

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

GENIUS SPORTS LTD.,
Petitioner,

v.

SPORTSCASTR INC.
(d/b/a PANDA Interactive)
Patent Owner.

IPR2024-01309

U.S. Patent No. 10,425,697

IPR2024-01305

U.S. Patent No. 10,805,687

IPR2024-01311

U.S. Patent No. 11,039,218

DEPOSITION OF
STEPHEN WICKER, Ph.D.
{Pages 1 - 112}

Wednesday, May 7, 2025
9:00 a.m. - 1:07 p.m.
U.S. Legal Support, Inc.

Stenographically Reported By:
Deanne M. Moore, RMR, CRR, FPR, FPR-C

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14 ALSO PRESENT:

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1 Deposition taken before Deanne M. Moore, RMR, CRR,
2 FPR, FPR-C and Notary Public in and for the State of
3 Florida at Large in the above cause.

4 - - - - -

5 THE COURT REPORTER: Do you swear or affirm the
6 testimony you are about to give will be the
7 truth, the whole truth, and nothing but the
8 truth, so help you God?

9 THE WITNESS: I do.

10 THE STENOGRAPHER: Thank you. And, Ms. Stone,
11 whenever you're ready.

12 MS. STONE: Thank you so much.

13 Whereupon,

14 STEPHEN WICKER, Ph.D.,
15 having been sworn to tell the truth and testified upon
16 his oath as follows:

17 DIRECT EXAMINATION

18 BY MS. STONE:

19 Q Dr. Wicker, if you could please state your full
20 name for the record.

21 A My name is Stephen Bryant Wicker.

22 Q And I know that you've been deposed and
23 testified many times before, but just for the sake of
24 due diligence, I'll walk through the basics.

25 A Okay.

1 Q You understand you're under oath today?

2 A Yes.

3 Q And is there any reason why you cannot testify
4 truthfully and accurately?

5 A No.

6 Q If any of my questions are unclear, definitely
7 let me know. Otherwise I will assume that you
8 understand the question. And if you need a question
9 repeated, please let us know, and the court reporter can
10 read it back to you.

11 Can you state where you're physically located
12 today?

13 A Yes. I'm currently located in Webster,
14 New York, in my home -- my home office.

15 Q Okay.

16 A We have a great deal of background noise.

17 Q Yes, there's a lot of feedback going on.

18 MS. STONE: Could everyone besides Dr. Wicker
19 and I try going on mute just to see if that helps?

20 A That helped tremendously. Thank you.

21 Q Okay. No problem. And is there anyone else in
22 the room with you today?

23 A No.

24 Q And do you have electronic access to the
25 exhibits for today's deposition?

1 A No, not yet. Is there a link?

2 Q I believe through the platform over on the
3 right side you should see -- I've shared at least one
4 exhibit, your declaration, just to make sure that you
5 can see it.

6 Do you see that there?

7 A Yes, I do. Thank you very much.

8 Q Okay. Perfect. As I share exhibits, that
9 should populate more. But if at any time there is a
10 specific exhibit from your declaration that you would
11 like to see, please let me know.

12 Do you have any paper materials in front of you
13 today?

14 A I do. I have clean copies of a number of
15 things, my declaration and some of the prior art and the
16 various responses and documents that have been filed so
17 far in this case.

18 Q Okay. But no other materials besides what's
19 been filed in this case?

20 A That's correct.

21 Q All right. And did you do anything to prepare
22 for your deposition?

23 A Yes, I did.

24 Q Did you meet with anyone?

25 A Yes, I did.

1 Q And who did you meet with?

2 A Sorry. I met with Mr. Baker for two days.

3 Q Okay. Did you meet with anyone else outside of
4 counsel for this proceeding?

5 A No.

6 Q Okay. And so you understand that you're here
7 to testify regarding your declaration provided in six
8 different IPR proceedings; is that correct?

9 A That's my understanding, yes.

10 Q Yes. And so the testimony you provided in your
11 declaration relates to three different patents, just for
12 the sake of the record: U.S. patent number 10,425,697,
13 number 10,805,687, and number 11,039,218; is that right?

14 A That is correct.

15 Q And for purposes of this deposition, is it okay
16 if I refer to those as the '697 patent, the '687 patent
17 and the '218 patent?

18 A Certainly, that's fine.

19 Q And if I use the phrase "the challenged
20 patents," you'll understand that I'm referring to all
21 three patents, right?

22 A Understood.

23 Q Okay. Go ahead and pull up your declaration --
24 or I guess I'm sharing it to you so it should populate
25 just below as an exhibit on your screen.

1 A I can see it, yes.

2 Q Awesome. And I am going to -- well, I was
3 going to grant control to you. I'm assuming you're the
4 person labeled "unknown."

5 A I do have control.

6 Q You do have control?

7 A Yes.

8 Q Awesome. Can you confirm that this is a copy
9 of your declaration that you submitted on these three
10 challenge patents?

11 A Yes, this is indeed my declaration. There were
12 some exhibits attached but --

13 Q Yes.

14 A -- this is the basic declaration.

15 Q Yes. Are you referring to the exhibits in the
16 proceeding --

17 A Yes.

18 Q -- so Exhibit 1002? Okay, got it.

19 And then if you could just scan to that last
20 page, page 490, is this your signature at the end of the
21 declaration?

22 (Exhibit 1001 was marked for identification.)

23 A Yes, it is.

24 Q And this declaration, because it covers all
25 three patents, it's identical between all six of the

1 IPR proceedings; is that correct?

2 A There may be slight differences just because of
3 different cover pages, et cetera, but otherwise, yes.

4 Q Okay. Other than the cover page and signature
5 page, the content is the same; is that correct?

6 A That is correct.

7 Q I can -- I can put all of them in, if you need
8 it too. Just let me know.

9 Okay. And how did you go about preparing your
10 declaration?

11 A Okay. So the first thing I did was to read the
12 patents under consideration. Then I prepared some
13 arguments based on prior art, and I created the first
14 draft.

15 Q All right. Did you speak to anyone besides
16 petitioner's counsel in drafting the declaration?

17 A No.

18 Q And did you perform any evaluations, tests,
19 et cetera, outside -- or to support your statements in
20 the declaration?

21 A Anything that I did other than review the prior
22 art is reflected in the declaration.

23 Q Okay. All right. I am sharing to you the copy
24 of your CV, Exhibit 1002, in this proceeding maybe.

25 Hang on. All right. There you -- there we go.

1 Do you now have Exhibit 1002 in front of you?
2 (Exhibit 1002 was marked for identification.)

3 A Yes, I do.

4 Q Perfect. And is this -- do you recognize this
5 exhibit?

6 A Yes. It appears to be a complete copy of my
7 CV.

8 Q And is all the information in your CV accurate?

9 A It is accurate -- it certainly was accurate at
10 the time that I provided it. I don't think I've
11 finished any papers or done anything that would have
12 required an update, so I think this is current.

13 Q Okay. Got it.

14 If you could turn to page 2?

15 A Okay.

16 Q Under "consulting," does this represent a list
17 of all the other cases in which you've testified as an
18 expert in the past five years, nothing to -- nothing to
19 change? Or actually I guess you recently testified in
20 maybe an additional case between Omnitracs and Motive
21 Technologies, correct?

22 A Exactly. I think -- that's already on here,
23 though. I guess not. Yes. So as you're well aware,
24 the Omnitracs case was more recent, but I think that's
25 it.

1 I'll note -- I'll note that this actually goes
2 back further than five years. I was trying to be
3 complete.

4 Q Sounds good.

5 Did any of these cases listed in your CV under
6 consulting involve similar generation or broadcasting of
7 live stream of digital content and issues regarding
8 client-side latency?

9 A Some of them would have been related. Identity
10 Security versus Apple involved the security of streaming
11 among other things and how Apple protects streamed data.

12 Q All right. Anything else?

13 A Sorry, I'm working my way through them.

14 Q That's okay. Take your time.

15 A Viasat versus Adobe was also related in the
16 same way; in other words, it involved security for
17 streamed data.

18 Q All right. And then did any of these cases
19 involve the display of screen animation, special
20 effects, graphics or the display of event information
21 along with a video/audio feed?

22 A No.

23 Q Okay. If you could please turn to page 31 of
24 your CV --

25 A Okay, I'm there.

1 Q -- where it lists patents and patent
2 applications.

3 A Yes, I'm there.

4 Q And did any of these patents or applications
5 involve similar technical problems addressed by the
6 challenged patents?

7 A I'd say some of them involve related
8 technologies but not the specific problems that were
9 being solved by the patents.

10 Q Okay. Can -- which ones would you identify as
11 related?

12 A Okay. The private overlay for information
13 networks involve securing a -- a user's connection in
14 such a way that the user's private information would not
15 be taken by the service provider.

16 Q Understood.

17 A So it would have been devices that would have
18 been used in the context of the patents at suit, but not
19 directly related to the problems solved allegedly.

20 Q Is there anything else that you would describe
21 as tangentially related?

22 A No, I think that would be it.

23 Q Okay. I'd like to start by just walking
24 through some of the general terminology in this case.
25 In the context -- and this is just, you know, generally

1 based on your experience.

2 In the context of computer data, can you
3 explain what a "queue" is?

4 A Certainly. A queue is -- generally it's a term
5 of art, and it's considered to be a -- a device or
6 structure in which you have two pieces: You have a
7 buffer that is buffering tasks, and then you have a
8 server that's actually performing the task.

9 Q And would it be accurate to describe a queue as
10 a data structure specifically?

11 A It's a little more than a data structure, but
12 certainly a queue uses data structures.

13 Q And it would -- to -- is that to organize data
14 or information?

15 A Organize in the sense of sequencing data so
16 that it can be accessed, for example, in a particular
17 order.

18 Q And, for example, does a queue data structure
19 follow a First In, First Out rule?

20 A It certainly can. There are other kinds of
21 queues, but a First In, First Out queue is -- is a
22 prominent example.

23 Q All right. And what is your understanding of
24 what a topic queue is specifically?

25 A Well, the term "topic queue" is actually used

1 in -- in the prior art. It is a collection of files or
2 media associated with a particular topic.

3 Q And is that consistent with your general
4 understanding of the term "topic queue"?

5 A There's more structure to it; in other words,
6 it's addressable. It is something that can be accessed
7 such that you can actually direct information to the
8 topic queue and receive information directly from it.

9 But other than that, yes, it is a queue in the
10 sense that it organizes information.

11 Q What do you mean by you can direct information
12 to the topic queue?

13 A In other words, it's addressable. It's a
14 structure in the prior art. I don't know if -- you
15 know, we don't have any of the prior art up, but the
16 particular prior art --

17 Q And we'll definitely get more into Spivey, but
18 when you say you can direct information to the topic
19 queue, do you mean a subscriber could place data
20 payloads into the topic queue?

21 A The subscriber can definitely receive
22 information from the queue. The queue can be loaded by
23 content providers.

24 Q But could the subscriber, in fact, place
25 information into the queue itself?

1 A I don't recall there being anything that would
2 prevent a subscriber from being a content provider as
3 well.

4 Q Is that typically how topic queues are used?

5 A Well, topic queues, someone has got to load it,
6 so you could have a community of people that are
7 exchanging information using the topic queue as a point
8 of focus, so they could both load the queue and receive
9 data from the queue.

10 Q So it's your position that a subscriber could
11 also direct data payloads to the topic queue?

12 A Again, I don't -- I didn't see anything that
13 would prevent that from being a possibility; in other
14 words, content providers can load the queue.

15 Q Have you ever worked on or seen a system where
16 subscribers were loading data payloads into a topic
17 queue?

18 A Well, generally speaking, there are classes of
19 networks that are peer to peer. It is a large category
20 in which people share information, in some cases by
21 using a bulletin board of some kind. That would be an
22 early example of a topic queue.

23 Q Do both the publisher and the subscriber have
24 to be live and active to use a topic queue to
25 communicate?

1 A Do you mean do they have to be live and active
2 at the same time?

3 Q Correct.

4 A Okay. So we're talking about Spivey, and one
5 of the things that's emphasized is reducing the delay in
6 moving through the topic queue.

7 Q And like I said, we will get into Spivey. I
8 think I'm just asking more generally based on your
9 extensive years of experience.

10 When topic queues are used, do subscriber and
11 publisher have to both be live and active for a topic
12 queue to function?

13 A Not at the same time, no.

14 Q Okay. And based on your experience, how does a
15 device typically subscribe to a topic queue?

16 A There are a number of ways that can be done.
17 The subscription procedure can involve using simple HTTP
18 posts where you -- you go to the site, and you simply
19 indicate your interest in information from that
20 particular queue. There could be other ways of doing it
21 as well.

22 Q What's another -- can you just give me one more
23 example?

24 A Certainly. One can join a list, for example,
25 for multicast transmissions. There are other ways of

1 indicating one's interest in this material.

