

1 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2 -----
3 BEFORE THE PATENT TRIAL AND APPEAL BOARD
4 -----

5 MICROSOFT CORPORATION AND AFFIRMED NETWORKS, INC.,

6 Petitioners,

7 v.

8 LEMKO CORPORATION,

9 Patent Owner.

10 -----
11 Case No. IPR2023-00529

12 U.S. Patent No. 7,653,414
13 -----

14
15 DEPOSITION OF JAMES PROCTOR

16 DALLAS, TEXAS

17 December 6, 2023
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20 Job No.: 515314

21 Pages: 1 - 127

22 Reported by: Susan S. Klinger, RMR-CRR, CSR

Transcript of James Proctor
Conducted on December 6, 2023

1 (1 to 4)

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3	December 6, 2023	3	WITNESS PAGE
4	9:25 a.m.	4	JAMES PROCTOR
5		5	EXAMINATION BY MR. PRICE 5
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7		7	
8	Deposition of JAMES PROCTOR, held at the	8	E X H I B I T S
9	offices of Winston & Strawn, 2121 N. Pearl,	9	(None marked.)
10	Dallas, Texas, before Susan S. Klinger, a	10	
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Transcript of James Proctor
Conducted on December 6, 2023

2 (5 to 8)

5 1 PROCEEDINGS 2 JAMES PROCTOR, 3 having been first duly sworn testified as follows: 4 EXAMINATION 5 BY MR. PRICE: 6 Q Good morning, Mr. Proctor. How are you 7 today? 8 A Good morning. I'm doing fine, thank you. 9 Q Do you understand why you are here today? 10 A I do. 11 Q And why is that? 12 A I wrote some declarations related to the 13 validity of several patents and we're here to 14 discuss my reports or at least one of them today. 15 Q I will hand you the report that we're 16 talking about today. We will go through 17 preliminaries. 18 Mr. Proctor, do you recognize this 19 document? 20 A I do. 21 Q And what is this document? 22 A This is my declaration related to the '414	7 1 14th of February this year? 2 A Yeah, yes. 3 Q You didn't have anything better to do on 4 Valentine's Day? 5 Was it your understanding that as of 6 February 14th, 2023 that you were supposed to 7 include in this declaration all of the opinions 8 that you had formed about the validity of the '414 9 patent up to that time? 10 A Well, based upon the information I had in 11 front of me at the time I expressed all my 12 opinions. 13 Q Okay. Do you have any opinions that you 14 have formed about the validity of these patents 15 since you filed this declaration that cannot be 16 found in what you have written? 17 A Well, I didn't have access to Dr. 18 Cooklev's rebuttal declaration or the preliminary 19 patent owner's response. So to the extent that I 20 have formed opinions related to those and the 21 patent, that is it. 22 Q Okay. And you will be able to testify to
6 1 patent. 2 Q Okay. And when you say "the '414 patent," 3 are you referring to the U.S. Patent 7,653,414? 4 A I am, yes. 5 Q Okay. Have you ever been deposed before? 6 A I have. 7 Q Roughly how many times? 8 A Probably 15 or 20. 9 Q Okay. Okay. So I won't go through all 10 the preliminaries, but, you know, just in the 11 interest of making this go smoothly I will ask 12 that you let me finish my questions before you 13 start answering and I will make sure I do my best 14 to let you answer your questions fully before I 15 start a new question, sound good? 16 A Yes. 17 Q Okay. Can you turn to page 110 of the 18 declaration? 19 A Okay. 20 Q Is that your signature on page 110? 21 A Yes. 22 Q And you signed this declaration on the	8 1 those opinions that you formed since you signed 2 this declaration when I ask you about them today? 3 A Yes. 4 Q Okay. Actually I'm going to hand you the 5 '414 patent. 6 Mr. Proctor, I'm handing a document 7 labeled Exhibit 1001? 8 A Thank you. 9 Q Do you recognize this document? 10 A I do. 11 Q And what is this document? 12 A This looks to be the '414 patent. 13 Q Okay. When you were preparing your 14 declaration in this case, did you read the '414 15 patent? 16 A Yes, I did. 17 Q Did you read it cover-to-cover? 18 A Yes. 19 Q So you -- you will be able to testify 20 about the substance of the '414 patent if I ask 21 you questions about it? 22 A Yes.

9 1 Q Okay. Can you please turn to column 18 of 2 the '414 patent, it is marked page 34? 3 A Okay. 4 Q At the very -- the second limitation in 5 Claim 1 that begins "Receiving"? 6 A Well, I assume that that is the second 7 limitation. It looks like the first one. There 8 is a preamble, a method comprising and then 9 receiving. So yes, I see receiving there. 10 Q I wasn't trying to trip you up or get an 11 admission that the preamble was somehow limiting 12 or something, I just wanted to make sure we were 13 on the same page. 14 So can you give me your understanding of 15 what this claim term means? 16 A Well, it says receiving at a first 17 distributed -- receiving at a first distributed 18 mobile architecture DMA system of a DMA network, a 19 call from a first mobile subscriber to a second 20 mobile subscriber wherein the DMA network includes 21 at least a first DMA system and a second DMA 22 system.	11 1 that. 2 Q In the context of the full claim, is it 3 your understanding that the first mobile 4 subscriber subscribed to the first DMA system? 5 A None of the elements of Claim 1 that I 6 see, unless I expressed a different opinion that I 7 don't recall at the moment that the first mobile 8 subscriber has to be -- I'm sorry, what was the 9 question specifically? 10 Q In the context of the full claim, is it 11 your understanding that the first mobile 12 subscriber is subscribed to the first DMA system? 13 A Yeah, I don't see that limitation as I sit 14 here within the whole context of the claim. 15 Q Could a first DMA system receive a call 16 from a first mobile subscriber if neither the 17 first mobile subscriber nor the second mobile 18 subscriber are subscribed to the first DMA system? 19 A Well, it depends on what you mean 20 subscribed, by subscribed. So to the extent that 21 the first mobile is subscribed to the overall 22 service, and the -- and if the first mobile
10 1 Q So I asked for your -- can you give me 2 your understanding of what this claim term 3 means -- 4 MR. RUECKHEIM: Object to the form. 5 Q -- in your own words? 6 A Sure. I'm just referring to my report as 7 I've written opinions about it and want to refresh 8 myself. 9 Q That is why I gave it to you. 10 A Excellent. I found it, sorry. So it 11 relates to a first distributed mobile architecture 12 system, DMA system, of a DMA network receiving a 13 call from a mobile subscriber to a second mobile 14 subscriber wherein the mobile DMA network includes 15 at least a first and second DMA system. 16 It is relatively self-explanatory there 17 that the first DMA system receives a call to a 18 second mobile. 19 Q Is it your understanding that the first 20 mobile subscriber is subscribed to the first DMA 21 system? 22 A Well, this limitation doesn't require	12 1 subscriber is attached to that network but 2 registered primarily with another network that is 3 authorized to be on that particular DMA system, 4 generally speaking that is required for such a 5 system. 6 Q Okay. Yeah, why don't we -- since you 7 brought it up, why don't we just kind of get 8 terminology straight so that we're not going back 9 and forth -- 10 A Sure. 11 Q -- all day long. 12 Can we agree for purposes of this 13 deposition today that subscribed means that you 14 are -- that the network that you are on is your 15 home network? Is that -- is that a reasonable 16 assumption, whereas, if you are not subscribed you 17 might still be able to use the network if you are 18 visiting or roaming? 19 A Well, so generally you wouldn't subscribe 20 to a piece of hardware to a DMA system. You would 21 subscribe to a service, which may be -- which that 22 system may be a part of which the overall DMA

13 1 network, for instance, may be also a part of. And 2 so you have to get authorized to -- to be part of 3 that. So you would need generally to be -- one of 4 ordinary skill in the art would understand that 5 generally speaking you would need to be subscribed 6 to such a service. 7 Of course that is at the discretion of the 8 service provider in order to allow unsubscribed, 9 but it is not very common. And in cellular I 10 don't -- well, there are instances, 911 calls you 11 don't have to be a subscriber, for example. 12 Q Is the word "registered" a better word to 13 describe what happens when a user device connects 14 to a particular cell tower, whereas, you know, if 15 you are subscribed to the network you can access 16 any of the cell towers in the network? 17 A Generally speaking the term is attached. 18 Q Okay. 19 A When you attach or do a location update, 20 you register with a particular -- well, you end up 21 doing a location update which then updates the 22 home location register with whatever particular	15 1 architecture system? 2 A Yes. 3 Q Is that describing what you meant by the 4 term "attached"? 5 A No. 6 Q Okay. Can you explain what the difference 7 is? 8 A Well, when you attach to a network, you 9 update your home location register with the 10 location of the particular VLR and MSC, and in 11 this particular embodiment that you're actually 12 attached to. 13 Q Okay. But that is not what the HLR in the 14 '414 patent is, right, I just read you something 15 different? 16 A I'm sorry? 17 Q I said, but that is not what -- that is 18 not how the patent describes the HLR; isn't that 19 right? 20 MR. RUECKHEIM: Object to the form. 21 A I'm not understanding your question. You 22 just read a sentence from the patent
14 1 MSC or -- or other network entity RNC that you -- 2 you may particularly be at temporarily. 3 Q So should we use the term "attached" to 4 talk about when a particular device is temporarily 5 registered with a particular location? 6 A I mean, I guess, you could just ask me the 7 question specifically. They don't really use the 8 term "attached" in the patent spec and I would 9 like to stay within the terminology of the patent 10 spec. 11 Q Can you just -- can you suggest a 12 different term from the spec that we can use to 13 make sure that we're -- we're not talking past 14 each other? 15 So for example, in column 3 of the '414 16 patent there is a sentence starting on line 21. 17 So here the patent introduces the idea of a home 18 location register, right? 19 A Yes. 20 Q And that includes information associated 21 with one or more mobile subscribers and it says 22 registered with the first distributed mobile	16 1 specification. 2 Q So the patent -- yeah, okay. So the 3 patent specification says that the module includes 4 a home location register that includes information 5 associated with one or more mobile subscribers 6 registered with the first distributed mobile 7 architecture system. 8 That -- isn't that definition different 9 from the one that you just gave me about how HLRs 10 are typically used? 11 MR. RUECKHEIM: Object to the form. 12 A Well, the scope is that they are 13 registered with the first DMA. So there is a HLR 14 within the first DMA, and then there is a 15 collection of users registered with that DMA. In 16 an HLR traditionally one would have users, a 17 collection of users also that would be registered 18 with that particular MSC. Usually MSCs are 19 coupled with HLRs. 20 Incidentally, this terminology is all 2G, 21 early 2.5G terminology from about, I would guess, 22 the priority date of this patent is somewhere

17 1 around 2006. By 1999, 3G was out and developed. 2 So this terminology was about six to seven years 3 old at the time, a little outdated in context. 4 CDMA2000 it was out, it operated differently, 5 also. And each of those systems have slightly 6 different scopes. 7 So we need to be careful about the scope 8 of are they describing this in terms of a 2G GSM 9 system, a 2.5G GSM/GPRS system, a 3G which uses an 10 RNC and a Node B. 2G systems did not use Node Bs. 11 So there is a mixture of discussions here. 12 So we just need to be careful about the 13 context in which each of these disclosures is 14 being made and are they talking generally or 15 specifically about it -- about an embodiment. 16 Q Yeah. And I appreciate all of that and 17 thank you for that answer. You know, which is why 18 I'm kind of trying to get us to agree on some 19 terminology that we can have, you know, a starting 20 point to make sure that we're on the same page 21 when we're talking about these. You know, there 22 is going to be 100 different acronyms right, and,	19 1 was the GSM core network. And so I will note 2 that, for instance, Dr. Cooklev mentions that at 3 the time of this patent all systems were 4 hierarchical in 2G and he is completely wrong in 5 that statement. 6 And I'm glad to show you in his report, 7 because 3G was out at that time, 2.5 was out, both 8 of those systems utilized GPRS. GPRS was a 9 parallel network, which was not circuit-switched. 10 It was a pure IP-based connection between the 11 nodes of the GSM and WCDMA core networks. 12 And so to characterize the interfaces as 13 he does as being hierarchically circuit-switched 14 and requiring circuit-switched interfaces as 15 opposed to internet protocols to access the 16 network with his, is just wrong. It is not 17 historically correct. 18 Q Okay. I don't think that answered my 19 question, which was about how the HLR is used in 20 2G networks. 21 A Sure. So the HLR is generally associated 22 with the IS-41 network and it is coupled with a
18 1 you know, I just want to make sure that we're 2 getting everything -- everything right. 3 So just going back to what my question 4 was, is the way that the term HLR is used here in 5 column 3 the same or different as the way it is 6 used in the 2G technologies? 7 A Well, there is slight differences there 8 also because the 2G technologies have multiple 9 versions, some of which are quite similar and some 10 of which have significant divergences. For 11 instance, in 2G, there was GSM, first developed in 12 about 1991, about '91 or deployed then. There was 13 also IS-136, which was TDMA in the U.S. and there 14 was also IS-95. 15 And they all had slightly different 16 terminologies as well within 2G. 2G is a very 17 broad classification as is 3G and 4G and 5G and 18 there is multiple groups of systems with diverse 19 architectures. 20 For instance, in the U.S.-based systems 21 they used something called IS-41. In GSM they 22 used something, something different than that, it	20 1 MSC. The HLR is essentially a piece of software 2 that is a database and it has a couple of 3 responsibilities. It is responsible for 4 containing the records associated with subscribers 5 and it is -- it is also responsible for helping to 6 authenticate users in some versions. 7 And so to the extent that you have a 8 subscriber with a subscriber record in your HLR 9 those would be subscribers who that is where their 10 information is stored. 11 When a subscriber who has a record in the 12 HLR associated with one or more MSCs where the HLR 13 is primarily associated with that MSC, they will 14 make a call, authenticate and then they will 15 actually have a record entry in the VLR also even 16 though they have an entry in the HLR. They will 17 have a entry in both the VLR and HLR and be 18 assigned a temporary mobile number effectively. 19 And that is -- that is, A, how you're located even 20 though they're in their network where they have 21 that entry they're still getting a temporary 22 number and then they connect to that service.

