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

META PLATFORMS, INC., Petitioner,	)	Case IPR2024-00528 U.S. Patent No. 8,249,932
	)	Case IPR2024-00529 U.S. Patent No. 8,332,454
v.	)	Case IPR2024-00530 U.S. Patent No. 9,877,345
SITNET LLC, Patent Owner.	)	Case IPR2024-00612 U.S. Patent No. 8,249,932

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ORAL DEPOSITION OF

DR. AVIEL D. RUBIN

FEBRUARY 7, 2025

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ORAL DEPOSITION OF DR. AVIEL D. RUBIN, produced as a witness at the instance of the Petitioner, and duly sworn, was taken in the above-styled and numbered cause on February 7, 2025, from 9:02 a.m. to 11:19 a.m., before Donna Wright, CSR in and for the State of Texas, reported by machine shorthand, at THE WESTIN AUSTIN DOWNTOWN, 310 East 5th Street, Austin, Texas, pursuant to the provisions stated on the record or attached hereto.

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EXHIBITS

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Exhibit 1	Oct. 2022 CV	7

DR. AVIEL D. RUBIN,
having been first duly sworn, testified as follows:
EXAMINATION
BY MR. TUMINARO:
Q. Good morning, Dr. Rubin. Would you please state your full name for the record?
A. Sure. Aviel David Rubin.
Q. And I assume that you have had your deposition taken before; is that right?
A. Yes.
Q. Okay. About how many times? Do you know?
A. Close to 80.
Q. Close to 80, okay. So you know the rules, but I'll just go over the ground rules for this deposition.
I'm going to try to ask clear questions. But if at any point you don't understand one of my questions, will you let me know?
A. Yes.
Q. Okay. If you answer my question, I'm going to assume that you understood it. Is that fair?
A. Sure.
Q. I'm going to take periodic breaks, about once

every hour, but if you need a break, will you let me know?

A. Yes.

Q. I would just ask that if there is a pending question, you answer the question before we take a break. Is that okay?

A. Yes.

Q. You have been doing this, you know there is a court reporter here, but I ask that you give me verbal answers today to my questions and not just head nods.

Do you understand?

A. Yep.

Q. Okay. You have in front of you what I believe is three declarations that you submitted in this case. There is one for IPR2024-00529 dated December 4, 2024.

Do you see that?

A. Yes.

Q. It's Exhibit 2009 in that IPR.

Do you see that in the bottom right-hand corner?

A. Yes.

Q. Okay. You also have in front of you your

supplemental declaration from December 3, 2024, IPR2024-00530.

Do you see that in front of you?

A. Yes.

Q. And, lastly, you have in front of you your expert declaration from December 4, 2024 and case numbers IPR2024-00528 and IPR2024-00612.

Do you see that?

A. Yes.

Q. Okay. Do you stand by the opinions that you put forth in each of these declarations?

A. Yeah.

Q. Are there any changes that you would like to make to any of these declarations?

A. No.

Q. No additions and no deletions from these declarations?

A. Correct.

Q. All right. I would like to go -- if we could start with the -- the declaration in IPR-530, IPR-530. If I call it IPR-530, do you know what I'm referring to?

A. Yes.
Q. Okay. So IPR-530, if we could start with that report. If you would turn with me to paragraph 22. In paragraph 22, you say, "A detailed record of my professional qualifications is set forth in the attached Exhibit A, which is my curriculum vitae."
Do you see that?
A. Yes.
Q. In preparing for this deposition, did you realize that there was no Exhibit A attached to your report?
A. No.
Q. Did you ever come to realize that there is no Exhibit A that was attached?
A. No.
Q. Okay. So that was just an oversight?
A. Yes.
Q. I'm going to hand you --
MR. TUMINARO: Can we have this marked, maybe, as Exhibit 1?
(Exhibit 1 marked)
Q. (BY MR. TUMINARO) So I have handed you what's

been marked as Exhibit 1 for identification purposes. This purports to be your CV, at least from October 2022.

Could you just look at it and see if that's correct?

A. October 2022?

Q. Or about that timeframe.

A. It looks like it.

Q. Okay. Are there any additions to your CV that you would -- that should be included since October 2022?

A. Yes. I have three more conference papers and I had more testimony since then that is on my current resume.

Q. Testimony in which cases?

A. I'm not sure that I can remember them all. My current resume is online right now. I had a testimony in Apple versus -- it's Kent v. Apple, Dominion versus Newsmax, Robocast v. Netflix.

I think there were others and I'm just not remembering.

Q. Okay. And just to be clear, these three cases

that you mentioned, you said there was testimony. Was that testimony at deposition, testimony at trial, something else?

A. The Apple case was trial. The other two were depositions.

Q. Just to be clear, for the Apple case, which side of the -- were you on behalf of Apple or Kent?

A. Apple.

Q. And for Dominion, were you on behalf of Dominion or Newsmax?

A. Dominion.

Q. And for Robocast versus Netflix?

A. Netflix.

Q. Netflix.

MR. TUMINARO: Counsel, I would just ask that an updated CV be submitted as an exhibit in this proceeding.

MR. ZAK: Yeah, I already made a note for that. And I just want to apologize for that oversight. That should not have happened.

MR. TUMINARO: Okay, thank you.

Q. (BY MR. TUMINARO) All right. Let's talk

about your background, then, a little bit.

So you got a BS, a master's and a PhD in computer science from the University of Michigan; is that right?

A. That's right.

By the way, I remembered more updates to my CV if you want that.

Q. Yes, please.

A. So in August of 2023, I became an emeritus professor and retired from full-time teaching. That's just the one I remembered just now.

Q. Okay, thanks.

A. And there's more testimony. I'm just not thinking of it.

Q. About how many more cases do you -- would you estimate?

A. A handful of depositions. I don't know how many, five or six, but it could be more. I feel like there was another trial in there, but I'm not remembering either.

Q. Has your testimony ever been struck or excluded on any basis?

A. I had a small section of an expert report in a patent case that was stricken.

Q. For what reason?

A. It was in the apportionment section and the judge said that I was not qualified to offer the economic opinion that I had in that section, so it was removed.

Q. What case was that in?

A. It was -- it's against Cisco. It's in here, NetFuel versus Cisco.

Q. Let's look at paragraph 5 of your declaration -- in your declaration, sorry.

So your PhD dissertation was on cryptography; is that fair?

A. It was -- it was security, networking and cryptography. The title -- my PhD advisor insisted that I limit my title to three words. I initially had a very long title. So this was the most descriptive I could be, but it maybe indicates more of a cryptography focus than the thesis really had.