2 Q And how is data or information typically added
3 to a topic queue?

4 A Generally speaking, data would be added through
5 an access of the memory or in the server and some sort
6 of command that tells the server, This is what I want to
7 load on to this queue, so an example would be an HTTP
8 post.

9 Q And how is data information typically obtained
10 from the topic queue?

11 A It can be obtained in several different ways.
12 It could be obtained by an HTTP get or it can be
13 obtained through -- in a subscription service, it might
14 actually be pushed to the client. There -- there are
15 many different ways it could be done.

16 Q And then this term I want to -- I want to
17 discuss the term "broadcaster." In the context of the
18 challenged patents, what is the broadcaster referring
19 to?

20 A Is there a particular place where it's used do
21 you want to point me to?

22 Q Absolutely. I'm going to give you -- we'll
23 take the '697 patent since it's apparent. You should
24 have the '697 patent which is Exhibit 1006 in these
25 proceedings in front of you.

1 (Exhibit 1006 was marked for identification.)

2 A Yes, I've got it.

3 Q And for example at column 7, let me know when
4 you're there.

5 A Okay. I've got it. And you said column 7?

6 Q Yes, column 7, lines 44 to 47.

7 A Okay. I'm there.

8 Q And does this match -- is this your
9 understanding of how broadcaster is used in the -- in
10 the challenged patents?

11 A Yes, this is consistent with the use of the
12 term in the challenged patents.

13 Q And is this an interpretation of broadcaster
14 that you've applied in your analysis in this proceeding?

15 A Yes.

16 Q I'd also like to talk about online gaming
17 information in the context of these patents.

18 In the context of these patents, what is your
19 understanding of what online gaming information is?

20 A It would be information related to a user's
21 interaction with a gaming platform, and in particular,
22 information, for example, regarding betting odds,
23 et cetera.

24 Q Okay. All right. I realize I'm jumping
25 through terms, I promise we'll get to the prior art

1 soon.

2 I want to turn to the term "socket." Is socket
3 a term that is generally used in the computer industry?

4 A Yes. It's a -- a term of art, and it is one
5 that is -- that is frequently used in the context of
6 discussing computer networking.

7 Q And what's your understanding generally of what
8 a socket is?

9 A A socket is an addressable endpoint. It
10 typically is designated as an IP address, a networking
11 layer address, as well as a port member, which points to
12 a particular process in a computer at the transport
13 layer.

14 Q Would it be accurate to describe a socket as a
15 low level communication mechanism?

16 A A low level comm- -- that's -- it would depend
17 on the context because low level is vague in the sense
18 that, you know, what are we comparing it to, what's high
19 level.

20 Q Fair. What level of instruction would you
21 describe a socket as?

22 A Socket -- sockets, excuse me, are typically
23 used by applications to perform basic functionality such
24 that the application doesn't have to include all the
25 details of the lower layers.

1 And so I -- I would say it's below the
2 application layer but includes information about the
3 transport and network layer.

4 Q And for a socket connection to function, both
5 ends of the socket connection need to be live -- need to
6 be live and active, correct?

7 A That is fair. In other words, there has to be
8 an active, for example, TCP connection or something
9 equivalent.

10 Q And are socket connections persistent and
11 continuous?

12 A They certainly can be. I don't think a socket
13 has to be persistent.

14 Q Have you seen examples in your experience where
15 they were not?

16 A One example that I can think of would be the
17 use of HTTP, which is transactional in the sense that
18 the TCP connection supporting HTTP can be closed down
19 after the initial transmission, so that would be
20 nonpersistent.

21 So the socket associated with that HTTP action
22 would not be persistent, but I don't think that's how
23 it's typically used.

24 Q If you could please turn to your -- or sorry,
25 your declaration.

1 A Okay.

2 Q And I've shared it as well on the platform.

3 Let's go to paragraph 46.

4 A And I think I've mentioned I've got a clean
5 copy of that in front of me, so I'll be referring to
6 that.

7 Q That's just fine.

8 A And I'm sorry, the paragraph is 46?

9 Q Yes. It's at the bottom of page 16 of the
10 declaration we've got here.

11 A Okay.

12 Q And in this paragraph, you discuss a one-to-one
13 connection topology, and specifically you state there:
14 "The communication is between one source socket
15 (representing the source host's IP address and port
16 number) and one destination socket (representing the
17 destination host IP address and port number.)"

18 Did I read that correctly?

19 A Yes.

20 Q And what's the purpose of the host's
21 IP address?

22 A The host's IP address from a structural
23 standpoint is a network layer entity that can be
24 addressed, and, for example, data to that entity can be
25 routed through the Internet.

1 Q So does it identify the -- identify, for
2 example, where the server -- where a server is?

3 A Technically it identifies the host, and so the
4 server can be a host. A server may also have multiple
5 IP addresses, multiple host identities but typically
6 not.

7 Q And can the source or destination socket
8 function as you've described without this IP address?

9 A No, without an IP address, it would not be
10 addressable. I assume -- I assume we're talking within
11 the context of the Internet.

12 Q Yes.

13 A There may be sockets that use other kinds of
14 addressing, but in the context of the Internet, it has
15 to be the Internet protocol, so you have to have an
16 IP address.

17 Q And what's the purpose of the source or
18 destination host port number?

19 A The port number identifies a process on the
20 device, server, client, whatever the case may be.

21 Q And can the source or destination socket
22 function as you've described without this port number?

23 A In the Internet context, no.

24 Q If you could also turn to -- or just the next
25 paragraph, 47?

1 A Okay. I'm there.

2 Q And here you discuss a one-to-many topology,
3 and you say "In a one-to-many topology, the
4 communication may be from the same source socket at the
5 source host to multiple destination sockets (one at each
6 destination host.)"

7 You also say that "A web server an a common
8 example, where all users connect to the same socket
9 (using port 80.)"

10 Did I read that right?

11 A Yes, that's correct.

12 Q What is port 80?

13 A Port 80 is typically associated with HTTP.

14 Q And is it the default port typically used for
15 HTTP?

16 A If I remember correctly, there may be one or
17 two others, but that is certainly one of them.

18 Q Would you consider a port to be a communication
19 endpoint?

20 MR. BAKER: Objection, form.

21 A Ports point to processes, and certainly at
22 some -- I hate to use the word "port" twice, but at some
23 point in the stack, traffic moving into a device like
24 the laptop I'm looking into is going to reach the
25 transport layer, and that port number will associate the

1 incoming traffic with a particular process, for example,
2 my web browser in this case.

3 Q And in this description of a one-to-many
4 topology in paragraph 47, is it your understanding that
5 the socket is uniquely addressable?

6 A Yes.

7 Q In your opinion would a socket identified by a
8 discrete URL be uniquely addressable?

9 A So the URL would be resolved into several
10 things. If it's associated with a socket, that socket
11 is uniquely addressable.

12 Q So, for example, the challenged patents
13 describe a client device using an URL that includes an
14 event ID in the path of the URL to connect to a socket,
15 correct? Excuse me.

16 A That's certainly an option, yes.

17 Q Okay. Looking at your declaration again, let's
18 jump down just a little bit to paragraph 52.

19 A Okay.

20 Q And here you're discussing web -- WebSocket
21 communications, correct?

22 A That's correct.

23 Q And specifically you state that "WebSocket is a
24 client-server communication protocol standardized by the
25 Internet Engineering Task Force in 2011 that is

1 bidirectional, full duplex and continuous."

2 A That's correct.

3 Q Did I read that right?

4 And you also say that "Once a WebSocket
5 connection is established between a server and a client,
6 the client receives instant updates from the server
7 without the need to poll."?

8 A That's right, it's a form of pushing.

9 Q So it's your understanding that a web --
10 WebSocket connection requires bidirectionality, correct?

11 A It supports bidirectionality, but you don't
12 have to use that feature. In other words, it could be a
13 one-way system; in other words, you can use WebSocket to
14 push data that comes into a server to the intended
15 recipients without allowing return traffic.

16 Q And would that comport with the Internet
17 Engineering Task Force web- -- WebSocket communication
18 protocol?

19 A It would. The RFC in this case does not have
20 to be used in its entirety; in other words, you could
21 use it in one direction if you so chose.

22 Q And that, in your opinion, would still be
23 considered a WebSocket communication protocol?

24 A It would still be WebSocket. You just wouldn't
25 be using all the capabilities of WebSocket.

1 Q What are the advantages of bidirectionality in
2 a WebSocket connection?

3 A The advantages include being able to support
4 more applications, so, for example, two-way traffic is
5 necessary in some contexts, at its simplest, simply to
6 acknowledge the receipt of a particular packet or file,
7 but it can also be used for communication. Like yhe
8 communication we're having is two-way. One-way would
9 not be useful in this context.

10 Q In describing this client-server -- that's the
11 word used in your declaration. In describing a
12 client-server communication protocol, who or what is the
13 client? Does it --

14 I guess a more specific question would be:
15 Does the client refer to the device immediately
16 downstream that is receiving that update from the
17 server?

18 A So let me -- let me back up for a second. A
19 client-server architecture is one in which we have
20 one or more clients accessing a server for some
21 particular functionality. It could be to obtain
22 information, it could be to obtain webpages, it could be
23 to share a particular piece of software that's licensed.

24 So the client is the one making the request,
25 and the server is the one providing the information,

1 generally speaking.

2 Q And is this typically a device that's
3 immediately downstream from the server or could there
4 potentially be an intermediary between the client and
5 the server?

6 A Well, for example, it -- it could definitely be
7 much further downstream. If I pulled up a webpage, you
8 know, and went to Amazon.com, there would be a lot of
9 entities between my laptop and the server that's
10 actually providing the web content. For example, there
11 would be routers. There would be other entities as
12 well.

13 Q So when you say "client," it doesn't
14 necessarily refer to the end users -- the farthest end
15 user's client device; is that correct?

16 A When I think of clients, I think of the end
17 user. I think of the -- the process or person, as the
18 case may be, that is actually trying to access material
19 on a server.

20 Q But it could be any client. You've -- you
21 know, you've stated that it's not necessarily the
22 immediate downstream client, but it could be a client
23 between the end user device and the server; is that
24 correct?

25 A I want to make sure I understand the question.

1 So let's go back to my Amazon example.

2 Q Yeah.

3 A So I am -- I am not shopping for books at the
4 moment, but if I was, my -- my browser would be showing
5 me webpages that are provided by Amazon. In between are
6 lots of routers, and there's other things as well, but
7 let's just focus on the routers. I would not consider
8 those intermediate routers to be clients. My browser
9 would be the client.

10 Q And if you could jump down to paragraph 53.

11 A Okay.

12 Q And here you liken a socket to a restaurant's
13 door in the context of a restaurant delivery service; is
14 that right?

15 A That's correct.

16 Q And specifically you state "each home can send
17 someone or something to the restaurant. It is not a
18 one-way communication system"; is that correct?

19 A That is correct.

20 Q And just to make sure I understand, you're
21 saying the socket communication is not a one-way
22 communication system?

23 A Not in this example, that's correct.

24 Q Generally, though?

25 A Sockets support two-way communication. You

1 don't have to use it, but it is available if you choose
2 to use it.

3 Q All right. If you -- we're going to open up
4 Spivey, assuming I can share it to you. Let me see. So
5 this is -- I'm now sharing -- and I'm not exactly sure
6 how it's pronounced. We've got two members that say
7 Spivey or Spivey.

8 Do you have a preference?

9 A I -- I thought it was Spivey.

10 Q Spivey. We'll go with that since I said --
11 (Simultaneous crosstalk.)

12 A But I -- I don't know the inventors. I can't
13 be certain.

14 Q Yeah. This is Exhibit 1017 in these
15 proceedings.

16 (Exhibit 1017 was marked for identification.)

17 A Okay.

18 Q Do you have it up on your screen or in front of
19 you?

20 A I've got it on my screen and in front of me,
21 thank you.

22 Q Got it. Now, Spivey is titled "techniques to
23 broadcast live event data in realtime"; is that right?

24 A That's correct.

25 Q And Spivey discloses a system for broadcasting

1 live event data such as sports scores, right?

2 A That is correct, among other things, yes.

3 Q Do you recall -- let's see.

4 And Spivey doesn't explicitly discuss the
5 provision of video to client devices, correct?

6 A Well, if you look at Figure 23, for example,
7 there is a video adapter. There's discussion of video
8 cards in Paragraph 163, video adapters in 171.

9 So there -- there is some discussion of video,
10 and clearly it's something that is available in the
11 systems that are depicted.

12 Q So there are video-related components on these
13 computers; is that accurate?

14 A Yes, that's correct.

15 Q But Spivey does not explicitly talk about
16 these -- sending a video to these computers; is that
17 correct?

18 A In Paragraph 171, it talks about display
19 devices being connected, for example, through video
20 adapter, which presumably would indicate that video is
21 being transmitted, but there is no extensive discussion
22 of video being transmitted.

