

In the Matter Of:

CIENA CORPORATION vs

K. MIZRA LLC

ROBERT AKL, D.S.C.

July 09, 2026



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

CIENA CORPORATION,
Petitioner,
v.
K. MIZRA LLC,
Patent Owner.

Case IPR2025-01364
U.S. Patent 10,735,320

PETITIONER'S NOTICE OF DEPOSITION OF
DR. ROBERT AKL, D.S.C.

ORAL DEPOSITION OF
ROBERT AKL, D.S.C.

TAKEN : JULY 9, 2026

ORAL DEPOSITION OF ROBERT AKL D.S.C.,
produced as the PETITIONER, and duly sworn, was taken in the
above-styled and numbered cause of July 9, 2026, from 9:56
a.m. to 10:33 a.m., before Cailin L. Doyle, in and for the
State of Texas, reported by voice steno via LegalView,
pursuant to the Federal Rules of Civil Procedure and the
provisions stated on the record or attached hereto.

2 A P P E A R A N C E S ATTORNEY FOR THE PETITIONER, CIENA CORPORATION : MR. PAUL BELNAP, ESQ. Duane Morris LLP 901 New York Ave., N.W., Suite 700 East Washington, D.C. 20001 (202) 776-7800 Pbelnap@duanemorris.com ATTORNEY FOR THE DEFENDANT, K. MIZRA LLC, PATENT OWNER: MR. CLIFF WIN, ESQ. Folio Law Group PLLC 13492 Research Blvd., Suite 120, No. 177 Austin, Texas 78750 (206) 809-6809 Cliff.win@foliolaw.com ***** INDEX <table style="width: 100%;"> <tr> <td></td> <td style="text-align: right;">Page</td> </tr> <tr> <td>Appearances.....</td> <td style="text-align: right;">2</td> </tr> <tr> <td>Preliminary Proceedings.....</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Examination by Mr. Belnap.....</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Changes and Signature.....</td> <td style="text-align: right;">42</td> </tr> <tr> <td>Reporter's Certification.....</td> <td style="text-align: right;">44</td> </tr> </table> ***** EXHIBIT INDEX <table style="width: 100%;"> <tr> <td></td> <td style="text-align: right;">Page</td> </tr> <tr> <td>Exhibit No. 2013 Declaration of Dr. Robert Akl, D.S.C.</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Exhibit No. 1001 United States Patent Pan et al.</td> <td style="text-align: right;">4</td> </tr> </table>		Page	Appearances.....	2	Preliminary Proceedings.....	3	Examination by Mr. Belnap.....	3	Changes and Signature.....	42	Reporter's Certification.....	44		Page	Exhibit No. 2013 Declaration of Dr. Robert Akl, D.S.C.	3	Exhibit No. 1001 United States Patent Pan et al.	4	4 A. Yes. Q. Do you recognize this document? A. Yes. Q. What is this document? A. It is the declaration of Dr. Robert Akl, D.S.C, in support of K. Mizra, patent owner response. It's the declaration that I wrote to support patent owner's response in IPR 202-50-1364. Q. Okay. Thank you. I've also dropped in the chat Exhibit 1001. Could you download that, please? (Exhibit No. 1001 was marked.) A. Yes. Q. Okay. Do you recognize this document? A. Yes. Q. What is this document? A. This is U.S. Patent number 107-35320. Q. Okay. I may refer to U.S. Patent 107-35320 as the 320 patent. Is that okay? A. Yes. Q. Alright. And this patent involves a multi-protocol label switching protocol. Correct? A. The title is application wire. I'm not sure what you are reading. Q. Dr. Akl, does the 320 patent discuss multi-protocol label switching?
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3 MADAM COURT REPORTER: Good morning. Today is July 9, 2026. The time is 9:56 a.m. This will be the oral deposition of Mr. Robert Akl, Doctor of Science, and is being conducted remotely. My name is Cailin Doyle, CVR. Mr. Akl, will you please raise your right hand? Do you swear or affirm the testimony you are about to give in this matter will be the truth, the whole truth, and nothing but the truth? THE WITNESS: I do. MADAM COURT REPORTER: Counsel, you may proceed. Q. Good morning Dr. Akl. How are you doing today? A. Good, thank you. Q. Thank you for joining us here. I understand you've been deposed many times before; correct? A. Yes. Q. Including PTAP proceedings; correct? A. Yes. Q. Okay. I think we'll forgo a lot of the typical introductory portions of a deposition, but one introductory question; is there any reason why you can't provide a full and truthful testimony today? A. No. Q. Okay. I had dropped in the chat Exhibit 2013. Could you download that, please? (Exhibit No. 2013 was marked.)	5 A. Yes. MPLS Technology, which is multi-protocol label switching is discussed in this specification. Q. Okay. And I'll probably refer to it as MPLS just as you did -- strike that. I will refer to multi-protocol label switching as MPLS. Does that sound okay? A. Yes. Q. Alright. Dr. Akl, do you hold yourself out as an expert in the field of network architecture? A. I haven't rendered an opinion -- I mean, I would say, yes, based on my 30 plus years of experience in the field. Q. Okay. I heard you respond with, you haven't rendered an opinion. What haven't you rendered an opinion on? A. The words network architecture put together. I mean, this is not an opinion I officially rendered in my declaration. I think I use the term word network communication system, but I was trying to answer the question that was asked. But I do agree that I'm also -- a network architecture is also an area of expertise of mine. Q. Okay. Thank you. If I understand correctly, did you say that you've not rendered an opinion on network architecture? A. No. I said I have not rendered specifically an opinion of me being an expert in the field of network																		