Q. If we look at your CV, you're an adjunct professor at New York University; is that right?

A. I was.
Q. And there, it looks like you taught courses in web security in the spring of 1992; is that right?
A. No, '99.
Q. '99, yeah.
A. I was still in grad school in '92.
Q. Oh, okay. And you taught a course in design and analytics of cryptographic protocols in '96?
A. Design and analysis.
Q. And in '95, you taught a course in cryptography and computer security?
A. Right.
Q. As a teaching assistant in 1993, you taught a course in cryptography?
A. Right.
Q. And you also had industry experience?
A. Yes.
Q. In 1994, you worked for Bellcore; is that right?
A. Yes.
Q. And you worked in the cryptography and network security research group?

A. Yes.
Q. You worked at IBM in the summer of '89 as a programmer?
A. That's correct.
Q. What did you do there?
A. I was working on the MVS operating system. They were introducing, for the first time, hot swapping into MVS, which meant that they could unplug one unit and then plug another unit in and keep running.
And, I mean, I was a pretty lowly intern, you know, 22 years old, and I was given some programming tasks for that project.
Q. So would you consider yourself an expert in cryptography?
A. Yes.
Q. This case is not about cryptography, right?
A. Correct.
Q. This case is more about networking?
A. Right. I'm also an expert in networking.
Q. What makes you an expert in networking?
A. For the last -- for about seven years, I taught the networking course at Johns Hopkins. I've

published over 30 papers on networking. I have been program chair of a conference on network security. I have written books that involve networking. So I think I'm an expert in that.

Q. What does it mean to establish a connection in a network?

A. Are you talking about a physical network, a logical network or -- and it also depends on which layer in a network you're -- you're discussing.

Q. Well, let's say in a social network, what would it mean to establish a connection in a social network?

A. Establishing a connection in a social network would mean creating a link. So, for example, if I added you as a friend and you accepted, then we would have a link in our social network.

Q. What about in a general network, what would it mean to establish a connection?

A. So if you're talking about a computer network, you have two computers, I would say if one of them sends a TCP request to open a TCP/IP connection and the other machine follows the three-way handshake protocol,

that those machines would have a connection.

Q. So opening a TCP/IP session is a form of a connection in the network?

A. Yes.

Q. Would that be, in your mind, a logical connection or a physical connection?

A. That would be a logical connection.

Q. Logical connection.

So opening a TCP/IP session in a network is a type of logical connection. Is that fair?

A. Yes.

Q. Are there other ways to -- besides establishing a TCP/IP session in a network, are there other ways to establish a logical connection?

A. Yes.

Q. Can you name a few?

A. Sure. So you could have an application that is a client server application and you can establish a connection within the application.

So Computer A, when the user is running, say, tax software -- you name it, I'm just giving an example -- and there is a server component to that.

And within that application, you could have code that involves remembering the state of the communication that you had with the server.

And so when you start up the client and the first time that you request something from the server, that establishes a connection. And then when you log out, that could close the connection. That would be a higher layer logical connection than the underlying TCP connection. In fact, it could happen without a TCP connection. It could happen with a UDP over IP over --

THE REPORTER: With a U --

THE WITNESS: UDP, IP, any -- any way to get the bits from one place to the next. The application wouldn't care. It would be connected.

And so when the application client requests data from the application server, it's using their logical connection.

Q. (BY MR. TUMINARO) So what layer of the OSI stack are you referring to when you talk about that server connection?

A. Seven.

Q. Seven.

And when you were talking about the TCP/IP session being open, what layer of the stack are you referring to?

A. Four.

Q. Is opening a TCP/IP session in the Layer 4 stack a way of creating connection or establishing a connection in a social network?

A. The concept of layering is that every layer is independent of what's happening at the other layers. So I would say that the act of establishing a TCP connection is not setting up a connection in a social network, but that doesn't mean that a social network wouldn't use TCP.

Q. Is there a particular layer, in your mind, that is associated with connections in a social network?

A. Layer 7.

Q. Do you think that's the only layer that would be important in making a connection in a social network?

A. Yes.

Q. Do those -- so you understand that there are three patents at issue with respect to the declarations that you submitted? You understand that?

A. Yes.

Q. If I refer to them as the '932 patent, the '345 patent and the '454 patent, would you know what I'm referring to?

A. Yes.

Q. Okay. And those patents, they didn't create or invent a new type of connection for a social network. Is that fair?

A. What do you mean by "a new type of connection"?

Q. Let's look at your declaration.

A. Sure.

Q. Paragraph -- your declaration in IPR -- the 530 IPR.

A. Okay.

Q. And in paragraph 54, the second sentence, you say, "Thus, one of the key elements that defines networks are the connections established between the various components or elements presented within the

network."

Do you see that?

A. Present within the network.

Q. Did I read it incorrectly?

A. You said one word wrong. You said "presented" and it's "present."

Q. Let me read it again.

"Thus, one of the key elements that defines a network are the connections established between the various components or elements present within the network."

Did I read that correctly?

A. Yes.

Q. What connections are you referring to in this statement?

A. So any network will have components or elements. If it's a physical network, you have routers, computers. If it's a logical network, say a social network, you would have the entities that are connecting on a social network.

And so the connections would be the links between those various components of the network.

Q. So in paragraph 54 of your declaration, are those connections at a particular layer in the OSI stack?

A. No. This is designed to capture all possible networks. So it would refer both to Layer 4, Layer 7, even Layer 1 connections.

Q. So you're talking -- when -- in paragraph 54, you're referring to both logical and physical connections?

A. Yes.

Q. Okay. I want to unpack one other thing that you said earlier. I think when you were talking about social networks, I think you referred to it as a logical network; is that right?

A. That's correct.

Q. So you -- you think of a social network as a logical network, not a physical network?

A. That's correct.

Q. And the social network would then sort of ride on top of the physical network?

A. That's one way of looking at it. It's a higher layer.

Q. How would you describe it? I said "right on top." Are there different words that you would want to use?

A. I -- I think that's not a bad description. It's not one that I've used before, but I like it.

So you have -- within the concept of layering, the idea is that programmers, developers, analysts only really need to concentrate on one layer at a time because whether your physical layer is wireless or wired won't affect the connections that you have at the social network. Like if Bob is friends with Alice, that's going to be independent of whether their communication is over TCP or whether it's spoken or whether it's wireless.

So the idea of a logical layer is that these things aren't actually connected by a wire, like Bob and Alice may not have a wire going between them. We don't even care or know how the underlying communication is happening. We're just looking at the network at Layer 7, which is the application view.