21 1 At the same time in other 2G systems, 2.5G 2 systems, where they're associating with the packet 3 network, the SGSN performs that role effectively 4 and interfaces to the HLR. 5 Q The SGSN performs the role of the MSC? 6 A For packets. 7 Q So in a packet switch network is, like, 8 the internet, is that an example of a packet 9 switch network that uses packets for transmission? 10 A Yes. 11 Q And that is contrasted with a 12 circuit-switched network? Can you tell me how a 13 circuit-switched network is different? 14 MR. RUECKHEIM: Object to the form. 15 A Well, again, it depends on the particular 16 system we're talking about. It depends on the 2G, 17 3G or 4G system. In 3G -- well, frankly -- well, 18 in 3G you had both circuit-switched and 19 packet-switched networks overlaid as well as in 20 2.5G. The GPRS system was a packet-switched 21 overlay on top of a circuit-switched voice system. 22 That being said, in that timeframe people	23 1 system we're talking about. Traditionally there 2 was one HLR/MSC combination, but even within 2G 3 that evolved to where you could have a plurality 4 of MSCs to a centralized database, which would be 5 an HLR that eventually evolved into something 6 called an HSS which serves an enormous number of 7 what effectively evolved from a MSC. 8 So again, there is in 3GPP the standard 9 organization that standardized or has the 10 responsibility for GSM and WCDMA and LTE I think 11 we're on release 15 or 16 now or actually more. 12 And so each of those is a revision. And so 13 they're making changes to each of those and so 14 this, even within even at the late date of 2006, 15 there have been probably around five releases, 16 probably six. I would say it is either release 5 17 or 6 at that point, maybe even 7. 18 And so there is variations over that time 19 in the systems, not to mention other systems like 20 IS-136 that -- I'm sorry, IEEE 82.16 WiMAX, which 21 Dr. Cooklev mentioned he helped review the 22 standards, which was a pure IP had no
22 1 did do voice calls over the packet-switched 2 network in addition. So doing a voice call does 3 not -- you are not limited to the circuit-switched 4 system. 5 Q Are there any downsides to doing voice 6 calls over a packet-switched system instead of 7 circuit-switched system that you are aware of? 8 A Well, it is a very broad question. It 9 depends on the system you're talking about. 10 Q Does a person of ordinary skill in the art 11 have an understanding of circumstances where it 12 would be more preferable to use a circuit-switched 13 system versus a packet-switched system? 14 A Again, it would depend on the specific 15 system you are talking about. 16 Q You said an HLR is typically associated 17 with an MSC, correct? 18 A Yes. 19 Q In a system with more than one MSC, would 20 you have one centralized HLR for all of those MSCs 21 or does each MSC have its own HLR? 22 A Well, again, it really depends on the	24 1 circuit-switched whatsoever, which was a 2G system 2 as well. 3 Q I'm going to hand you Exhibits 1005 and 4 1006 just to make this a little more confident. 5 Do you recognize these documents? 6 A I do. 7 Q And which documents are these? 8 A 1005 is the Mauer reference listed as 9 patent 7,395,085 and Exhibit 1006 is the Waylett 10 reference, which is patent 8,184,603. 11 Q Is it your contention that Mauer and 12 Waylett both teach an HLR? And you can refer back 13 to your declaration if it is helpful. 14 A I mean, the cover of Waylett's patent has 15 an HLR right in it and Figure 1 of Mauer has an 16 HLR called out by 44. 17 Q Okay. Waylett you said that there is an 18 HLR on the cover. Where are you showing me that? 19 A Well, probably can't transcribe me 20 pointing, but I will describe it better. In fact, 21 I will find the figure that is on the cover here. 22 Figure 1A it says, private HLR AUC called out as

25 1 item 128. Also Figure 6 has a private HLR called 2 out as 316. Figure 5 has a box called 224 called 3 a NIB, N-I-B, which embodiments describe it as 4 containing an HLR. There are probably other 5 disclosures of it as well. 6 Q Okay. Is there one or more of these 7 particular HLRs that you pointed me to that you 8 contend is the HLR that is claimed in the '414 9 patent? 10 MR. RUECKHEIM: Object to the form. 11 A (Reviewing document.) I can point you to 12 in paragraph 94 of my report Mauer is wireless WAN 13 14 is a first wireless network includes a HLR 44 14 and a VLR 42. And then Waylett discloses that it 15 is network-in-a box 224 include both an HLR and a 16 VLR as depicted in Figure 6. 17 Q Is that the end of your answer? 18 A Yes, it wasn't intended to be exhaustive. 19 I was simply answering what I pointed to. 20 Q And is it your contention that in Waylett 21 what you are referring to as this HLR is stored at 22 the NIB?	27 1 discloses a radius system and a radius server. 2 One is, for instance, the dotted box called out by 3 310. That is the system. The server is a piece 4 of software running within that. That server in 5 some embodiments includes and is combined with the 6 HLR and the VLR as a single module. 7 In other embodiments that software is run 8 as a separate functional module within the radius 9 system, so it is still within the radius system. 10 And all of that is still within the NIB and all 11 the embodiments, which would be, of course, within 12 an enclosure which would have other support 13 functions, like, storage and identity module, 14 things of that nature interfacing within the NIB 15 enclosure memory as I discuss. 16 Q Some of your invalidity grounds require 17 more than one NIB, correct? 18 A Well, so specifically in discussing the 19 combination of Mauer and Waylett the NIB is taught 20 as having the functionality of both the LAN, a WAN 21 or multiple versions of that, various air 22 interfaces, a plurality of them can as well as the
26 1 A Well, there is two embodiments described 2 by Waylett. Waylett describes that there is a 3 radius system which is called out as 310, which is 4 a -- which is encapsulated as part of the NIB. 5 And then that -- in one of the described 6 embodiments it includes an HLR/VLR and N radius 7 server. 8 Other embodiments it describes that the 9 radius server itself can be combined as a single 10 server entity. In other words, the radius 11 server -- server is a thing with a processor and 12 memory. It is a, you know, operational piece of 13 software and it can be combined with the HLR and 14 VLR functions such that it is a single software 15 entity running on the server processor from those 16 instructions. 17 Q And in the embodiment where the radius 18 server is located as part of the NIB, is it your 19 contention that this PHLR and PVLR are stored at 20 the NIB? 21 A Well, as I mentioned there is two 22 embodiments. One of the embodiments, so Waylett	28 1 radius server, the memory, the processing of a 2 process. 3 And so to reduce the cost of a system in 4 Mauer one would be motivated to take the NIB and 5 incorporate it into the disclosures of Mauer. But 6 to do that, one would take the process of Figure 2 7 of Mauer in order to affect the objectives of 8 Mauer. 9 Q Okay. We're going to have to take that 10 apart. 11 A Sure. 12 Q Let's open up Mauer. I'm not sure I quite 13 understood that answer. So can you turn to Figure 14 2 of Mauer? 15 A Yeah. 16 Q So if I understand your last answer 17 correctly, you are modifying Mauer with Waylett 18 but in a way that Mauer still performs the process 19 of Figure 2? 20 A Yes. 21 Q Okay. Can we talk about exactly how that 22 is done in Figure 1?

29 1 A It is very -- it is very straightforward. 2 Q I'm glad to hear that, because I was a 3 little confused reading through exactly how this 4 combination is supposed to come together. 5 Figure 1 of Mauer has on the left-hand 6 side a WWAN? 7 A Well, in this particular embodiment. 8 Q Is there another embodiment that I should 9 be concerned with? 10 A Oh, yes. 11 Q Which -- 12 A A whole bunch of them. 13 Q To be clear you're saying that you're -- 14 to be saying -- I'm sorry. 15 To be clear, you were saying that you 16 would modify the system of Claim 1 with Waylett, 17 right? 18 MR. RUECKHEIM: Object to the form. 19 A Did you say Claim 1? 20 Q I'm sorry, Figure 1? 21 A Yeah. So yeah, I'm not limiting the 22 disclosures of Mauer by utilizing Figure 1 as the	31 1 Q What is a wide area network? 2 A Well, it is -- it is a system that can be 3 used which generally has a larger wireless 4 coverage footprint than a local area system. That 5 being said, there are use cases where the coverage 6 could be smaller, for instance, indoor, but one 7 would still call that a wide area technology in 8 the vernacular of one of ordinary skill in the 9 art. 10 Q But a wide area technology is not 11 necessarily a wide area network, is it? 12 A I'm not sure I'm understanding your 13 question. 14 Q Well, you can use CDMA2000 very locally, 15 right, in just a single house; is that accurate? 16 A Generally when that is done it is deployed 17 in a licensed spectrum, because it is a cellular 18 system despite being indoors. And when deployed 19 by a wireless operator, which they're the ones 20 with the licensed spectrum, that would be 21 something which would also have coverage outdoors. 22 So oftentimes, they have small cells and large
30 1 example of how it would be combined. My only 2 point is that there is embodiments where the WLAN 3 is described as being any number of different 4 systems. 5 Same with WWAN. For instance, Mauer 6 discloses that the preferred embodiment of a WWAN 7 can be CDMA2000, which is -- and EV-DO, which is a 8 data only system. So this particular embodiment 9 is describing, for instance, a GSM network, but 10 the patent specification clearly says that the 11 WWAN could be CDMA2000, could be a data only 12 system. It very clearly says it could support 13 circuit-switched calls or packet-switched calls, 14 data only, even says video. And it even says data 15 and voice simultaneously. 16 So it is in no way a WWAN restricted to a 17 circuit-switched system or a 2G system. 18 Q Okay. My -- my question about the WWAN is 19 completely different. 20 A Oh. 21 Q What is a WWAN? 22 A A wide area wireless network.	32 1 cells. 2 In fact, I think Dr. Cooklev admits there 3 are picocells, macrocells and various other kinds 4 of cells, some of which are actually used indoors 5 and have pretty limited size footprints. 6 Another example within the LAN space some 7 -- that would be considered, some people might 8 even refer to it as LANs aren't LAN at all. For 9 instance, 802.16 is a metropolitan area network, 10 which is more like a cellular system. 11 Q Is it your contention that a person of 12 ordinary skill in the art would understand the 13 coverage area provided by a single NIB to be a 14 wide area network? 15 A Well, a single NIB is disclosed as action 16 containing both the local and a wide area network 17 and some embodiment. 18 Q Can you show me where that is? 19 A Sure. I'm getting paper camouflage, 20 sorry, I'm trying to find the right reference. 21 Yes, so if you look at Figure 3 and Figure 22 there is an example. Both of those disclose

