-regular graph while maintaining
23 the M-regular state. So Denes teaches a formula for when you
24 lose a node, how do you get back to M-Regular.

1 Rufino teaches messaging in an M-Regular broadcast
2 channel when a computer is removed. So Rufino adds the piece
3 how do I find the neighbors of a node that has gone missing.
4 There's a particular messaging technique disclosed in Rufino and
5 we rely on the messaging technique as part of the obviousness
6 combination.

7 And then, finally, the Todd reference which we didn't
8 believe was actually necessary for the 103 combination and still
9 don't believe that it's necessary, a person of ordinary skill in the
10 art would have been motivated and would have understood to use
11 the Rufino messaging technique in the combination of
12 Shoubridge and Denes, but Todd makes it clear that the teachings
13 of Rufino apply beyond the M-equals-2 paradigm, so we relied on
14 Todd for that purpose.

15 I want to talk about some of the claim construction
16 issues starting with the word connection and connected, and this
17 is slide 8 of our slide deck.

18 So what Patent Owner is trying to do here is add a lot of
19 limitations into the term connection, and the Board is probably
20 well familiar with Patent Owner's attempt to do this for multiple
21 related IPRs where they tried exactly the same thing and that was
22 rejected by the Board, in particular IPR2015-01953, 01996 and
23 01972. In each of those three IPRs, the same issue came up,
24 should the word connection be construed to be this edge between

1 application programs connected to a logical broadcast channel
2 and this Board said no.

3 And, in particular, I'll refer to in the 01953 IPR, Paper
4 107. On page 20 the Board -- and this is the final written
5 decision. The Board said, "As Petitioner points out, Claim 8
6 recites the connections are TCP/IP connections, which means the
7 connections may exist at the transport layer rather than at the
8 application layer as Patent Owner's construction requires." The
9 exact same issue here, there are dependent claims here, 5 and 14
10 in particular, that make it clear that the connection is a TCP/IP
11 connection.

12 This Board also said on the same page 20, "Similarly in
13 the specification, connections are described without reference to
14 application programs," and it's the same issue here. In the
15 specification, connections are described as being between
16 computers, not between application programs. And, in fact, one
17 of their slides actually shows that support.

18 So they are not in this construction really trying to
19 explain what connection means, what is a connection. What
20 they're really getting at is what is being connected. So their
21 construction is about what is being connected, namely they think
22 application programs, what the items being connected are
23 connected to, which is a logical broadcast channel and even what
24 that supposedly overlays an underlying network. So this
25 construction should be rejected for multiple reasons.

1 JUDGE FINK: Are computers that are on the same
2 network as -- if I have a bunch of computers and they're all on the
3 same network, are they all connected to each other in the context
4 of the claims?

5 MR. MURRAY: They might be connected to each
6 other.

7 JUDGE FINK: So like the internet.

8 MR. MURRAY: I'm sorry?

9 JUDGE FINK: If I take the internet as an example.

10 MR. MURRAY: You could have a situation where
11 those computers are connected to each other.

12 JUDGE FINK: I guess my question is, is does
13 connection require something more than just being capable of
14 connecting to another computer?

15 MR. MURRAY: If you can translate information back
16 and forth between the two computers, then they are connected.

17 JUDGE FINK: Do I need to have a TCP/IP connection
18 I guess is -- so maybe not an application program, but if it -- does
19 it require a TCP/IP connection or something at the transport
20 layer?

21 MR. MURRAY: Well, TCP/IP at the transport layer is
22 one of the examples, of course, that's in the specification and
23 some of the dependent claims, although not dependent claims that
24 we're dealing with, but some of the other dependent claims in the

1 patent talk about a TCP/IP connection as being an example of a
2 connection, so certainly that's sufficient, Your Honor.

3 Now, moving to slide 10, this is the broadcast channel,
4 really a similar issue. Patent Owner is taking every opportunity
5 to try to sort of cram into this patent the idea of a logical channel
6 that overlays an underlying point-to-point communication
7 network. They've done that repeatedly in connection with various
8 terms in this and the related IPRs. This Board has repeatedly
9 rejected their attempts to do that. The claims are clear that the
10 broadcast channel is between computers. There's no logical
11 overlay requirement of Claim 6 and the specification doesn't
12 support that narrow reading.

13 And I want to talk about the specification and now I've
14 moved to our slide 11. So they "repeatedly" from column 4, and
15 you'll see in some of their slides they have excerpts from column
16 4, and they have a quote where they were asking Dr. Karger
17 about column 4, but they never showed this part, which is at the
18 beginning of that at line 10 of column 4 it says, In one
19 embodiment the broadcast technique provides a logical broadcast
20 channel.

21 So they rely on a part of the specification that is clearly
22 talking about only one preferred embodiment, this logical
23 overlay. That is one embodiment. The claims are not limited to
24 that on their face and there's no reason to interpret them that way.

1 Finally, I'll move to our slide 12 which is the healing a
2 disconnection of a first computer from a second computer. So
3 what they're doing here is they're trying to read in a disconnection
4 step. So their construction requires that the second computer has
5 involuntarily been disconnected from the first computer. There is
6 no disconnection step in Claim 6. As I said at the outset, Claim 6
7 is about healing a disconnection after it has happened. So there is
8 no reason to read in a disconnection step into Claim 6, let alone
9 one that is involuntary.

10 And they also add a redundant requirement of in order
11 to maintain an M-Regular network. That is in the last part of
12 Claim 6. It's not part of the healing a disconnection portion of the
13 preamble.