Q. Okay. So if there is a social network and there is a logical connection between Bob and Alice, I

think that's your example, that connection, in order to persist, would have to be saved into actual physical layers somewhere, true?

A. That connection might be, for example, stored in some database that might say Bob and Alice are connected, but even that's logical. You know, the database is -- is not -- I mean, it does consist of zeros and ones, but the information that Alice and Bob are connected is something that I would also consider logical information.

Q. Well, so a social network, in order for like a user to interact with a social network, it has to be instantiated into a physical network; is that fair?

A. So I wouldn't put it that way.

Q. How would you put it?

A. I would say that, at some point, if Alice and Bob are going to communicate, the communication eventually has to take place on a physical network. Otherwise, the communication wouldn't reach the other party.

Q. Okay. So for a human, Alice and Bob, let's say there's a human, for those two humans to interact

over a social network, that social network has to be implemented onto a physical network?

A. You have to have all of the layers functioning for there to be communication, and so there has to be physical layer communication happening in order for social layer communication to occur.

Q. So is what I said wrong?

A. I don't think it was as precise. I didn't analyze whether or not it's wrong, but I'm not sure what you mean by "instantiate."

Q. I think what I said is that for two humans to interact over a social network, that network has to be implemented on a physical network.

A. At some point, a physical network has to be involved for that communication to occur.

Q. So what I said is true, then.

It has to be -- the logical social network has to be implemented on a physical network for two humans to interact over that social network; is that a true statement?

A. Yes.

Q. So for the logical connection between those

two humans, that would have to be saved on some physical device somewhere for those two humans to interact; is that true?

A. The information would have to be stored somewhere and, ultimately, it would be in a physical -- whether it's in memory or on a disk somewhere, the information would be stored on something physical.

Q. And the patents at issue here, the '932, the '454 and the '345, didn't describe new ways to physically save the information that would be used to connect two users over a social network; is that right?

A. That's right.

Q. In order to save the information that two users would need to communicate over a social network, the patents talk about using sort of known technologies; is that fair?

A. Can I see the patent, please?

Q. Yes. I'll give you all three. How about that?

A. Sure.

MR. TUMINARO: You don't want it?

MR. ZAK: No, no. If I get too much

paper in front of me, I'm just going to get lost.

MR. TUMINARO: So just let the record reflect that I placed in front of the witness the '932 patent, the '454 patent and the '345 patent.

Q. (BY MR. TUMINARO) Can you confirm that that's correct?

A. Yes.

I don't remember the question now.

Q. I was just going to go back.

So this is the question. In order to save the information that users would need to communicate over a social network, the patents talk about -- no, sorry. Strike that. That's wrong.

I think the question was the patents don't describe any new type of technology for saving the information that would be needed for two users to communicate over a social network; is that true?

A. That's true.

Q. In the concept of a network, what's a node?

A. In the concept of a network, is that your question?

Q. In the context of a network, what's a node?

A. Sure. So a node is different depending on which layer of the network you're referring to. So, for example, in a TCP network, TCP/IP network, the nodes would be the communicating parties that have particular IP addresses.

And in application, it would be whatever attributes are defined by the application. So if the application is a social network, then a node could be an object representing an entity in the social network and it would have attributes that would define the node in it.

Q. So in declaration 529, paragraph 34, which I think is the document that you're looking at --

A. Which paragraph? I was on a different one.

Q. 34.

A. Yes, that's it.

Q. You -- you set forth a definition of what a node is?

A. Right.

Q. Where did this definition come from?

A. So this represents my understanding of how social networks work and is informed by the Facebook

document in footnote 1.

Q. So are you aware that this definition of a node is nearly word-for-word from Facebook's website that's referenced in footnote 1?

A. That does not surprise me.

Q. But it's your opinion that this definition somehow applies to the nodes that are referred to in the '932, the '454 and the '345 patent?

A. Yes.

Q. What's your basis for that?

A. There's nothing in the patents that overrides this definition of a node, which is my understanding of what a node is in a social network.

Q. The patent at issue in these proceedings did not invent the concept of a social network; is that fair?

A. Yes.

Q. So when you're referring to a node as an object with attributes that define the node, that, in your understanding, sort of lives at Layer 7 in the OSI stack; is that right?

A. Yes.

Q. Okay. What is the object in that definition that you're offering for node?

A. So in some respects, that depends on the specific implementation. So it could be in an object, or in programming language, it could just be a data structure. That's an object that contains the attributes in it.

Q. I just want to make sure I understand what you said.

So the object could be any sort of data structure that has attributes associated with it; is that right?

A. Well, it can't be any data structure, but it would take the form of a data structure with attributes.

Q. Okay. All right. And just to be clear, though, the -- the object is a logical construct, not a physical construct. Is that fair?

A. Yes.

Q. In order to -- for humans to interact with that social network, that logical construct, the object would have to be implemented on a physical device; is

that right?

A. At some point physical devices have to be used.

Q. So -- so is it a true statement that, in order for humans to interact with a social network, the object, which is a logical construct, would have to be implemented on a physical device?

A. There would have to be a physical device that was involved in the usage of it.

Q. So I guess what I'm confused -- like is what I said wrong? That's what I'm confused about.

A. Well, here's the thing. It's like I -- as a professor, I like to be really precise.

When you say "implement it," I think about the programmer who's creating the social network writing the code that will create this object, and that person will be sitting at a computer, which is a physical device. So I just want to be clear that that's what you mean.

Q. Well, the code has to execute on a physical device related to that object in order for humans to interact on a social network?

A. Right.
Q. That's correct, what I said?
A. That -- yeah.
Q. Okay. So "implementation" isn't right, but "execution of the code" is more precise?
A. Right. So implementation is when a system is created and execution is when it runs.
Q. Okay. So I just want to make sure we're talking the same language, then.
So is it a true statement that in order for humans to interact with a social network object, which is a logical construct, that object would have to be executed on a physical device?
A. Yes.
Q. Okay. So the object has attributes that define the node, if it's a node, right?
A. Right.
Q. The object is a data structure, right?
A. Yes.
Q. The attributes that define the node were not invented by the inventors of the '932, the '454 or the '345 patent; is that right?

MR. ZAK: Objection, scope. We're not talking about inventorship here.

THE REPORTER: About what? I couldn't hear.

MR. ZAK: Sorry. Objection, scope. He is offering no opinions about inventorship.

THE WITNESS: So that's -- I don't entirely agree with that.

Q. (BY MR. TUMINARO) Let's look at the '345 patent.

A. Okay.

Q. At column 16, starting at line 32, I'll read it for the record.

"Those skilled in the art will recognize that there are numerous well-known software and hardware technologies that may be utilized to implement the attributes of the users of the NDSN 100 and the attributes of the associations between users."