33 1 GSM, GPRS, which, of course, GPRS is the 2 packet-switched network, and WiLAN transceiver in 3 Figure 3. And then similarly in Figure 2 some of 4 the modules that are disclosed, those vertical 5 blocks within the chassis of 136 are described 6 essentially GPRS and WiLAN. 7 Q Can you turn to column 4, line 54? 8 A Of Waylett? 9 Q No, of Mauer, sorry, are we talking about 10 Waylett? 11 A That was Waylett I was describing, NIB. 12 Q No, no, you are right. So Figure 3 and 13 Figure 2, my fault, I apologize. 14 Okay. So in Figure 3 I see a GSM/GPRS 15 transceiver. Is that what you were referring to? 16 A Yes. 17 Q Is it your contention that GSM regardless 18 of how broadly it is deployed is a wide area 19 network? 20 A Generally a person of ordinary skill in 21 the art would describe GSM and GPRS as a cellular 22 network and it is often used as a wide area	35 1 contiguous if that is what you mean. 2 Q Well, each base station will give you a 3 certain range, right, depending on how much power 4 is supplied to the transceivers? 5 A As well as the -- the environmental 6 instructions and the height of the tower and all 7 those things. 8 Q So my question is, is it your contention 9 that a single NIB is sufficient to provide a wide 10 area network? 11 A Oh, you're -- I think I'm understanding 12 your question. You're asking me what a network 13 is. 14 Q Yes, I'm not -- yeah, this is -- I'm 15 talking about the difference between wide area 16 network and local area network. I'm talking about 17 the network, not the technologies that -- that 18 underlie it? 19 A I would say it is the amount of coverage 20 in wide or not wide, right. 21 Q Right. 22 A But it really is a contextual question,
34 1 network. 2 Q And it is often used as a wide area 3 network when you have multiple access points, 4 correct, over a wide geographical area? 5 A Yeah, they don't really use the term 6 access points in that standard, but they do call 7 them access points in 802.16 WiMAX, and that is 8 cellular related. 9 So yeah, they -- they -- you can call them 10 a base station, which is imprecise as you change 11 standards as well, right, because a base station 12 can be a -- can have multiple transceivers. 13 In 2G vernacular as described in the '414 14 they talk about BTSes, base transceiver system. 15 And that generally is -- that is generally a 16 radio. 17 Q But in order to construct a wide area 18 network using GSM technology, you are going to 19 need multiple base station transceivers, right? 20 A Oh, they -- both -- so you can have a 21 network with a single -- you can deploy a single 22 base station and not have coverage that is	36 1 because it is a very broad question. I think it 2 really depends on the situation you are talking 3 about. 4 Q Okay. We have a situation that we're 5 talking about here. Is it your contention that 6 when you replace Mauer's WWAN with a NIB that you 7 still have a WWAN? 8 A Well, yeah. It has a -- it is disclosed 9 as having a local area network within it. I'm 10 sorry, you said wide area network. Yeah, I mean 11 to the extent that the claims require a network of 12 two different DMAs having two different NIBs that 13 perform those functions is a network. 14 Q To be clear, my question is about your 15 combination of Waylett with Mauer and not whether 16 a NIB is a DMA server, because your -- you write 17 in your declaration that a person of ordinary 18 skill in the art would find it obvious to use 19 Waylett's NIB in place of Mauer's WWAN; is that 20 not correct? 21 MR. RUECKHEIM: Object to the form. 22 A You are going to have to explain your

37 1 question, because I'm sorry I'm just not 2 understanding it. 3 Q Let's turn to paragraph 75 of your 4 declaration. And you can read that paragraph just 5 so that we're on the same page. 6 A Okay. 7 Q Okay. So in this paragraph you say, A 8 POSA would have thus recognized that Waylett 9 discloses an inexpensive way to implement the same 10 networks used in Mauer's WWAN 14 and WLAN 12. 11 Do you see that? 12 A I do. 13 Q When you envisioned this combination, did 14 you envision a single NIB in the place of Mauer's 15 WWAN 14 or did you envision an entire WWAN built 16 from interconnected NIBs? 17 MR. RUECKHEIM: Object to the form. 18 A Well, at a minimum, one, within the WWAN, 19 because for instance, Figure 1 of Mauer shows a 20 single BTS within the network. So within the 21 context at least of Figure 1 of Mauer, it is not 22 saying that a single base station doesn't comprise	39 1 sufficient wide area network within their homes. 2 Generally people do not include having a wide area 3 network within their home though, some do. You 4 can have what is called a femtocell. And in that 5 case they would say, yes, I have a wide area 6 network in my house. It is this femtocell that I 7 got from a wireless operator and provides cellular 8 coverage within my home. That was around in about 9 2004, 2005. 10 Q Can you turn to Mauer, column 4, line 54 11 and just read that sentence starting on line 54? 12 A I'm sorry, which -- which column? 13 Q Column 4. 14 A WWAN 14 may provide wireless coverage in a 15 relatively large geographic area such as an entire 16 city often by using a plurality of contiguous 17 wireless coverage areas such as cells or sectors. 18 Was that all you wanted me to read? 19 Q Do you agree or disagree with this 20 description? 21 A I agree, it very well may have multiple 22 coverage areas. It doesn't say it can only have
38 1 a network though there are certainly embodiments 2 that describe having multiple BTSes just as 3 Waylett does. 4 Q Is a single BTS sufficient to make a WWAN? 5 A Well, that is what Mauer is disclosing in 6 Figure 1. 7 Q Isn't Figure 1 shown with a restricted 8 amount of components for clarity or do you think 9 that Mauer is actually teaching that a WWAN can 10 include a single base station? 11 MR. RUECKHEIM: Object to the form. 12 A Well, I think in the context of this 13 discussion, one would qualify just as one would 14 qualify for a WLAN. For instance, in your home, 15 you may have one wireless access point and someone 16 might ask do you have a wireless network. And 17 most people would answer yes I have a wireless 18 network in my house despite having a single 19 wireless access point. 20 Q Would that person also say that they have 21 a wide area network? 22 A Most would complain they don't have	40 1 one. It can't have one either. 2 Q Can a single NIB provide service over a 3 relatively large geographic area such as a entire 4 city? 5 MR. RUECKHEIM: Object to the form. 6 A Well, I think it is important to 7 understand that Mauer is not describing a wireless 8 WAN as being limited in any way to providing 9 coverage over a entire city. 10 Q Is Mauer using the term WWAN in a way that 11 is different from how a person of ordinary skill 12 in the art understands? 13 A I think the key is the word "may" in that 14 sentence. It is saying if Mauer intended to 15 define that as being restrictive, he said, he 16 would say "must" or "does" as opposed to "may," 17 right? So may is there are here is an example of 18 how this may be deployed. 19 Q Is there another example where Mauer 20 discloses a wide area network that does not 21 encompass a relatively large geographical area? 22 We have been going for about an hour

41 1 whenever you -- if you need a break, let me know. 2 A Well, in Figure 1 it shows a single BTS 3 34. And so unless that is a very, very tall 4 tower, it would be less than multiple contiguous 5 -- actually it would not be multiple contiguous 6 coverage areas. It would be a single coverage 7 area no matter how tall the tower is. So I think 8 that is an example that would include a single 9 base transceiver system. 10 Q So given all of that, it is your 11 contention that a single NIB can be implemented in 12 place of the WWAN disclosed in Mauer, right? 13 MR. RUECKHEIM: Object to the form. 14 A Well, I think it -- nothing limits you 15 from having multiple within that WWAN. You could 16 have multiple NIBs as well. There is no -- there 17 is no restriction. You could certainly have a 18 plurality of NIBs to provide additional coverage 19 just as you're not limited to having to include a 20 WLAN. It could be multiple wide area networks 21 that allow you to have a continuous coverage area 22 or you could have multiple WLANs as well.	43 1 person of ordinary skill in the art how to build a 2 wide area network out of individual NIBs? 3 MR. RUECKHEIM: Same objection. 4 A Sure. 5 Q How? 6 A Yeah. So -- so I describe it in my 7 report. 8 Q And just before you answer I just want to 9 clarify. I'm talking about in -- in this kind of 10 second idea where you have multiple NIBs making up 11 the wide area network? 12 A Yeah. 13 Q Okay, go ahead, thank you. 14 MR. RUECKHEIM: Object to the form. 15 A Yeah, so column 6, line 15 says, Although 16 Figure 1 shows only one MSC and only one BSC, WWAN 17 14 may include, again may, a plurality of MSCs 18 which may in turn control a plurality of BTSes via 19 a plurality of BSCs. MSC 40 also has access to a 20 visitor location register. 21 And it goes on from there, but it is 22 describing having a plurality of sets of BTSes,
42 1 This isn't -- Figure 1 is not limited to 2 this example. In fact, as I mentioned before, it 3 is certainly not limited to 2G and 4 circuit-switched as Dr. Cooklev contends, because 5 Mauer explicitly discloses a preferred embodiment 6 that supports voice and data called CDMA2000. 7 Q Why don't we take a break? 8 A Okay. 9 (Recess, 10:33 to 10:41 a.m.) 10 Q Mr. Proctor, before the break do you 11 remember we were talking about your proposed 12 combination of Waylett and Mauer? 13 A Yes. 14 Q Okay. So I just want to make sure I 15 understand your position. Your first position is 16 that a single NIB can be used in place of Mauer's 17 WWAN, full stop, correct? 18 MR. RUECKHEIM: Object to the form. 19 A Well, I don't think it is full stop. I 20 think you could certainly have multiple NIBs if 21 you -- there is nothing limiting it to that. 22 Q Does either Mauer or Waylett teach a	44 1 BSCs, MSCs, VLRs, and each of those, as I explain, 2 could be substituted with a NIB. 3 Q Okay. So in this construction, then, if 4 you have multiple NIBs would they be connected to 5 each other in the same way that MSCs are connected 6 to each other in Mauer? 7 A Well, Mauer describes having a packet 8 network. Not in that figure, but it certainly 9 does describe having a packet network in the 10 preferred embodiment of CDMA2000, which is 11 CDMA2000 uses a packet network as well as an 12 EV-DO, which it describes, which is data only, 13 which allows for VoIP calls. 14 So I wouldn't be confused by the 15 limitations of that specific embodiment as Dr. 16 Cooklev apparently was. It is much more flexible 17 than that, because one has multiple systems that 18 are described, multiple technologies both in the 19 LAN and the WAN space. So it is not limited to 20 circuit-switched interfaces between them. It very 21 well could be, for instance, if it is GPRS, the -- 22 the GGSN, SGSN interfaces would all include packet

45 1 networks. 2 Q So this is your combination that you are 3 proposing. How would a POSITA connect multiple 4 NIBs in order to implement the Mauer WWAN? 5 A Well, only one is required, so as the -- 6 only one for the WAN is required. 7 Q Okay. To be clear, all of my questions 8 here are now about your -- about multiple -- the 9 multiple NIBs. We can return back to a single NIB 10 embodiment, but right now I'm talking about 11 this -- this idea that you are going to have 12 multiple NIBs making up a WWAN. If that is the 13 case -- 14 A Well, Claim 1 doesn't require that. 15 Q You're telling me that your combination 16 envisions not only a single NIB in place of a WWAN 17 but any number of NIBs, right? 18 A Well, it can. 19 Q It can? 20 A I didn't say it must. 21 Q My question is, in that combination, how 22 would a person of ordinary skill in the art go	47 1 but there is a line between NIB and GPRS 3G GPRS 2 network. 3 Q Uh-huh. 4 A Right. So that is an IP interface 5 incidentally and that is something that would 6 interface in one example. That is a standardized 7 interface by the way. Anyone knowing GSM/GPRS and 8 3G GPRS would be aware of that interface and that 9 is how each individual NIB would interface. 10 Q With another NIB? 11 A Well, that interface is standard. And so 12 it is not specific to a NIB, it is just specific 13 to that network. So it would do it in a way that 14 one of ordinary skill in the art would understand. 15 It is commonly known if one knows -- is aware of 16 3G GPRS, then that is a defined interface. 17 Q Where does Waylett say that it would 18 communicate with -- each NIB would communicate 19 with other NIBs via the GPRS interface? 20 A Well, Figure 5 makes it pretty clear. 21 Q Okay. It is not clear to me so can you -- 22 can you walk me through it?
46 1 about connecting the NIBs together? I'm asking 2 about your combination, not the claims? 3 A Yeah. Well, so my report is about the 4 validity of claims. And so the key is that I'm 5 showing that one of ordinary skill in the art 6 would be motivated to substitute a NIB into the 7 WAN, because it reduces the cost, it is more 8 efficient. There is lots of reasons I express in 9 the report for the motivation to do that. 10 And so I guess I'm surprised by your 11 question, but -- but that being said, Waylett 12 certainly describes incorporating multiple NIBs 13 and how they're interconnected and it teaches 14 that, and -- to non NIB interfaces, but NIBs have 15 standard interfaces, so they would be connected in 16 the same way as depicted in Waylett. 17 For instance, you see in Figure 5 the NIB 18 interfacing to a GPRS 3G GPRS network. And so 19 each NIB would likewise connect to each other 20 through that same interface. 21 Q Which same interface? 22 A Well, do you see that it is not labeled,	48 1 A Well, yeah, okay. So the 3G GPRS network 2 would interface to a NIB through that standardized 3 interface, which is how all NIBs would interface, 4 right. So you could have multiple NIBs all having 5 each of the respective line into the GPRS network. 6 And from the outside -- those are standardized 7 interfaces of course. 8 So from the outside, the network doesn't 9 know any different about it being a NIB or just a 10 standard network. It is a network-in-a box. So 11 there is no -- there is nothing special about the 12 NIB from the outside looking in. It is just a 13 collection of software functions that are within 14 the same processor and memory server. 15 Q Can you reference Figure 1 of Mauer for a 16 moment? 17 A Incidentally I'm not limiting my 18 explanation of your question. It is just -- I 19 think it is out of the scope of my opinions, but 20 that is just one example. Mauer, okay. 21 Q Okay. So my questions were about how NIBs 22 would communicate with each other if they were