14 JUDGE FINK: Where does the involuntary come from,
15 is that prosecution history?

16 MR. MURRAY: There is some prosecution history and
17 actually I'll move to the next slide, Your Honor, to answer your
18 question specifically. This is slide 13 in our deck.

19 So this is their support -- part of -- well, really all of
20 their support for trying to do this and there are two sentences
21 from the prosecution history that they cite and it's here on this
22 slide. So the first sentence says that these claims, 6 to 10, relate
23 to a situation where a computer is involuntarily disconnected
24 from the M-Regular graph computer network.

1 Certainly we don't dispute that Claim 6 relates to an
2 involuntary -- it's useful for an involuntary disconnection
3 situation, but there's no reason why it is limited to that. So the
4 claim is a technique basically for finding the neighbors of a node
5 that has left, however that node has left. That's a technique that
6 could certainly apply to a planned disconnection or an unplanned
7 or involuntary disconnection, but there's no reason to limit the
8 claim to an involuntary disconnection.

9 JUDGE FINK: Your view is that statement is just
10 context for what the claim amendments --

11 MR. MURRAY: Right. And it doesn't say the claim is
12 limited to or restricted to or we have amended the claim to limit it
13 to or anything like that, and there's no -- of course, there's no
14 actual language in the claim about involuntary disconnection
15 because, again, the claim is about healing after the disconnection
16 has already happened.

17 The second sentence that they have here on slide 13,
18 Claim 6 has been -- now, here's sort of the real crux of what was
19 going on in the file history. There was an amendment. Claim 6
20 has been amended to indicate the healing process of the computer
21 network is performed in a way such as to maintain the M-regular
22 graph nature of the computer.

23 That amendment was not in the healing step that they're
24 construing here. That amendment was the last part of Claim 6
25 where this language is there explicitly. So this is what the Patent

1 Owner was actually relying upon to try and distinguish the prior
2 art. This is not a -- clearly not an unequivocal disclaimer of
3 anything other than involuntary disconnections. So there's no
4 reason to limit the claim in that way.

5 Now, I would like to move on to our slide 15 and talk
6 about Shoubridge for a minute. So this is our base reference.
7 Shoubridge clearly discloses a 4-regular network. You can see
8 here there's a 64 grid, an eight-by-eight grid. Each node is
9 connected to four other nodes. This picture comes from the
10 Shoubridge thesis, not from the Shoubridge reference on which it
11 was instituted, but it's described in detail in the Shoubridge
12 reference, Exhibit 1005.

13 And what we'll see is that this is actually very similar to
14 the Todd sort of overlaying -- overlapping ring network that we'll
15 see later, except Todd shows it as four-by-four, but they're almost
16 the same pictures actually, which is interesting. So that's the
17 basic Shoubridge.

18 Here are their criticisms of Shoubridge on our slide
19 number 16, which we think are baseless. Patent Owner argues
20 nodes are never dropped or added in Shoubridge's fixed-node
21 simulated network. That's just not true. In the simulation he's
22 modeling a real system.

23 So Shoubridge says, hey, I'm going to do a simulation to
24 collect some data. So for purposes of my simulation, I'm going to
25 assume that the nodes are not coming and going, but he

1 acknowledges that this is modeling a real system and he
2 acknowledges that in real systems you have failures. So certainly
3 a person of skill in the art would understand that if you're going to
4 build Shoubridge, you're going to build his network, you're going
5 to have failures. So the fact that there's an assumption made for
6 purposes of gathering data in a simulation does not restrict the
7 fair teaching of the reference.

8 They also argue that in the second row here Shoubridge
9 does not disclose or suggest the claimed broadcast channel, which
10 overlays a point-to-point communications network. The claim
11 doesn't require that and certainly the combination of prior art that
12 we have shown actually teaches a logical overlay. You know,
13 certainly Rufino does that explicitly. There's a logical ring
14 overlay, so that's taught by the combination of references anyway,
15 but clearly the claim doesn't require that and this Board has found
16 repeatedly that this overlay concept where they keep trying to
17 pull into their claims is not appropriate.

18 Now, moving to slide 17, this is the Denes basic
19 teaching of how do you get back to M-regular when a node leaves
20 the network. So I don't think I need to spend a lot of time on the
21 formula here. It's really pretty straightforward. When P leaves,
22 you take the neighbors of P, P1, P2 in this example and you
23 connect them to each other, and this is extrapolated out to any
24 regular network, 2, 4, 6, 8, whatever you want.

1 So certainly somebody of skill in the art would
2 understand that we have a node failure in a regular network like
3 Shoubridge, Denes teaches you how you get back to a regular
4 network. It teaches you how you reconnect those nodes to keep it
5 regular when you have a failure.

6 JUDGE FINK: I guess the argument is it doesn't work
7 in every case.

8 MR. MURRAY: Well, it doesn't work and neither does
9 their preferred embodiment work in every case. If you have M is
10 equal to 3, for example, you have three connections. So if you
11 lose a node, you've got three sort of loose connections there. You
12 can connect two together, but now you have sort of this -- you
13 know, this loose connection that you can't -- you know, you don't
14 have a node to match it up to.

15 So when M is an odd number, as their patent
16 specification specifically says, you can't get back to M -Regular.
17 So, yes, Denes doesn't work for odd M . Their preferred
18 embodiment doesn't work for odd M . You can't get back to
19 M -regular when M is odd.