6 1 architecture, per se, but I am an expert in that field. I 2 use in my declaration -- I used the term -- so if we go to 3 paragraph seven, I used the term network communication 4 systems. 5 Q. Okay. Do you consider yourself an expert in the 6 area of network security? 7 A. Network security is a broad field. Some aspects 8 of network security I would be an expert. Again, I haven't 9 rendered opinions on that in this declaration. 10 Q. So are you saying that you are not an expert in 11 all areas of network security? 12 A. I'm saying network security is an area of 13 expertise of mine. I just need to know what aspect of 14 network security, and that falls outside the scope of this 15 declaration. 16 Q. Okay. Do you hold yourself out as an expert in 17 internet protocols? 18 A. Internet protocols is an area of expertise of 19 mine. 20 Q. Okay. Do you hold yourself out as an expert in 21 the area of packet networks? 22 A. Yes. That is an area of expertise of mine. 23 Q. Okay. Do you hold yourself out as an expert in 24 the field of MPLS? 25 A. Yes. That's a subcategory. It is acknowledging	8 1 a subcategory under one of the categories in areas of 2 expertise, like for example, internet protocols or network 3 communication. 4 Q. Dr. Akl, you're familiar with the term, 5-tuple; 5 correct? 6 A. I'm sorry. What is the term again? 7 Q. 5-tuple? 8 A. Can you spell that, please. 9 Q. Yes. 5, f-i-v-e, tuple, t-u-p-l-e. Do you 10 understand what I'm referring to when I say 5-tuple? 11 A. I'm not sure I do. Can you provide me more 12 context? 13 Q. Dr. Akl, you said that you were an expert in 14 network architecture; correct? 15 A. I am an expert in network architecture, yes. 16 Q. You also stated that you are an expert in 17 internet protocols; correct? 18 A. Yes. These are broad fields, and I am an expert 19 in those fields. 20 Q. And you are also an expert in the field of 21 packing networks; correct? 22 A. Yes. 23 Q. Okay. Being an expert in all these fields, you 24 do not understand what the term 5-tuple refers to; is that 25 correct?
7 1 that I have taught in my courses and I have rendered 2 opinions in district court, and other courts related to 3 MPLS. 4 Q. You mentioned that MPLS is a subcategory, but I 5 don't think you provided what it's a subcategory of. What 6 is a MPLS a subcategory of? 7 A. A type of network communication, or a type of 8 network protocol. 9 Q. And you consider yourself an expert in network 10 protocols; correct? 11 A. Yes. 12 Q. Dr. Akl, I would like you to turn to page 56 of 13 your declaration. 14 A. I'm there. 15 Q. Alright. You'll see an area titled Areas of 16 Expertise; do you see that? 17 A. Yes. 18 Q. Under area of expertise you list many different 19 technologies that you are an expert in; do you see that? 20 A. Yes. 21 Q. And it is correct you do not list MPLS as one of 22 your areas of expertise here on your CV; correct? 23 A. Like I answered previously, it is a subcategory. 24 It is not listed as a category. There is a lot of things 25 that would fall within my area of expertise. MPLS would be	9 1 A. It is not a term that I think appears in this 2 declaration. 3 Q. Dr. Akl, that wasn't my question. My question 4 was, are you familiar with the term 5-tuple? 5 A. Can you spell the second word again, please. 6 Q. Certainly. The second word is t-u-p-l-e. 7 A. That is not a term that appears in my 8 declaration. I don't have opinions on that today. 9 Q. Okay, thank you, Dr. Akl. So I understand that 10 you are unfamiliar with the term 5-tuple; correct? 11 A. No. That is not -- you're mischaracterizing my 12 response. My answer is that is not a term in my 13 declaration, and I don't have opinions on it today. 14 Q. Okay. To clarify, you do not have opinions on 15 the 5-tuple in your declaration in this proceeding; 16 correct? 17 A. That is fair. 18 Q. Okay. Nevertheless, you are familiar with the 19 term 5-tuple; correct? 20 MR. WIN: Objection to form. 21 A. I don't have opinions on it today. 22 BY MR. BELNAP: 23 Q. Okay. Are you telling me that you cannot speak 24 to the term 5-tuple? 25 A. I do not have opinions on it today. It is