Do you see that?

A. I see that.

Q. Did I read it correctly?

A. You did.

Q. It's talking about the attributes, correct?
A. Yes, it's talking about the technologies used to implement the attributes.
Q. And those are well-known technologies?
A. Yes.
Q. So the -- those attributes were not invented by the inventors of the '932, '454 and '345 patent; is that fair?
MR. ZAK: Objection. Again, scope, going into inventorship.
THE WITNESS: That I don't agree with.
Q. (BY MR. TUMINARO) Why?
A. Because while the technologies used to implement the attributes were well-known, the specific attributes that are used and are described in this patent were invented in the patent.
Q. So the object -- just going back to what a node is, a node is an object with attributes that define the node, right?
A. Yes.
Q. So a user node would be an object with attributes that define the user. Is that fair?

A. Yes.
Q. And an event node would be an object with attributes that defines the event; is that fair?
A. Yes.
Q. Those objects are simply data structures, right?
A. That's what they are.
Q. And those data structures would be stored in some sort of physical device, like a database, if the users were going to interact on a social network with those objects, true?
A. I disagree that a database is a physical device. A database, in my opinion, is a logical device. It's a software construct.
Q. Okay. So then -- I appreciate that. Let me rephrase my question, then.
So the data structures that would be used to store -- strike that.
The data structures that define the object would be stored in some sort of physical device if users were going to interact on a social network with that object. Is that a fair statement?

A. Yes.
Q. What type of physical device might the data structure be stored in?
A. It could be stored in RAM, it could be stored on a disk somewhere.
Q. Can a single physical device, say a server, could it host multiple nodes?
A. Yes.
Q. Could a single node represent multiple physical devices?
A. I don't know of a social network that would do that, so I don't know.
Q. If you would go to IPR-529 for the '454 patent.
A. Okay.
Q. If you would go to paragraph 26.
A. Okay.
Q. In paragraph 26, you set forth various constructions that were given by the district court; is that correct?
A. Yes.
Q. At the top of page 8, one of those

constructions is for situation -- situation authority; is that correct?

A. Wait, I'm sorry. Page 8?

Q. In the '454 patent.

A. The 529 IPR?

Q. Oh, yeah, I'm sorry. So the -- I guess the confusion is there -- it's page 6 of your declaration, but it's page 8 of the PDF that says "8 of 35" at the bottom.

A. Got it.

Q. So at the top of that page, it says "situation authority."

Do you see that?

A. Yes.

Q. And it provides a definition being an entity providing information concerning a situation.

Do you see that?

A. Yes.

Q. Do you agree with that construction?

A. Yes.

Q. Would the entity in that definition be a server?

A. Yes.
Q. Go to paragraph 29 --
A. Okay.
Q. -- of the same declaration.
A. I'm there.
Q. This provides a definition for situation authority or an event node server?
A. Right.
Q. Okay. And the first sentence says, "There is a corresponding situation authority, also referred to as an event node server, for each situation authority."
Did I read that correctly?
A. No.
Q. I did not?
A. No, you left a word out.
Q. Would you read it for me, please?
A. "There is a corresponding situation authority server, also referred to as an event node server, for each situation authority."
Q. I can confirm that you read that correctly.
A. Thank you. I've been reading a long time.
Q. I just learned last week. Just kidding.

So the presence of a situation authority server suggests that there is an organization or some situation authority that would operate the server. Is that fair?

A. I don't see that that's a requirement.

Q. Is it a fair statement?

A. I think it's most likely there could be a situation where a server is autonomous and it's -- it's running automatically. And so in that situation, I don't know that there would be an entity running the server. I mean, at a financial level, there would be somebody in charge of paying for that.

Q. So when it says "a situation authority server," is that physical construct or logical construct?

A. I think of that as a logical construct running on a physical piece of hardware.

Q. What's the logical portion of that that you're referring to?

A. The server code.

Q. The server code?

A. Yes.

Q. So a situation authority server has server code that is a logical construct. Is that what you mean?

A. Yes.

Q. Okay. And the situation authority server has a physical component being the server itself. Is that what you mean?

A. Well, so, to me, server is ambiguous as to whether you're talking about hardware or software. And I have worked on cases where the patent specifically defined it one way or the other. I don't recall seeing anything about that in here.

So when you say "server," you could be referring to the software or the hardware or the combination, as far as I know.

Q. Is a situation authority server interchangeable with an event node server? Let me ask that a different way.

Do they mean the same thing? Does a situation authority server mean the same thing as an event node server?

A. Yes.

Q. Earlier, we talked about an event node. And I think we agreed that an event node would be an object with attributes that define the event; is that right?

A. Yes.

Q. So, then, an event node server would be an object with attributes that define the event executing on the server?

A. I haven't offered any opinions in my report yet about what the server is with respect to whether it's an object or not, so I don't know.

Q. You did offer opinions about what falls within the scope of the claims, right?

A. Yes.

Q. So you understood the scope of the claims in order to offer those opinions, right?

A. Yes.

Q. And one of the terms that is included in the claims is "event node server," right?

A. Which claim?

Q. If you look at the '454 patent, claim 1, element A, I'll read it for the record.

"Creating, by an event node server, an

event node in a multidimensional personal information network, the node corresponding to a situation."

Do you see that?

A. The event node.

Q. Didn't I read it --

MR. ZAK: You know what, don't worry. My eyesight is so bad that I would be asked to read in law school, I would just stumble and act like a fool.

Q. (BY MR. TUMINARO) Let me read it again.

A. Okay.

Q. What the hell is going on today?

"Creating, by an event node server, an event node in a multidimensional personal information network, the event node corresponding to a situation."

A. Right.

Q. You understand the scope of that limitation; is that true?

A. Yes.

Q. That limitation includes the word "event node server" -- words "event node server"?

A. Yes.

Q. So going back to my question, then, about what

an event node server is, would that be an object with attributes that define the event executing on a server?

A. Sorry, it takes me a little while. I've had a lot of Zoom depositions lately where I can just search and I miss that sometimes.

That's not my understanding of what the server is.

Q. What's your understanding of what it is?

A. It's a part of the system that can create and manage nodes.

Q. I just want to sort of make sure I understand what that means.

Your -- it's your understanding that the event node server is a thing that could create and manage nodes?