20 So these are their criticisms of Denes. Denes does not
21 address the situation where a node abruptly leaves the network.
22 Claim 6 doesn't require an abrupt leaving of the network. There's
23 no disconnection step in Claim 6 and -- but we agree, Denes
24 doesn't talk about how the node or why the node left the network.

1 They have this theory that Denes is about planned leaves. Well,
2 that doesn't make sense either.

3 Denes doesn't talk about a planned leave or an
4 unplanned leave. It just says, you know, it's a mathematical proof
5 really showing you how you get back to M-regular when a node
6 leaves. Denes doesn't talk about how the node leaves or how you
7 figure out who the neighbors are. We acknowledge that.

8 In order for Denes to work, you've got to know P1 and
9 P2, right? You have to be able to identify the neighbors of the
10 node that left so you can connect them to each other. Denes
11 doesn't tell you how you figure out who the neighbors are. We
12 never -- we didn't rely on it for that purpose. That's why we have
13 Rufino. Rufino has a nice method for figuring out who the
14 neighbor is when you have a failure.

15 So Rufino clearly discloses that nodes can leave in an
16 abrupt or orderly way and Rufino teaches this nice method that he
17 calls who follows where you need to figure out who's the
18 neighbor of the node that left. So you have a node. It's trying to
19 send a message to its neighbor. That fails. So that node says,
20 okay, I've got a failure, I need to figure out who is the neighbor of
21 the node that failed. So the way I'll do that is I'll send this who
22 follows message out over the network and then the neighbor, the
23 former neighbor of the node that failed, essentially raises its hand
24 and says, I'm the former neighbor, and it sends the set's successor
25 frame message back identifying itself as the neighbor.

1 So this is a nice, straightforward, simple way of figuring
2 out who are the neighbors of a node that abruptly leaves a
3 network, and it's really exactly the same thing that their patent
4 talks about. You have this message that gets sent out, you have a
5 response and then you're able to connect and restore the network.

6 JUDGE FINK: Now, the who follows would be sent to
7 all of the nodes that are in -- on the token bus network?

8 MR. MURRAY: Well, this -- well, it needs to go back
9 to the node that issued the -- I'm sorry, the who follows -- yes,
10 goes out to everybody because the node sending it doesn't know
11 who the neighbor is. So that message gets passed around the
12 ring, right? So basically it's a message that goes out around the
13 logical ring which says, are you the node that followed the node
14 -- this node that has now failed? And if you are, tell me. That's
15 what happens. That goes around the ring. Of course, it's going to
16 hit -- it goes to everybody, so it's going to hit the node that was
17 the neighbor, yes.

18 So here are their criticisms of Rufino. Rufino's
19 messaging techniques are peculiar to the context of a token bus
20 network, not extensible to point-to-point network underlying the
21 claimed broadcast channel. Well, again, they're reading a lot of
22 stuff into Claim 6, but Rufino -- this also doesn't make any sense
23 because Rufino clearly has a logical overlay over an underlying
24 point-to-point network. So there's a bus that underlies the logical

1 overlay. So Rufino is this kind of overlay network. Even though
2 Claim 6 doesn't require it, Rufino has it.

3 Then you have this sort of strange argument in column
4 2 here of slide 22 -- I'm sorry, row 2. Because Rufino's
5 underlying network is a physical bus in which all the computers
6 are directly connected, there exists no third computer not already
7 connected to said first computer, but now they're reading the
8 word connected to require a physical connection, which is the
9 exact opposite of how they're trying to construe the word
10 connected, which is a logical overlay.

11 So certainly in Rufino you have computers that are not
12 connected to each other in the logical overlay. You have a ring
13 and they're not all connected to each other. There's a ring.

14 JUDGE FINK: Are they not connected to each other or
15 do they just not pass the token to each other?

16 MR. MURRAY: In the logical ring they're not
17 connected to each other.

18 JUDGE FINK: So they show a -- Patent Owner has a
19 figure from the Tanenbaum reference, Exhibit 2007.

20 MR. MURRAY: Right.

21 JUDGE FINK: And I don't know if you have it in your
22 demonstratives, but -- so what they're showing is the logical ring
23 overlay of a bunch of computers connected on a bus, right?

24 MR. MURRAY: Right, exactly.

1 JUDGE FINK: And I guess the question is, as I
2 understand, their contention --they're arguing that those
3 computers are all connected to each other. If they're in the ring,
4 they're connected to each other, in which case there wouldn't be a
5 2-regular network. It would be -- each of those computers would
6 be connected to each of those other computers --

7 MR. MURRAY: That's their argument, but --

8 JUDGE FINK: -- that are part of the ring.

9 MR. MURRAY: But it doesn't make any sense. First
10 of all, it's completely inconsistent with the way they're trying to
11 interpret connection. They're saying connection requires a logical
12 overlay. So when they are defining -- trying to define connection,
13 they want to define it in logical way, are these computers
14 logically connected to each other?

15 JUDGE FINK: Well, you're arguing against that
16 construction. So if we're -- if we were to reject that construction,
17 would that argument make sense?

18 MR. MURRAY: Well, I think the claim is not limited
19 to that, so I think the claim covers that, which is a very different
20 thing. So certainly the connection can be a logical connection. It
21 can be a physical connection. The claim just says it's a
22 connection. So they're trying to do some very inconsistent things
23 here. They're trying to interpret connection as being logical and
24 then when they're pointing to Rufino and criticizing it, they're

1 saying, oh, but it's about physical connections. So that doesn't
2 make any sense.