23 Q So again, it may have display devices or
24 components to support video on the end-user device, but
25 there is no explicit discussion of video being

1 transmitted?

2 A I think that's fair. Any transition of video
3 is -- is implicit in the sense that the video capability
4 is present, but it doesn't discuss it in detail.

5 Q And specifically Spivey doesn't explicitly
6 discuss synchronization of the transmitted data with a
7 video feed, correct?

8 A What I'm doing is I'm looking at the various
9 disclosures of latency as an issue, and I don't see that
10 it's talking about the explicit problem you just
11 described.

12 Q I'd kind of like to orient ourselves in the
13 context of Spivey's architecture a little bit, so if you
14 could turn to Figure 1.

15 A Okay.

16 Q In the embodiment illustrated in Figure 1, the
17 live data access server 130 is a public interface
18 between the client devices 110 and the message queue
19 server 120, correct?

20 A In Figure 1, that's correct.

21 Q And so, for example, this live -- in this
22 embodiment, the live data access server allows client
23 device users to subscribe to topic information available
24 at the message queue server, correct?

25 A That's correct, and again in this embodiment.

1 Q Excuse me, sorry.

2 And so the live data access server retrieves
3 the topic information and pushes that information to the
4 client devices 110, correct?

5 A Yes, that's -- that's one of its capabilities.

6 Q All right. And then if you could scroll down
7 to Figure 5.

8 A Okay.

9 Q And Figure 5 elaborates on the live data access
10 server 130's capabilities, correct?

11 A It is an implementation of a live data access
12 server device.

13 Q And specifically functions of the live data
14 access server device illustrated in Figure 5 may
15 represent the functions of live data access server 130
16 in Figure 1, correct?

17 A I don't recall that the patent actually ties
18 those two together, but certainly --

19 Q Well, let me go ahead and point you to it.

20 A Okay.

21 Q If you could scroll to paragraph 38.

22 A Okay.

23 Q And I apologize for interrupting you.

24 A No worries. And I said patent. It is a patent
25 application as you all know.

1 Okay. I'm there.

2 Q Yes. At Paragraph 38, about midway down,
3 you'll see a sentence that says "Embodiments and
4 functions of live data access server 130 are discussed
5 below with respect to Figure 5."

6 Did I read that correctly?

7 A Yes, you did.

8 Q Okay. So Figure 5 is an example of the live
9 data access server 130; is that correct?

10 A That is correct.

11 Q Okay. And consistent with what we saw in
12 Figure 1 where the live data access server operates as
13 an interface between the message queue server and the
14 client devices, Figure 5 illustrates an interface
15 component 530; is that correct?

16 A That is how it's described, that's correct.

17 Q And this interface component allows an operator
18 of a client device to request and authenticate a
19 connection to the live data access server, correct?

20 A That's correct.

21 Q Now, if you could please turn to Figure 3.

22 A Okay.

23 Q And Figure 3 illustrates the message queue
24 server device 310, correct?

25 A That's correct.

1 Q And this message queue server device is an
2 example of the messaging queue server 120 that we saw in
3 Figure 1, correct?

4 A Yes, that's correct.

5 Q And Spivey teaches that this message queue
6 server device 310 pushes data from the topic queues to a
7 live data access server that has subscribed to its topic
8 queues, correct?

9 A In one embodiment -- or actually in several
10 embodiments, that's correct.

11 Q And after data is pushed to a live data access
12 server, the data is no longer stored on the message
13 queue server, correct?

14 A It would depend on the implementation. There
15 may be situations in which you want the topic queue to
16 retain a copy of what's been sent.

17 Q Does Spivey disclose an embodiment in which the
18 data payloads are stored on the message queue server
19 device after being pushed?

20 A I don't recall that it explicitly says that.

21 Q And Figure 3 does not illus- -- does not
22 include an interface component, correct?

23 A No, I don't agree with that. There are a
24 number of interface components. For example, you've got
25 a communication component 308. Memory units are by

1 their nature designed with interfaces so that you can
2 access what's stored.

3 Q But there's no specific block in this block
4 diagram that's labeled interface component, correct?

5 A It doesn't explicitly say interface component,
6 but again, you'd understand a communication component to
7 be serving as an interface.

8 Q So is it your understanding that the message
9 queue server communication component is the same as the
10 live data access server's interface component?

11 A No, I wouldn't say that. They're -- they're
12 providing different functionalities in the embodiment
13 described. I'm simply saying the communication
14 component is an interface.

15 Q All right. And if we could turn to Figure 4,
16 please.

17 A Okay.

18 Q And Figure 4 of Spivey illustrates another
19 embodiment of the message queue server 120 depicted in
20 Figure 1, correct?

21 A That's correct.

22 Q And Spivey teaches that the message queue
23 server 120 may be broken into two separate devices, here
24 a message queue server device 410 and a live data access
25 server device 450, correct?

1 A Would you repeat the question, please?

2 Q Yeah. Absolutely.

3 MS. STONE: Actually can we have it read back.

4 (Question read back.)

5 A Yes, that's fair.

6 Q And the functions that were previously handled
7 by one message queue server 120 are now handled by two
8 separate devices, correct?

9 A Well, what we're seeing is a subdivision of an
10 embodiment of 120, so I would say it's probably a little
11 more accurate to say what we're seeing is more of the
12 detail of a particular embodiment of 120.

13 Q And just to make sure I understand, this live
14 data server device 450 --

15 MS. STONE: And, Deanne, I apologize. Would
16 you mind going back on mute? Thank you.

17 BY MS. STONE:

18 Q And so the live data server device 450, that
19 doesn't generate live data, correct?

20 A It contains queues which have live data. Are
21 you saying is it the source of the live data?

22 Q Correct. It's not the source of the live data,
23 correct?

24 A It's the immediate source for 410, but, no,
25 it's not --

1 Q But -- oh, apologies. Go ahead.

2 A No worries.

3 It's not the original source, no.

4 Q Rather it has the circuitry necessary to
5 receive live data from the data sources, correct?

6 A Yes, that's correct.

7 Q And in this embodiment in Figure 4, the live
8 data server device 450 receives live data from the data
9 sources and transmits data payloads to message queue
10 server device 410, correct?

11 A Yes, in this embodiment, that is correct.

12 Q So the live data device 450 does not perform
13 the same functions as the live data access server 130,
14 correct?

15 A Not as described, no.

16 Q And here in Figure 4, neither the message queue
17 server device nor the live data server device include a
18 block labeled interface component, correct?

19 A Okay. Again, there are blocks that would
20 service interfaces, but none of them are specifically
21 described as interface devices.

22 Q So you're referring to just the fact that a
23 communication component may generally relate to
24 interfaces, correct?

25 A Certainly, yes.

1 Q But here there's no specific set aside block
2 that is termed an interface component?

3 A That's correct. They're described as
4 communication components.

5 Q All right. If you could turn back to your
6 declaration for a moment. And if we could go to
7 Paragraph 99.

8 A Okay.

9 Q And here you opine that Spivey discloses an
10 embodiment in which "the message queue server 120
11 communicates directly with client devices (110-1 through
12 110-a) without the use of a live data access server."

13 Did I read that right?

14 A Yes, you did.

15 Q And you support (sic) three paragraphs of
16 Spivey to support this opinion, correct?

17 A That's correct.

18 Q All right. I'd like to turn back to Spivey now
19 and take a look at those paragraphs.

20 So if we could go -- so I'm looking now again
21 at Spivey -- I'm actually not. Let me put up the right
22 exhibit.

23 All right. I put Spivey Exhibit 1017 up.

24 A Okay.

25 Q And if you could scroll to Paragraph 36.

1 A Okay. I'm there.

2 Q And in this paragraph Spivey states that "in
3 some embodiments, message queue 120 is not accessible to
4 clients over the network directly. For example, message
5 queue server 120 may be behind a firewall not shown."

6 Did I read that correctly?

7 A Yes, you did.

8 Q What are the advantages of placing the message
9 queue server behind a firewall?

10 A The firewall would provide a level of security,
11 a modicum of security, so depending on how it's
12 designed, it could prevent certain kinds of attacks; for
13 example, a denial of service attack.

14 Q And in this paragraph Spivey does not
15 illustrate or explicitly describe an embodiment in which
16 the client devices access the message queue server
17 directly, correct?

18 A I don't agree. The first sentence of Paragraph
19 36 states "message queue server 120 may receive live
20 data from one or more live data sources 140, and may
21 process live data to provide live data quickly to the
22 client devices."

23 Q But it doesn't specifically say that this is
24 provided directly, correct?

25 A I would say that the term "quickly" as used in

1 that sentence is implying it's direct.

2 Q But Spivey describes reducing on orders of
3 magnitude the latency, even when it has included an
4 intermediary between the client devices and the message
5 queue server, correct?

6 A I'm not sure what you're referring to.

7 Q All right. We'll get there.

8 A Okay.

9 Q Does this paragraph describe the client devices
10 establishing any type of connection with the message
11 queue server?

12 A It's implicit in the message queue server
13 providing data quickly to the client devices, but it
14 doesn't describe the details the connection formed.

15 Q Let's take a look now at Paragraph 38 which is
16 just in the next column over.

17 A Okay.

18 Q And this is the second paragraph that was cited
19 in your declaration.

20 Can you tell me where in this paragraph Spivey
21 teaches direct communication between the message queue
22 server and client devices without the use of a live data
23 access server?

24 A Okay. What this is describing is the position
25 of the LDAS between the client devices and the message

1 queue server, so what it says here is live data access
2 server may provide a public interface.

3 And so what's being claimed here is that it's
4 an option, it's an embodiment, but it's not necessary.

5 Q You're aware that it's common in patent
6 specification drafting to use permissive or open
7 language such as "may," correct?

8 A Certainly. It -- it allows for the fact that
9 there are other embodiments, other designs that are
10 covered by what's being taught.

11 Q And are you aware that Spivey generally teaches
12 that each and every component of its architecture may be
13 used?

14 A Just looking at this page I see the use of the
15 word "may" fairly often. But I haven't looked through
16 the whole patent application to see if it's used
17 everywhere.

18 Q So by your logic, does that mean a person of
19 ordinary skill can simply ignore the architecture that
20 Spivey is disclosing and reallocate the function of any
21 component?

22 A No, I -- I don't think I'm saying anything that
23 all conclusive. But what I am saying is that a person
24 of skill in reading this would understand there are
25 different ways to use the Spivey invention.

1 Q Let's turn to Paragraph 53. And this is that
2 last paragraph cited in your declaration.

3 Can you tell me where in this paragraph Spivey
4 teaches direct communication between the message queue
5 server and client devices without the use of the live
6 data access server?

7 A So what's being described here is the fact that
8 there are different embodiments considered for a message
9 queue server, and in this particular case an alternative
10 is to implement with two separate devices: The message
11 queue server and the live data server device.

12 Q And is there anything in this paragraph that --
13 that teaches a direct communication between the message
14 queue server and client devices?

15 A What it's teaching here is that there are
16 multiple ways to implement the message queue server. So
17 that's why I pointed you there.

18 Q And specifically it's teaching ways of
19 implementing the message queue server 120 that was
20 illustrated in Figure 1, correct?

21 A Well, it's referring actually to Figure 4, but
22 Figure 4 is an example of what we see in Figure 1.

23 Q All right. I'm going to go on mute to clear my
24 throat.

25 A Okay.

1 Q Sorry about that.

2 There are a couple other places in your
3 declaration that you assert that Spivey discloses a
4 system in which a message queue server device is
5 accessible to clients over the network directly, so I'm
6 going to jump around your declaration a little bit.

7 A Okay.

8 Q Let me pull that up. All right. I've now
9 shared Exhibit 1001, your declaration. If you could
10 turn to page 92.

11 A Okay.

12 Q I'm still working on -- my way there.

13 All right. And at page 92, we'll see
14 footnote 3, and here you quote Spivey asserting that
15 "Spivey also discloses that the message queue server
16 device, MQSD, may be 'accessible to clients over the
17 network directly.'"

18 Did I read that correctly?

19 A Yes, that's correct.

20 Q And here we have Paragraph 84, so I want to
21 jump back to Spivey, Exhibit 1017, and we'll go to
22 Paragraph 84.

23 A Okay. I'm there.

24 Q And here Spivey is describing a user
25 interface 900 that allows an operator of a client device

1 to view and select topics of live data that they wish to
2 subscribe to, correct?

3 A That's correct.

4 Q And these topics correspond to topics of live
5 data received by the message queue server, correct?

6 A I'm sorry, would you repeat that?

7 Q Yeah. And these topics correspond to topics of
8 live data received by the message queue server, correct?

9 A That is fair, yes.

10 Q So in order for client devices to receive the
11 live data that they care about, an operator needs to
12 subscribe to these topics through the user interface,
13 correct?