10 1 outside the scope of my declaration. 2 Q. Okay, thank you. Dr. Akl, is the 320 patent 3 within the scope of your declaration? 4 A. I have opinions on -- I have provided rebuttal 5 opinions. So the opinions that I have in my declaration 6 are limited to rebuttal opinions to petitioners -- to the 7 petition that the petitioner submitted. I understand that 8 the word 5-tuple appears in the specifications, but I have 9 not provided opinions on 5-tuple in my declaration. 10 Q. Thank you. Dr. Akl, as an expert, would you 11 agree that IP-based models have been developed to address 12 the QOS requirements associated with applications before 13 the 320 patent? 14 MR. WIN: Objection to form. 15 A. I have no opinions, broadly, to address your 16 question. 17 BY MR. BELNAP: 18 Q. Dr. Akl, you're telling me you cannot tell me 19 whether or not you would agree that IP-based models have 20 been developed to address the QOS requirements associated 21 with applications before the 320 patent? 22 MR. WIN: Objection to the form of the question. 23 A. The specification of the 320 patent provides a 24 background of the invention and it provides its own 25 description of prior art. I have not provided an opinion	12 1 would be for a person of ordinary skill in the art at the 2 time of the invention of the 320 patent. I provide that in 3 paragraph 27. I have not commented on those 4 qualifications. I provided my own qualifications in 5 paragraph 28, and my opinions would apply under either set 6 of qualifications. 7 Q. Dr. Akl, you state in paragraph 25 of your 8 declaration that you understand that a person of ordinary 9 skill in the art is a hypothetical person who is presumed 10 to have known the relevant art of the challenged claims of 11 the 320 patent at the time of the invention; correct? 12 A. Yes. 13 Q. Would you consider IP-based models that have 14 been developed to address the QOS requirements associated 15 with applications before the 320 patent as as being 16 relevant art? 17 MR. WIN: Objection to form. 18 A. I haven't rendered an opinion on that either way 19 in this case. 20 BY MR. BELNAP: 21 Q. Dr. Akl, it is your opinion that the 320 patent 22 is directed to methods and systems for handling QOS 23 guarantees at a per application level; correct? 24 A. In my declaration, I provide an overview of the 25 320 patent, starting in paragraph 49. Can you repeat your
11 1 on the background. So I do not have the position related 2 to your question. 3 BY MR. BELNAP: 4 Q. Dr. Akl, would you consider solutions that 5 address the QOS requirements associated with applications 6 pertinent to the knowledge of a person of ordinary skill 7 in the art for the 320 patent? 8 MR. WIN: Objection to form. 9 A. I don't understand the question. 10 BY MR. BELNAP: 11 Q. Dr. Akl, you do understand what a person of 12 ordinary skill in the art is; correct? 13 A. Yes. 14 Q. What is your understanding of a person of 15 ordinary skill in the art? 16 A. So if we go to my declaration, if we go to page 17 12, I understand from Counsel that there is a person of 18 ordinary skill in the art is a hypothetical person that is 19 presumed to have knowledge of relevant art and be able 20 to -- so be able to provide an understanding of the 21 specification. And this would be at the time of the 22 invention, in this case, of the 320 patent. So there is a 23 level of skill that would be associated with such a 24 person. And I understand that the petitioner has provided 25 a definition of what petitioner believes that those skills	13 1 question, please? 2 Q. Certainly. Dr. Akl, is it your opinion that the 3 320 patent is directed to methods and systems for handling 4 QOS guarantees at a per application level? 5 MR. WIN: Objection to form. 6 A. I mean, I provide an overview. I don't think 7 you're reading exactly the opinion that I have, but it 8 seems consistent at a high level. I do state then the 320 9 patent is directed to systems and methods that recognizes 10 and analyzes the incoming data stream, specifically the 11 application flow. And it enables the network to guarantee 12 quality of service at a more granular per application 13 flow, among other things. And I do provide in different 14 sections of my declaration a description of the benefits 15 to some extent of the 320 patent. 16 Q. Dr. Akl, could you turn to paragraph 64 of your 17 declarations? 18 A. I am there. 19 Q. So I understand that your opinion is that the 20 320 patent is directed to methods and systems for handling 21 QOS guarantees at a per application level; correct? 22 A. Yes, this is one of the paragraphs that I stated 23 earlier in my previous response, where I also addressed 24 some of the benefits of the 320 patent. You did not read 25 the entire sentence, but that is a phrase that I use as

14 1 part of a larger sentence explaining the benefits of the 2 320 patent over an improvement over prior art quality of 3 service mechanisms. 4 Q. You would agree that the claims in the 320 5 patent do not require handling QOS guarantees at a per 6 application level; correct? 7 A. We would need to go to the claims. I have not. 8 Q. Okay. 9 A. We can look at the claims that form the 10 invention and we would need to go over to the claims if I 11 am to answer your questions. 12 Q. Certainly. Let's turn to Exhibit 1001, and let's 13 look at claim one. Are you there? 14 A. Yes. 15 Q. Okay. Dr. Akl, does claim one of the 320 patent 16 require handling QOS guarantees at a per application 17 level? 18 A. Those words, specifically in that order, may not 19 appear in claim one. The word application flow does 20 appear. 21 Q. Thank you, Dr. Akl. My question was not whether 22 or not those words appear in the claim. Do you understand 23 that? 24 A. I am trying to answer the question to the best 25 of my ability.	16 1 Q. Dr. Akl, while we're looking at claim one, I 2 would like to look at a specific limitation, okay? 3 A. Sure. 4 Q. Specifically the limitation that starts with 5 identifying information associated with and ending with 6 includes the application flows. Do you see that? 7 A. Yes. 8 Q. It is your opinion that information associated 9 with an application flow refers to application-specific 10 information such as the sending device application or the 11 type of sending device application; correct? 12 A. We can go back to my declaration. I have 13 provided opinions on that limitation in a couple different 14 places. 15 Q. Certainly. Let's turn to page 61 of your 16 declaration. 17 A. I am there. 18 Q. It is your opinion that the claim term 19 information associated with an application flow refers to 20 application-specific information such as the sending 21 device application or the type of sending device 22 application; correct? 23 A. Not exactly. I think you're mischaracterizing 24 the opinion that I have. So to clarify the opinion that I 25 have, we would need to go to page 27, and when you go to
15 1 Q. Dr. Akl, you would agree that claim one in the 2 320 patent does not require handling QOS guarantees at a 3 per application level; correct? 4 A. Those words do not specifically appear in that 5 order in claim one. 6 Q. Thank you, Dr. Akl. My question is not whether 7 or not whether the words appear in there or not. Do 8 understand that? 9 A. I am trying to answer the question to the best 10 of my ability. 11 Q. Dr. Akl, I'll ask again. You would agree that 12 the claims in the 320 patent do not require handling QOS 13 guarantees at a per application level; correct? 14 A. Those words do not appear in the claim. 15 Q. Dr. Akl, if words do not appear in a claim, does 16 that mean that the claim does not require those missing 17 words? 18 A. It depends on the context. You'll have to look 19 at the scope on how a POSITA wiykd understand the words 20 that are in the claim. The claim defines the invention. 21 Q. Do you have any opinion whether claim one of the 22 320 patent requires handling QOS guarantees? 23 A. I do not believe I specifically addressed that 24 in my declaration. I did not need to provide rebuttal 25 opinions related to the petition.	17 1 page 27, I provide an opinion that the phrase starting 2 with identifying information associated with an 3 application flow, all the way to -- includes the 4 application flow, which is the entire limitation, how that 5 term should be construed. I have a table, I think, if you 6 go to page 23, there's a table, and I think you were 7 reading a subset of what a POSITA would understand the 8 plain and ordinary meaning. But I think you need to refer 9 to the entire phrase, which is on the left of the table, 10 and the entire construction that patent owner is proposing 11 on the right, versus subsets of each. 12 Q. Okay. First question. So on this table on page 13 23, you have a column that says the patent owner's 14 proposed instructions; correct? 15 A. Yes. 16 Q. And do you agree with both of these patent 17 owners proposing constructions; correct? 18 A. Yes. 19 Q. Okay. So the 320 patent requires identifying 20 information association -- strike that. Let me start over 21 here. The 320 patent requires identifying information 22 associated with an application flow based on one or more 23 un-encapsulated packet headers of the application flow or 24 based on an ingress data stream that includes the 25 application flow; correct?