A. Yes.

Q. So that means the event node server would be a thing that could define objects with attributes that define the node?

A. Yes.

Q. Where would the code for defining and managing nodes execute?

A. On whatever was designated as the server.
Q. Which would be a physical device?
A. At some level, it would run on a physical device.
Q. The patents at issue here refer to something called an n-dimensional social network. How, if at all, is an n-dimensional social network different than just a social network?
A. Can you point me to the claim again, please?
Q. How about I point you to your declaration in the 528 IPR, IPR2024-528, relating to the '932 patent.
A. Okay.
Q. At paragraph 53, you say, "The situational network can be implemented in a multidimensional social network that allows multiple connections --"
A. Can I stop you? I'm in the wrong -- I thought I grabbed the right --
Q. I'm probably reading it wrong anyway.
A. Okay, now I'm there. So let me get to 53. Okay.
Q. I'll try to read it for the record.
First sentence, "The situational network

can be implemented in a multidimensional social network (NDSN) that allows multiple connections between individual nodes."

Do you see that?

A. Yes.

Q. So my question is how, if at all, is a multidimensional social network different than just a social network?

A. A multidimensional social network can have projections, which take subsets of connections and relate to just that projection or just that subset.

Q. So let me see if I understand.

Does that mean for a multidimensional social network, nodes have -- there are at least two nodes that have more than one connection between them?

A. Well, at the least, I would say that the network has the capability for that to exist.

Q. Are you aware of any social networks that are not multidimensional?

A. I haven't considered that before. Sitting here, I can't think of any.

Q. You can't think of any social network that

existed that was not multidimensional?

A. Like I said, it's not something I've thought about before, but I can't think of any right now.

Q. We have been going about an hour. Maybe we can take a break.

A. Sure.

(Recess from 10:03 a.m. to 10:16 a.m.)

Q. (BY MR. TUMINARO) Welcome back, sir. A couple things I wanted to follow up on from the last go-round.

In the declaration for the 529 IPR, it's the '454 patent at paragraph 34. We were talking about the definition of a node.

A. Right.

Q. And you mention that the definition comes from Facebook's website, which is referenced in footnote 1?

A. Right.

Q. And I think what you said is the definition that Facebook offers doesn't override what's in the '454 patent, or something along those lines.

Did I get that right or --

A. No.

Q. No, okay. What --
A. I said that that's I believe the plain and ordinary meaning and there was nothing in the patents that overrides that and defines it a different way.
Q. Okay. Which came first, Facebook's definition on its website or the patents?
A. I don't know.
Q. Do the patents themselves offer a definition of "node"?
A. I don't recall seeing one. That's why I applied the plain and ordinary meaning.
Q. Why did you choose Facebook's website to determine what the plain and ordinary meaning of "node" was?
A. So I didn't use that to determine it. I, as an expert, have my opinion. It's consistent with what Facebook said. They are a party in the case, so I thought it would be a good one to use.
Q. Earlier, we were talking about Layer 7 and Layer 4 and we had a discussion about that.
A. Yeah.
Q. So my question relates to if you have two

applications communicating over a network, those two applications would have a Layer 7 connection?

A. Yes.

Q. There would also be a Layer 6, 5, 4, 3, 2, and 1 connection if those two applications are communicating; is that true?

A. So I tend to ignore Layers 6 and 5. I don't think that they are -- they are substantive letters.

Q. That's -- so that's fair. Then at least how about this.

If there's a Layer 7 connection between two applications that are communicating over a network, there would also be a Layer 4 connection. Is that fair?

A. Yes.

Q. And --

A. Though -- so I need to preface that by saying Layer 4 contains two predominant protocols: PDC and UDP. So if it was happening over Layer 4, I wouldn't say there was a connection --

Q. Okay.

A. -- necessarily.

Q. That's fair. So let me just clarify, then, just to make sure I understand what you're saying.

For two applications that are communicating over a network, there would be a Layer 7 connection, and if the two applications were communicating using TCP/IP, there would be a TCP/IP connection; is that fair?

A. At least one. There could be multiple.

Q. And then obviously there would have to be a physical layer connection?

A. There would most likely be many because the physical connection is just point to point. So if they were far away, there would be many physical connections.

Q. Got it.

I would like to talk about your preparation for this deposition. Did you prepare for it?

A. Yes.

Q. What did you do?

A. I reread my declarations, reread the patents, I had a meeting with counsel and I read some art.

Q. Okay. And when you said you had a meeting with counsel, who was that with?
A. With James Zak.
Q. Okay. Where did that meeting occur?
A. At an office space in downtown Austin.
Q. It was an in-person meeting?
A. Yes.
Q. About how long did the meeting last?
A. About two hours.
Q. Did you have any -- before that in-person meeting in Austin, did you have any other telephone calls or preparatory meetings with counsel for this deposition?
A. No.
Q. Did you speak with anyone else besides Mr. Zak in preparation for your deposition here today?
A. No.
Q. When were you first contacted with respect to this case?
A. Sometime in the last year, maybe six to nine months ago, but I don't remember.
Q. You did submit a preliminary declaration back

in June of '24.

Do you recall that?

A. Yes.

Q. So, obviously, you were contacted before that?

A. Yes.

Q. Do you -- can you estimate like about when before June '24?

A. Two or three months. I don't remember, really.

Q. Okay. Do you remember who contacted you?

A. David Hecht.

THE REPORTER: What's the last name?

THE WITNESS: H-E-C-H-T.

Q. (BY MR. TUMINARO) So you submitted a declaration in June for these cases and you also submitted a declaration in December for these cases?

A. Right.

Q. Do you know about how much time you have billed to these matters?

A. I don't.

Q. Is it more than 50 hours?

A. I don't know.

Q. If you had to estimate, would you say it's more than 100 hours?

A. Probably not. Me, personally. I have a staff, so I just want to make sure.

Q. You have a staff that helped you prepare these declarations that you signed for these two cases?

A. Yes.

Q. A staff apart from counsel that you've worked with?

A. Yes.

Q. How many people are on your staff?

A. I believe that two people on my staff assisted me.

Q. With those matters?

A. Yes.

Q. What are their names?

A. They are Dr. Christian Peters and Dr. Logan Blue.

Q. Dr. Peters, what's his PhD in?

A. Computer science.

Q. And Dr. Logan Blue, I'm assuming it's a PhD, what's his --

A. PhD in computer science.
Q. Do you know about how much time Dr. Peters spent on these matters?
A. No.
Q. Dr. Blue, do you know about how much time?
A. No.
Q. Did you talk to your staff to prepare for this deposition?
A. No.
Q. What's Dr. -- strike that.
Do you bill for just your time or do you also bill for Dr. Peters' and Dr. Blue's time?
A. We have a timekeeping system and a financial manager and as we work, we enter our time into it. It's called FreshBooks. And at the end of every month, our financial manager sends an invoice to the client.
Q. Okay. So you have a $925 billing rate, right?
A. Yes.
Q. What's Dr. Peters' billing rate?
A. I think both of them are billing at 585.
Q. So just to be clear, though, you bill each individual's time, your time, Dr. Peters' time,

Dr. Blue's time separately at each of your rates? You don't bill some sort of blended rate?