14 A That's an example, but, yes, there is a
15 description here of using drop-down or pop-up menus as a
16 means of subscription.

17 Q Is there another example that Spivey provides
18 besides using an interface?

19 A Well, this paragraph is focused on user
20 interface, and it's discussed further in Spivey in the
21 next several paragraphs.

22 So are you saying is there a way to subscribe
23 without using a user interface?

24 Q Correct.

25 A Not that I am aware of.

1 Q Okay. And Spivey explicitly teaches that the
2 live data access server provides the user interface for
3 subscribing to topics, correct?

4 A That is one implementation, that's correct.

5 Q Does Spivey provide any other examples of other
6 components providing an interface component with the
7 interface?

8 A Well, as we just discussed, there -- there are
9 examples of embodiments in Spivey in which there is
10 direction connection between the user and the -- the
11 message queue device, and that would mean that the user
12 interface is within the message queue device.

13 Q If Spivey did contemplate a direct connection,
14 don't you think it would have included the interface
15 component in the message queue server such that users
16 still could have a user interface?

17 A Well, Spivey -- let's see. Which figure was
18 that? We were looking at it earlier. The message queue
19 server device 310 includes a communication component.

20 Q Correct. But Spivey -- Spivey distinguishes
21 between a communication component and an interface
22 component, correct?

23 A I don't agree. I think the communication
24 component is an example of an interface component.

25 Q If you could scroll down to Figure 5, and we've

1 already discussed Figure 5, but Figure 5 illustrates the
2 live data access server, correct?

3 A That is correct, or an embodiment of live data
4 access server.

5 Q And here it illustrates and distinguishes
6 between, for example, the LDA communication
7 component 520 and the interface component 530, correct?

8 A That's right. In this embodiment, it's --
9 those two are depicted as separate entities.

10 Q And Spivey describes -- sorry, I just opened up
11 something.

12 And Spivey describes the communication
13 component and the interface component as providing
14 distinct functions, correct?

15 A In -- in this embodiment, yes, those two are
16 described as having different capabilities.

17 Q And Spivey specifically teaches that --
18 apologies. I'm going to back up a second.

19 Paragraph 84 that we were just looking at in
20 Spivey, that relates to user interface 900 which is
21 illustrated in Figure 9, correct?

22 A That is correct.

23 Q And Spivey specifically teaches that Figures 8,
24 9 and 10, including user interface 900, are examples of
25 user interfaces provided by the live data access server,

1 correct?

2 A Yes, there -- there is an embodiment that uses
3 8, 9 and 10 as the interface within an LDAS --

4 Q If we --

5 A L-D-A-S.

6 Q If we could turn back to your declaration --

7 A Okay.

8 Q -- again to footnote 3. And again this was at
9 page 92 if you need it.

10 A Yes, I'm there.

11 Q You further cite Paragraph 46 of Spivey as
12 supporting a direct connection; is that right?

13 A Did you say 46 or 36?

14 Q I believe it was 46.

15 A That's right. That is one we talked about.
16 That's not referenced here, but that is one we -- no, it
17 is referenced further on.

18 Q Okay. So in footnote 3 you say -- in this
19 second sentence, when you reference pushing data from
20 topic queues, you cite Paragraph 36, correct?

21 A That is correct. Thank you.

22 Q Okay. And turning back to Spivey Exhibit 1017,
23 let's go to Paragraph 46.

24 A Okay.

25 Q And in this paragraph Spivey explains that the

1 message queue server receives requests to subscribe to
2 topics and may push data from topic queues to
3 subscribers of those topics, correct?

4 A That is correct.

5 Q And this paragraph is describing the Figure 3
6 embodiment in which the message queue server is a single
7 device, correct?

8 A Yes, it begins by saying "message queue
9 server 310" which is the depiction in Figure 3.

10 Q In the Figure 4 embodiment on which you rely,
11 which device is receiving requests to subscribe to
12 topics?

13 A In Figure 4? Okay. So in paragraphs -- let me
14 see, where does it start -- 53 through 58, there are a
15 number of possibilities considered, and again as we've
16 noted before lots of use of the term "may."

17 So it appears that the requests can be
18 considered by either the message queue server device 410
19 or the live server device 450.

20 Q And let's look at Paragraph 54 of Spivey
21 specifically in that range.

22 A Okay.

23 Q And here the very first sentence you'll see
24 that "message queue server device 410," so this is one
25 of the devices illustrated in Figure 4?

1 A Yes.

2 Q "May be substantially similar to message queue
3 server device 310," in Figure 3 including -- and down
4 one line, you'll see the MQS, message queue server,
5 communication component 408; is that right?

6 A That's correct. It says that.

7 Q And specifically it goes on in that sentence to
8 say "which may be analogous," so let me back up.

9 And in that -- if you read that sentence as a
10 whole, it says that the MQS communication component 408
11 may be analogous to, for example, the MQS communication
12 component 308; is that right?

13 A That's correct.

14 Q And jumping over to the previous column in
15 Paragraph 46, and this talks about -- in the second
16 sentence you'll see "MQS communication component 308 may
17 include hardware and/or software that allows MQS
18 device 310 to transmit and receive electronic data, for
19 example live data, with other devices, such as the live
20 data access server."

21 A Okay.

22 Q Is that your understanding of what the
23 communication component in the Figure 4 embodiment is
24 doing?

25 A Yes. In other words, to transmit and receive

1 electronic data, I would agree with that.

2 Q And jumping down to the next sentence in
3 Paragraph 46, it specifically says MQS -- or sorry. "In
4 an embodiment, MQS communication component 308 may also
5 receive requests to subscribe to topics in a topic set."

6 So would it be your understanding that in the
7 Figure 4 embodiment, the analogous MQS communication
8 component 408 would be capable of receiving requests
9 from client devices?

10 A As an example, yes.

11 Q And specifically the MQS communication
12 component 408 would receive requests to subscribe to the
13 topics?

14 A It certainly could, yes.

15 Q And in the Figure 4 embodiment which includes,
16 again, the two devices, which device is pushing data
17 payloads from the topic queues?

18 A There's reference in Paragraph 58 to a
19 particular kind of implementation using RABBITMQ. It
20 says "facilitates topic queues that receive published
21 messages and push the messages to clients that have
22 subscribed to the topic queues."

23 In this particular embodiment -- it goes on to
24 note it's not limited to this implementation, but in
25 this particular embodiment in Figure 4, what's being

1 discussed is a means in which you could have separate
2 topic queues, in other words, distinct topic queues in
3 the two devices.

4 So it's implying you can transmit from either
5 of the two that are shown in the figure.

6 Q And when you're relying on Spivey in
7 combination with other references, in that resulting
8 combination, which device is purportedly pushing out
9 data payloads from the topic queues?

10 MR. BAKER: Objection, form.

11 A So that would be coming from the message queue
12 server.

13 Q Specifically the message queue server device?

14 A Yes.

15 Q I'd like to turn back to Figure 5 of Spivey.

16 A Okay.

17 Q And I know we've discussed this already, but
18 Figure 5 illustrates the live data access and embodiment
19 of the live data access server, correct?

20 A That is correct.

21 Q And Spivey teaches that the live data access
22 server includes both an interface component 530 and a
23 subscription component 540, correct?

24 A That is correct.

25 Q And as we've discussed, the interface component

1 provides user interfaces for allowing users to subscribe
2 to topics, correct?

3 A I'm not sure I heard that correctly. Can you
4 repeat it, please?

5 Q Yeah. And as we previously discussed, the
6 interface component provides user interfaces like those
7 in Figures 8 through 10 for allowing users to subscribe
8 to topics, correct?

9 A Yes, although obviously that would involve the
10 subscription component as well. But the actual user
11 interface would be provided as part of the interface
12 column as described as an embodiment in Spivey.

13 Q And Spivey specifically teaches that the
14 subscription component 540 manages subscriptions to
15 topics for currently connected clients, correct?

16 A That is correct.

17 Q But the subscription component receives
18 selected topics from the interface component and then
19 communicates with the message queue server to subscribe
20 to the topic queues that correspond to those topics,
21 correct?

22 A Yes, in that embodiment, that's correct.

23 Q So this embodiment data payloads are pushed
24 from the topic queues to the live data access server,
25 correct?

1 A That's right, and they are in turn pushed out
2 through the communication component.

3 Q If we could please turn back to -- and
4 apologies.

5 Would you like to take a break? I usually try
6 to take a break every hour or a little bit more.

7 A I think I'm fine for now, but if the court
8 reporter needs a break or you need a break, I'm -- I'm
9 happy to break.

10 Q I'm just fine.

11 MS. STONE: Deanne, is it okay if we can
12 continue? Wonderful.

13 BY MS. STONE:

14 Q Let's turn back to your declaration, and if we
15 could go to Paragraph 110.

16 A Okay.

17 Q And in the last sentence, which starts about
18 midway down through the paragraph, you state that "A
19 person of ordinary skill would have been motivated to
20 integrate Spivey's LDS and MQSD into Ellis' data
21 delivery system to reduce latency to a time period 'at
22 least two orders of magnitude shorter than the
23 conventional time periods of legacy devices,' as taught
24 by Spivey."

25 Did I read that correctly?

1 A Yes.

2 Q And to support this you cite Paragraph 96 to
3 support that, correct?

4 A That is correct.

5 Q All right. Jumping back to Spivey, if we could
6 go to Paragraph 96.

7 A Okay. I'm there.

8 Q And Paragraph 96 describes the logic flow 1100,
9 correct?

10 A Yes.

11 Q And logic flow 1100 represents the operations
12 executed by Spivey's live data access server, correct?

13 A That is correct.

14 Q And if we jump to Paragraph 92 which introduces
15 Figure 11 of logic flow 1100 --

16 A Okay.

17 Q -- Spivey explains -- let's see. Let me try
18 and find it.

19 And I think that the -- it's about midway down
20 through Paragraph 92, Spivey explains that the "live
21 data access server may open or accept a connection to
22 the client such that the client and the live data access
23 server can send and receive information to each other
24 simultaneously"; is that correct?

25 A That's correct.

1 Q Okay. I want to talk a little bit more about
2 Spivey's topic queues.

3 Spivey teaches that its topic queues might be
4 hierarchically related; is that correct?

5 A Yes.

6 Q So can you just briefly explain what that
7 means? What does hierarchically related mean in the
8 term -- in the context of topic queues?

9 A Okay. As I recall there's a figure that
10 captures that -- that notion. Basically it means topics
11 can be general and then have increasing specificity so
12 they nest within each other.

13 Q Nesting is --

14 A If I'm remembering this correctly, it was, for
15 example, NFL and then a particular team, let's use the
16 Dallas Cowboys, and then, you know, we could narrow it
17 down to individual players, for example.

18 Q So where hierarchal topic queues are used, the
19 same data payload may be placed in multiple topic
20 queues, correct?

21 A I don't think there's anything that would
22 prevent that or limit that, so, yes, for example, you
23 could have a discussion of a particular player in three
24 different football queues.

25 Q So an example of this in the NFL setting, if

1 incoming data is labeled for a topic queue that's based
2 on NFL Steelers statistics, a copy might be placed in
3 the more general NFL topic queue as well as the slightly
4 more specific Steelers topic queue and then again the
5 more specific Steelers statistics topic queue, correct?

6 A I don't see why it couldn't be. That's
7 certainly possible. I'm not sure that's disclosed, but
8 it is possible.

9 Q I'm actually at a really good stopping place.
10 Let's take a 10-minute break if that works for you guys,
11 and circle back here around 8:30 -- or sorry, 10:34
12 Eastern Time.

13 A That sounds good.

14 Q Awesome. Thank you.

15 THE WITNESS: Thank you.

16 (Break taken.)

17 BY MS. STONE:

18 Q Dr. Wicker, I'm going to share Exhibit 1017
19 again which is Spivey.

20 A Okay.

21 Q And I want to turn to the Figure 4 embodiment
22 again.

23 And as we've previously discussed, this
24 embodiment of the message queue server implemented as
25 two separate devices, correct?

1 A Yes. I think I put it slightly differently.
2 The message queue is depicted as two subdevices that are
3 interconnected.

4 Q And these two subdevices -- sorry, Spivey
5 teaches that the message queue server device 410 may
6 include a topic set and topic queues, correct?

7 A That is correct. It's depicted as 430.

8 Q And Spivey also teaches that the live data
9 server device 450 may have its own topic set 440 and
10 topic queues 442, correct?

11 A That's right. The patent -- the patent
12 application describes there possibly being a benefit in
13 segregating the topics to provide additional security
14 for one set.