49 1 part of a WWAN. Do you understand that? 2 A Oh, that is not necessary. As I 3 explained, you can have a single NIB, you don't -- 4 Q Mr. Proctor -- Mr. Proctor, I'm sorry to 5 jump in. This whole line of questioning and I've 6 said it before, is addressing your testimony today 7 that said that the WWAN can include multiple NIBs. 8 I'm trying to ask questions about that testimony. 9 A Okay. 10 Q Okay. If you have multiple NIBs making up 11 a WWAN, how would those NIBs communicate with each 12 other? 13 A Okay, I -- I thought I just answered that. 14 Q They would do it through that same 15 standard NIB interface? 16 A Well, it is not a standard NIB interface. 17 It is a standard GSM/GPRS interface. 18 Q So let's take the -- the example of Mauer 19 where we have a GSM wide area network. Would each 20 of the individual NIBs, when they were 21 communicating with each other talk to each other 22 over this circuit-switched network in Mauer or	51 1 other MSCs in a peer-to-peer manner just over 2 circuits which are in many ways more peer-to-peer 3 than IP is. 4 Q Okay. So I think we've established that 5 your contention is that a person of ordinary skill 6 in the art would have implemented Mauer's WWAN 7 with one or more of Waylett's NIBs; is that 8 correct? 9 A Yes. 10 Q Waylett discloses a communications 11 network, a private communications network with 12 more than just the NIB, right? 13 A Well. 14 Q And we can talk about Figure 5 for 15 reference. 16 A Well, there is various embodiments, but in 17 Figure 5 there is a -- what they're calling a 18 private cellular network 222, which includes in 19 this embodiment a NIB with an external identity 20 module which -- so the software, the NIB in that 21 case is separate from the identity module but 22 clearly it could be the same enclosure for -- for
50 1 would they have some separate connection to each 2 other that doesn't involve the core network? 3 MR. RUECKHEIM: Object to the form. 4 A Well, so again, I want to be clear that 5 Figure 1 is not limited to 2G. Column 6 very 6 clearly says the preferred embodiment of CDMA2000, 7 and it discusses various other technologies. And 8 then I also want to be very clear that a plurality 9 is not required and that is not just 10 representative as 34, because Mauer clearly says 11 although one is depicted multiple can be used. 12 In the embodiment where you have one of 13 them and it is 2G it would use circuit-switched. 14 If it is -- well, if it is GSM specifically. If 15 it is 2G, and it is 802.16, it would use IP. In 16 the case where it was 802.16, it would have 17 peer-to-peer connections using IP between the 18 NIBs. 19 In the case where it was 2G, it would be 20 controlled by a MSC which would then have 21 connections to other MSCs through a 22 circuit-switched network. So MSCs do talk to	52 1 that particular network-in-a box. 2 Q I will be a little bit more specific with 3 my question. So in Figure 5, private network 220 4 includes both a private cellular network 222 and 5 WLAN 228, do you see that? 6 A I'm sorry, say it again. 7 Q So in Figure 5, private network 220 8 includes a -- both a private cellular network 222 9 and WLAN 228. Do you see that? 10 A I do. 11 Q When you -- in your modification of Mauer 12 with Waylett, are you including the WLAN or not 13 including the WLAN? 14 A Well, they're different embodiments that 15 are taught by Waylett, some have both included as 16 being within the NIB. There are embodiments in 17 Mauer that say various components can be 18 integrated into it within the NIB. 19 And for instance, if you look at Figure 3 20 it has got both transceivers in the same box, 21 whereas, Figure 5 depicts the WiLAN transceiver 22 being outside of the NIB, right. So there are

53 1 various embodiments of where that particular NIB 2 embodiment is disclosed as having. 3 Q So my question is, is your modification of 4 Mauer with Waylett does it include a WLAN or not? 5 A Specifically where are you talking about 6 in Mauer? 7 Q So your -- so let's -- let's take an 8 example, the WWAN. I understand that you say that 9 you implement that with one or more NIBs. When 10 that implementation occurs, does that include the 11 WLAN in Waylett or not? 12 A Well, it could. 13 Q Would it? 14 A It doesn't have to. 15 Q I mean, when you make a combination of 16 prior art references, there has to be a reason for 17 what is included and what is not included? 18 A Yeah, it needs -- it needs to include the 19 WAN, right? It has to include the WAN. It could 20 include the LAN as well. It wouldn't -- I mean it 21 would be fine, it would provide additional LAN 22 coverage as well, that would be fine. But it	55 1 obvious to reduce the cost of the cellular network 2 by replacing at least the cellular network 3 portions with the less expensive NIB to have a 4 first DMA system. So one would look to Waylett as 5 a lower cost cellular replacement as motivation 6 for having at least one BTS, BSC, MSC, HLR/VLR 7 within Figure 1 of the WAN of Mauer. 8 Q So your combination doesn't necessarily 9 include the WLAN features of Waylett? 10 A Well, it wouldn't hurt anything to have it 11 there, right, because it would be obvious to 12 include it because it is very inexpensive. 13 Q Would it be obvious not to include it? 14 MR. RUECKHEIM: Object to the form. 15 A I think having -- not having it would be 16 fine in particular embodiments, but that is not 17 necessarily what is taught. So I think having 18 what exactly Waylett is teaching and including it 19 in Mauer is what I've proposed doing, because it 20 would reduce the cost of the wide area network and 21 allow for a more robustness in failure if you had 22 a plurality -- particularly if you had a plurality
54 1 would be obvious that it would need to include at 2 least the WAN components. 3 Q Mauer teaches a WAN and a WLAN, right, as 4 two different networks that the mobile device can 5 connect to? 6 A Yes. 7 Q In your combination, are you replacing 8 both the WWAN and the WLAN with Waylett's NIB and 9 WLAN? 10 A So you would have a first -- so on page 44 11 I provide a very clear block diagram of what 12 I'm -- 13 Q Page -- 14 A 44, paragraph 90. 15 Q Okay. So my question is a little bit 16 different. So in this paragraph -- I'm sorry, 17 were you done or -- 18 A I think I lost your question. 19 Q In your combination are you replacing both 20 the WWAN and the WLAN with the NIB and WLAN taught 21 by Waylett? 22 A Well, I'm proposing that it would be	56 1 of NIBs for additional coverage areas one would be 2 -- would understand that that provides for 3 redundancy. And so, yeah. 4 Q Can we turn back to Figure 5 of Waylett? 5 A Okay. 6 Q Do you see how Waylett's private network 7 interfaces with a public network and specifically 8 public cellular networks 210, 214 and this GPRS 9 number which is not numbered? 10 A Yes. 11 Q In your combination of Mauer and Waylett, 12 do those public networks still exist? 13 A Well, I didn't speak to that. I didn't 14 render an opinion about it. It certainly could. 15 It would be obvious that using a standardized 16 system could be integrated into a broader network, 17 it certainly could. 18 Q And does Waylett teach using a NIB as a 19 network that is complementary to public networks? 20 A Sure. The WiLAN would be complementary to 21 -- particularly in terms of indoor coverage. 22 Q So in going back to Figure 1 of Mauer,

57 1 where would this public network be located? 2 A So I think there is a misconception. It 3 is not mandatory that the wide area network be 4 public, right. It is just a different -- you're 5 using a NIB to support a base station HLR/VLR, all 6 those components and it is not mandatory that the 7 other components be public or private. 8 Q I mean, isn't the point of both of these 9 references so that you can make calls to people in 10 other networks? 11 A Of course, that is what a private cellular 12 network does. It makes calls to other people who 13 are not private. 14 Q So where is the public network that is 15 necessary to connect the private network to a 16 caller that is not in the private network? 17 A Well, I will give you a perfect example. 18 Within the WiLAN, you may be limited to -- I mean, 19 some deployments would allow you to -- to make a 20 call to public users. While in other deployments 21 it may be restricted to your company, for 22 instance, and not be something that interfaces	59 1 A Yeah, I don't think I rendered an opinion 2 about that in my -- in my report. Figure 5 is 3 described as in the context, the particular 4 example of interfacing a private cellular and LAN 5 network with a public cellular database and 6 network. I don't think it is limited to that. 7 Q Are you finished? 8 A Oh, yeah, yes. 9 Q Okay. So my question -- my question was 10 did Waylett teach that the public network is 11 optional? 12 MR. RUECKHEIM: Object to the form. 13 A I don't think it speaks to whether the 14 example of the public network depicted in Figure 5 15 can also be a wider private network. I don't 16 think it really talks about it. The example it is 17 giving is how you integrate the present invention 18 with the ability to enable communication between a 19 public network 202 and a less expensive low power 20 unregulated private UE providing substantially the 21 same functions and services available from the 22 more expensive radios or MSes of the public
58 1 necessarily to public networks. 2 I don't think there is any particular 3 limitation that would prevent you from having a 4 broadier network, say, for -- a perfect example 5 would be emergency responders, right. The -- the 6 first net, I think they call it, where you have a 7 limited set of infrastructure and -- and 8 capabilities that is for emergency responders. 9 So it doesn't have to be a public network, 10 it could be a -- you could have a NIB within a 11 limited subscriber base for the rest of a network 12 as well. I don't think it says you have to be 13 able to -- it has to be on a public network. That 14 is certainly the example they give, but I don't 15 think it is limited to that in any way. 16 Q When you said, I don't think it says you 17 have to be on a public network, what -- what does 18 "it" refer to? 19 A Oh, I was talking about Waylett. 20 Q So it is your contention that a person 21 reading Waylett would understand the public 22 network to be optional?	60 1 network and/or private cellular network 222. 2 So it is -- what it is really talking 3 about is how you take very inexpensive hardware 4 and integrate it and replace it with expensive 5 hardware. It is giving an example of a public 6 cellular network and substituting -- rather than 7 using the public infrastructure in -- which would 8 be overkill and too expensive for the private use 9 with fewer subscribers, indoors, and interfacing 10 the WLAN, with the -- with the private cellular 11 network how you do that without having to bring in 12 full capacity, very expensive cellular 13 infrastructure. 14 The example it is using is the public 15 cellular networks, but one of ordinary skill in 16 the art would understand that if the same 17 infrastructure were using a private network, say, 18 for first responders, the same invention would 19 work exactly the same way. It is not limited to 20 that. 21 Q So are you saying in your combination of 22 Waylett and Mauer there is no public network?

61 1 A I'm not saying that either way. What I'm 2 saying is that one would be motivated to reduce 3 the cost of Mauer by substituting the NIB of 4 Waylett. 5 Q What would you do to reduce cost to build 6 out a system with the same coverage as, say, 7 AT&T's cellular system from the ground up using 8 Waylett's NIBs? 9 A It depends on the specific instances 10 you're talking about and are you talking about at 11 that time or now or -- 12 Q Let's keep it at that time? 13 A Okay. 14 Q Would it be more cost effective to build 15 out an entire network of NIBs that covers the same 16 coverage area as an existing public network and 17 forego the use of the public network that already 18 exists? 19 MR. RUECKHEIM: Object to the form. 20 A Well, first of all, I don't think the 21 claims require that. That being said, there are 22 certainly instances where picocells were used in	63 1 patent? 2 A So AT&T's network at the time was built 3 out of multiple different standards. So they had 4 -- GSM was probably phased out at that time in 5 2006, that was a pretty old technology that is 6 described in the '414. But the -- so they had 7 support for WCDMA at that time, which was a 3G 8 network. They had, I think, it was Release 6, 9 which was -- maybe even 7, which had -- it was 10 called HSPA, high speed packet data access. So 11 but they probably had legacy GSM also, so they had 12 multiple networks integrated at the same time. 13 So the question is extremely hypothetical, 14 because in order to -- essentially there is no 15 single infrastructure. Each carrier has multiple 16 vendors, multiple base station vendors, multiple 17 infrastructure vendors for each of the different 18 technologies. So it is not really a question that 19 is applicable to -- to this analysis really, so 20 I'm not sure I've -- 21 Q I mean, your -- one of your reasons that 22 you are -- that you give for motivation to combine
62 1 conjunction with stand-alone networks. We have a 2 plurality of picocells for indoor coverage. And 3 that was done and is done, it was done at the 4 time. And so as Dr. Cooklev admits there is 5 macrocells, picocells, femtocells. I don't think 6 he mentioned femtocells, but they existed at the 7 time. 8 And so you use the right tool for the 9 right job so you absolutely would not want to put 10 -- to get cellular coverage, say, indoors in a 11 tunnel or in a hotel or in a stadium you would not 12 want to use a macrocell for that typically. 13 Q Okay. That didn't answer my question. My 14 question was would it be more cost effective to 15 build out a entire network of NIBs that covers the 16 same coverage area as an existing public wide area 17 network, cellular wide area network that foregoes 18 the use of the public wide area network? 19 MR. RUECKHEIM: Object to the form. 20 A What network are you talking about? 21 Q The example I gave was AT&T's cellular 22 network at the time that it existed for this	64 1 Mauer and Waylett is that it would be more 2 inexpensive to substitute NIBs to build out the 3 WWAN of Mauer, right? 4 A Sure, yes. 5 Q Is it more expensive to install a NIB 6 where you also have wireless coverage from a 7 public network or is it more expensive to use the 8 existing public network? 9 MR. RUECKHEIM: Object to the form. 10 A Again, it depends on the situation. So 11 your example was AT&T. There is -- they have to 12 cover -- and again, the '414 is not limited to 13 that specific example, right. It can be many -- 14 they're claiming a particular system that has got 15 two DMAs in it, right, so it is not a nationwide 16 system. 17 So they're in a -- in a nationwide 18 network. There is many, many different 19 topographies that have to be covered, some of 20 which a macrocell would be incredibly inefficient 21 and costly to provide coverage and just doesn't 22 make sense. And so they use other types of base