3 JUDGE FINK: Well, they can argue in the alternative.

4 MR. MURRAY: Yeah, but -- so, okay, even if they're
5 doing that, clearly connection is broader than a logical or a
6 physical. So in Rufino -- to directly answer your question, in
7 Rufino all the computers are connected to each other physically,
8 but there's a logical overlay here and that's what's important. This
9 is a ring network.

10 So, you know, the token is getting passed around the
11 ring. That's why you have -- why do you need the who follows
12 query?

13 JUDGE FINK: Well, that's true of the token, but if one
14 computer on that ring wants to send information to another
15 computer on that ring, it doesn't have to follow the same path as
16 the token, as I understand the token bus network.

17 MR. MURRAY: Right. But, first, it has to get the
18 token.

19 JUDGE FINK: Right.

20 MR. MURRAY: So if you -- and we're looking at the
21 token as being the message of the -- you know, the message of
22 the claims and the connection of the claims is the token ring. So
23 -- and that has to work, otherwise the network -- you know, the
24 whole Rufino thing doesn't work because you have multiple
25 people broadcasting on the bus at the same time. So it's very

1 important for Rufino that these nodes be logically arranged in a
2 ring.

3 And if there's an attempt to send a token and it fails
4 because a node has failed, you need to reestablish a logical
5 connection between that node that used to have the neighbor of
6 the failed node and now the next one. So you need to rebuild or
7 heal that logical ring, and that's what Rufino is talking about.

8 So that's what -- that's the connection that's important in
9 terms of understanding what's going on in Rufino, not the
10 underlying connection. So then pointing to the underlying
11 connection here is really sort of missing the point that these nodes
12 are not all connected together logically in the ring.

13 Now, I just want to talk about Todd. So Todd has a
14 four-by-four overlapping ring network, so it extends the sort of
15 ring concept to beyond M equals 2. This is an M equals 4
16 network. It looks very similar to Shoubridge. It's actually the
17 same kind of overlapping ring where the edges sort of wrap
18 around each other to form a torus, and you can see here that you
19 have sort of each row is a different ring and it's a very
20 straightforward application.

21 And since I'm running out of time, I want to sort of
22 jump to an issue that's really very important for Todd. They
23 argue that you can't use the Rufino messaging technique in a
24 network like Todd because there are no longer predecessor nodes
25 and nodes that -- and successor nodes.

1 So in a ring it's -- you have one predecessor and one
2 successor for each node. So they're saying -- and that's why you
3 have the who follows and the said successor messaging and
4 they're saying, well, that doesn't make any sense in terms of
5 Todd, but, of course, it does. You just have more in Todd.

6 So if you look at any particular node here, such as --
7 let's just pick 1,1 as an example. Node 1,1 has 2 successor nodes.
8 In the row the successor for 1,1 is 1,2, and you see the little arrow
9 pointing from 1,1 to 1,2. So 1,2 is the successor for 1,1 in the
10 row. In the column the successor for 1,1 is 2,1.

11 So these operate -- according to Todd, these can operate
12 as individual rings or you can merge them together and you can
13 broadcast sort of on two rings simultaneously if you grab both
14 tokens. So the who follows -- the particular technique of Rufino
15 applies perfectly to this.

16 JUDGE FINK: So then the who follows, I think you
17 would agree that Todd is talking about token rings, so it's talking
18 about 802.5, IEEE 802.5, right?

19 MR. MURRAY: Well, Todd talks about both. He talks
20 about token buses and token rings.

21 JUDGE FINK: It talks about both?

22 MR. MURRAY: Oh, absolutely. If you look at the
23 background -- if you look at the first column of Todd, in fact, he
24 specifically cites both.

1 JUDGE FINK: Okay. Well if -- I guess what I'm
2 confused about is, is if you have -- if you're taking the protocol of
3 Rufino, which is for token bus, and you're trying to extend that to
4 a token ring, at least the standard token ring, which is not
5 overlapping with another token ring, then it doesn't seem like the
6 who follows makes sense in that context, right, because you only
7 have two connections. You have a predecessor and a successor.

8 MR. MURRAY: If you have -- if you have a -- first of
9 all, if you have a physical token ring --

10 JUDGE FINK: Yeah, a physical token ring.

11 MR. MURRAY: Okay. A physical -- because I think
12 token ring can be interpreted in different ways. I think you can
13 have a logical ring and you can have a physical ring. So if Your
14 Honor --

15 JUDGE FINK: I guess I'm using the terminology of
16 Rufino as token bus, so that would be the logical -- a logical ring
17 overlaying a different physical network.

18 MR. MURRAY: Right. I mean, they're both rings,
19 Your Honors, I think the point I'd like to make, so they're rings
20 and they work in a very similar way. You have tokens that go
21 around the ring. If you want to broadcast, you have to wait until
22 you get the token and then you broadcast. In a physical ring, I
23 agree it doesn't make a lot of sense to use the who follows kind of
24 query, right, because it's a physical ring. So you need -- if a node

1 fails, you just have to physically bypass that node in order to keep
2 the physical ring going.

3 JUDGE FINK: Right. I think that's right.

4 MR. MURRAY: Right.

5 JUDGE FINK: So the 802.5 protocol doesn't have a
6 who follows message in it.

7 MR. MURRAY: Right, but Todd talks about -- he cites
8 the 802.5 and 802.4. He talks about the problems of throughput
9 and whatnot in token buses and in token rings. Then he gives an
10 example of extending a token ring into this grid pattern. A person
11 of ordinary skill in the art would certainly understand that Todd is
12 looking beyond physical rings. He's looking to rings generally,
13 which is why he's talking about it specifically in the background.