15 Q And the topic queues between -- or strike that.
16 The two devices may have the same topic queues,
17 correct, i.e., topic set 430 may match topic set 440?

18 A That's correct, there may be benefits to that
19 as well.

20 Q And then the two devices may also include other
21 topic queues that are unique to each device, correct?

22 A That is correct.

23 Q Now, it's your opinion that the topic queues on
24 Spivey's message queue device function as sockets,
25 correct?

1 A Yes, that's correct.

2 Q And that Spivey's message queue server device
3 is therefore a socket server?

4 A That's correct as well.

5 Q Is it also your opinion then that Spivey's live
6 data server device 450 is also a socket server?

7 MR. BAKER: Objection to form.

8 A It could be implemented as such. To the extent
9 that both are providing topic queues, then, yes.

10 Q If you could please turn to your declaration,
11 Paragraph 564.

12 A Okay. I'm there.

13 Q And here you opine that "Client devices use
14 topic label text strings to connect and subscribe to the
15 MQSD's topic queues," correct?

16 A That is correct.

17 Q And you state that "First, client devices
18 'request a live data connection' with the MQSD by
19 'selecting or entering the address or connection
20 information to a particular MQSD.'"

21 Did I read that correctly?

22 A Yes, you did.

23 Q And to support this statement, you cite
24 Paragraphs 81 through 82 of Spivey, correct?

25 A That is correct.

1 Q Let's go ahead and turn back to Spivey again.

2 A Okay.

3 Q And Paragraphs 81 through 82.

4 Now, Paragraphs 81 through 82 discuss figure
5 8 -- or the user interface 800, correct?

6 A That is correct.

7 Q And Paragraph 81 at the very bottom of the
8 column, it's in Paragraph 81, explicitly teaches that
9 "the user interface will allow an operator of a client
10 to request a live data connection with a live data
11 access server," correct?

12 A That's correct.

13 Q And then if we go to Paragraph 82, Spivey
14 teaches that "the operator may enter or select an
15 address, for example, an URL for a particular live data
16 access server," correct?

17 A Sorry. I'm not finding exactly where you're
18 reading from, but that's my recollection. Oh, there it
19 is, yes.

20 Q Spivey does not explicitly disclose an operator
21 selecting or entering an URL for the message queue
22 server, correct?

23 A Well, what this -- these two paragraphs
24 disclose is URLs that are associated with particular
25 topics, and in one embodiment, there is an LDAS that

1 provides the interface, but again there are other
2 embodiments that don't use the LDAS.

3 Q And in your opinion that's based on Figure 4?

4 A In part, yes.

5 Q And these paragraphs, 81 through 82, they
6 specifically describe interface 800 which is provided by
7 the live data access server correct?

8 A In one embodiment, that's correct.

9 Q Does Spivey explicitly disclose any embodiment
10 in which the message queue server is described as
11 providing a user interface?

12 A Spivey teaches embodiments that don't use the
13 L-D-A-S, the LDAS, and so it would necessarily fall
14 under the message queue server to have that user
15 interface capability.

16 Q Does Spivey explicitly teach that the message
17 queue server would take on these functions of the live
18 data access server?

19 MR. BAKER: Objection to form.

20 A I think that would have been clear to a person
21 of skill just from reading the written description.

22 Q Does Spivey explicitly teach that the message
23 queue server provides a user interface?

24 MR. BAKER: Objection, asked and answered.

25 A What Spivey teaches is that the message queue

1 can provide direct connectivity, so that would include
2 user interface. It doesn't have the words that would
3 necessarily include the user interface, but I think
4 that's understood.

5 Q Can you point me to where Spivey explicitly
6 teaches that the message queue server can form a direct
7 connection with client devices?

8 A I think we've already seen it.

9 Q So if I -- sorry, please continue.

10 A I'm doing this by memory, but -- there it is.
11 Paragraph 36 "message queue server 120 may receive live
12 data from one or more data live data sources and may
13 process live data quickly to the client devices."

14 Q And --

15 A I consider that a disclosure of direct
16 provision of the data.

17 Q And we've previously discussed this paragraph.
18 Are there any disclosures that we have not
19 specifically discussed in this deposition yet which in
20 your opinion explicitly disclose a direct connection to
21 client devices?

22 A We've gone over the paragraphs that I've cited
23 as having those disclosures. Spivey, of course, speaks
24 for itself, but the three paragraphs that we've
25 discussed are the ones that I relied on.

1 Q Turning back to your declaration, still at
2 Paragraph 564.

3 A Okay.

4 Q You assert that the "client devices can use the
5 topic labels to select 'the topics available from the
6 message queue server device," in brackets, "in a topic
7 selection list," and you rely on Figure 9, correct?

8 A That's correct.

9 Q And again you're aware that Figure 9
10 illustrates a user interface provided by the live data
11 access server, correct?

12 A In one particular embodiment, that's right.

13 Q And that the live data access server includes a
14 subscription component which subscribes to the topic
15 queues on behalf of the client devices?

16 A Yes. That's the way that embodiment is
17 described.

18 Q And if we look at Figure 9 of Spivey, just to
19 be clear, the -- the topic labels illustrated in Figure
20 9, those topic labels alone are not URLs, correct?

21 A The labels would be incomplete if used as URLs,
22 that's right.

23 Q And so the client device would not access a
24 third-party server using nothing more than a topic
25 label, correct?

1 A Well, these particular topic labels are not
2 fully qualified domain names, so you -- you couldn't use
3 them exactly as they are, but there's no reason that you
4 couldn't use a fully qualified domain name as a topic
5 label.

6 And, in fact, I would say that's suggested
7 because -- though what is shown here is -- is not
8 complete, it's certainly getting there.

9 Q I'd like to talk about the event socket
10 limitations. Is event socket a term of art that was
11 previously known in the industry?

12 A No. No, it wasn't. Socket certainly is, but
13 event socket is basically something we get from the
14 patents-in-suit.

15 Q And in your opinion, event socket -- an event
16 socket is simply a socket, correct?

17 A No, it's not just a socket. It's a socket
18 that's associated with a particular event.

19 Q But it is a -- it is simply a socket where
20 information -- in your opinion where information about
21 one sporting event is provided; is that correct?

22 A Yes, that's fair.

23 Q And in your declaration, you provide a
24 definition of socket which we've talked a little bit
25 about. You describe a socket as being a uniquely

1 addressable communication endpoint, correct?

2 A That's correct.

3 (Cell phone ringing.)

4 BY MS. STONE:

5 Q All right. I'd like now to turn to another
6 term of art reference. Let's look at Ellis, which is
7 Exhibit 1016 in these proceedings.

8 (Exhibit 1016 was marked for identification.)

9 A Okay.

10 Q And I've also shared it on the screen.
11 If you could please turn to Figure 1 of Ellis.
12 Go ahead and let me know when you have it up.

13 A Okay. I'm there.

14 Q Wonderful. All right. In Figure 1, Ellis
15 discloses at least two content sources, correct, a
16 content source and a supplemental content source?

17 A That is correct.

18 Q And the content source 130 provides media
19 content such as broadcast programming, digital music,
20 et cetera, correct?

21 A That is how it's described, yes.

22 Q And the supplemental content source provides
23 data feeds that may, for example, included sports
24 scores, tournament brackets, things like that?

25 A More generally metadata, yes.

1 Q Does Ellis actually limit the data -- the data
2 provided by the supplemental content source to metadata?

3 A No. Paragraph 41 discusses supplemental
4 content source 120 as being any suitable content source
5 configured to provide realtime sports scores and game
6 summary information, and there's a number of other
7 examples, but they all fall under, you know, the -- the
8 label of data associated as opposed to the actual event
9 video and audio.

10 Q And Ellis teaches that the supplemental content
11 source contains the architecture necessary to, for
12 example, store and transmit the sports-related data,
13 correct?

14 A Can you repeat the question, please?

15 Q Yeah. Ellis teaches that this supplemental
16 content source contains the architecture necessary to,
17 for example, store and transmit the sports-related data,
18 correct?

19 A That is correct, yes.

20 Q So, for example, Ellis discloses a database 122
21 within the source to store the sports-related
22 information?

23 A For example, that's correct. That's
24 Paragraph 42.

25 Q And Ellis discloses other components within the

1 supplemental content source including a third-party
2 application provider?

3 A That's correct.

4 Q It also may include a data manager, a content
5 aggregator and a content manager; is that correct?

6 A In -- in some embodiments, that's right.

7 Q And as another example, in some embodiments the
8 supplemental content source may further include an
9 intermediate content provider, correct?

10 A Yes, that's correct as well.

11 Q And in Figure 1, Ellis teaches that these
12 content sources communicate content to the user
13 equipment over communication paths 150 and 152, correct?

14 A That is correct.

15 Q And Ellis discloses exemplary communication
16 paths that may be -- that may be used such as satellite
17 path, a fiberoptic path, a cable path, among others,
18 correct?

19 A That's correct.

20 Q Now, Ellis discloses user equipment that relies
21 on tuners to tune into and display a specific content
22 source, correct?

23 A That's not shown in Figure 1. I believe that's
24 just a particular embodiment, but there is reference to
25 various kinds of tuners, for example, in Paragraph 5.

1 Q Does Ellis disclose alternative user equipments
2 that are using something other than tuners to tune into
3 the content source?

4 A There's reference to IPTV in which the notion
5 of tuning is pretty broad. Content delivered on a
6 particular network address on which an IP socket is
7 currently joined. That's Paragraph 74, so that is not
8 the traditional sense of a tuner.

9 Q Internet based TV did not become mainstream
10 until the 2000- -- 2010s, correct?

11 MR. BAKER: Objection, form.

12 A The term "Internet TV" is a little bit
13 ambiguous. People of course have been watching videos
14 over the Internet since the '90s. The provision of
15 commercial Internet television where you literally tune
16 into or stream a particular program, that is more into
17 the 2000s.

18 Q And specifically Ellis discloses analog or
19 digital tuners, correct?

20 A It does. That's back in Paragraph 5, I think
21 it was. Yes.

22 Q Do tuners have to request a connection with a
23 server in order to receive content?

24 A No. Not --

25 Q I have a few questions that are more general

1 outside the context of Ellis that are just based on your
2 experience.

3 Do more servers always equal more latency?

4 MR. BAKER: Objection to form.

5 A It would depend on how the servers are oriented
6 in the architecture. So, for example, if all the
7 servers are at the same position in the architecture and
8 there's simply more of them, that might reduce service
9 delays which would generally reduce latency.

10 And also just for clarification, latency
11 between the request and reception of the video, or are
12 you talking about latency in another sense?

13 Q I am talking more client-server interactions
14 and communication.

15 A Okay. So anything that speeds up that
16 interaction will, of course, reduce latency, and having
17 more servers available, again at the same level to
18 provide service, would reduce latency.

19 Q All right. I'd like to take a look at your
20 proposed combination of Ellis and Spivey's teachings.

21 A Okay.

22 Q If we could please turn to your declaration,
23 Exhibit 1001 at Paragraph 11 -- I'm sorry,
24 Paragraph 111.

25 A Yeah, okay. Okay. I'm there.

1 Q And this image in your declaration on page 53,
2 this is a composite image you created which includes
3 elements of both Ellis and Spivey, correct?

4 A That is correct. It's got individual pieces
5 from those applications or patents, but I'm the one who
6 arranged it.

7 Q And this illustration only shows one content
8 source, but it's your opinion that a person of ordinary
9 skill would include multiple content sources, correct?

10 A Yes. I was just trying to keep the -- the
11 diagram reasonably simple.

12 Q And similarly this illustration only shows one
13 user equipment, but it is your opinion that a person of
14 ordinary skill would scale system to many user's
15 equipment, correct?

16 A Yes, that's correct.

17 Q And so this illustration includes one
18 communication path, 150, between a single content source
19 and a user equipment.

20 When this system is scaled as you suggest,
21 would there be a connection between every content source
22 and every piece of user equipment or would there be some
23 kind of shared connection?

24 A Well, on the Internet, since we're using
25 digital packets, all resources are shared in a sense.

1 So, for example, when I go from one router to another,
2 there could be packets from many, many different
3 connections -- TCP connections. Let's be specific.

4 So there would be multiple connections between
5 content sources and user equipment, but there could be
6 shared resources.

7 Q I guess in your proposed combination of what --
8 what is the proposal? Is it multiple connections, kind
9 of one between each content source and user equipment?

10 A There would be a single connection in the sense
11 that at least at the transport layer, we would use
12 something like TCP which requires a connection to be
13 established before communication can take place.

14 Q And so each user equipment wanting to access
15 each content source would need to establish that
16 connection with the content source, correct?

17 A That is correct.

18 Q And just to be clear about the annotations on
19 this figure, Ellis alone only discloses a single
20 connection 152, correct?