65 1 stations that have smaller coverage regions. 2 And so having -- leveraging the cost 3 reduction for those specific deployments really 4 makes sense. For instance, indoors or a campus, 5 or an extremely rural environment where you are 6 just trying to cover -- I mean rural is one, but a 7 good example is in San Diego you have these areas 8 that are referred to as canyons where you have a 9 relatively small area but they are steep walls of 10 canyons hard to get coverage in. And so having a 11 smaller base station really makes sense in the -- 12 in the -- sometimes call those picos or even 13 femtos. 14 So it depends on the network you're 15 talking about. In some instances you -- well, in 16 a nationwide network you would absolutely want 17 something like a network-in-a box to reduce the 18 cost of at least some of those base stations. 19 Q Okay, and I appreciate that. So, you 20 know, and I think Waylett is fairly 21 straightforward in that there are some 22 circumstances where a network-in-a box might be	67 1 industry. 2 Q Okay. Is any of that in evidence in the 3 record that we can look at or is this just -- 4 A Oh, this is to answer your question, not 5 about the limitations of the claims, but about the 6 cost of a nationwide network, which was a 7 hypothetical unrelated to the limitations of the 8 claims. 9 Q In Figure 1 in Mauer you refer to the 10 whole figure labeled with a reference number 10 as 11 a DMA network, right? 12 A I'm sorry, you pointed to 10? 13 Q Uh-huh. 14 A Oh, well, yeah, so to be clear, the whole 15 thing is not a DMA network, because the telephone 16 56 is clearly not part of a network, right. The 17 mobile phone 16 is clearly not part of a network 18 -- of a DMA network. So there are clearly 19 elements within Figure 1 that are not part of a 20 DMA network. That is pretty obvious that a phone 21 is not part of the DMA network. 22 And so what would be part of a DMA network
66 1 more cost effective. 2 Is it your opinion that it would be more 3 cost effective to build out a nationwide cellular 4 system with NIBs when you already have public 5 infrastructure covering most of the coverage area? 6 A Well, if it is already deployed, it is not 7 more cost effective to replace it, if it already 8 exists, right, unless you're upgrading to a new 9 standard in which case it very well may be. 10 Q Did you do a cost analysis of what it 11 would take to build out a nationwide cellular 12 network made from NIBs? 13 A Well, I didn't, because it is irrelevant 14 to my analysis. And the reason for that is that I 15 didn't see in the claims where it required a 16 nationwide network. I can say, though, at that -- 17 prior to the time of this '414 patent when 18 consulting at Qualcomm, there were actively 19 deployed femtocells that supported the evidence 20 that having very small base stations within the 21 carrier's networks was very advantageous from a 22 cost point of view based on my experience in the	68 1 to the extent that I said that the whole thing is 2 a DMA network that was imprecise, let me clarify. 3 What it would be is as I -- as I said, you would 4 have two DMA systems, each with the included 5 functionality of Figure 2 of Mauer, and -- and the 6 network connectivity between them. And that would 7 be the scope of the -- of that network. 8 Q So the network connectivity between them 9 meaning signaling network 54, circuit-switched 10 network 52, softswitched 62, gateway 60, 11 packet-switched network 30, voicemail server 66, 12 is it everything except for the telephone or which 13 elements are not part of the DMA network in your 14 opinion? 15 MR. RUECKHEIM: Object to the form. 16 A Well, I don't think the voicemail server 17 would be part of the DMA network. That would be 18 external to it. 19 Q Why? 20 A Oh, because the DMAs are clearly separate 21 and then the -- and then they're networked, right? 22 And so nobody would include the phones or the --

69 1 or the -- I mean, just as if you had a DMA system 2 within a broader network, you wouldn't say that 3 the rest of that system is part of the DMA 4 network, right? 5 Like, for instance, using your example of 6 AT&T, and if you deployed, say, two DMAs within a 7 network like that, you wouldn't say the macrocell 8 is part of that network nor would you say a 9 subscriber's phone or the other infrastructure 10 providing services to customers to be part of that 11 network. 12 So yeah, I think it is pretty obvious that 13 the cellular -- that the telephones would not be 14 part of that network. They are used to gain 15 access or provide service, but they're not part of 16 that network. 17 Q So I mean in your declaration, and I know 18 you said that you were a little bit imprecise in 19 paragraph 90, you say that both WLAN 14 and WLAN 20 12 belong to the same system 10, quote, DMA 21 network, right? 22 A Oh, I didn't see that. Yes, I did say --	71 1 A I did. 2 Q And what was -- what is your understanding 3 of what a DMA is in the context of the '414 4 patent? 5 A Well, it was very important to consider it 6 along the legal instructions I was given to 7 consider it, which I speak to. And for instance, 8 paragraph 50 of my report says, I understand that 9 an IPR is a proceeding before the United States 10 Patent and Trademark Office, USPTO, for evaluating 11 the validity of issued patent claims. I 12 understand that in an IPR a claim term is 13 interpreted in a manner consistent with the 14 standard used in patent litigation. That standard 15 generally construes the claims according to 16 ordinary and customary meaning in view of the 17 claim language specification and file history and 18 where applicable relevant other evidence. 19 And so in doing -- in considering the term 20 distributed mobile architecture, I considered the 21 patent specification and all the disclosures 22 within it. Mobile architecture speaks for itself
70 1 I did label 10 the DMA network. Well, yeah, so 2 the DMA network is the -- I mean, it clearly is 3 not everything within Figure 1, it can't be, 4 right, because the phones cannot be part of that 5 network. 6 Q Okay. 7 A They're not DMAs. 8 Q What is a DMA? 9 A The DMA systems. 10 Q You said it is not a DMA. I am wondering 11 what a DMA is? 12 MR. RUECKHEIM: Object to the form. 13 A Well, certainly not a telephone. 14 Q Why? 15 A Well, telephones don't have BSCs or base 16 stations or MSCs or GPRS support systems or -- or 17 other -- it is not infrastructure and nor is it 18 part of the radio access network. 19 Q In coming up with your opinions in this 20 case, did you consider the meaning of the term, 21 the claim term DMA as -- yeah. 22 MR. RUECKHEIM: Object to the form.	72 1 in terms of it has got to be an architecture that 2 addresses mobile devices, and then distributed 3 means that something has got to be in multiple 4 places. 5 Q Okay. I mean, given your reading of the 6 patent, what has to be in multiple places for it 7 to be distributed? 8 MR. RUECKHEIM: Object to the form. 9 A Well, generally speaking, it would be 10 according to the limitations of the claims and 11 so -- 12 Q I'm sorry, is that a legal tenet that you 13 are trying to provide or what? 14 A No, I'm not a lawyer. I'm simply 15 interpreting the rules, the legal guidance I was 16 instructed to follow. But what I'm saying is what 17 the passage I just read says that I need to 18 interpret the terms of the claims in light of the 19 specification including the limitations of the 20 particular claim we're talking about, and so that 21 is what I have done. 22 And so I explained what the word

73 1 distributed means and what mobile architecture 2 means. And then the -- the claim limitations 3 speak to requirements of what that particular 4 device needs to do. 5 Q Okay. So you said, I explained what the 6 word distributed means? 7 A Yeah. 8 Q What is -- where do you -- where did you 9 do that? 10 A I just -- well, in my response to your -- 11 Q Oh. 12 A -- question. 13 Q It is not in your report? 14 MR. RUECKHEIM: Object to the form. 15 A I'm not saying it is not in my report. 16 Q Is it in your report? 17 A What the word -- what the word distributed 18 means? 19 Q Did you explain what the word distributed 20 means in your report? 21 A Well, I think one of ordinary skill in the 22 art would understand what distributed means. So	75 1 Q In Waylett, what is distributed? 2 A In Waylett what is distributed. Yeah, so 3 the wireless access is distributed, the 4 information related to the subscribers is 5 distributed. 6 Q What do you mean the wireless access is 7 distributed? 8 A Yeah, each device provide -- each NIB 9 provides wireless access and so you are 10 distributing the access. You also have 11 functionality that is distributed as well. 12 Q What functionality? 13 A HLRs, AUCs, VLRs. 14 Q Can you tell me where Waylett describes 15 its HLR being distributed? 16 A Well, you can see that each -- each one 17 includes an HLR/VLR. 18 Q So if you have multiple NIBs, each one 19 includes an HLR and a VLR? 20 A Yes, I mean they certainly can. 21 Q Can you show me where that is disclosed in 22 Waylett?
74 1 did I specifically define the word distributed, 2 no, I don't think I did. I might have. 3 Q Did you have any discussion in here about 4 what distributed means or why the art of record 5 teaches a distributed mobile architecture? 6 A Oh, I applied the ordinary and customary 7 meaning of those terms in light of the 8 specification. I did not do a claim construction, 9 for instance, that Dr. Cooklev did to report claim 10 elements. 11 Q What is the ordinary meaning and customary 12 meaning of those terms in light of the 13 specification? 14 MR. RUECKHEIM: Object to the form. 15 A Yes. As I said, a mobile architecture 16 needs to address, generally speaking, wireless 17 communications and distributed would mean that 18 something needs to be distributed. 19 Q What needs to be distributed? 20 A There needs to be functionality 21 distributed. I don't think there is a limitation 22 defining that.	76 1 A Yes. So if you look at Figure 6 and the 2 NIB in the bottom left side within it 310 is a 3 radius system which includes VLR/HLR, radius 4 server. And so having multiple NIBs would have 5 multiple contained functionality. 6 MR. RUECKHEIM: Counsel, sorry to 7 interrupt. I am getting a note that lunch is here 8 so I can -- do you think in the next 10 minutes? 9 She wants to know when to bring it in. 10 MR. PRICE: I will let the witness decide, 11 it doesn't matter to me. 12 MR. RUECKHEIM: I will tell them 10 13 minutes and then if we need to go longer. 14 MR. PRICE: If Mr. Proctor is ready for 15 lunch, we can take a break. 16 If you want to keep going, we can keep 17 going. 18 MR. RUECKHEIM: It is your call. 19 A I don't care, maybe another half hour or 20 so. 21 Q Yes, that works. Can we turn back to 22 Claim 1 of the '414 patent?

77 1 A Sure. 2 Q Going back to this receiving limitation 3 that we talked about right at the start. Is it 4 correct to say that the first mobile subscriber is 5 making the call that is received at the first DMA 6 system? 7 A That would certainly be within the scope 8 of the claim. 9 Q Do you read it any other way? 10 A Not within the embodiments that are 11 described within -- within the '414. 12 Q There are limitations in Claim 1 where the 13 second mobile subscriber is not located within a 14 first wireless coverage area of the DMA network 15 associated with the first DMA system, right? 16 A Sorry, explain that again. 17 Q So Claim 1 talks about a call from a first 18 mobile subscriber to a second mobile subscriber, 19 right? 20 A Right. 21 Q That second mobile subscriber might be 22 located within the first wireless coverage area of	79 1 be in the coverage area of the first DMA system in 2 order for the call to be received at the first DMA 3 system? 4 A Well, that certainly would be an example 5 of -- of a situation. I can't say that it 6 couldn't be within, say, the second and then 7 making a, you know, being routed back to the first 8 for some reason, but generally speaking, an 9 example would be being within the first coverage 10 area. 11 Q Can you turn to page -- paragraph 86 of 12 your declaration? 13 A Okay. 14 Q You rely on Mauer? 15 A Sorry, did you say page 6 of my 16 declaration? 17 Q No, I said paragraph 86, completely 18 different? 19 A Yeah, I was looking at my background 20 and -- 21 Q And wondering where I was going? 22 A You were asking me about Mauer so I was
78 1 the first DMA system, right? 2 A He might be, yes. 3 Q The second mobile subscriber may not be 4 located within the first wireless coverage area 5 but may be located within the second wireless 6 coverage area of a second DMA system, right? 7 A Yes. 8 Q The second mobile subscriber may also not 9 be located in either of those coverage areas and 10 is actually outside of the coverage area of the 11 DMA network, correct? 12 A Yes. 13 Q So when the call from the first mobile 14 subscriber is received at the first distributed 15 mobile architecture system, how do you understand 16 that call is being received at the first 17 distributed mobile architecture system? 18 A Well, the first mobile subscriber would 19 have made a call to the second mobile subscriber. 20 There would be control signaling that would be 21 requesting to initiate the call. 22 Q Would the first mobile subscriber have to	80 1 very confused. Okay, I'm with you now. Sorry 2 about that, okay. 3 Q Okay. So you're pointing to this Figure 2 4 process in Mauer for -- as teaching receiving at a 5 first DMA system of a DMA network a call from a 6 first mobile subscriber to a second mobile 7 subscriber, right? 8 A Yes. 9 Q In Figure 2 where is that call received in 10 Mauer's system? 11 A Well, so it would be WiLAN 12 or in -- I 12 mean, both can receive calls. So WAN 14 or WAN 12 13 they can receive calls. 14 Q So when you are saying that Mauer teaches 15 receiving the call, what you are referring to is a 16 mobile subscriber, for example, calling another 17 mobile subscriber by connecting to a BTS of WWAN 18 to initiate the call, right? 19 A Well, to the -- to the MSC and, in this 20 specific example it could be to a GGSN. It could 21 be to any -- any specific -- it could be the IP 22 PBX, it could be any specific --