14 So I think I better stop and save my remaining time for
15 rebuttal. Thank you.

16 MR. LEE: We'd like to reserve three minutes for
17 rebuttal.

18 And may it please the Board, so, first, I plan to provide
19 a brief summary of the arguments and then get into the technical
20 issues and then the rest for the Motion to Exclude.

21 Starting with slide 2, there are three main limitations
22 that the prior art fails to teach. In the interest of time I plan just to
23 discuss the healing a disconnection and then having third
24 computer not already connected to the said first computer
25 respond.

1 Going to slide 10, so the '147 teaches the -- like a lot of
2 Acceleration Bay patents, the M-regular overlay, aka the
3 broadcast channel. In particular, the '147 discusses how to
4 disconnect from this broadcast channel. There are two different
5 types of disconnections. One is planned, and this applies to
6 Claims 1, 5, 11 and 16 and also the unplanned disconnection, and
7 this applies to Claim 6 and 10 -- 6 through 10. It's really
8 important that in this case the only claims at issue are regarding
9 unplanned disconnections.

10 Regarding the unplanned disconnection, let's go to slide
11 13 about planned leave scenario. So the specification clearly
12 describes a different way to do planned versus unplanned. In the
13 planned scenario there's a computer that's connected to the
14 broadcast channel and then sends a disconnect message in order
15 to be able to leave.

16 Going to the unplanned scenario, this is about a
17 computer that was disconnected in a manner such as a power
18 failure. And, as Petitioner admitted, that Claim 6 is about a
19 computer that was disconnected.

20 Going to the claim construction, it's slide 19. So the
21 law requires that the broadest reasonable interpretation be
22 consistent with the specification and it also has to -- the PTO has
23 to consult with the prosecution history.

24 I plan just to cover the healing of disconnection. This
25 case, as previously discussed, the specification clearly

1 distinguishes between planned and unplanned and the healing a
2 disconnection of a first computer from a second computer is
3 relating to the computer that's been involuntarily disconnected.

4 The prosecution history makes this even clearer, in
5 particular, the prosecution history at slide 21 cites Exhibit 1002
6 v.3 at page 630. There's a clear and unequivocally stated that the
7 claims in question relate to the situation where a computer is
8 involuntarily disconnected. There is no clearer or unequivocal
9 statement than that. And, further, this term was -- further stated
10 that this term healing a disconnection was added to declare this
11 point.

12 There was a case that actually -- that was only recently
13 decided on Thursday that we did not have an opportunity to brief
14 on this, but it actually goes to this issue, if we have the
15 opportunity to brief it. It's regarding Aylus Networks versus
16 Apple. It's a recent Federal Circuit case that talks about
17 prosecution history and it says that --

18 JUDGE MEDLEY: You're not authorized --

19 MR. LEE: Oh.

20 JUDGE MEDLEY: -- to brief that because it's not part
21 of the record, but we are aware of the case and it's on the record
22 here that you've mentioned the case.

23 MR. LEE: Sure.

1 JUDGE FINK: So your position would be that Claim 6
2 does not cover the case of a planned departure -- healing a
3 planned departure.

4 MR. LEE: Yes. It's regarding an unplanned leave, so
5 the involuntary disconnection.

6 JUDGE FINK: Okay. So if we took the scenario where
7 there was a planned leave and then using the method of Claim 6
8 would not cover that situation, if it otherwise met the claim
9 limitations.

10 MR. LEE: Yes, because -- I mean, or else it wouldn't
11 say healing. I mean, healing is something that's been implied
12 that's involuntary. It would say like adding or like -- you know,
13 so it's pretty clear that it's not for planned leave. It's for
14 unplanned.

15 Any other questions?

16 Okay. Turning to the healing a disconnection
17 limitation, so the healing a disconnection Petitioner -- the Petition
18 only references Shoubridge and Denes for this claim element. So
19 Shoubridge does not heal a disconnection because -- actually
20 Shoubridge doesn't heal anything. All it does is it has a fixed
21 topology that nodes never leave in an unplanned or a planned
22 manner.

23 Now, the Petitioner cites -- says that they're talking
24 about the real system rather than a simulation. In the real system,

1 again, there's no healing of anything. All it is, is the nodes are
2 always there.

3 Going to slide 26, Petitioner's expert, Dr. Karger,
4 admitted that Shoubridge does not disclose a scenario where
5 nodes are added or dropped from the network. So clearly healing
6 a disconnection is not disclosed in Shoubridge.

7 JUDGE FINK: You would agree that Rufino discloses
8 the situation of an unplanned departure, correct?

9 MR. LEE: Well, first of all, Rufino was not identified
10 in the Petition, so that's a new -- a brand-new invalidity theory
11 that should not --

12 JUDGE FINK: Rufino wasn't identified in the Petition?

13 MR. LEE: For this.

14 JUDGE FINK: For the preamble.

15 MR. LEE: For the healing of a disconnection, correct.
16 It was only Shoubridge and Denes. So it would be improper to
17 allow them to have a new invalidity theory. But on top of that,
18 we also --

19 JUDGE FINK: I don't know if it's -- if I would call it a
20 new theory because they relied on Rufino. As I read the Petition,
21 Petitioner relies on Rufino for the scenario of a computer network
22 in which there's a sudden removal of a computer from the
23 network. So perhaps the Petitioner isn't applying that to the
24 preamble, but they're using it -- they're relying on that in the body
25 of the claim to try to help meet these limitations, right?