18 1 A. Yes. 2 Q. And you agree that the plain and ordinary 3 meaning wherein an information associated with an 4 application flow refers to application-specific 5 information, such as the sending device application or the 6 type of sending device application based on information 7 including at least data in layer four and above headers of 8 the packet; correct? 9 A. Yes. 10 Q. So you would agree that the claim term 11 information associated with an application flow refers to 12 application-specific information such as the sending 13 device application or the type of sending device 14 application based on information including at least data 15 in layer four and above headers of the packet; correct? 16 A. You're mischaracterizing again, because you're 17 not reading the entire claim term. So the entire claim 18 term, as you read previously, would have a plain and 19 ordinary meaning, and I provide what the patent owner's 20 proposed construction for that entire limitation is. So I 21 agree with that, but then when you start taking out 22 sections, I do not. It's hard to answer your question, 23 because the construction is based on the entire 24 limitation, which -- and the entire limitation is 25 construed as proposed by patent owner. And the opinions	20 1 A. I've answered that question to the best of my 2 ability. You seem to be either going around in circles, or 3 I don't understand your question. 4 Q. So, Dr. Akl, you cannot tell me whether or not 5 those words are or are not included in the proposed 6 construction? 7 A. You don't need me to verify what words appear in 8 the construction. You can read the claim language, which 9 you have, and you have read the proposed construction 10 which you have. I don't understand the question as 11 phrased, because some of those words -- I'm not sure if 12 you're reading them as part of the construction or of part 13 of the claim term. That's where the confusion is coming 14 in. 15 Q. Dr. Akl, my question is clear. It's whether or 16 not the words that I stated are in the proposed 17 construction. You cannot tell me whether or not those 18 words are in the proposed construction? 19 MR. WIN: Objection to the form. 20 A. So you're being a little argumentative. You're 21 telling me your question is clear, is your opinion. I am 22 entitled to make sure I understand the question before I 23 answer it. And I'm not understanding exactly what you're 24 asking. 25 BY MR. BELNAP:
19 1 that I have are related to the entire limitation. 2 Q. Thank you, Dr. Akl. So the construction you 3 agree with states that information associated with an 4 application flow refers to application-specific 5 information such as the sending device application or the 6 type of sending device application based on information 7 including at least data in layer four and above headers of 8 the packet; correct? 9 A. Can you repeat the question again? 10 Q. Dr. Akl, I'm reading the construction word for 11 word from your declaration; am I not? 12 A. To the extent that construction is being mapped 13 to the claim term on the left, that is correct. What you 14 seem to be doing is reading part of the claim term and 15 then asking me to agree to a construction for part of the 16 claim term, which I have stated the construction maps the 17 entire claim term. 18 Q. Okay. Thank you, Dr. Akl. I don't think we got 19 to the whole construction of the term yet. My question 20 right now is simply, does the proposed construction state 21 that information associated with an application flow 22 refers to application-specific information such as the 23 sending device application or the type of sending device 24 application based on information including at least data 25 in layer four and above layers of the packet?	21 1 Q. Thank you, Dr. Akl. Does the proposed 2 construction state information associated with an 3 application flow? 4 A. Those are words that appear as part of the 5 proposed construction. 6 Q. Dr. Akl, does claim one of the 320 patent state 7 information associated with an application flow? 8 A. Those are words that appear as part of the claim 9 term that is being construed. 10 Q. Are the words information associated with an 11 application flow in part owners can propose construction 12 the same as the words information associated with an 13 application flow, in claim 10320 patent? 14 A. I don't understand what you're asking. 15 Q. Dr. Akl, does the patent owner's propose 16 construction state information associated with an 17 application flow? 18 A. Those are words that appear in the proposed 19 construction and the construction goes on to explain what 20 that is, or limited further, I should say, in the context 21 of the proposed claim term. 22 Q. Dr. Akl, you stated that the construction goes 23 on to explain quote what that is; correct? 24 A. Yes. 25 Q. What are you referring to when you use the