81 1 Q Okay. 2 A -- capability. 3 Q Okay. When this call is received, does 4 the call have to be routed outside -- strike that. 5 I will make it a little more clear. 6 If the call is received at an MSC of WWAN 7 14, is -- where does that call go in order to 8 determine its route to the second mobile 9 subscriber of the second DMA system? 10 A So -- so in the combination we would have 11 incorporated the NIB including Mauer's Figure 2 12 functionality within the NIB as teaching the first 13 and second DMA systems. So in order to figure out 14 the routing, they would -- it would consult its 15 HLR/VLR and configuration table in order to 16 determine whether or to determine how to route the 17 call. 18 Q Where is the process of Figure 2 carried 19 out in Mauer? 20 A It would be within the DMAs specifically 21 within the NIBs incorporating Figure 2. 22 Q Okay. You are going to have to show me a	83 1 instance, the -- the SIP registers, so -- 2 Q Isn't the point of the softswitch that the 3 person who is making the call doesn't know whether 4 the second party is connected to the WWAN or the 5 WLAN? 6 A When you are making a call, you never know 7 where the other mobile is. You just provide a 8 number or some other SIP, URI or something of that 9 nature to try to make the call. 10 Q Right. But the point of the softswitch is 11 that even in the MSC of the WWAN the caller might 12 not know whether the -- at the time it is making 13 the call that the caller will know if it is 14 connected to the WLAN or the WWAN and the 15 softswitch is there to resolve that problem, isn't 16 it? 17 A No. 18 Q What is the softswitch for? 19 A Well, so the softswitch is -- is 20 something, one example of implementing the process 21 of Figure 2. And that in that example, the 22 softswitch in that particular example is showing
82 1 citation for that, please? 2 A Oh, sure. Yeah, I explained -- I 3 explained that in the combination. So in 4 paragraph 77 of my declaration I describe how 5 Mauer's methods shown in Figure 2 would be 6 incorporated into Waylett's NIB 224 to allow the 7 multi-mode station be reached. 8 So Mauer's Figure 2, a person of ordinary 9 skill in the art would implement Mauer's technique 10 of Figure 2 within -- within the NIB. So Mauer 11 discloses a softswitch 62 or other controller 12 which may facilitate calls directed to mobile 13 stations in the wireless WAN, and in the wireless 14 LAN. 15 So it says it could be in the -- in the 16 softswitch 62 or another controller. And there is 17 already that capability within -- within the NIBs 18 that are described. So one would be motivated to 19 incorporate the process of Figure 2 within the 20 NIB, because it is already having to figure out 21 how to connect a call to the rest of the network. 22 And wireless NIB already includes controllers, for	84 1 how to bridge a circuit-switched example with a 2 packet-based example of network 30, so from 50 to 3 30 back and forth. 4 However, Mauer clearly teaches that it 5 does not have to be a -- that the wireless WAN 6 does not have to be circuit-switched in column 6, 7 top of column 6 first paragraph. If you would 8 like to -- like me to read it. It says a 9 preferred embodiment CDMA2000, right, so which is 10 not circuit-switched. 11 Q The softswitch is not part of the DMA 12 system, is it? 13 A The -- well, to finish my answer, the top 14 of column 6, says, although Figure 1 shows only 15 one BTS WWAN may include a plurality, so it could 16 be either as we talked about. That may provide a 17 plurality of coverage areas, plural. The 18 communication between BTS and multi-mode mobile 19 station may occur in a digital format such as 20 CDMA, TDMA, GSM, or may be analog such as amps. 21 Communications could be voice only, data only, for 22 example, using 1X EV-DO, or voice and data such as

85 1 a preferred wireless communication format is 2 CDMA2000. 3 So my point of that is that there are 4 multiple architectures that Mauer is describing. 5 And so Mauer specifically mentions that the 6 softswitch may implement the process of Figure 2 7 or other controllers may implement the process of 8 Figure 2, so it is not limited to the softswitch 9 doing that. The softswitch is there in that 10 example to bridge between circuit-switched and -- 11 and SIP or packet-switched network. 12 Q Isn't that what the gateway is for? 13 A But -- 14 Q Sorry. 15 A But in an example where you, for instance, 16 had data only or were making a call, in that 17 example that gateway would not be needed other 18 controllers would be used to implement the process 19 of Figure 2 of Mauer. 20 Q But isn't the process of Figure 2 of Mauer 21 only in order to deal with this multi-mode 22 cellular device that might be connected via cell	87 1 only system such as 1X EV-DO. 2 The figure of -- the Figure 2 of Mauer 3 does not mention -- it just mentions multi-modes, 4 not what modes those are. And so it talks to 5 determining -- it's the process of determining how 6 to communicate with a multi-mode station. 7 There are multiple modes that could be 8 data only, it could be voice based or 9 circuit-switched based. And that voice could be 10 SIP based or it could be circuit-switched based. 11 The primary example that they give associated with 12 Figure 1 is a circuit-switched network going to a 13 packet-based system supported by the WLAN. 14 But as I mentioned in the top of column 6 15 it is clear that -- that it -- that the wireless 16 WAN does not need to be limited to GSM or another 17 circuit-switched. It says it can even be -- it 18 can be data only and -- and this is just clearly 19 packet based. 20 Q Doesn't the gateway in Mauer deal with the 21 problems of connecting two unlike networks? 22 A So as I mentioned in -- in Figure 1, it
86 1 network or might be connected via a WLAN? 2 MR. RUECKHEIM: Object to the form. 3 A So the process of Figure 2 could be used 4 over -- between any particular networks including 5 WAN to WAN, LAN to LAN. It is not limited to that 6 and it is also not limited to circuit-switched to 7 packet-switched. It is just simply talking about 8 two networks, or two systems I should say. Mauer 9 is clearly not limited to implementing a wireless 10 WAN using circuit-switched systems. 11 Q Is it your opinion that Mauer is not about 12 how to place a call to a multi-mode mobile 13 station? 14 MR. RUECKHEIM: Object to the form. 15 A Mauer certainly talks of that. 16 Q Where does Mauer talk about the use of 17 this process of Figure 2 for connecting a mobile 18 station that is two mobile stations that are 19 connected to a cellular network? 20 A So you have different technologies, you 21 have different standards. You could have a data 22 only system such as 802.11, you can have a data	88 1 shows an example of a circuit-switched network 2 being interfaced with a packet-based network, but 3 Figure 2, the process, does not speak to the 4 gateway whatsoever. So the gateway is 5 specifically one example of interfacing a 6 circuit-switched to a -- to a packet-switched, but 7 in the very same description, says that the 8 cellular may not be circuit-switched. 9 Q Can you show me this? 10 A Yeah, I just did. Paragraph 6 -- I mean, 11 column 6, top in the description of Figure 1. So 12 line 2 through roughly 12. It is saying 1X EV-DO, 13 which means data only. It could be a combination 14 of voice and data, EV-DV, or CDMA2000. Those are 15 all different systems. Figure 1 depicts GSM, but 16 in no way are they limiting it to GSM or another 17 2G system. 18 Q What is the difference between the 19 operation of the softswitch and the gateway in 20 Mauer? 21 A Yeah, typically the softswitch is control 22 and the gateway would be media. So it would be

89 1 interfacing -- gateways interface typically 2 dissimilar networks. And so it would be 3 interfacing, say, a TDM line with a IP network. 4 Even in that example, IP network 30 is 5 still between the two DMAs, but in the case where 6 both are data based and there is no 7 circuit-switched capability, that gateway wouldn't 8 be needed as one of ordinary skill in the art 9 would understand, because both sides are data, 10 they're packet-based. 11 Q Are gateways also used to interface two 12 unlike data networks? 13 A I mean, it depends on -- it could be a 14 security gateway if that is what you mean. They 15 could be used to provide a firewall or access 16 something of that nature. 17 Q What is a GGSN? 18 A Yes, a GGSN is -- well, it is a GSN 19 gateway, service node. It is -- it has got a lot 20 of different functions. 21 Q Does it interface between a cellular data 22 network and another data network like the	91 1 Q Welcome back. 2 A Thank you. 3 Q What does HLR stand for? 4 A Home location register. 5 Q What is a location register? 6 A So a location register includes 7 information about how to reach a -- as one of the 8 functions how to reach a particular subscriber. 9 Q Does it tell you the location of that 10 subscriber? 11 A Well, it can. 12 Q What do you mean it can? 13 A For instance, traditionally an HLR will 14 include the VLR which a subscriber is connected to 15 or the last one that it was connected to. 16 Q What is a VLR in this -- in your answer? 17 A Well, a VLR is a visitor location 18 register, but it doesn't mean that if you're in a 19 VLR that you're literally visiting necessarily. 20 If you are in a network in which you are -- you 21 have an HLR record, and connect to that, you will 22 still have an entry in the VLR, that is how IS-41
90 1 internet? 2 A It can. 3 Q Is that the typical use of a GGSN? 4 A Well, not necessarily. I mean, for 5 instance, a GGSN could interface to the carriers 6 IMS network, which is a private network. It could 7 interface to the carrier's private IP network for 8 provisioning or servicing or for MMS for text 9 messages. They interface to a lot of different 10 things. They have different APNs they call them 11 that can interface to different services. And 12 typically you would have different GGSNs that 13 would be related to each of those services. For 14 instance, they call it a default gateway and then 15 supplemental service gateways. 16 Q Is the use of a GGSN to interface between 17 the internet and a cellular data network a typical 18 use of the GGSN? 19 A That is certainly one typical use. 20 MR. PRICE: I think that was our half hour 21 that we committed to. 22 (Recess, 12:16 to 12:46 p.m.)	92 1 works. It just really means the one you were 2 connected to actively. So you could think of a 3 VLR as being tactical and a -- and an HLR as being 4 more permanent records. 5 Q So for 2G, for example, just take an easy 6 example, let's say 2G GSM, just to make it -- 7 A Okay. 8 Q -- as simple as possible, what is stored 9 in the HLR of a GSM network? 10 A Well, I don't have a complete list in 11 front of me specifically, but usually you will 12 have a listing of -- it will include a listing of 13 subscribers, which are authorized to have access 14 to the service. It will have a listing of the 15 services that they're allowed to have. It can 16 include -- it can include things like that IMEI or 17 information about the equipment as opposed to the 18 subscriber themselves. It will also often include 19 the -- an entry for the VLR or the last VLR that 20 -- to which the subscriber connected. 21 Q And when you say the last VLR to which the 22 subscriber connected, does that mean the

93 1 particular BTS? 2 A No, it means the VLR. 3 Q Okay. So what does it mean to connect to 4 a VLR? 5 A Well, so in GSM you can have a -- you will 6 have a base station controller that is connected 7 to a MSC. And that MSC will have an associated 8 VLR and HLR, but for this purpose -- discussion 9 the VLR. And it will have a list -- so the HLR on 10 one -- one HLR not associated with that MSC will 11 have the -- the HLR will have an entry associated 12 with the VLR for the second MSC. 13 Q So the HLR will identify the MSC that the 14 particular subscriber you are trying to reach is 15 associated with? 16 A That -- there are different levels of 17 specificity. Sometimes it is a location area and 18 sometimes it is specific to a -- to a cell. And 19 it depends upon the situation. 20 Q Is it right to say that for a typical GSM 21 network with multiple MSCs you have one HLR for 22 all of those MSCs and then individual VLRs	95 1 be performed in that softswitch or in some other 2 controller. 3 So it is not limited to being in -- in the 4 softswitch, but the softswitch would -- Mauer 5 discloses that the softswitch interfaces to the 6 control network 54 to control the gateway which 7 interfaces to the circuit-switched 52 of the TDM 8 network 50. I might have those two numbers 9 backwards, but -- and then to the packet-switched 10 network, the IP network 30 on the site. 11 Q When the call gets to the softswitch, does 12 the softswitch know which network the destination 13 device is connected to? 14 A Well, it depends on if the softswitch is 15 implementing Figure 2 or not. If it is another 16 controller, no, it wouldn't. 17 Q Okay. And what about in the embodiment 18 where the softswitch is used? 19 A It is -- well, it may, but the way it 20 finds out is described in the process of Figure 2. 21 Q And how does it find out? 22 A Well, if it doesn't know then it follows
94 1 associated with each MSC? 2 A It depends on the standard. Oftentimes 3 you can have one MSC with multiple BSCs. I think 4 initially in 2G you had one HLV/VLR/MSC 5 combination. As the standards evolved, you would 6 have bigger databases for a -- for a HLR that were 7 grouped together. 8 And the VLR functionality evolved into 9 different entities and so that you sort of 10 separated them as the standards evolved, but in 11 the earliest versions of GSM in the 2G system, as 12 I recall, you had an MSC/HLR/VLR that were 13 tactically combined. 14 Q Why does Mauer need the smart switch? 15 A Well, do you mean the softswitch? 16 Q Yes. 17 A Yeah. So the softswitch, as I recall, is 18 the control aspect of the gateway. And so in an 19 example where you were bridging between 20 circuit-switched and packet-switched, you would 21 need a gateway to do that. And -- and so Mauer 22 discloses that the process of Figure 2 could also	96 1 the process of Figure 2 to find out which involves 2 trying to establish a communication session with 3 the device at its last known address. 4 Q Is that communication session a call? 5 A Well, it could be. 6 Q So in Figure 2 step 102 says, in response 7 to a request for communication session, the -- 8 there is an attempt to establish the communication 9 session via the first network, right? 10 A Right. 11 Q So does that mean that the call goes from 12 the first mobile subscriber to where the system 13 thinks the first -- the second mobile subscriber 14 might be? 15 A So what is disclosed on Figure 2 says, A 16 requester requests a communication system with a 17 multi-mode mobile station. And then in Step 102 18 in response, attempt to establish the 19 communication session via the first wireless 20 network. And then depending upon the outcome if 21 it is established, you are done. 22 If it is not, then -- then you try now the