A. Correct.

Q. Can you describe what your staff did to help you in preparing these reports?

A. Yes. So my staff works for me full time. They assist me with discussions when performing analysis, they assist me with drafting. So after we discuss something, I direct them to -- to write it up and they write it and I review it, and sometimes I write and then they review it. And then at the end of the process, I make sure that the whole report represents my opinion and I sign it.

Q. You state that you're not a legal expert and you're not offering any legal opinions.

Do either Dr. Peters or Dr. Blue have any legal training?

A. No.

Q. The '345 patent talks about establishing or forming a situational network for devices that are geographically proximate to a situation.

Do you recall that?

A. Yes.

Q. When forming such situational networks, would all devices within that geographic area be contacted to be included in the situational network?

A. I missed the middle part of your question. Can I hear it again, please?

Q. When forming such situational networks, would all devices within a geographic region be contacted to be included in that situational network?

A. Do you mean all devices that exist?

Q. Yes. Like there could be, you know, hundreds, thousands. Would every single device in a geographic area be contacted or would only a subset be contacted?

A. I don't know. I haven't considered that.

Q. If you look at claim 1 of the '345 patent.

A. Okay.

Q. The limitation that starts with "forming a situational network," do you see that?

A. Yes.

Q. And in that limitation, it talks about participant devices that are determined to be geographically proximate.

Do you see that?

A. Yes.

Q. What distinguishes a participant device from just a sort of generic device?

A. So say that there's -- let's use Facebook as an example. So say that you had a Facebook network of people in their certain area; they would be -- their devices that they use Facebook on would be participant devices. Say I have a phone that I never joined Facebook on and I walked through there, then I wouldn't be a participant device.

Q. So the users that would be contacted would already be part of an existing network before forming this situational network; is that right?

A. I don't know. That's -- I don't offer any opinions on that at this stage of the case.

Q. Well, the example that you provided was where the devices that would be contacted would be devices that were already part of Facebook?

A. That was an example, yes.

Q. So in that example those devices would already be part of an existing network, right?

A. In that example, yes, but it wasn't a limiting example.

Q. So that's why I'm trying to understand. What's the difference between a participant device versus just the generic device?

A. A participant is one that is part of the communication, part of the system.

Q. Because that participant device is part of an existing network?

A. That's not something that I analyzed. I don't have an opinion on that.

Q. That would fall within the scope of the claims, though, right?

A. I have not looked at the claims at that level of detail. So I may very likely later in the case, but I don't have an opinion on that right now.

Q. So -- so would the claims exclude the scenario where there's a device that's part of an existing network that's in a geographically proximate area, could that device -- even though it's part of an existing network, could that device be included in the formation of the situational network?

A. One more time, please.
Q. If there's a device that's part of an existing network --
A. Okay.
Q. -- could that device be included in the formation of a situational network?
A. Yes.
Q. And you gave an example of how that device would then be included in the formation of a situational network -- well, strike that.
In order for that device that's part of an existing network, in order for it to be included in the formation of a situational network, that device would have to have a new connection created. Is that fair?
A. Yes.
Q. That connection would be at which layer of the stack?
A. Layer 7.
Q. If there's a Layer 7 connection and you have two applications talking to each other, there would also be a Layer 4 connection if it's TCP or a

connection if it's UDP, right?

A. Yes.

Q. Let's go back to claim 1 of the '345 patent.

A. Okay.

Q. I'm going to try to read, so I'm going to do my best to read the words that are on the page.

Claim 1 says, "A method of accessing situation-related information, the method comprising."

Do you see that?

A. Yes.

Q. The first element is receiving an indication of an occurrence of a situation.

Do you see that?

A. Yes.

Q. So receiving an indication, that would be like receiving data about something, fair?

A. Yes.

Q. Okay. Forming a situational network, and then it goes on.

Do you see that?

A. Yes.

Q. So forming a situational network, that's

creating logical connections. Is that fair?

A. Yes.

Q. In order to create logical connections, you have to manipulate data. Is that fair?

A. Yes.

Q. Presenting a roll call query to each of a plurality of devices, and it goes on.

Do you see that?

A. Yes.

Q. So when you're presenting a roll call, that's presenting information, fair?

A. Yes.

Q. Okay. Receiving a status response, and it goes on.

Do you see that?

A. Yes.

Q. Okay. So that's -- a status response would be a form of data, right?

A. Yes.

Q. So you're receiving data?

A. Yes.

Q. Okay. The last element is aggregating the

status responses from responsive participants into a roll call list.

Do you see that?

A. Yes.

Q. So when you're aggregating that data, that's sort of manipulating that data into a list. Is that fair?

A. Yes.

Q. And when you're -- to establish an event node, that would be, again, I guess, forming logical object that has attributes?

A. Yes.

Q. That's manipulating data somehow to make those attributes, fair?

A. Yes.

Q. Can we go to the '454 patent?

A. I'm there.

Q. Claim 10.

A. Okay.

Q. Again, I'm going to try to read, so I'm going to do my best.

A. Well, you're doing better. You're doing

better.

Q. I don't know what happened.

Claim 10, "A method of creating a projection of a situational network, the method comprising."

Do you see that?

A. Yes.

Q. All right. Element A says, "Receiving, by a first device, corresponding to a node in a multidimensional personal information network," and it goes on.

Do you see that?

A. Yes.

Q. So if you're receiving -- actually, what's being received there is an invitation.

Do you see that?

A. Yes.

Q. So receiving an invitation, that's receiving some form of data. Is that fair?

A. Yes.

Q. And this claim element refers to a multidimensional personal information network.

Do you see that?

A. Yes.

Q. Is that different than a social network?

A. No.

Q. Okay. And the node, again, is -- it's a data structure that includes attributes that define it; is that right?

A. Yes.

Q. So element A is receiving data, essentially?

A. There's a lot more to it than that, but everything that's described in the claim and the information would be data.

Q. Okay. Element B says, "Transmitting a response accepting the invitation to establish a link with the event node server."

Do you see that?

A. Yes.

Q. So that response would be data that's transmitted, correct?

A. Right. A specific type of data, but that is data.

Q. Okay. And then element C is establishing a

link with the event node server, and that link would be a logical connection. Is that fair?