22 1 phrase, what that is? 2 A. I am referring to the claim term that appears on 3 the left, starting with identifying information associated 4 with an application flow based on one or more 5 un-encapsulated packet headers of the application flow, or 6 based on an ingress data stream that includes the 7 application flow. 8 Q. Dr. Akl, you would agree that the claims of the 9 320 patent do not require identifying the sending device 10 application or the type of sending device application; 11 correct? 12 A. We -- I don't think I specifically rendered 13 opinions on the entire claim language. I rendered opinions 14 on a subset of claim language. So I don't have an answer 15 to your question. 16 Q. Dr. Akl, if I understand, you do not have an 17 opinion whether the claims of the 320 patent require 18 identifying the sending device application or the type of 19 sending device application; correct? 20 A. I think you're mischaracterizing slightly what I 21 stated. 22 Q. Thank you. I'll try to ask the same question 23 again. Dr. Akl, you do not have an opinion that the 320 24 patent does not require identifying the sending device 25 application or the type of sending device application;	24 1 you could use the words such as, and that would be 2 consistent with how a POSITA would understand an example 3 that would need the claim term being construed. 4 Q. Dr. Akl, does patent owners proposed 5 construction require identification of the sending device 6 application? 7 A. I can't add to your question in vacuum like 8 that, because you are taking part of a claim construction, 9 and a sub-phrase of it. And so I agree with the entire 10 construction. And the entire construction provides a 11 couple of examples. So you would have to look at the 12 context of what is being pointed to, to be able to say, 13 yes, or no. Such as the sending device application, the 14 type of sending device application, as long as it's based 15 on information including at least data in a higher layer 16 like layer four. So those are all consistent with how a 17 person of ordinary skill in the art would understand the 18 plain and ordinary meaning of the phrase. But it would be 19 difficult to specifically render an opinion on part of the 20 phrase, because one, the claim term uses for and the 21 construction also uses or, which means it can be met in a 22 couple different ways. 23 Q. Dr. Akl, I believe you stated that the proposed 24 construction provides a couple of examples; correct? 25 A. Yes. Such as -- and that, and then there's for,
23 1 correct? 2 A. Can you repeat the question, please? 3 Q. Dr. Akl, you have provided no opinion whether 4 the claims of the 320 patent require identifying the 5 sending device application or the type of sending device 6 application; correct? 7 MR. WIN: Objection to form. 8 A. I haven't provided any opinions on the entire 9 claim language. I've provided opinions on a couple of 10 limitations in the claim language and sending device 11 application would be an example of -- it appears in patent 12 owners proposed construction of the limitation that we're 13 discussing. So it's hard to answer your question as 14 phrased, because the proposed construction uses the terms 15 such as the sending device application, and that would be 16 an example that a POSITA would understand to be consistent 17 with the plain and ordinary meaning of the phrase that's 18 being construed that I don't need to read again on the 19 record. 20 Q. If I understand correctly, Dr. Akl, is your 21 opinion that a sending device application is an example 22 that would meet this claim limitation; correct? 23 A. I am saying the proposed construction uses such 24 as, and so patent owners proposed construction is 25 providing -- I mean, they don't use the word example, but	25 1 and then there's another phrase. 2 Q. Dr. Akl, I'm a bit confused as to exactly what 3 the examples are in patent owners proposed construction. 4 Can you identify what is one example provided in patent 5 owner's proposed construction? 6 A. So the sending device application would be 7 consistent with the plain and ordinary meaning of 8 information associated with an application flow, when it 9 refers to application-specific information. 10 Q. Thank you. I'm going ask the question again. Can 11 you provide the example in the construction -- strike 12 that. Dr. Akl, can you provide one example from this 13 proposed construction? 14 A. I think I already answered the questions. 15 Q. Okay. Dr. Akl, is the sending device application 16 one of the examples in patent owner's proposed 17 construction? 18 A. Yes. It's consistent with the plain and ordinary 19 meaning of how a POSITA would understand what information 20 associated with an application flow refers to 21 application-specific information, and then it says such as 22 a sending device application. 23 Q. Dr. Akl, is the type of sending device 24 application the other example provided in patent owner's 25 proposed construction?

26 1 A. That would be another example. But again, you're 2 reading those phrases without the entire context, but yes, 3 that would be another example that would be consistent 4 with the plain and ordinary meaning of how a person of 5 ordinary skill in the art would understand the term being 6 construed. 7 Q. Dr. Akl, so it's your understanding that the two 8 examples provided in the patent owners construction are 9 first, the sending device application, and second the type 10 of sending device application; correct? 11 A. Not exactly. Again, you're taking parts of the 12 construction and the proposed construction is the entire 13 term, and we have to also include the last part of the 14 construction, because they also need to be based on 15 information including at least in layer four, and above 16 headers of the packet. And so all of that language 17 together would be consistent with how a POSITA would 18 understand the plain and ordinary meaning. Not dissecting 19 it to a couple words at a time. 20 Q. Okay. Thank you, Dr. Akl. I'm just trying to 21 understand what you considered the examples to be in the 22 proposed construction. If I understand, you're stating 23 that this based on information, including at least data in 24 layer four, and above headers of the packet is required as 25 part of each of the examples; correct?	28 1 data in layer four and above the headers of the packet? 2 MR. WIN: Objection to form. 3 A. Yeah. I answered that question to the best of my 4 ability. I can give you the answer again, which is, the 5 limitation is what's on the left. The limitation, I 6 believe would have a plain and ordinary meaning. And I 7 have provided, or patent owner has provided an explanation 8 elaborating what a POSITA would understand, the plain and 9 ordinary meaning. And I agree that is consistent with the 10 plain and ordinary meaning. And so that's the opinion 11 that I have today. 12 Q. Dr. Akl, is it your opinion that consistency 13 with the plain and ordinary meaning indicates a 14 requirement of the claim? 15 MR. WIN: Objection to form. 16 A. It is difficult to answer your question in 17 vacuum, because what I feel you're asking is to identify 18 the exact boundary or the scope, which I did not need to, 19 to provide the opinions that I have here today. So I can 20 point to -- so the opinions that I have are rebuttal 21 opinions, whether it be prior art discloses this 22 limitation. That's one of the opinions that I have. And 23 looking at the prior art, which is specific, I can state 24 whether it discloses this limitation or not. And the 25 opinions that I have, that it does not. It is not
27 1 A. That's fair. 2 Q. So the first example in patent owner's proposed 3 construction is the sending device application based on 4 information including at least data in layer four and 5 above headers of the package; correct? 6 A. That's fair. 7 Q. And the second example in patent owner's 8 proposed construction is the type of sending device 9 application based on information including at least data 10 in layer four and above headers of the packet; correct? 11 A. That's fair. 12 Q. Dr. Akl, does claim one of the 320 patent 13 require identifying the sending device application based 14 on information including at least data in layer four and 15 above headers of the packet? 16 A. That would be consistent with the plain and 17 ordinary meaning of how POSITA would understand the 18 limitation on the left that is required. 19 Q. Thank you, Dr. Akl. I'm a bit confused as to 20 your answer whether or not this is a requirement of the 21 claim or not. You stated in there that it would be 22 consistent with the claim, but not whether or not it's 23 required by the claim. I'll ask again; Does claim one of 24 the 320 patent require identification of the sending 25 device application based on information including at least	29 1 something that fits close to the boundary of the scope 2 where I need to provide -- since it's not close to the 3 boundary, I do not need to identify the exact boundary of 4 the scope to render the opinions that I have here today. I 5 think that's ultimately -- you're asking me something 6 broader than the opinions that I have, because I can use 7 the proposed construction and provide an opinion that the 8 prior art does not meet it without providing an exact 9 boundary of the scope. And I think that's where your 10 questions are ending up requiring me to answer. 11 Q. Dr. Akl, is it your opinion that claim one of 12 the 320 patent requires identification of the type of 13 sending device application based on information including 14 at least data in layer four and above headers of the 15 packet? 16 MR. WIN: Objection to form. 17 A. That would be consistent with the plain and 18 ordinary meaning of one thing that would meet the term on 19 the left. 20 BY MR. BELNAP: 21 Q. Thank you. Again, my question is not whether 22 this is consistent with the term. My question is whether 23 it's required by the term. So I'll restate my question. 24 A. I understand the question. I'm sorry, go ahead 25 and finish your question.