97 1 second network or if you determine that they don't 2 want to be connected to it, you can – there is an 3 obvious, another path down 110. But in Step 108 4 if the multi-mode station is inaccessible by the 5 first network, attempt to establish it by the 6 second network. 7 Q And you established that the device is not 8 accessible by trying to make a call to that 9 network? 10 A In this example, yes, but of course there 11 is examples associated with the controller in 12 which a SIP registration, a proxy would be within 13 the controller either in the PBX or within the 14 softswitch – 15 Q Where do you see that? 16 A – or both. 17 I will find it for you, but essentially in 18 the case where the mobile has done the SIP 19 registration to that SIP registrar, then of course 20 it would know that it is present although it could 21 potentially have dropped off so you would still 22 need to talk to it.	99 1 So it could have information saying that 2 the mobile is present in that network. Of course, 3 it goes on to say that the user may have dropped 4 off and not unregistered. So you still would have 5 to reach out to determine, but at least at the 6 time of the registration it is there. That 7 functionality, of course, could be present in any 8 controller. 9 Q I mean, can you put that functionality in 10 the controller of a mobile device? 11 A Well, in a mobile device. When I say any 12 controller, what I mean is the reference that 13 Mauer provides that it can be in another 14 controller – 15 Q Where is that? 16 A – obviously. 17 Q Sorry, go ahead? 18 A Obviously, if you are in some controller 19 that is not attached to a network that doesn't 20 make sense, right. It needs to be one that could 21 be elsewhere in the network than in the 22 softswitch, which Mauer explicitly states.
98 1 Yes, so bottom of column 7, starting at 2 around line 53 down through the end, it is talking 3 about the softswitch 62 may also have access to 4 various types of information regarding multi-mode 5 mobile stations such as multi-mode mobile station 6 16. For example, softswitch 62 may serve as a SIP 7 registrar in which case softswitch may maintain a 8 database of SIP registrations for multi-mode 9 mobile stations. A SIP registration for a 10 multi-mode mobile station may associate a SIP URI 11 with one or more contact addresses that can be 12 used to reach the multi-mode mobile station 13 provided the multi-mode mobile station is in 14 communication with the appropriate network. 15 So for example, when a multi-mode mobile 16 station first associates with a given wireless 17 access point in a WiLAN, the -- the station may 18 use a SIP register method to register a contact 19 address with the SIP registrar. The contact 20 address can be used to reach the mobile station 21 via WiLAN at least at the time of the 22 registration.	100 1 Q Where does Mauer talk about that? 2 A Yeah, associated with the process of 3 Figure 2. Well, so column 8 about line 48 says 4 Figure 2 is a flowchart illustrating a process for 5 attempting to communicate with the multi-mode 6 mobile station in accordance with an exemplary 7 embodiment. The process of Figure 2 may make use 8 of wireless telecommunication system 10 and 9 multi-mode mobile station 16 as shown in Figure 1. 10 It is to be understood, however, that other 11 network architectures could be used to implement 12 the process of Figure 2, so it is not limited to 13 the softswitch doing it or the illustration of 14 architecture at Figure 2. 15 There is -- I will find you the exact 16 disclosure in just a moment here. 17 So line 37 at column 7 says, More 18 particularly softswitch may serve as a controller 19 with respect to calls placed to multi-mode mobile 20 stations such as multi-mode mobile station 16. So 21 all that is required is a controller to do that, 22 and then as I mentioned, other architectures are

101 1 applicable as well to implement Figure 2. 2 Q Doesn't your combination maintain the 3 architecture that Mauer discloses in Figure 1? 4 A Well, remember, Figure 1 is a specific 5 embodiment that is a circuit-switched system 6 communicating with a packet-based system, but 7 Mauer explicitly discloses using other 8 technologies that wouldn't necessarily be limited 9 to circuit-switched. They disclose 10 packet-switched systems such as CDMA2000 and GPRS. 11 So the combination wouldn't necessarily 12 require such a gateway to convert between TDM to 13 packet-based. For example, if both were 14 packet-based, it would be within the scope of 15 Mauer's architecture to not have a gateway there. 16 You could -- also Mauer states that a controller 17 could implement that such as a controller within 18 one of the systems -- 19 Q So -- 20 A -- both of the systems. 21 Q So if both systems were packet-based, is 22 there a need for the softswitch or the process	103 1 controller that could operate as maintaining the 2 process of -- of communicating over a 3 packet-switched network 30 and operating within 4 the scope of Mauer's invention implementing Figure 5 2 as one example. 6 Q So in the combination of Mauer and 7 Waylett, is it your contention that you would 8 still need the process that is carried out by the 9 softswitch? 10 MR. RUECKHEIM: Object to the form. 11 A Yeah, in my report I specifically state 12 that the process of Figure 2 would be implemented 13 within the NIB or NIB I should say. 14 Q Can we find that part of your declaration 15 so we can take a look? 16 A Yes, yes. So paragraph 77 sort of 17 starting on the top of page 36 talks about 18 implementing. So it is obvious to one of ordinary 19 skill in the art that you have already got 20 controllers within the -- within the NIB and that 21 one could implement the process of Figure 2 of 22 Mauer within the NIB 224.
102 1 carried out by the softswitch? 2 A Yes. 3 Q Why? 4 A Well, for the same reasons that the 5 softswitch is there to begin with, to carry out 6 that process. 7 Q What process? 8 A The process of determining which network 9 the system is on. 10 Q Isn't that typically carried out by HLRs 11 and VLRs? 12 A No, HLRs and VLRs are one type of a 13 system, but you still have to figure out in the 14 packet-based system where the user is there. 15 Q Didn't you just tell me that SIP 16 registration will do that? 17 A Right. And they disclose the softswitch 18 as operating as a SIP registrar for voice calls. 19 And that is how it would be implemented for voice 20 calls, so exactly. So to the extent that you have 21 got a SIP registrar for voice calls, say, in a PBX 22 in a WiLAN system, as disclosed that is a	104 1 As an example at the end of paragraph 77 I 2 provided a quote from Exhibit 1018 stating, One or 3 more vendors recently acquired by Alvarion which 4 is a wireless company, interWave, offers a similar 5 solution, quote, network-in-a box, which collapses 6 the functionality of all three -- softswitch, base 7 station controller and mobile switching center 8 elements -- into a single rack for GSM 9 applications. 10 And that is an example that was referenced 11 to -- from -- related to Mauer's Figure 2 in the 12 SIP register. 13 Q Coming to your opinions in this case, did 14 you come to an understanding of what the patent 15 means by the term community location register? 16 A Yes. 17 Q What is a community location register in 18 the context of the '414 patent? 19 MR. RUECKHEIM: Object to the form. 20 A Well, it describes -- again, I applied the 21 legal standard related to the terms and what the 22 patent discloses. And so it needs to have

105 1 information about determining the location of 2 devices which are not within the home location 3 register of the particular HLR or VLR. 4 In fact, there is a good quote about it 5 here. Yeah, so the CLR is -- is -- must be usable 6 to determine if the second mobile station is 7 located within a second wireless coverage area 8 based on information stored at the CLR. 9 So that is my understanding of what the 10 requirements of a CLR are, that it has information 11 about the community that it is -- that that 12 particular DMA system is a part of. And that it 13 has got to be able to use information within that 14 register to determine if the second user -- second 15 wireless device is within the second DMA system 16 coverage area. 17 Q And it is a location register, right? 18 A Well, it says -- right, it says community 19 location register. 20 Q So the CLR needs to have information about 21 the location of or which devices are subscribed to 22 that particular location, the particular location	107 1 determine the location. And the process for doing 2 that is to utilize the location information 3 determined using information from the community's 4 location registers. 5 So you're able to use the CLR to -- 6 information from the CLR, which is the requirement 7 of the claim to determine the location of the -- 8 of the -- or at least the, if the user is in the 9 second wireless coverage area or not. 10 Q Isn't that what the CLR does based on the 11 definition that you read me? 12 A Yeah, the configuration cable, you use 13 that to determine whether or not the user is in 14 the second location or in the second coverage 15 area. 16 Q And so when you are referring to the 17 configuration table, you are not referring to 18 anything in the '414 patent, right? 19 A No. I'm referring to the CLR, that is in 20 the '414 patent. 21 Q But the configuration table is not, 22 correct?
106 1 being the second DMA system, right? 2 MR. RUECKHEIM: Object to the form. 3 A Well, no, that is not what the claim says. 4 Q What does the claim say? 5 A Yeah. So it says it has to contain 6 information that is usable to determine if the 7 user is in the second coverage area. 8 Q But it is a location register, right? 9 A Well, the scope of what it covers means it 10 needs to be able to be usable to determine the 11 location. 12 Q Are you saying that the term "location" 13 doesn't mean anything in the context of this claim 14 element? 15 MR. RUECKHEIM: Object to the form. 16 A Well, it is very likely that a VLR doesn't 17 have the location of a particular user either, 18 right. So yeah, you do not need the explicit 19 location of something, you need to be able to 20 determine its location. 21 So if one doesn't have an entry within a 22 VLR, the system will look to other sources to	108 1 A Well, oh, I see. No, so I'm -- I'm 2 explaining how the configuration table acts as a 3 CLR, which is in the '414 patent. 4 Q But that wasn't my question, but we might 5 get there. My question is just about the meaning 6 of the term CLR in which we need to figure out 7 before we determine whether or not the 8 configuration table actually is a CLR, right? 9 A Right. 10 Q Okay. 11 A So in reading the claims, it provides the 12 requirements for what a CLR has to do. There are 13 multiple embodiments. In patent specifications 14 the embodiments that are claimed, my 15 understanding, are the ones that are specified in 16 a particular claim to be specific about the 17 requirements of that system or that -- that claim 18 patent embodiment. 19 And the CLR has to do something with the 20 community, something with location and it has to 21 store some information. So the configuration 22 table has to do with community, because it says

109 1 how to determine location. Has to do with 2 location for the exact same reason that it is 3 determining -- it is being used to determine -- 4 information being used to determine whether or not 5 something is located in the signal coverage area. 6 And it is a register, because it is storing 7 information that is being used to determine that. 8 Q Are you telling me that the CLR does not 9 have to include information associated with one or 10 more mobile subscribers registered with the second 11 distributed mobile architecture system? And I'm 12 reading from column 3, lines 28 to 31. 13 MR. RUECKHEIM: Object to the form. 14 A So I'm reading what you cited. In a 15 particular embodiment, the module also includes a 16 second community -- community location register. 17 So in a particular embodiment, so there must be 18 other embodiments that have different scope than 19 this particular disclosure. 20 Yeah, so is it required that it fit that 21 exact definition. Well, in that particular 22 embodiment it does, but in other embodiments I	111 1 the first DMA system and it has got to contain 2 information. That is about it. 3 Q Does Waylett's configuration table contain 4 -- is Waylett's configuration table associated 5 with a second DMA system? 6 A Yes. 7 Q How? 8 A So it has got MZ entries, which tell it 9 how to get to the appropriate MSC. Which would be 10 -- in the example I provided contained within 11 another NIB which, of course, is a DMA system. 12 Q If there are three DMA systems, does a 13 configuration table have information for all three 14 of those systems? 15 A Different entries in the table or separate 16 tables would include information about determining 17 whether or not the mobile is within those coverage 18 areas using those -- that information. 19 Q Does that information tell you which 20 coverage areas you are in or does it allow you to 21 figure out which location -- which coverage areas 22 they're in?
110 1 don't think it would, because it is very specific. 2 It is not even in an embodiment. It says in a 3 particular embodiment emphasizing that there is a 4 very specific embodiment in which a CLR includes 5 information associated with one or more mobile 6 subscribers registered with the second distributed 7 mobile architecture system. 8 One of ordinary skill in the art would 9 understand from the name, community, as I 10 mentioned would need to do something about the 11 other nodes within the network. Location has to 12 have something to do with location in that there 13 needs to be registration information or 14 information about -- it needs to be a register 15 such that information is stored there. 16 And so I would look to the language of the 17 claim to narrow down the specific embodiment being 18 claimed as opposed to a particular embodiment 19 cited here. 20 So the requirement in looking at the 21 claims is that it is going to be associated with 22 the second DMA system, it is going to be stored at	112 1 A It -- it does allow you -- it has got 2 information related to determining the location. 3 Q But it doesn't tell you the location, 4 right? 5 A Well, it tells you the location to go 6 check, so it is a location. 7 Q But not the location itself? 8 MR. RUECKHEIM: Object to the form. 9 A Well, you have to go check. I mean, that 10 is what the -- that is what the '414 ultimately 11 discloses. You can be disconnected, you can be -- 12 you don't know if they're still there or not. 13 Q Where does the '414 disclose that? 14 A It describes -- it describes where the -- 15 it describes embodiments in which a user is not 16 present in the CLR and it has to continue to 17 search. Let's see where is that. 18 Yes, so it says on the '414 in column 9, 19 states, As such, in an illustrative embodiment 20 when a mobile subscriber attempts to call a 21 particular MDN, mobile directory number, that is 22 not within the HLR, the second CLR or the third