1 MR. LEE: It's our position that if it's not mapped in the
2 Petition to this healing a disconnection, then it wasn't an
3 invalidity theory that was actually disclosed in the Petition. But
4 in any case, I can discuss why Rufino doesn't meet that as well.
5 It's because the healing a disconnection has to occur in a
6 M-Regular network where the M is at least 3 and there is no
7 dispute in this case that Rufino's token bus network is only
8 2-regular. So they cannot be healing a disconnection as worded
9 in the claim.

10 JUDGE FINK: So could you go back to that slide?

11 MR. LEE: Sure.

12 JUDGE FINK: So you're saying that the token bus is a
13 2-regular network?

14 MR. LEE: Yes. This is actually -- this is something
15 that they explicitly state in the Petition itself, so I don't think
16 there's any -- this is not -- I don't believe this is disputed at all.
17 This is actually stated in the Petition as 2-regular. So I don't think
18 there's any dispute that's M equals 3 in Rufino. So it cannot be --
19 the claim language requires that M equals more than equal to 3,
20 M equals -- yeah, sorry, Rufino is only M equals 2 and the claim
21 language requires that it to be M equals more than equal to 3.

22 Going back to Denes, so Denes is -- it also doesn't meet
23 the claim limitation because it's dealing with an unplanned leave
24 scenario and this is clear from the language where it says that the
25 equation that they cite to, Petitioners cite to, can be applied if and

1 only if he is in the vertex of the graph. So that means the node
2 has to be in the connection. It has to be connected to the graph
3 before there's a disconnection. So it's a planned leave. As
4 described earlier, the unplanned leave starts with the computer
5 that was already disconnected, and this I don't believe is disputed
6 at all either.

7 JUDGE PETTIGREW: Are you arguing that the
8 language healing a disconnection has patentable weight separate
9 from the limitations in the body of the claim?

10 MR. LEE: What do you mean by patentable weight?

11 JUDGE PETTIGREW: That it's -- that's language in
12 the preamble. It sounds like your argument is that Petitioner
13 didn't specifically map Rufino to the preamble language in its
14 claim chart even though it relies on Rufino for some of the other
15 language in the claim.

16 MR. LEE: It is limiting. Our position that the preamble
17 is limiting and they did -- I believe they believe that as well or
18 else they wouldn't have mapped Shoubridge and Denes to it.
19 They've mapped at least two references to it.

20 JUDGE PETTIGREW: Well, the preamble has a lot of
21 language in it, including an M-Regular graph, and I think the
22 Petition does say to the extent the preamble is deemed to be a
23 limitation of the claim, Shoubridge discloses this, Denes discloses
24 that.

1 MR. LEE: But our point is that if it doesn't map Rufino
2 to the healing a disconnection, then this is not a theory that was
3 disclosed in the Petition and it's a brand-new one that they're
4 disclosing right now.

5 JUDGE PETTIGREW: Even if Rufino was relied on
6 for limitations in the body of the claim that themselves constitute
7 the method of healing a disconnection?

8 MR. LEE: Well, yes, because it also has to be mapped
9 directly to the preamble as well. I mean, that's why there's -- I
10 believe that's why there's a requirement for a
11 limitation-by-limitation claim chart for the IPRs so that we know
12 exactly what's being mapped to what reference and Rufino was
13 not mapped to the healing a disconnection.

14 JUDGE FINK: I'm sorry, can you explain again? I
15 didn't understand what you meant. The P is in the vertex of the
16 graph, that that's why that's a planned leave versus unplanned
17 leave scenario.

18 MR. LEE: Sure. So --

19 JUDGE FINK: Why does Denes care whether it was
20 planned or unplanned I guess is my question.

21 MR. LEE: Denes only applies in the planned leave
22 because it starts with the scenario where the node is already in the
23 graph. So it has to start there and then it will do the leave as
24 opposed to in the unplanned situation, it's already been

1 disconnected. So this is why the equation says that it can only be
2 applied if and only if P is in the vertex.

3 So it has to -- the only way that this leave can happen is
4 if the node was in the graph already. It can't be already
5 disconnected. It doesn't know how to deal with that situation. If
6 it was already disconnected, you know, this would not apply
7 because this can only apply, if and only if P is in the vertex within
8 the graph, meaning that it's --

9 JUDGE FINK: Well, it starts that way and then the
10 transformation contemplates the remove P from the graph so that
11 would be -- that step would be prior to Claim 6, right? Removing
12 P would be something that happened prior to Claim 6, right,
13 because Claim 6 is about healing the disconnection.

14 MR. LEE: Well, this ET transformation is what they're
15 citing to, to do the healing, the actual healing of the -- the healing,
16 so this healing can only be applied if it was already in the graph,
17 though.

18 JUDGE FINK: Well, I mean, I guess does it -- I'm
19 confused. Doesn't your claim contemplate that there was also a
20 node that was once in the graph that is no longer there and now
21 you're healing it?

22 MR. LEE: Yes, but this is talking about starting with
23 the situation where it's already in the graph and it's regarding
24 where it has to --

1 JUDGE FINK: You have to have that before you can
2 do Claim 6. You have to have a situation where a node in the
3 graph before you begin to do the method of Claim 6 to heal, then
4 it has to leave and then heal it. Claim 6 begins the healing, the
5 healing process.