30 1 Q. So let me restate. Does claim one of the 320 2 patent require identification of the type of sending 3 device application based on information including at least 4 data in layer four and above headers of the packet? 5 MR. WIN: Objection to form. 6 A. I answered that question to the best of my 7 ability. I'm answering the question, that it is consistent 8 with the plain and ordinary meaning. The plain and 9 ordinary meaning can include more than one thing that 10 would meet the claim language. Patent owner's proposed 11 construction provides examples that are consistent with 12 the plain and ordinary meaning. That's the best I can 13 answer your question. And we've been going about an hour, 14 so maybe this is a good time for a break. 15 MR. BELNAP: Certainly. Break for 10, 15 16 minutes? 17 A. Ten minutes is fine. We'll come back at the top 18 of the hour. 19 MADAM COURT REPORTER: The time is 10:50 a.m. We 20 are off the record. 21 (A short break was taken.) 22 23 MADAM COURT REPORTER: The time is 10:02 a.m. We 24 are back on the record. 25 MR. BELNAP:	32 1 it, but again, these are all examples that would be 2 consistent with the plain and ordinary meaning. And that 3 term appears in the specification. This is why I have it 4 there. So if you're on paragraph 61, if you look at 5 paragraph 63, I am citing to the specification, and I'm 6 citing -- it appears there in that citation, but I 7 specifically address it in paragraphs 66, where again I'm 8 citing through that same section of the specification of 9 the 320 patent, specifically column 324 to 31, and the 10 specification itself uses that language. 11 Q. Thank you, Dr. Akl. Does the language based on 12 information including at least data in layers four and 13 above headers of the packet require identification of 14 information in layers five or above layer five? 15 MR. WIN: Objection to form. 16 A. Again, they don't require it. These are examples 17 of how a POSITA would understand the plain and ordinary 18 meaning, or things that would meet that claim term. 19 BY MR. BELNAP: 20 Q. Dr. Akl, you would agree that identifying 21 information associated with an application flow, as stated 22 in claim one 320 patent, can be satisfied with identifying 23 information from just layers four and below; correct? 24 A. The specification gives examples of layers four 25 or above. So if we look at what the specification is
31 1 Q. Welcome back, Dr. Akl. 2 A. Thank you. 3 Q. I'd like to return to paragraph 61 of your 4 declaration. Could you go ahead and turn there? 5 A. Yes, I'm there. 6 Q. Alright. So in that paragraph, you state, I 7 understand patent owner submits that this claim term 8 should be afforded its plain and ordinary meaning, or in 9 the information associated with an application flow refers 10 to application-specific information, such as the sending 11 device application, or the type of sending device 12 application based on information and including at least 13 data in layer four and above headers of the packet; 14 correct? 15 A. Yes. 16 Q. Dr. Akl, I'm a bit confused as to what you mean 17 by based on information including at least data in layer 18 four and above headers of the packet. I'll have a few 19 questions for you. Do you see that section? 20 A. Yes. 21 Q. Okay. Dr. Akl, does based on information 22 including at least data in layer four and above headers of 23 the packet require identifying information at layers five 24 and above? 25 A. That would be an example. So it doesn't require	33 1 stating, the specification is stating application flow 2 data includes data associated with layer flow or above as 3 defined in the OSI protocol model. So it doesn't say layer 4 four or below. So I think I would disagree with your 5 characterization is inconsistent with the specification. 6 Q. Dr. Akl, I believe you opined that the 320 7 patent specification provides examples of data in layer 8 four and above as information associated with the 9 application flow; is that correct? 10 A. I think the specification says layer four or 11 above. 12 Q. Okay. 13 A. And then it says, in some embodiments 14 application flow includes data packets transmitted and 15 received by an application, such as voice over IP, instant 16 messaging, video on demand, etc. I am reading from the 17 specification of the 320 patent, column three, lines 24 to 18 31, which I include in paragraph 63, and I also include in 19 paragraph 66. As I am providing an opinion on why patent 20 owners claim construction, which includes the phrase 21 you're asking me about, is something I agree with is 22 consistent with the plain and ordinary meaning of the 23 phrase being construed, or the claim term being construed. 24 Q. So, Dr. Akl, is it possible to satisfy claim one 25 of the 320 patent, without identifying information above