21 A The figure only has a single connection, but it
22 certainly describes multiple users obtaining information
23 from multiple queues.

24 Q And, yes. I just want to be sure about the
25 image. So you've added the annotation 152-N, correct?

1 A That's right, the idea being there are some N
2 connections, 1 through N.

3 Q And would that be -- that wouldn't be multiple
4 connections to one user equipment device; that's
5 representing multiple user equipments, correct?

6 A It could be one user, but I was thinking in
7 terms of multiple pieces of user equipment.

8 Q Okay. So your illustration and your annotation
9 is representing the multiple connections to multiple
10 user equipments; is that right?

11 A It could be multiple connections to one user or
12 to several users.

13 Q And in this image, you've replaced Ellis'
14 supplemental content source with the live data server
15 device and the message queue server device disclosed in
16 Spivey, correct?

17 A That is correct.

18 Q And is it your opinion that a person of
19 ordinary skill would upgrade Ellis' supplemental content
20 delivery system while maintaining Ellis' video delivery
21 system just as it is?

22 A They certainly could, yes.

23 Q And more than just could; it's your position
24 that a person of ordinary skill would be motivated to,
25 correct?

1 A Yes, that's correct.

2 Q And what specifically are you referring to when
3 you say the video content delivery system?

4 A That would be the system by which video
5 content -- video and audio are delivered to the user
6 equipment.

7 Q And so in this illustration, what is video
8 content delivery system referring to?

9 A In other words, that would be the path by which
10 video is delivered to the user equipment.

11 Q And so what is -- what -- what in this
12 illustration represents that video delivery system?

13 A That would be the -- the video would be along
14 the line 150.

15 Q Between the content source and user equipment?

16 A That's correct.

17 Q And you're aware that this communication path
18 150 also delivers data generally, not just video,
19 correct?

20 A I'm not sure what you're referring to.

21 Q Let's go ahead and take a look at Ellis which
22 is Exhibit 1016.

23 A Okay. I am there.

24 Q And if you could turn to Paragraph 46.

25 A Okay. I'm there.

1 Q And here in the first sentence it says "User
2 equipment 102 may receive interactive application data
3 from one or more instances of data sources 140."

4 Did I read that correctly?

5 A Yes, you did.

6 Q And it goes on further down in the paragraph,
7 the next sentence, to say "Data sources 140 may provide
8 data for a particular type of content or for a
9 particular application running on user equipment 102";
10 is that right?

11 A That's right.

12 Q And so in the context of Figure 1, that data
13 communication pathway 150 also transmits data generally,
14 not just video, correct?

15 A In Paragraph 46 of -- of Ellis that's
16 definitely considered, yes.

17 Q So is it your opinion that in this combination,
18 you've proposed a person of ordinary skill would be
19 motivated to upgrade only some of the data delivery
20 mechanisms in Ellis?

21 A A person would be motivated to upgrade as
22 needed for their particular application, so it could
23 just be one path. It could be multiple paths.

24 Q And in this combination you've proposed, you
25 have proposed upgrading only the delivery system

1 associated with the supplemental content source,
2 correct?

3 A That's what I show as making use of the
4 capabilities of Spivey. That's what I discuss is what a
5 person of skill would have been motivated to do.

6 Q If you could please turn back to your
7 declaration, Exhibit 1001.

8 A Okay.

9 Q And Paragraph 114.

10 A Okay. I'm there.

11 Q And in the very last sentence of that
12 paragraph, you state, "It would have been obvious to
13 substitute any of Ellis' elements with any combination
14 of Spivey's LDS, MQSD, and/or Live Data Sources, which
15 are similarly involved in transporting live event data
16 to users and may be configured in any manner."

17 Did I read that correctly?

18 A Yes, I did.

19 Q Are you suggesting reconfiguring any of
20 Spivey's devices when implementing them in Ellis'
21 system?

22 A If by reconfiguring, you mean, you know,
23 designing them so that the connections work together,
24 for example, choosing a communication protocol that
25 would be common to the Spivey and Ellis devices, then,

1 yes.

2 I'm not talking about making major changes to
3 any of the Spivey devices. In other words, the
4 functionality remains as described in Spivey.

5 Q And specifically what minor reconfigurations
6 would be necessary to implement Spivey in Ellis' system?

7 A Okay. So, for example, you see that the
8 content source from Ellis, the media sources, are
9 communicating with control server of Spivey over 154.
10 You would simply need to make sure that the appropriate
11 addresses are known and that the -- there is a common
12 communication protocol that is understood.

13 Q And what would that common communication
14 protocol be?

15 A It would depend on the implementation, but it
16 would be basic network engineering to make sure that --
17 excuse me -- to make sure that the control server could
18 communicate with the content source.

19 Q So along all of these communication paths
20 illustrated in your figure in Paragraph 118, so a person
21 of ordinary skill may need to reconfigure the
22 communication protocol used along -- along those
23 connection paths; is that right?

24 A I'm sorry, I think you said 118. Did you mean
25 111?

1 Q The -- the figure of the combined system that
2 you've proposed?

3 A Okay. Just -- it's part of Paragraph 111.
4 Okay.

5 Q Oh, sorry, it's also in 118.

6 A Oh, you're right, with a slight difference.

7 I'm sorry, I thought we were focused on 111, but . . .

8 Q Apologies. We are focused on Paragraph 111. I
9 just got lost in this declaration a little bit.

10 So let's turn to Paragraph 111.

11 A It doesn't change any of my answers.

12 Q Okay. And in this figure -- so what you were
13 saying is that a person of ordinary skill may need to
14 reconfigure the communication protocol along the
15 connection paths in the system?

16 A I don't -- wouldn't put it quite like that.
17 It's not that complicated. It's a matter of making sure
18 there's a shared understanding of what the protocol is
19 and that the addresses are known.

20 So, for example, if the content source is
21 sending something to the live data server device, it
22 would need to know what the appropriate IP address,
23 port number, et cetera, are.

24 Q And what would -- what would making that -- I
25 know you don't want to call it a change, but that making

1 sure that you've just referenced, what would that
2 involve specifically?

3 A Well, it would be simple network engineering;
4 in other words, making sure that the two boxes can
5 communicate with each other.

6 Q And so would that involve, for example, the
7 programming that sets up the content source and the
8 programming that sets up the live data server device?

9 A Only to a very limited extent, so when you're
10 sending content to the live data server device, you
11 simply have to make sure that there is a protocol in
12 place and designated port numbers and an understanding
13 of how the information is being formatted.

14 Q And the content source would need to be
15 informed of that protocol as well, correct?

16 A That's right, both the transmitter and the
17 receiver would have to know.

18 Q In this proposed system in Paragraph 111, you
19 now have data that's being delivered, in your word,
20 orders of magnitude faster, and you have video delivery
21 that is unchanged.

22 Would a person of ordinary skill need to
23 account for any discrepancies between the latency of
24 each content stream?

25 A That would depend on the specific application.

1 Q Can you give me an example of when a person of
2 ordinary skill would need to account for those
3 differences?

4 A I'm trying to think of an example. So
5 situations in which the data is being presented and
6 serving an integral role with the audio/video content;
7 in other words, where you would want them synchronized,
8 otherwise, it would -- you know, it would not make as
9 much sense.

10 There are also situations, for example, where
11 you're providing scores.

12 And the fact you're watching a football game
13 and being presented the scores of other games, they
14 would -- variations in delay would not be as important
15 there.

16 Q So I'm just trying to think of an example. The
17 first example you gave where the data might be
18 integrally -- integrally related with the video, would
19 this include, for example, there's an injury in the
20 game, and there's information on the injury provided via
21 the data?

22 A That example sounds familiar. I would say that
23 that's a good example, yes.

24 Q Okay. And do either Ellis or Spivey explicitly
25 address -- let me strike that.

1 When the data is integrally related with the
2 video, what changes would need to be made in order to
3 account for potential discrepancies in the latency of
4 each content stream?

5 A Well, as we've seen in the other prior art,
6 there are mechanisms by which you can synchronize the
7 content and the -- the data, so, you know, you would --
8 you could pursue one of those avenues for
9 synchronization or simply drive down the delay for both
10 the content and the data so that they're arriving at
11 roughly the same time.

12 Q And how would you drive down that delay?

13 A One of the things that's happened in the last
14 few decades of Internet engineering is the -- the
15 various switches. The routers have gotten much faster,
16 and so that in conjunction with variations on the
17 Internet protocol would allow you to ensure that things
18 follow the same path, has been able to, for example,
19 allow voiceover IP, which has very little -- very little
20 delay, at least that you can perceive.

21 Q So you would propose incorporating, for
22 example, one of these types of routers to modify the
23 delay as needed?

24 A I think I'm saying something more general.
25 What you could do is use variations on the Internet

1 protocol to make sure that the data is following similar
2 paths, and so the relative delay is quite small.

3 Q Maybe I'm misunderstanding. Are you suggesting
4 that both content streams would follow the same
5 communication path?

6 A The content and the data streams could follow
7 the same communication path perhaps. That would be one
8 approach. I thought we were just talking generally
9 about ways we can reduce relative delay between the
10 content and the data.

11 Q I -- I think that's right, but I would like to
12 know specifically in this system where the data is
13 integrally related to the video, how would you account
14 for the discrepancies in the latency between the two
15 content streams?

16 A I would account for the discrepancy in terms of
17 reducing that discrepancy by, for example, picking
18 variations on the Internet protocol that allow for
19 following paths, for example. It would depend on the
20 application.

21 Q And so in this proposed application that you've
22 illustrated, are you saying that you would make the --
23 let me strike that.

24 I'm trying to understand the -- the method
25 that -- that you're describing.

1 So when you say that you would re-route or
2 choose particular communication paths, are you saying
3 that you would perhaps send both content streams over
4 the same communication path literally?

5 A If that option -- and by the way, when you say
6 "both content," you mean the content, video and audio,
7 as well as the data?

8 Q Correct.

9 A If that's -- if that's an option, yes. I mean,
10 that would be one-way of assuring the relative delay --
11 when I say relative delay, the difference in latency
12 between the two streams could be driven down
13 substantially.

14 Q And neither Ellis or Spivey explicitly address
15 this method, correct, of dragging down latency to match
16 latency of another communication path; is that correct?

17 A I think that's correct. I don't recall Ellis
18 or Spivey discussing it. It's simply something that
19 would be in the toolkit of the networking engineer.

20 Q And turning back to this illustration in
21 Paragraph 111 and your general discussion of this
22 proposed combination, how does the user equipment
23 subscribe to the topic queues of the message queue
24 server device?

25 A That would be by, for example, using the user

1 interface that's disclosed in Spivey.

2 Q And you'll recall we talked about Spivey's
3 subscription component. So you're aware Spivey's
4 teachings rely on a subscription component, which
5 subscribes to topic queues on behalf of users, correct?

6 A That's correct, one embodiment.

7 Q Is that true of your proposed combination as
8 well, would a subscription component subscribe to -- be
9 used to subscribe to the topic queues?

10 A More generally the user interface, but the
11 subscription -- the subscription component could be
12 used, yes.

13 Q And I understand that in the computer world,
14 everything could be possible. I'm trying to understand
15 in your proposed combination, are you -- would a person
16 of ordinary skill be motivated to use the subscription
17 component to subscribe to topic queues?

18 A Yes.

19 Q And in your -- in your proposed combination,
20 where would a person of ordinary skill implement such a
21 subscription component?

22 A That could be done in either place, but, for
23 example, the message queue server device could have the
24 subscription component.

25 Q I'd like to turn to discuss Herzog. Let's pull

1 this exhibit down. And I'm now sharing Exhibit 1015
2 which is Herzog in these proceedings.

3 A Okay.

4 Q And if you could please turn to Figure 4.

5 A Okay. I am there.

6 Q Now, Figure 4 illustrates the overall
7 architecture of Herzog system, correct?

8 A That's correct.

9 Q And at a high level we have the content
10 provider 42 on the left-hand side, the solution
11 integrator 44 in the middle, and a wireless network 43
12 on the right-hand side, correct?

13 A That is correct.

14 Q Now, within the content provider 42, we see
15 four different sources, correct?

16 A Yes.

17 Q And Herzog teaches that these correspond to
18 four different sources at the same live event, correct?

19 A If my memory serves, Herzog teaches both
20 multiple sources from one event, different perspectives,
21 for example, different cameras, and I think it also
22 suggests different events entirely.

23 Q Could you point me to where it might suggest
24 multiple events entirely?

25 A Okay. Yes. Reference on paragraph 83 to other

1 events; in other words, it says "This synchronization
2 technique can be used for any sporting event that has a
3 unique video and metadata source that do not follow the
4 same path of transmission."