A. Yes.

Q. So in order to create that logical connection, you would need to manipulate the data to form that logical connection. Is that fair?

A. Yes.

Q. Okay. And element D is receiving information about the situation from the event node server.

Do you see that?

A. Yes.

Q. And so that's -- that information would be in the form of data. Is that fair?

A. Yes.

Q. So you would be receiving data about that situation?

A. Yes.

Q. Okay. Let's go to the '932 patent.

A. Okay, I'm there.

Q. If you could go to claim 1.

A. Okay.

Q. Claim 1 is a method of presenting targeted

advertising in a situational network, the method comprising; is that right?

A. Yes.

Q. The first element is receiving a plurality of advertisements from at least one advertising entity.

Do you see that?

A. Yes.

Q. So in the context of this claim, that would be receiving data about those advertisements. Is that fair?

A. Yes.

Q. Okay.

(Discussion off the record)

Q. (BY MR. TUMINARO) So the next element in claim 1 of the '932 patent is automatically connecting devices corresponding to a plurality of individuals to the situational network established in response to the situation.

Do you see that?

A. Yes.

Q. So connecting the devices, that makes a logical connection between the devices; is that right?

A. Yes.

Q. To make that logical connection you would need to manipulate the data; is that fair?

A. Yes.

Q. Okay. The next element is causing an automatic redirection of a web browser application operating on each of the devices to a web page containing information related to the situation.

Do you see that?

A. Yes.

Q. So redirecting a web browser application would require manipulating data to establish a different connection?

A. Yes.

Q. The next element is providing to each of the devices at least one of a plurality of advertisements, and it goes on.

Do you see that?

A. You made a mistake.

THE REPORTER: Pardon? What did you say?

MR. ZAK: He said he made a mistake.

Q. (BY MR. TUMINARO) I did make a mistake. I'll

read it again. Thank you for pointing that out to me.

Providing to each of the devices at least one of the plurality of advertisements for display, and then it goes on.

Did I read it correctly that time, please?

A. Yes.

Q. Okay. So that would entail displaying the advertisements. Is that fair?

A. The claim talks about providing them for display. I don't see that it says that it actually displays it.

Q. Oh, so this is just sort of like transmitting the data, but the data doesn't necessarily have to be displayed onto a display device. Is that what you're saying?

A. I would assume it would be displayed, but the claim itself is just talking about the providing of it and not the displaying of it. It's providing data that's purpose is to be displayed.

Q. Okay, understood. This is in the '454 patent, and I don't know if you want to go to the claims or

not, but I'll just ask the question.

Is there a limitation or language in the claims of the '454 patent that restrict the situational network to be temporarily limited?

A. I haven't considered that.

Q. Well, if you look at paragraph 94 of your '529 declaration, in the -- at paragraph 94, the first sentence, you say, "The '454 patent teaches of a temporally limited, i.e. temporary situational network."

Do you see that?

A. Yes.

Q. So, again, my question is are there -- is there language in the claims of the '454 patent or a limitation that requires the network to be temporally limited?

A. I don't see the words "temporally limited" in the claim, but the claim is -- has embodiments in the patent specification that describe a temporally limited network.

Q. Okay. I just want to make sure I understand what you're saying.

The claim doesn't include limitations related to being temporally limited, but the spec talks about those type of temporal limitations. Is that fair?

A. Right. So situational network, to me, based on the specification, includes a network that can be temporally limited. But those words, "temporally limited," are not in the claim.

Q. Are there embodiments in the specification of social networks that are not temporally limited?

A. I don't see now and I don't recall seeing an embodiment described that says it's not temporally limited.

Q. Is there language in the claims of the '454 patent that require the situational network to be dynamically alterable?

A. Just to save time, if you know the place that I cover that in my report --

Q. Paragraph 94 of the declaration that we were looking for at for the '454 patent and the '530 -- '529 IPR.

A. Okay.

Q. Second sentence of paragraph 94?
A. Thanks.
The words "dynamically alterable" do not appear in the claims, but the whole patent description for a situational network is about a dynamic nature of a situation, like, for example, people are in the path of a tornado and then they are not. So I think that that's part of the definition of a situational network.
Q. If you would go to paragraph 26 of your report.
A. Right.
Q. One of the terms that was construed or defined was "situational network." Is that right?
A. Right.
Q. And by the district court, it was defined as a network created in response to an event or situation.
Do you see that?
A. Yes.
Q. Do you agree with that definition?
A. No.
Q. Do you think that that definition is wrong?
A. I don't think that definition captures a

situational network in the patent.

Q. And one of the features that you think that should be included in a situational network is the ability to dynamically alter the connections; is that right?

A. Yes.

Q. So you disagree with the district court's construction, then?

A. Yes.

Q. When you were analyzing references, did you apply your understanding of what a situational network is?

A. Yes.

Q. Not the district court's construction, then, right?

A. Right.

MR. TUMINARO: I think we should take a break here.

THE REPORTER: Off the record.

(Recess from 10:55 a.m. to 11:05 a.m.)

Q. (BY MR. TUMINARO) Welcome back, Dr. Rubin.

A. Thank you.

Q. I would like to follow up on a couple of things.

Do you recall that before the break we were talking about whether there was language in the claims about -- of the '454 patent about the situational network being temporally limited? Do you recall that discussion?

A. Yes.

Q. And I think what you said is that the claim language -- there's no claim language that says "temporally limited," but that's how you understand the situational network; is that fair?

A. Yes.

Q. And then I asked whether you were aware of any examples in the specification of the '454 patent where the situational network was not temporally limited.

Do you remember that?

A. Yes.

Q. Okay. And you said you weren't able to remember that; is that right?

A. I wasn't able to find one.

Q. Okay. So if you look with me at column 4 of

the '454 patent.

A. Okay.

Q. At line 37.

A. Okay.

Q. It says, "The connections or links established in forming and sustaining the situational network 3000 may be persistent or temporary."

Do you see that?

A. Yes.

Q. Does that sort of correct your understanding that the connections in the situational network could be persistent?

A. That -- that gives an example of where they can be persistent.

Q. So the specification of the '454 patent does not require the situational network to be temporally limited; is that right?