34 1 layer four? 2 A. Is it possible? I mean, in vacuum, that's a very 3 broad question. Is that how a POSITA would understand the 4 plain and ordinary meaning, would be the better question. 5 The OSI model is fairly well adopted. And normally layers 6 one, two, and three are not application flow specific. So 7 examples that you would find in the lower layers, and by 8 lower layers I mean layers one, two, or three, would not 9 be application flow data. Higher layers like layers four 10 or above, would be layers in the OSI capital O, capital S, 11 capital I protocol stack. That would provide 12 application flow data. So that's the best way I could 13 answer your question. When you state, is it possible, it's 14 too broad. Is that consistent with the knowledge of how a 15 POSITA understands layers in the OSI protocol stack work, 16 the answer would be no. The lower layers do not normally 17 deal with application flow data. They normally have like 18 source address, destination address. These are things 19 related to the device and not the application flow data. 20 Q. Dr. Akl, let's turn to paragraph 106 of your 21 declaration. 22 A. I'm there. 23 Q. Dr. Akl, you state here that Taguchi does not 24 disclose identify higher level application specificity 25 such as determining the traffic belongs to a particular	36 1 four or above discussion we were having just a few moments 2 ago, okay? 3 A. Sure. 4 Q. I believe you stated that layer four and above 5 is information associated with an application flow; 6 correct? 7 A. No. You're mischaracterizing again the opinion, 8 slightly. So I stated that the specification, and I'm 9 citing from the specification. The specification of the 10 320 patent states, and this is in paragraph like 63, 11 states that application flow data includes data associated 12 with layer four or above, as defined by the OSI protocol 13 stack, and then gives additional examples. 14 Q. Dr. Akl, is it possible to satisfy patent 15 owner's constructions without reference to data in layers 16 five or above? 17 MR. WIN: Objection to form. 18 A. I think so, yes. Again, I don't believe it 19 requires layer five. It is providing examples that a 20 POSITA would understand would be consistent with the plain 21 and ordinary meaning. That understanding is based on, in 22 part, on the specification. I understand from legal 23 principles, claims, are read in light of the 24 specifications and understood by a POSITA. So it is not a 25 requirement that you need something in layers four, five,
35 1 application. For example, Spotify, Slag, Netflix, etc., 2 based on higher level packet header inspection, or 3 application letter signatures; correct? 4 A. Yes. And for the court reporter Taguchi is 5 spelled capital T-a-g-u-c-h-i. 6 Q. Dr. Akl, is it your opinion that the claims of 7 the 320 patent require determining that traffic belongs to 8 a particular application? For example Spotify, Slag, 9 Netflix, etc? 10 A. Those would be examples that would be consistent 11 with the plain and ordinary meaning of the claim term that 12 we've been looking at. They're not a requirement in the 13 sense they're not the only requirement. And again, I'm not 14 identifying a complete list of requirements. I am 15 providing, or patent owner says the term has plain and 16 ordinary meaning, but provides examples that would be 17 consistent with the plain and ordinary meaning. And this 18 would be an example that would be consistent with the 19 plain and ordinary meaning, but -- and Taguchi doesn't 20 disclose any examples that would be consistent with the 21 plain and ordinary meaning. And so Taguchi wouldn't 22 disclose that claim limitation. And then in the second 23 part I go the extra step of showing what the reference 24 does disclose. 25 Q. Dr. Akl, I would like to go back to the layer	37 1 six, or seven would be an example that could satisfy it, 2 but it's not a requirement. 3 Q. Dr. Akl, similar question but slightly 4 different. Is it possible to satisfy a patent owner's 5 construction without information above layer four? 6 A. When you say, is it possible, is it possible in 7 vacuum? In vacuum, I would say, yes. If you do meet the 8 requirement that the limitation specifies, implementation 9 wise, that would not be consistent with the OSI model, but 10 it's not impossible, because if you have a system that may 11 not be consistent with the OSI model -- but again, that 12 would go against what the specification states. Because 13 that specification is written and understood by a POSITA 14 and consistent with the knowledge of a POSITA at the time 15 of the invention, lower layers -- by that I mean layers 16 one, two, and three, normally would not have application 17 flow data associated with that. Those would appear in 18 higher layers. But to the extent there is application flow 19 data in a lower layer that would meet the claim term, 20 again, in vacuum that would be -- that would meet the 21 claim term, but that would be inconsistent with the 22 knowledge of the POSITA at the time of the invention. I 23 mean, that practice would be inconsistent with the 24 knowledge of a POSITA at the time of the invention and 25 would be inconsistent with the specification that is