6 MR. LEE: Actually Claim 6 is about a computer that
7 was disconnected already, so, I mean, this is admitted to by
8 Petitioner during their opening statement. This is Claim 6 is
9 about a computer that was disconnected. So there's no --

10 JUDGE FINK: It was once connected and now it's
11 disconnected.

12 MR. LEE: Yeah, it doesn't start with it being -- as
13 opposed to Claim 1, it starts with it being connected and that
14 gives it the opportunity for that connected computer to send a
15 disconnected message before leaving, and this is similar to -- you
16 know, this is similar to Denes where it says it has to be in there
17 before they can even start this process to go, so that's why this
18 can be only applied for a planned leave, not an unplanned.

19 And Denes never says that it's for an involuntary
20 disconnection and this language makes it clear that it's only -- if
21 and only if P is in the vertex of the graph. I don't believe this is
22 disputed at all.

23 Going to having a third computer not already connected
24 to said first computer respond, this is slide 38. So for this
25 limitation, the Petitioner references Rufino and Denes for this,

1 and the claim language says having a third computer not already
2 connected to said first computer respond to said connection port
3 search message in a manner to maintain the M-Regular graph.

4 So Denes does not teach any kind of messaging
5 whatsoever and the claim language going back to slide 39 says it
6 has to respond to said connection port search message. So Denes
7 cannot be responding to a port connection message. That's why
8 Denes doesn't meet this limitation.

9 In Rufino every computer in Rufino's network is
10 connected to every other computer through the token bus. So,
11 again, Petitioner admitted that the computers are connected
12 through the token bus, so there should be no dispute that that's
13 already connected.

14 JUDGE FINK: Is the computer 19 in that picture,
15 Figure 4-25, is computer 19 connected?

16 MR. LEE: Yes, it is. So everything is connected
17 through that dark line in the middle. 19 is just not in the -- it says
18 it is not in the logical ring, but the broadband coaxial cable that's
19 basically the physical bus is a physical connection that's
20 connecting all the stations. So that's --

21 JUDGE FINK: So would that even be an M-equals-2
22 network or why would that be an M-equals-2 network? If every
23 computer is connected to every other computer, it would seem to
24 be an M-equals-7 network.

1 MR. LEE: Well, it's because of the who follows and the
2 successor, it has to be only sending messages to the -- you know,
3 in a ring, along the ring, so it's only connected that way. It
4 doesn't send to another -- to, you know, other than the successor
5 and then what -- I mean, the predecessor and the successor.

6 JUDGE FINK: So it can only send payload? I'm not
7 talking about the token anymore, but the payload can only go to
8 the successor computer?

9 MR. LEE: Yes, that's right.

10 JUDGE FINK: And so it gets passed around the ring?

11 MR. LEE: Sorry, would you repeat the question?

12 JUDGE FINK: So if there's payload -- so I agree, I
13 mean, I think we agree that we all -- everybody agrees that the
14 token gets passed in a certain order. The token decides -- the
15 token is the -- decides who gets to send data --

16 MR. LEE: Correct.

17 JUDGE FINK: -- over the network.

18 MR. LEE: Correct.

19 JUDGE FINK: So if -- let's say node 13, so let's just
20 make an example. If node 13 has the token in that figure, can
21 node 13 pass data to node 14 or let's say node 11, which is also on
22 the ring -- no, wait, now that's the direction of the token motion.

23 All right. So let me -- I'm sorry. So let me change the
24 example slightly. So node 13 has the token. Can node 13 pass to
25 node 20 payload without following the direction of the token

1 motion? Does it have to pass data in the direction of the token
2 motion, or does it -- can it just open and send data directly to --

3 MR. LEE: No, it can't send data to -- okay. All right.
4 So fine, it can.

5 JUDGE FINK: So the ring, then, determines the
6 direction of the token motion, but it doesn't determine the
7 direction of payload.

8 MR. LEE: Yes. So what is the issue there?

9 JUDGE FINK: Well, I mean, I guess -- I mean, it's
10 relevant to what's connected I think.

11 MR. LEE: I mean, what's important is that it's all
12 connected through the physical bus and there's -- in the claim
13 language it requires that it's not already connected and so it can't
14 be -- having it respond in this way does not meet the claim
15 limitation.

16 JUDGE FINK: Well, it's more than just physically
17 connected because there could be -- they're really -- they can be
18 logically connected to without being connected to the successor
19 or the predecessor of the token.

20 MR. LEE: Yes.

21 JUDGE FINK: In the token ring.

22 MR. LEE: Correct.

23 JUDGE FINK: Which is different than a token ring
24 topology which you can only pass data to the next successor node
25 in the token ring, right?

1 MR. LEE: Correct.

2 JUDGE FINK: Okay.

3 MR. LEE: So I'll go to the motivation to combine. So
4 it's important that in this case Petitioner is relying on four distinct
5 references, Shoubridge, Denes, Rufino and Todd, just for one
6 claim. There's a lot of incompatibilities with this combination
7 and it -- in most parts it changes the principal operation of the
8 actual references.

9 So modifying -- so, for example, they propose
10 modifying Shoubridge's simulated fixed network topology with
11 Denes and Denes is intended for adding or removing nodes in a
12 graph. So essentially they're using Denes to fix something in
13 Shoubridge that's not broken. In Shoubridge there's no reason --
14 there's no adding or removing of nodes in the graph, so why
15 would they apply Denes to that?