5 So it is allowing for the fact that there are
6 different types of sporting events.

7 Q Sorry. Can you point me to where -- is it --
8 where in the paragraph 83 it is that you're reading
9 from?

10 A The very last sentence.

11 Q All right. Thank you.

12 But this sentence says it can be used for any
13 sporting event. It does not say it could be used for
14 multiple sporting events, correct?

15 A It definitely does not say multiple sporting
16 events, but it's allowing for the fact that there are
17 different events; in other words, for any sporting
18 event, it's telling me that they're contemplating
19 multiple sporting events.

20 Q But, in fact, the illustration in Herzog, the
21 four live streams there represent live streams from a
22 single broadcaster, correct?

23 A It is described that way in several
24 embodiments. For example, you've got a race, and there
25 is a separate feed from each of four different cars, so

1 it's the same event in the sense that it's a single
2 race, but different feeds because they're coming from
3 different places.

4 I'm sorry.

5 Q No, I apologize.

6 And there's no explicit example in Herzog in
7 the disclosure of the figures that demonstrates how this
8 would be implemented for multiple events, correct?

9 A I think a person of skill would understand it,
10 but it does not provide a detailed embodiment. I
11 certainly agree with that.

12 Q And what changes, if any, would a person of
13 ordinary skill have needed to have made to scale this
14 system to multiple events?

15 A Let's go back to the figure we were discussing
16 originally, which is Figure 4. So to scale this to
17 multiple events, you really wouldn't have to change very
18 much; in other words, you've got four sources. There's
19 no reason why two sources couldn't be for a football
20 game and the other two for a baseball game or two
21 different football games, I guess. That's more likely.

22 So this patent teaches, I mentioned it before,
23 four different feeds from four different race cars.
24 There's no reason why those four different race cars
25 can't be in separate races.

1 Q The content provider 42, when you're scaling
2 this to multiple systems, would you, in fact, have
3 multiple content providers?

4 A You could. You wouldn't have to. I mean, we
5 certainly know of sports networks that are covering
6 multiple sports simultaneously, but I don't see any
7 reason given the connectivity shown -- we've got a
8 satellite transponder and HTTPS. There's no reason you
9 couldn't have separate content providers.

10 Q What would a person of ordinary skill in the
11 art -- let me strike that.

12 You suggest that a person of ordinary skill in
13 the art, it would have been well within the skill of a
14 person of ordinary skill in the art to scale this to
15 multiple systems.

16 What specifically would have been within their
17 skill, what -- what would they have done to scale this
18 to multiple systems?

19 A So to have multiple content providers, the
20 person of skill would recognize that he or she could
21 establish multiple HTTPS connections and also use
22 multiple channels through a transponder, a satellite
23 transponder.

24 Q And would a person of ordinary skill still
25 maintain just one of the solution integrators, 44?

1 A They could. I don't think they would have to,
2 but they certainly could because what we see here with
3 the integrator is four video and eight audio streams
4 being combined.

5 Q And is there anywhere in your declaration that
6 you discuss in more detail how a person of ordinary
7 skill would scale this to multiple events?

8 A I don't remember discuss- -- my report
9 obviously speaks for itself. It contains all my
10 opinions formed in this case. But I don't recall
11 discussing that issue in any detail.

12 Q Now, looking back at Figure 4, Herzog teaches
13 that the origin server 54 is responsible for
14 transmitting both the video/audio stream and the
15 metadata to the content delivery network, correct?

16 A I'm sorry, I missed the front end of your
17 question, would you mind repeating it, please?

18 Q No problem.

19 If we look at Figure 4 and the solutions
20 integrator in the middle, we see origin server 54.
21 Herzog teaches that this origin server is responsible
22 for transmitting both the video/audio stream and the
23 metadata to the content delivery network, correct?

24 A That is correct.

25 Q And if you could please turn to figure 6.

1 A Okay.

2 Q And in figure 6 we -- just to orient ourselves,
3 we see the solutions integrator along with the origin
4 server over on the left, correct?

5 A Correct.

6 Q And on the right we have the client application
7 program 85 which resides on, for example, a video player
8 86.

9 A Okay. Correct.

10 Q And Herzog teaches that the latency or the
11 transaction time of the metadata between the client and
12 server is less than two seconds, correct?

13 A Let's see. Can you say that again, please?

14 Q Yeah. So you'll see in this figure that
15 there's latencies listed --

16 A Yes.

17 Q -- at each step.

18 Herzog teaches that the latency or transaction
19 time of the metadata specifically between the client and
20 the server is less than two seconds, correct?

21 A I think it says less than 1 second, but that's
22 certainly less than two seconds, yes.

23 Q Yep. And just to make it more clear for you,
24 there's latency at both phases, so there is a latency
25 coming into the solutions integrator, and then there's a

1 latency coming into the client application; is that
2 correct?

3 A Yes, you're absolutely right then. If you're
4 combining those, the overall latency would be less than
5 two seconds.

6 Q And where was the latency of the video stream
7 up above is approximately 63 seconds, correct?

8 A Let's see. I'm adding 32 to 24 and getting 56.

9 Q I am as well, which is interesting because the
10 specification -- let me direct you to Paragraph 74.

11 A Okay. I think we're, you know, just --

12 Q Yeah.

13 A -- it's a matter of simple math, so it's fine.

14 Q In Paragraph 74, Her- -- let's see. Herzog
15 teaches that the latency of the video between when the
16 user requests a video and when the video is shown on the
17 display is approximately 63 seconds."

18 So there may be a discrepancy there, but
19 somewhere around the realm of 56 to 63 seconds, the
20 latency of the video is longer than the latency of the
21 metadata; is that correct?

22 A That is certainly true.

23 Q And so Herzog teaches a method in which the
24 video is used as a master clock for when the metadata
25 arrives at the application, correct?

1 A Yes, that's one way to look at it. Basically
2 what's happening is that the metadata is being delayed
3 so that the timestamps line up.

4 Q And so even if one were to decrease the latency
5 of the metadata between the client and server further,
6 you know, reducing it down close to zero seconds, it
7 would still arrive at the client at the same time
8 because it's been synchronized to the video stream,
9 correct?

10 A That is correct.

11 Q And if you could turn to Paragraph 86 of your
12 declaration.

13 A Okay. I'm there.

14 Q Apologies. My exhibit is frozen a little bit,
15 so I'm just waiting for it to respond. There we go.

16 Okay. And here in this paragraph, you're
17 describing Herzog's transmission of the video and the
18 timestamped metadata to the client, correct?

19 A That's correct.

20 Q And in doing this, Herzog teaches a method
21 where the timestamps of the metadata feed are
22 synchronize- -- sorry, Herzog's method for synchronizing
23 timestamps -- let me strike that.

24 Herzog's method for timestamping the metadata
25 appropriately occurs during the latency period of the

1 audio/video feed; is that correct?

2 A Yes, I would say that's correct. In this
3 particular implementation, you're applying the
4 timestamps during this delayed period, yes.

5 Q And in your declaration, we can jump to
6 Paragraph 145.

7 A Okay. I'm there.

8 Q And in your declaration you suggest replacing
9 Herzog's origin server 54 with Spivey's message queue
10 server device; is that right?

11 A That's correct.

12 Q And you opine that, quote, "Based on your
13 experience in the field, the combined system described
14 would maintain Herzog's video content delivery system
15 and upgrade the data delivery system to reduce latency."

16 Is that right?

17 A That's correct.

18 Q So just to make sure I am following correctly
19 and understand your proposed combination, Spivey's
20 message queue server device would now operate as the
21 origin server and handle the transmission of both the
22 video/audio stream and the metadata streams, correct?

23 A That's correct.

24 Q And are you suggesting that the video streams
25 would be handled using topic queues in Spivey's message

1 queue server device?

2 A Yes, that's correct.

3 Q And if the metadata is being slaved to the
4 video as the master clock, what is the point in speeding
5 up the metadata's transmission? Won't it still have to
6 wait for the video?

7 A By speeding things up, there would be less
8 relative delay to begin with. And so the overall
9 latency in terms of the provision of the content to the
10 server and then its delivery would be reduced.

11 Q So are you proposing that not only the metadata
12 feed would be sped up, you would -- this proposal would
13 also speed up the video delivery?

14 A I would say that the biggest beneficiary would
15 be the video data -- the video content, excuse me, video
16 and audio.

17 Q And how are you reducing latency in the
18 video/audio feed?

19 A That's through the improved processing of
20 Spivey.

21 Q Sending it via topic queues?

22 A Exactly.

23 Q Is there any need to reconfigure the message
24 queue server device of Spivey when you're using it to
25 send video in Herzog's system?

1 A The connectivity issues that we discussed for
2 the previous combination would be present here, but
3 beyond that, no, it would be some basic computer
4 engineering to interconnect the devices.

5 Q And would you need to reconfigure any of
6 Herzog's devices when having the -- let me strike that.

7 If the message queue server is delivering both
8 video and metadata via its topic queues, would you need
9 to make my changes to Herzog's client side devices to
10 receive those feeds?

11 A The client --

12 MS. STONE: Objection.

13 THE WITNESS: Oh, sorry.

14 MR. BAKER: No, just objection to form.

15 You can answer.

16 A The client devices would benefit if they could
17 exploit the subscription technology, in other words, be
18 able to use the user the interface to create a
19 subscription that would allow for pushing of the topics
20 directly to the device.

21 Q And that's what you're proposing, correct, is
22 allowing the message queue server to push data payloads
23 from the topic queues?

24 A Yes, that's correct.

25 Q Turning back to Figure 4, you'll see that in

1 the solutions integrator 44, there's an application
2 server 53.

3 A Yes.

4 Q In your proposed combination, would a person of
5 ordinary skill maintain the application server 53 that
6 is part of the solutions integrator?

7 A So in Paragraph 51, the application server is
8 described as providing the functionality of receiving
9 requests and sending back to the mobile device the
10 corresponding metadata with the time code signature.

11 The origin server then transmits both the
12 video/audio and the metadata to the content delivery
13 network.

14 I don't think you would have to retain that
15 functionality in an application server if you've got the
16 subscription capability, but it might be an option. I
17 don't see why you would necessarily rule it out.

18 Q In your proposed combination of Herzog and
19 Spivey, would a person of ordinary skill have been
20 motivated to maintain the application server or do away
21 with it?

22 A I don't think it would be necessary anymore, so
23 I would say do away with it.

24 Q And we've been going about an hour and 15. Do
25 you want to take another break?

1 A That would be fine.

2 Q Okay.

3 A With regard to lunch, we could --

4 Q It's -- oh, it is 11:45.

5 A We could plan lunch and then get back together
6 for say a half an hour while we wait for lunch to
7 arrive.

8 Q To be honest, I don't think our deposition is
9 going to go very long today.

10 MS. STONE: Todd, I will reach out and take
11 tomorrow off the calendar.

12 MR. BAKER: Okay.

13 MS. STONE: So it's up to you. I don't have a
14 lot left, so we could either break for lunch now,
15 and I can complete this once -- once we return, or
16 we can take a short break, and we could break for a
17 late lunch after we finish.

18 MR. BAKER: I'll leave it up to Dr. Wicker and
19 the court reporter.

20 THE WITNESS: I'm okay either way. Let's ask
21 the court reporter. She might be hungry.

22 THE STENOGRAPHER: I'm fine either way.

23 MS. STONE: Okay. Let's take a quick -- let's
24 take a 15-minute break, and I will wrap up for
25 everyone to get away for a little bit later lunch.

1 MR. BAKER: Works. Thank you.

2 MS. STONE: Yeah, talk soon.

3 (Break taken.)

4 BY MS. STONE:

5 Q All right, Dr. Wicker. Dr. Wicker, I'd like
6 now to turn to your combination of Ellis, Spivey and
7 Herzog. So let's take a look at your declaration and
8 now going to the illustration at Paragraph 118.

9 A Okay. Okay. I am there.

10 Q And again just to confirm, this image is a
11 composite image that you created which includes elements
12 of all three references, correct?

13 A That is correct.

14 Q And so this image as shown here is not -- does
15 not appear in the prior art?

16 A Not all in the same place, no.

17 Q And in this proposed combination, you have
18 replaced Ellis' supplemental content source with three
19 servers, correct?

20 A Yes.

21 Q And would a person of ordinary skill be
22 concerned that the addition of yet another server would
23 increase latency and complexity of the solution?

24 A No, not -- not in this instance because as
25 we've seen, there are ways of combining these devices

1 through simple engineering design to make them faster,
2 and furthermore, this is the path taken by the -- the
3 data, so it's the fastest path only.

4 Q And in Paragraph 118, let's see, I believe this
5 is below the illustration, so the top of page 58.

6 A Okay.

7 Q You opine that "placing Herzog's application
8 server in the location shown above would enable it to
9 facilitate communication by 'receiving the request' from
10 the client device and sending back synchronized,
11 timestamped metadata via the message queue server
12 device, in order to solve latency issues"; is that
13 correct?