38 1 describing the OSI model correctly. And normally in layer 2 four or seven is where application flow data would come 3 from. And lower layers would not be dedicated or would not 4 include application flow data. 5 Q. Dr. Akl, there are a couple statements in there 6 that I'm having trouble with from your last answer. I 7 believe that you concluded that statement stating that 8 application flow data is not associated with layers one 9 through three. But I believe you also said earlier that 10 application flow data is not normally associated with 11 layers one through three. Are either of those two 12 statements or my understandings incorrect? 13 A. Both statements are correct. It depends on the 14 context. When you're asking the hypothetical, I'm 15 answering your question in vacuum. When you're asking me 16 whether a POSITA would understand, I'm answering your 17 question from the point of view of a person of ordinary 18 skill in the art, at the time of the invention, and 19 consistent with the specification. So you seem to be 20 asking me, or I understand your questions to one, fall 21 outside the scope of the specification, and ask me 22 question in vacuum, which I tried to answer, and then more 23 relevant questions that fall within the scope of what a 24 POSITA would understand, and what the specification is 25 stating. And I am answering those questions. So both are	40 1 MADAM COURT REPORTER: The time is 10:23 a.m. We 2 are off the record. 3 (A short break was taken.) 4 MADAM COURT REPORTER: The time is 10:31 a.m. We 5 are back on the record. 6 BY MR. BELNAP: 7 Q. Alright. Thank you, Dr. Akl, for your time 8 today. I don't have any further questions, and I'll pass 9 the witness. 10 MR. WIN: I have nothing further. 11 MADAM COURT REPORTER: Well, that was short. 12 MR. BELNAP: Thank you, everyone. 13 MADAM COURT REPORTER: Dr. Akl, would you like 14 to read and sign or waive today? 15 THE WITNESS: I usually do, but I'll leave it up 16 to Counsel. It's their call. 17 MR. WIN: Ms. Doyle, do you have my email 18 address? Send me a rough or? 19 MADAM COURT REPORTER: Yes, I do have your email 20 address. 21 MR. WIN: Okay. 22 MADAM COURT REPORTER: So we are going to waive? 23 THE WITNESS: I usually prefer to sign, to read 24 and sign, but I leave that decision up to Counsel, because 25 they're paying for it. Or somebody's paying for it.
39 1 correct answers based on the context of the question that 2 you are asking. 3 Q. So does your statement that layers one through 4 three are normally not associated with application flow 5 data mean that sometimes layers one through three are 6 associated with application flow data? 7 A. No. That means in the context of what a person 8 of ordinary skill in the art would understand, and what 9 the specification states, and what the OSI model teaches, 10 that is not the case. 11 Q. So in the context of the 320 patent, layers one 12 through three can not be associated with application flow 13 data; correct? 14 A. That would be inconsistent with the knowledge of 15 a POSITA and the specification. 16 Q. Dr. Akl, when you say that, what are you 17 referring to? 18 A. Application flow data before layer four would be 19 inconsistent with the knowledge of a POSITA and what the 20 specification is describing at the time of the invention. 21 MR. BELNAP: Could you want, could we take a 22 quick break? 23 MR. WIN: Sure. 24 THE WITNESS: How long? We can go off the record 25 first.	41 1 MADAM COURT REPORTER: Counsel, what would you 2 like to do with the read and sign? 3 MR. WIN: Yeah, we'll go ahead and read and 4 sign. 5 MADAM COURT REPORTER: Mr. Belnap, what is your 6 order for this transcript this morning? 7 MR. BELNAP: What's normal turn around time? 8 MADAM COURT REPORTER: Ten business days. 9 MR. BELNAP: I think ten business days will work 10 for an offical copy. How soon could we get the rough? 11 MADAM COURT REPORTER: Probably three to four 12 days. 13 MR. BELNAP: Okay. 14 MADAM COURT REPORTER: Would you like an E-Tran 15 or hard copy? 16 MR. BELNAP: E-transcript will be fine, thank 17 you. 18 MADAM COURT REPORTER: And Mr. Win? 19 MR. WIN: Ms. Doyle, we're just going to go with 20 the standard. If the rough costs extra, we don't need 21 that. We'll just wait for the standard and E-Tran. 22 MADAM COURT REPORTER: Okay. And all my 23 questions and spellings have been completed. The time is 24 10:33 a.m. We are off the record. 25 *****

Robert Akl, D.S.C. - July 09, 2026

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1 CHANGES AND SIGNATURE 2 WITNESS NAME: DATE OF DEPOSITION: 3 ROBERT AKL, D.S.C. JULY 9, 2026 4 PAGE/LINE CHANGE REASON 5 _____ 6 _____ 7 _____ 8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____ 15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____ 22 _____ 23 _____ 24 _____ 25 _____	1 UNITED STATES PATENT AND TRADEMARK OFFICE 2 BEFORE THE PATENT TRIAL AND APPEAL BOARD 3 CIENA CORPORATION, 4 Petitioner, 5 v. 6 K. MIZRA LLC, 7 Patent Owner. 8 Case IPR2025-01364 9 U.S. Patent 10,735,320 10 PETITIONER'S NOTICE OF DEPOSITION OF 11 DR. ROBERT AKL, D.S.C. 12 13 REPORTER'S CERTIFICATION 14 ORAL DEPOSITION OF 15 ROBERT AKL, D.S.C. 16 JULY 9, 2026 17 I, Cailin L. Doyle, Shorthand Reporter in and for 18 the State of Texas, hereby certify to the following: 19 That the witness, Robert Akl, D.S.C., was duly 20 sworn by the officer and that the transcript of the oral 21 deposition is a true record of the testimony given by the 22 witness; 23 I further certify that pursuant to FRCP Rule 24 30(f) (1) that the signature of the deponent: 25 <u> X </u> was requested by the deponent or a party before the completion of the deposition and returned within 30 days from date of receipt of the transcript.
1 _____ 2 _____ 3 I, ROBERT AKL, D.S.C, have read the foregoing 4 deposition and hereby affix my signature that same is true 5 and correct, except as noted herein. 6 _____ 7 ROBERT AKL, D.S.C 8 9 THE STATE OF TEXAS) 10 COUNTY OF AUSTIN) 11 Before me, _____, on this day 12 personally appeared _____, known to me (or proved 13 to me under oath or through _____) (or proved 14 to me under oath or through _____) (description 15 of identity card or other document) to be the person whose 16 name is subscribed to the foregoing instrument and 17 acknowledge to me that they executed the same for the 18 purposes and consideration therein expressed. 19 Given under my hand and seal of office this ____ day of 20 _____, ____. 21 22 23 NOTARY PUBLIC IN AND FOR 24 THE STATE OF _____ 25 MY COMMISSION EXPIRES: _____	1 If returned, the attached Changes and Signature Page 2 contains any changes and the reasons therefore: 3 <u> </u> was not requested by the deponent or a party 4 before the completion of the deposition. 5 I further certify that I am neither attorney nor 6 counsel for, related to, nor employed by any of the parties 7 to the action in which this proceeding was taken. Further, I 8 am not a relative or employee of any attorney of record in 9 this cause, nor am I financially or otherwise interested in 10 the outcome of the action. 11 Subscribed and sworn to on this the 27th day of 12 July, 2026. 13 14 15 16 <i>Cailin L. Doyle</i> 17 _____ 18 Cailin L. Doyle, CVR 8685 19 Expires: 4/1/2027 20 21 22 23 24 25

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