16 They also propose modifying Shoubridge and Denes
17 because the -- from the M equals more than equal to 3 to Rufino
18 which can only apply to 2-regular networks, and they also
19 propose modifying Rufino with Todd. And Todd, the problem
20 with Todd, is it doesn't -- there's many problems with Todd. One
21 is it uses a physical -- it's just a physical connection, not logical,
22 and it doesn't support the kind of messaging techniques by
23 Rufino.

24 Rufino requires the logical ring in order to -- with the
25 passing of the tokens in order to work, and Todd does not work in

1 that manner. And say, like if you had to add or remove, you have
2 to actually physically disconnect something from Todd because
3 it's only a physical connection. This goes over the reasoning
4 behind not combining Shoubridge with Denes. Again, it provides
5 a solution in search of a problem.

6 And, again, going to slide 47, the token bus involves a
7 logical ring which means M equals 2 and this cites Tanenbaum --
8 we cite Tanenbaum for that notion as well.

9 And here's what I was talking about before where the
10 Petition at page 16 says that Rufino discloses techniques for
11 maintaining a 2-regular non-complete network when the node is
12 disconnected from the network. So here's an admission that
13 Rufino is applicable only to M equals 2.

14 Another problem, as I said before, was that Todd is
15 silent requiring messaging. They don't have any kind of
16 messaging whatsoever. So expanding -- using Rufino's
17 messaging in Todd is completely incompatible. This is described
18 on slide 50.

19 Also, I want to object to the discussion of how to extend
20 Rufino to Todd because of the adding the more successor nodes.
21 That was never a theory that was actually disclosed in any of the
22 papers.

23 Going to -- so if there's no questions, I'll go into the
24 Motion to Exclude.

1 So the Motion to Exclude, again, Petitioner introduces
2 manufactured evidence. 1203 and 1206 were manufactured by
3 Petitioner, by Petitioner's counsel, and 1203 and 1206 are not
4 cited, so they're irrelevant. So they should be excluded under
5 FRE 401 and 403.

6 The new evidence also should be excluded. 1205 was
7 introduced in the Petition, but -- Exhibit 1205 was introduced in
8 the Petition, but it was their burden to introduce all this evidence
9 during the Petition and to do it right not doesn't give us the
10 opportunity to reply to it.

11 As described earlier, there's a number of new arguments
12 where they switched reliance on -- they switched theories
13 basically relying on certain references for certain limitations as
14 opposed to other ones as described in the Petition. This is not
15 allowed and this is clearly against the case law because it doesn't
16 provide an opportunity for us to respond to it in the patent
17 response.

18 If there's no other questions, I'll reserve my time for
19 rebuttal. Okay.

20 MR. MURRAY: Okay. Thank you.

21 So I'd like to address a couple of issues. First, here is
22 Todd -- Judge Fink, we were talking about -- I was talking about
23 how Todd actually talks about buses and rings and I just wanted
24 to point that out. So here's the section where Todd is specifically
25 citing 802.3, talking about the problems of buses and rings. You

1 can see there, talking about how -- due to the linear topology of
2 rings and buses, the maximum throughput is severely restricted,
3 etcetera.

4 So Todd is talking about the problems in these rings
5 whether they're logical or physical rings that you have throughput
6 problems and he presents a solution to that, which is expanding it
7 beyond M equals 2. And certainly a person of ordinary skill in
8 the art would understand that even though the particular example
9 that Todd gives is in the context of the physical ring that it
10 certainly applies beyond merely a physical ring.

11 JUDGE PETTIGREW: Is that argument in your papers
12 or in Karger's declaration?

13 MR. MURRAY: I'm replying to an issue that they've
14 raised. I mean, certainly we talked about how Todd -- the reason
15 we cited Todd is because it's a teaching that the Rufino logical
16 ring can go beyond M equals 2. So that's the whole reason we
17 cited Todd. So we're talking about extending the M -equals-2
18 logical network of Rufino beyond that. So that is the exact
19 argument that we're making.

20 And just looking at their slide, this is the slide that Your
21 Honor asked me about before, so this is the logical ring that
22 overlays the underlying bus. So they have an inconsistency
23 problem that I think Your Honor, you know, got to in questioning
24 of Patent Owner's counsel, which is if you're looking at the
25 physical bus only, it's not an M -equals-2 scenario. It's an M

1 equals 7, because each node is connected to 7 other nodes. So it
2 doesn't make any sense to talk about this in terms of an
3 M-equals-2 network and then say, but in terms of the connection,
4 let's look at the M-equals-7 underlying network.

5 That's the sort of kind of crazy inconsistency that Patent
6 Owner's argument is making here. What we're talking about and
7 what you need to look at I suggest is the logical network. In the
8 logical network these computers are clearly not all connected to
9 each other. Computer 7 there is not connected to node 17.

10 So when you have -- and that's the whole reason for the
11 who follows in the set's successor situation here. When you have
12 a failure of a node like node 20, computer 7 needs to send the
13 who follows query out because it's not connected to computer 17.
14 It needs to set a new successor and establish that connection to
15 computer 17, and that's what Rufino teaches explicitly.

16 JUDGE MEDLEY: Okay. You're out of time.

17 Do you have any questions?

18 JUDGE FINK: No.

19 MR. LEE: I don't know about the procedure for
20 objections, but I didn't want to interrupt, but I would like to object
21 to the discussion of extending Rufino to Todd again because it's
22 not in the papers. Is that -- I don't know if you do it before or
23 after.

24 JUDGE MEDLEY: It's noted in the record. We'll rule
25 on it later if we need to.

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Okay. Thank you for your presentations and we are
adjourned. Thank you.

(Concluded at 11:39 a.m.)