113 1 CLR, the AAA module can match the prefix of the 2 MDN to the at least one MDN prefix in order to 3 determine a preferred call path destination for 4 establishing a call outside the DMA network 5 provided by the DMA in which the AAA module is 6 embedded. 7 Meaning that if it continues -- hold on a 8 second. Yeah, so it is saying that if you don't 9 have a match for the MDN or some other indicator 10 within the CLR, then it is outside of the network. 11 And that is how you determine whether it is inside 12 or outside the network, which is the purpose of 13 the CLR is determining whether it is -- the 14 collection of CLRs, whether it is within the DMA 15 network or outside of the DMA network and how to 16 direct the call that is not within it through the 17 DPR. That is what is claimed. 18 And so that -- that is the example you 19 were asking me about. 20 Q Is it your contention that the combination 21 of Mauer and Waylett discloses determining a 22 preferred call path to route the call outside of	115 1 network as one of ordinary skill in the art would 2 recognize mobile device 16 and fixed telephone 56 3 are also not part of the DMA network. 4 And voicemail server is not -- voicemail 5 server 66 is not part of the DMAs or the 6 intervening network. It is a service or a 7 capability or server that is off to the side of 8 it, and therefore, doesn't have anything to do 9 with the DMAs themselves other than having 10 information stored about how to reach it at each 11 DMA. 12 Q Is a voicemail server a mobile subscriber? 13 A It is a -- it is a destination to 14 communicate through a call with a -- with a 15 subscriber associated with a mobile device. 16 Q That wasn't my question. Is a voicemail 17 server a mobile subscriber? 18 MR. RUECKHEIM: Object to the form. 19 A No, it is not a mobile subscriber. It is 20 a account associated with a subscription service. 21 Of course that is not what the claim requires 22 either.
114 1 the DMA network when the second mobile subscriber 2 is not located within the first wireless coverage 3 area and not located within the second wireless 4 coverage area? 5 A Yes. 6 Q And what is your position on what the call 7 is that is routed outside of the DMA network? 8 A So Mauer discloses that associated with 9 Figure 2 that if the attempt to establish the 10 communication session via the second wireless 11 network is not successful to provide the requester 12 with an alternative communication option 120. 13 And in paragraph 119 I explain that Mauer 14 discloses, it could, for example, allow the 15 requester to leave a voice message on a voicemail 16 system, voicemail server 66 to send a message to a 17 multi-mobile station as an instant messenger SMS 18 or other type -- types of alternative 19 communications could also be provided. 20 And as I discussed earlier, voicemail 21 server 66 is not part of the DMA network, because 22 not everything in Figure 1 is part of the DMA	116 1 Q Why do you say that? 2 A Because it says when the mobile and the 3 second mobile subscriber is not located within the 4 first wireless network and is not located within 5 the second wireless coverage area, determining a 6 preferred call path throughout the call outside 7 the DMA network based on information stored at the 8 preference register. It is not -- you are 9 completing the call. 10 Q What is "the call" in the context of Claim 11 1? 12 A The call is being originated. 13 Q Can you read the limitation? 14 A When the second mobile subscriber is not 15 located in the first wireless coverage area and is 16 not located within the second wireless coverage 17 area, determining a preferred call path to route 18 the call outside, so you are changing the path of 19 the call, outside the DMA network based on the 20 information at the destination preference register 21 where it is stored at the first DMA system. 22 So it is just -- the claim requires

117 1 rerouting the call based on that address. 2 Q I know you are not a lawyer, but are you 3 familiar with the term antecedent basis? 4 A Yes. 5 Q And what is antecedent basis? 6 MR. RUECKHEIM: Object to the form. 7 A My understanding is it is a term which 8 specifies which one you're talking about. So in 9 other words, if you use "the," then under certain 10 circumstances within the scope of the claim, one 11 would look to that same term earlier to define 12 what you are talking about with respect to that 13 term to connect them together. 14 Q And where is the first place where the 15 term call is introduced in Claim 1? 16 A A call from the first mobile subscriber. 17 Q To? 18 A Yeah, so a call from a first mobile 19 subscriber, that is the call and then it is 20 addressed to a second mobile subscriber. 21 Q Where does it say addressed? 22 A That is what "to" means. So receiving a	119 1 right? 2 MR. RUECKHEIM: Object to the form. 3 A Well, no. It is a request -- it is really 4 the -- the pre-connected call. It is a call -- 5 one of ordinary skill in the art would understand 6 it is a -- it is the request to setup a call to 7 the -- to the second mobile subscriber, because it 8 is -- it is not connected yet, right. 9 They don't know where the user is. None 10 of this would be required if you already had a 11 call established with the second user, right. So 12 the call is a request to initiate a call. One 13 would understand that is the scope of it. 14 It says, a call from a first mobile 15 subscriber to a second mobile subscriber, but one 16 of ordinary skill in the art would understand that 17 that can't possibly mean an established call to 18 the second subscriber already because otherwise 19 you wouldn't have to look for the subscriber, 20 because you are already connected to them, right. 21 The purpose of this is to find and attempt 22 to connect to them within the first or second
118 1 -- so clearly when you are receiving at a first 2 mobile DMA system of DMA network, a call from a 3 first mobile subscriber to a second mobile 4 subscriber, you're not connected yet or else you 5 wouldn't be needing to figure out where the 6 subscriber is. Logic would just simply tell you 7 that. So it is not connected yet. It is a 8 request to make a call. 9 Q But then in the last limitation it is 10 actually talking about routing the call, right? 11 A Yeah. If you can't find the user routing 12 it to a different number. 13 Q Where does the claim say routing it to a 14 different number? 15 A Oh, to a different destination. So it 16 says -- so the call is -- is a call from the first 17 mobile subscriber. And if you can't find the 18 second mobile subscriber within the first or 19 second coverage area, then to look to the DPR to 20 route the call outside of the DMA network. 21 Q And the call being the call from a first 22 mobile subscriber to a second mobile subscriber,	120 1 wireless network, and therefore, if you are 2 already connected, none of this would be required. 3 Q Yeah. I mean, I think we're on the same 4 page, because the later limitations talk about 5 actually routing the call, right? 6 A To a preferred destination, right. 7 Q I'm sorry, what do you mean by the 8 "preferred destination"? 9 A Oh, the last limitation says when, 10 paraphrasing, when you can't find the first -- the 11 mobile subscriber within the first wireless 12 coverage area or in the second wireless coverage 13 area, determining a preferred call path to route 14 the call outside of the DMA network based on 15 information stored at a destination preference 16 register. 17 So you can't find the second user, so you 18 go to a destination preference register to figure 19 out where to send the call. 20 Q But that call doesn't have to be sent to 21 the second user? 22 A Well, it is -- it is going to the second

121 1 subscriber, a voicemail system which would 2 complete the call, because the second subscriber 3 is not present in the wireless network. So there 4 is a preferred -- there is a destination 5 preference register, which allows the call to be 6 routed to the subscriber, second subscriber, based 7 upon -- based upon the preference. 8 So it would get routed outside of the 9 network such that the subscriber ultimately would 10 receive it at its voicemail or some other method 11 of -- you know, it could be broader than that, 12 too, because Mauer describes or some other 13 alternative communication method. It doesn't have 14 to be a voicemail server, that is just the example 15 I used, but it could be some other. 16 Q So if there are multiple ways to route a 17 call to a second subscriber that is outside of the 18 DMA network, is it your understanding that a 19 destination preference register has to rank those 20 options? 21 A That could be one entry. There is nothing 22 limiting it to multiple entries.	123 1 have one entry, the others are not preferred. The 2 one that is in there would be preferred. 3 Q We have been going for about another hour. 4 Do you want to take a short break? 5 A Sure. 6 (Recess, 1:58 to 2:07 p.m.) 7 Q Can you turn to paragraph 60 of your 8 declaration? 9 A Okay. 10 Q In this paragraph you say, The '414 patent 11 explains the DMAs which are implemented as a 12 system or a device are used to receive and route 13 calls between mobile subscribers. 14 Do you see that? 15 A Yes. 16 Q So you cite two different parts of the 17 '414 patent for this, the second one being column 18 7, lines 56 through 59. Can you go there, please? 19 A Yes, it says, In a particular system, a 20 DMA can be implemented as a system or device, for 21 example, a DMA system or a DMA device can include 22 a DMA server or an DMA on board processor.
122 1 Q That wasn't my question. 2 A Oh, I thought it was. 3 Q I said, if there are multiple ways to 4 route a call outside of a second subscriber -- to 5 a second subscriber that is outside of the DMA 6 network, is it your understanding that the 7 destination preference register has to rank those 8 options? 9 MR. RUECKHEIM: Object to the form. 10 A Well, the '414 provides embodiments, 11 specific embodiments provided to that, but I see 12 no limitation. 13 Q What does the word reference mean? 14 MR. RUECKHEIM: Object to the form. 15 A The one you want it to go to. 16 Q So one is preferred over another? 17 A Certainly one where they are not listed 18 are not preferred. If one is in there it is 19 preferred. 20 Q Again, my question was about the case 21 where there are multiple options? 22 A But if there are multiple options yet you	124 1 Q So I think we talked earlier about what a 2 server is. What is your understanding of what is 3 meant here by on board processor? 4 A Well, it doesn't provide a lot of 5 description and grammatically a bit imprecise. 6 But so it says, for example, a DMA system or a DMA 7 device can include a DMA server or an DMA on board 8 processor. And so it is unclear with the 9 grammatical, slightly grammatical awkwardness 10 there. 11 But I think it -- it is saying that it 12 could be implemented as a server, which a server, 13 of course, similar to a radio server would have a 14 processor memory or it could be a processor on a 15 board within the system perhaps. You know, it is 16 not very specific in how it -- how it is 17 describing it. 18 MR. PRICE: I don't have any further 19 questions today. 20 MR. RUECKHEIM: Okay, take a quick break. 21 (Recess, 2:14 to 2:16 p.m.) 22 MR. RUECKHEIM: Mike Rueckheim for Winston

Transcript of James Proctor
Conducted on December 6, 2023

32 (125 to 128)

125 1 & Strawn for the witness and Microsoft and we have 2 no questions. 3 (Deposition adjourned at 2:16 p.m.) 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	127 1 IN WITNESS WHEREOF, I have hereunto set my 2 hand this 18th day of December, 2023. 3 4 5  6 Susan S. Klinger, RMR-CRR, CSR 7 Texas CSR 6531, Exp: 10/23/25 8 California CSR 14487, Exp: 11/30/24 9 10 11 12 13 14 15 16 17 18 19 20 21 22
126 1 CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC 2 I, Susan S. Klinger, Certified Reporter in the 3 States of Texas and California do hereby certify: 4 That JAMES PROCTOR, the witness whose deposition 5 is hereinbefore set forth, was duly sworn by me before 6 the commencement of such deposition and that such 7 deposition was taken before me and is a true record of 8 the testimony given by such witness. 9 I further certify that the adverse party, 10 LEMKO CORPORATION, was represented by counsel at the 11 deposition. 12 I further certify that the deposition of 13 JAMES PROCTOR, occurred at the offices Winston & Strawn 14 LLP, 2121 N. Pearl Street, Suite 900, Dallas, Texas, 15 75201, on Wednesday, December 6, 2023, commencing at 16 9:25 a.m. to 2:16 p.m. 17 I further certify that I am not related to 18 any of the parties to this action by blood or 19 marriage, I am not employed by or an attorney to any 20 of the parties to this action, and that I am in no way 21 interested, financially or otherwise, in the outcome 22 of this matter.	

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