A. That's right.

Q. If you go back to paragraph 26 of your declaration in the 530 IPR or the '345 patent.

A. Okay.

Q. Paragraph 26, the paragraph we looked at

before.
A. Okay.
Q. Paragraph 26 has claim constructions from the District Court, right?
A. Right.
Q. One of the claim constructions from the District Court relates to situational -- situation authority, correct?
A. Right.
Q. That definition from the District Court is an entity providing information concerning a situation, right?
A. Right.
Q. Do you agree with that construction?
A. Yes.
Q. That construction does not require the situation authority to be external, right?
A. It doesn't say anything about that.
Q. I would like to go back to your -- we talked about some of your background.
A. Right.
Q. And you talked about cases that you had worked

on?

A. We did.

Q. Yeah. Have you worked on -- besides this case, have you worked on any cases that involve social networks?

A. Blackberry Limited versus Facebook. That was in 2019, deposition. I don't see any other ones.

Q. Have you written any papers addressing social networks?

A. Not specifically.

Q. You mentioned earlier that you taught classes on networking.

A. Right.

Q. My question is have you taught any classes on social networking?

A. No.

Q. Do you consider yourself to be an expert in social networking?

A. Yes.

Q. On what basis?

A. The fact that social networking is -- uses technologies that are the technologies that I have been

teaching. And I have been a user of social networking and I have written many papers, attended many conferences, many lectures on social networking. So I think I have a lot of expertise in that area.

Q. So you think a person with expertise in networking would sort of necessarily understand the technologies and issues in social networking?

A. Maybe not any person, but I do.

Q. Does Dr. Peters have any expertise in social networking?

A. He understands the underlying technologies and how social networks work, but I wouldn't call that his primary area of expertise.

Q. Does Dr. Blue have any expertise in social networking?

A. Same answer.

MR. TUMINARO: I pass the witness.

MR. ZAK: If I could just ask all of my questions at the end, I think that would be more convenient.

MR. TUMINARO: This is the end.

MR. ZAK: Well, I assumed -- I thought we

were going to divide this up into two?

MR. TUMINARO: He covered all of the '932 stuff already. We're done.

MR. ZAK: Oh, he covered all the -- oh, sorry. Clarification, clarification. Sure, sure. I just have a few questions, just a few follow-up questions.

EXAMINATION

BY MR. ZAK:

Q. So, Dr. Rubin, we talked about the claim construction from the district court?

A. Right.

Q. If you recall -- do you recall?

A. Yes.

Q. Okay. And we talked about how one of the claim constructions -- this is mentioned in your report and I'm just looking at Exhibit 2009. I think this is the -- yes, the 530 report.

A. Okay.

Q. I'm on, again, what's page 8/page 9 of 43 -- I'm sorry, page 9 of 43.

A. Yes.

Q. And I think these were the same constructions -- just so we can establish that this is consistent across all of the reports, the same construction is represented in all of your reports, correct, from the District Court?

A. Yes.

Q. There was no District Court case that had different constructions?

A. Not to my knowledge.

Q. So all of these are the same, so this is going to be universal across all of your reports, then?

MR. TUMINARO: Objection, leading.

THE WITNESS: Yes.

MR. ZAK: Sorry, I don't mean to be leading.

Q. (BY MR. ZAK) Well, let me ask it another way.

Is there any difference with the claim construction across your reports?

A. Let me have a look.

I don't see any difference.

Q. Okay. So the District Court construed the term "situational network," and in your report you

presented that construction as a network created in response to an event or situation; is that correct?

A. Yes.

Q. And we talked about how -- when you were answering questions, do you recall talking about different layers of the network?

A. Yes.

Q. One through seven, if I remember correctly. Do I remember that correct?

A. Yes.

Q. In your understanding of the District Court's construction, did they specify -- when they say "a network," is that limited to any particular layer?

A. Not in the District Court construction.

Q. So as you understand the District Court construction, a network could be referring to Layer 1?

A. It could.

Q. It could be referring to any layer between one through seven?

A. Yes.

Q. Do you feel that's correct?

A. No.

Q. Why not?

A. Because if you look at the patent, it only deals with Layer 7 for a situational network.

Q. And when you were giving your opinion, did you apply the District Court's constructions?

A. No.

Q. Okay. I think that is going to be pretty much all of my questions.

MR. TUMINARO: Okay, we're done.

THE REPORTER: You would like a rough draft, right?

MR. TUMINARO: Yes, please.

MR. ZAK: Yes, and if you could please send it -- do you need my e-mail address?

THE REPORTER: Yes, I do.

(Proceedings concluded at 11:19 a.m.)

CHANGES AND SIGNATURE

WITNESS NAME: DR. AVIEL D. RUBIN

DATE OF DEPOSITION: FEBRUARY 7, 2025

PAGE	LINE	CHANGE	REASON

I, DR. AVIEL D. RUBIN, have read the foregoing deposition and hereby affix my signature that same is true and correct, except as noted above.

_____
DR. AVIEL D. RUBIN

THE STATE OF _____)
COUNTY OF _____)

Before me, _____, on this day personally appeared DR. AVIEL D. RUBIN, known to me (or proved to me under oath or through _____) (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office, this _____ day of _____, _____.

_____
NOTARY PUBLIC IN AND FOR
THE STATE OF _____

My commission expires: _____

____ No Changes Made ____ Amendment Sheet(s) Attached

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS,	)	Case IPR2024-00528
Petitioner,	)	U.S. Patent No. 8,249,932
	)	
	)	Case IPR2024-00529
	)	U.S. Patent No. 8,332,454
v.	)	
	)	Case IPR2024-00530
	)	U.S. Patent No. 9,877,345
	)	
SITNET LLC,	)	Case IPR2024-00612
Patent Owner.	)	U.S. Patent No. 8,249,932

REPORTER'S CERTIFICATION OF THE ORAL DEPOSITION OF DR. AVIEL D. RUBIN

FEBRUARY 7, 2025

I, Donna Wright, a Certified Shorthand Reporter and Notary Public in and for the State of Texas, hereby certify to the following:

That DR. AVIEL D. RUBIN, the witness whose deposition is hereinbefore set forth, was duly sworn by me before the commencement of such deposition and that such deposition was taken before me and is a true record of the testimony given by such witness.

I further certify that the adverse party, META PLATFORMS, INC., was represented by counsel at the deposition.

I further certify that the deposition of DR. AVIEL D. RUBIN, occurred at the offices of The Westin Austin Downtown 310 East 5th Street Austin, Texas 78701 on Friday February 7, 2025, commencing at 9:02 AM to 11:19 AM.

I further certify that I am not related to any of the parties to this action by blood or marriage, I am not employed by or an attorney to any of the parties to this action, and that I am in no way interested, financially or otherwise, in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 12th day of February, 2025.

Donna Wright

Donna Wright, CSR No. 1971
Expiration Date: 11/30/2026
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