14 A That's correct.

15 Q And just to make sure I understand your
16 proposed combination, is the metadata being provided to
17 the application server by the message queue server
18 device?

19 A The metadata would still be coming along the
20 lines 152-1 through N. The application server is
21 handling the request.

22 Q All right. So the application server -- and
23 apologies, strike that.

24 What is the client request that you're
25 referring to?

1 A Okay. So the request would be, for example,
2 the subscription to a particular queue.

3 Q So in your proposed combination, the
4 application server is receiving the request to subscribe
5 to a topic queue?

6 A For example, yes. That would be one use of it.
7 That would be one way that the request would be funneled
8 through to the message queue server device.

9 Q And so the user is not making that request of
10 the message queue server device directly?

11 A Well, the application server is serving as an
12 intermediary in this case, but the message queue server
13 device is receiving the request.

14 Q And then does the message queue server device
15 provide the metadata to the application server?

16 A No, it could be provided directly along 152-1
17 through N to the user equipment.

18 Q Does that mean that the message queue server
19 device is handling the timestamping and synchronization
20 of the metadata?

21 A Would you repeat the question, please?

22 Q Yeah.

23 MS. STONE: Can we have it read back, please,
24 Deanne?

25 (Question was read.)

1 A That's actually being done by the application
2 server, so as I note in Paragraph 118, the application
3 server is receiving the request from the client device
4 and sending back synchronized timestamped metadata via
5 the MQSD in order to solve the issues.

6 Q How does the application server obtain the
7 metadata in order to do the timestamping?

8 A It would be provided by the message queue
9 server device.

10 Q And so the message queue server device provides
11 the metadata to the application server to be
12 timestamped, correct?

13 A Among other things, yes.

14 Q And does the application server then provide
15 that metadata to the user equipment?

16 A The application server provides it to user
17 equipment by way of the message queue server.

18 Q So the application server sends -- in your
19 proposed combination the application server would send
20 the timestamped metadata back to the message queue
21 server device?

22 A That is one implementation, yes.

23 Q Is that what you're proposing in your proposed
24 combination?

25 A That's what I describe in Paragraph 118.

1 Q And in your opinion, is Herzog's application
2 server, as disclosed in Herzog, capable of performing
3 the timestamping and synchronization of the metadata?

4 A Yes.

5 Q If you could please turn to -- we're going to
6 go look at Herzog, Exhibit 1015.

7 A Okay. And which -- where in Herzog?

8 Q Paragraph 75 is the particular paragraph we're
9 looking at, although it's within the context of several
10 paragraphs.

11 A I am there.

12 Q Herzog teaches that the application server is
13 for the timestamped metadata, correct?

14 A That's correct.

15 Q And the application server merely forwards this
16 request to the ERP server, which is responsible for
17 transmitting the timestamped metadata to the origin
18 server, correct?

19 A That's correct.

20 Q And so the application server itself is not
21 responsible for timestamping or transmitting the
22 metadata, correct?

23 A It doesn't have to be. We can do it in the
24 application server or it could be done in the message
25 queue server.

1 Q And so you're suggesting implementing the
2 functionality for timestamping within the message queue
3 server device or within the application server?

4 A So in my specific embodiment that I'm
5 describing, I'm proposing that it be done in the
6 application server; in other words, the application
7 server is taking the content, synchronizing it and
8 providing it back to the message queue server device.

9 Q And how would you need to -- in the bigger
10 picture of this proposed system, how would you need to
11 modify the video and data delivery systems to
12 accommodate this sending of synchronized timestamped
13 metadata?

14 A So the content source would have to be
15 providing timestamped audio and visual information in
16 order for there to be synchronization with the metadata,
17 which has been timestamped as well.

18 Q And where is the timestamped metadata received
19 from?

20 A The timestamped metadata is received from the
21 message queue server device.

22 Q Sorry. Where is the source of the timestamped
23 metadata -- or strike that. I apologize. That might
24 have been confusing.

25 What is the source of the metadata?

1 A Okay. So the media sources are on the bottom
2 left where it says content source. This is being
3 provided to the live data server device which in turns
4 passes it in the message queue server device.

5 Q So the source of the metadata is the same
6 source as the audio/video feed?

7 A They're structurally different as we've
8 discussed, but they are coming from the same event.

9 Q Would the video delivery system in this figure,
10 which we've talked about as being the communication
11 path 150, would the video delivery system need to be
12 modified to allow for this synchronization of
13 timestamped metadata with the video feed?

14 A Only to the extent that it requires some sort
15 of timestamping in order to align it with the metadata.

16 Q And in Herzog's system the timestamped video
17 and metadata are synchronized and assembled by the
18 user's mobile device, correct?

19 A Yes, that's correct.

20 Q For example, if we look at Herzog, again
21 Exhibit 1015, and if we turn to Paragraph 58, and
22 specifically where it carries over on to the second
23 column?

24 (Exhibit 1015 was marked for identification.)

25 A Yeah.

1 Q It says the metadata -- the -- let me view
2 again.

3 Paragraph 58 says "the metadata (the slave) is
4 now synchronized to the video/audio data (the master).
5 Both types of data are assembled in the mobile device 45
6 via the client application software that resides within
7 the mobile device."

8 So in the combination you propose, there is no
9 such application on Ellis' user equipment, correct?

10 A Well, it's certainly not shown, but it would be
11 a simple matter to -- to implement something like that
12 if you wanted to have it on your equipment.

13 Q So in your proposed combination of a person
14 of -- is it your opinion that a person of ordinary skill
15 would implement a similar application within Ellis' user
16 equipment to synchronize the timestamped feeds?

17 A Yes, that -- that would certainly be one way of
18 doing it.

19 Q All right. Dr. Wicker, I have no further
20 questions.

21 A Well, thank you very much.

22 MR. BAKER: Okay. Mikaela, let's -- I'm going
23 to need 45 minutes or an hour. Let say 45 minutes.
24 Come back at 1:00. We'll have a chance to eat, and
25 we'll let you know if we have redirect at that time.

1 MS. STONE: That sounds good. So at one
2 o'clock Eastern Time reconvene?

3 MR. BAKER: Yeah, twelve o'clock your time.
4 Wait. You're mountain, so yeah, ten o'clock your
5 time.

6 MS. STONE: Eleven o'clock.

7 MR. BAKER: You're right.

8 MS. STONE: No worries. I will be back here in
9 45 minutes.

10 MR. BAKER: Sounds good.

11 MS. STONE: Thanks.

12 (Break taken.)

13 MR. BAKER: All right. We do have a few
14 questions on redirect for Dr. Wicker.

15 CROSS EXAMINATION

16 BY MR. BAKER:

17 Q Dr. Wicker, with reference to your declaration,
18 did you propose a construction for the term broadcaster
19 as part of your opinion?

20 A Broadcaster.

21 Q Yes.

22 A No, no, I didn't.

23 Q Earlier during cross examination, Ms. Stone
24 inquired whether column 7, lines 44 through 47 of the
25 subject patent, whether that provided a definition of

1 broadcaster. Do you recall that testimony?

2 A Yes, I do.

3 Q Did you use the explanation provided in the
4 glossary as the construction for your opinion?

5 A No, no. I -- as I noted in my declaration, I
6 relied on the plaintiff's infringement contention.

7 Q Okay. Thank you.

8 If we can turn your attention to Ellis, that's
9 Exhibit 1016. Let me know when you have that open.

10 A I'm getting there. Let's see. I'm there,
11 okay.

12 Q According to Paragraph 42 of Ellis, does the
13 supplemental content source create or receive data?

14 A It actually can do both.

15 Q And is the ability to do both -- is that
16 consistent with Spivey's Figure 4?

17 A Yes.

18 Q In what way is that consistent?

19 A In other words, Spivey's Figure 4 shows that
20 the supplemental content servers are -- are able to both
21 receive and/or generate the data.

22 Q Okay. Thank you.

23 Returning to your declaration, can you go to
24 paragraph 362, please.

25 A Okay.

1 Q Read that to yourself, and let me know when
2 you're done.

3 A Okay.

4 Q Dr. Wicker, does Spivey disclose a memory?

5 A Yes. In several places.

6 Q Can you elaborate, please?

7 A Certainly. If you look at Figure 4, which is
8 at the top of page 224 in my declaration, you can see
9 that there's a memory unit 414 and in the live data
10 server device memory 404 in the message queue server,
11 and the queues themselves have memory.

12 Q All right. Thank you.

13 Can we now turn your attention to Paragraph 175
14 of your declaration.

15 A Okay. I'm there.

16 Q Go ahead and read that to yourself, and let us
17 know when you're finished, please.

18 A Okay.

19 Q All right. Dr. Wicker, in Spivey where does
20 the user interface reside?

21 A The in- -- the user interface would be in the
22 message queue server device.

23 Q Now, can you elaborate on that as well --
24 (Simultaneous crosstalk.)

25 A Certainly.

1 Q -- device. Please go ahead.

2 A I didn't mean to interrupt you. I'm sorry.

3 So what's described is that Spivey teaches that
4 a user interface lists topics available for subscription
5 from the message queue server. Once a user subscribes
6 to at least one topic, the live data app sends the
7 selected topics to the MQSD requesting online updates,
8 for example.

9 So basically what's going on is that by
10 interacting with the MQSD, you are provided with a list
11 of what's available.

12 Q Okay. Thank you.

13 MR. BAKER: We have no further questions on
14 redirect.

15 MS. STONE: And I have no further questions.

16 MR. BAKER: Dr. Wicker, thank you very much.

17 MS. STONE: Thank you.

18 MR. BAKER: Mikaela, thank you for giving me
19 back tomorrow.

20 MS. STONE: You're welcome. Happy to do it.

21 THE WITNESS: And it was good to see you again.

22 MS. STONE: You as well. I'm sure we will meet
23 again.

24 THE WITNESS: I think so.

25 MS. STONE: Thank you everyone.

1 (There remote deposition was completed at 1:07
2 p.m.)
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1 CERTIFICATE OF OATH

2 STATE OF FLORIDA

3 COUNTY OF DUVAL

4

5 I, Deanne M. Moore, RMR, CRR, FPR, FPR-C and
6 Notary Public of the State of Florida, certify that
7 STEPHEN WICKER, Ph.D. personally appeared before me on
8 the 7th of May, 2025, and was duly sworn.

9 Signed this 20th day of May, 2025.

10

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12



13

Deanne M. Moore, RMR, CRR, FPR, FPR-C
Notary Public, State of Florida
Commission No: HH578832
Commission Expires: 9/11/2028

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1 CERTIFICATE OF REPORTER

2 STATE OF FLORIDA

3 COUNTY DUVAL

4 I, Deanne M. Moore, RMR, CRR, FPR, FPR-C certify
5 that I was authorized to and did stenographically report
6 the deposition of STEPHEN WICKER, Ph.D., pages 1 through
7 108; that a review of the transcript was requested; and
8 that the transcript is a true record of my stenographic
9 notes.

10 I further certify that I am not a relative,
11 employee, attorney, or counsel of any of the parties,
12 nor am I a relative or employee of any of the parties'
13 attorneys or counsel connected with the action, nor am I
14 financially interested in the action.

15 Dated this 20th day of May, 2025.

16

17

18



19

Deanne M. Moore, RMR, CRR, FPR, FPR-C

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1 WITNESS NOTIFICATION LETTER

2 May 20, 2025

3 STEPHEN WICKER, Ph.D.
4 c/o W. Todd Baker, Esq.
5 KIRKLAND & ELLIS LLP
1301 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

6 In Re: GENIUS SPORTS LTD v. SPORTSCASTR INC.
7 Deposition taken on May 7, 2025
U.S. Legal Support Job. No. 6871454

8 The transcript of the above-referenced proceeding has
9 been prepared and is being provided to your office for
review by the witness.

10 We respectfully request that the witness complete their
11 review within 30 days and return the errata sheet to our
office at the below address or via email to:
southeastproduction@uslegalsupport.com.

12 Sincerely,
13 Deanne M. Moore, RMR, CRR
U.S. Legal Support, Inc.
14 700 East Dania Beach Boulevard
First Floor
15 Dania Beach, FL 33004
(904) 359-0583

16 CC via transcript:
17 Mikaela Stone, Esq.
18 W. Todd Baker, Esq.

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1 ERRATA SHEET

2 DO NOT WRITE ON TRANSCRIPT-ENTER CHANGES OF THIS PAGE

3 GENIUS SPORTS LTD v. SPORTSCASTR INC.

4 Deposition taken on May 7, 2025

5 U.S. Legal Support Job. No. 6871454

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19 Under penalties of perjury, I declare that I have read
20 the foregoing document and that the facts stated in it
21 are true.

22

23 Date

STEPHEN WICKER, Ph.D.

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