UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ALARM.COM, INC.,	:	
Petitioner,	:	
vs.	:	Case IPR2016-00116
VIVINT, INC.,	:	Case IPR2016-00173
Patent Owner.	:	Case IPR2016-00161

Deposition of SCOTT A. DENNING

Washington, D.C.

Tuesday, October 25, 2016

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Pages 1 - 101

Reported by: Robert M. Jakupciak, RPR

Deposition of SCOTT A. DENNING, held at the offices of:

Sterne, Kessler, Goldstein & Fox, P.L.L.C.
1100 New York Avenue, N.W., Suite 600
Washington, D.C. 20005

Pursuant to Notice, before Robert Michael Jakupciak, RPR, a Notary Public in and for the District of Columbia, when were present on behalf of the respective parties:

SCOTT A. DENNING

A P P E A R A N C E S

On behalf of the Petitioner:

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SCOTT A. DENNING

C O N T E N T S

THE WITNESS: SCOTT A. DENNING

(No exhibits marked during deposition.)

E X H I B I T S R E F E R E N C E D

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P R O C E E D I N G S

Whereupon,

SCOTT A. DENNING,

called as a witness, and having been first duly sworn, was examined and testified as follows:

EXAMINATION BY COUNSEL FOR PETITIONER

BY MS. SANKOORIKAL:

Q Could you state your name for the record?

A Scott Andrew Denning.

Q And what is your address?

A 11855 Windmill Road, Colorado Springs, Colorado, 80908.

Q Do you understand that you are here to have your deposition taken for the Inter Partes Review of U.S. Patent Numbers 6,147,601, 6,462,654 and 6,535,123?

A Yes.

Q And you will understand if I refer to these patents as the '601 patents, the '654 patent and the '123 patent respectively?

A Yes.

Q And do you understand if I refer to all of those three patents as the Sandelman patents?

A Yes.

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Q I will try to take breaks periodically, but let me know if you need to take a break.

A Okay.

Q I'm going to assume that you understand my questions. But if you don't, let me know and I'll try to rephrase them. But if your attorney objects to the question I ask, unless he instructs you not to answer the question, I expect you to answer my question.

A Okay.

Q Is there any reason you can't give full and accurate testimony today?

A No.

Q What did you do to prepare for this deposition?

A I reviewed all of the cited materials, at least the portions that had to do with my declaration, I discussed numerous portions of the declarations with the attorneys and reviewed the declarations.

Q And with whom did you meet?

A A number of attorneys at this firm.

Q And when did you meet with them?

A I've had a number of phone conversations,

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conference calls with the team, and then I also met in person yesterday.

Q Do you remember the names of the attorneys with whom you met yesterday?

A Joe and Jay, Trent, Lauren, and Zho.

Q What was the last name?

A Zho.

Q Zho? And for how long did you meet?

A I think it was about six hours.

Q Did you review any documents?

A Yes.

Q Did you review the transcript of Mr. Zatarain's deposition given in this matter?

A There was at least one excerpt from that deposition that I reviewed.

Q I don't mean just yesterday, I mean in general have you -- is that the sum total of the portion of his deposition transcript that you have reviewed?

A Oh, I'm sorry. Did you ask me about deposition or declaration?

Q Deposition.

A No, I did not read the entire deposition.

Q Do you know what parts of the deposition

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you read?

A There are specific parts that are in my declaration. I know that I for sure read those parts.

Q And did you read Mr. Zatarain's declarations?

A Yes.

Q Did you review any documents aside from those listed in your declaration? If you need to refresh your recollection --

A Could I please see my declaration?

Q Yes. I will hand you what has been previously marked as Exhibit 2010, which is your declaration in the IPR related to the '601 patent. So it's Case Number IPR 2016-00116. There you go.

And I will hand you also what is Vivint 2010, which is your declaration in case IPR 2016-00161, and this relates to the '654 patent. And, finally, also Exhibit 2010, in case IPR 2016-00173 relating to the '123 patent.

If you could take a look at paragraph 12 of your declaration. Let me know whether there are any other documents that you recall reviewing. It's paragraph 12 in each of your declarations.

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A It appears that the declaration of Zatarain is not on here. The declaration, yes, I don't see that here listed in the '601.

Q You are talking about Mr. Zatarain's --

A Declaration, yes.

Q -- declaration is not listed here and you did review that?

A Yes, I did.

Q Okay.

A Here I see it on the other two, though.

Q Okay. So it's only omitted from the '601, your '601 declaration; is that correct?

A Yes.

Q Apart from that document, are there any other documents that you reviewed that are not listed in --

A I can't think of any.

Q Are you aware of any inaccuracies in your declarations?

A The opinions that I express are certainly accurate. I have noticed a few grammatical issues that I'm note crazy about.

Q Let me rephrase my question. Are you aware of any substantive inaccuracies in your

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declarations setting aside typographical errors?

A No.

Q Is there any substantive information missing from your declarations?

A I'm not aware of any.

Q Do your declarations contain all the points that you intended to make with regard to your opinions?

A Yes.

Q Is there any aspect of your opinions in any of your declarations that you wish to correct?

A No.

Q If you could turn to paragraphs five and six of your '601 declaration? There is a description of your experience.

A Okay.

Q You state specifically in paragraph six that you have experience in building systems monitoring, including elevator and HVAC controls, facility security including alarm access control and closed-circuit television. Do you see that language towards the end of the first sentence?

A Yes.

Q Do you consider yourself to be an expert

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in these areas?

A Yes.

Q And in which of these, in which positions did you design and implement building systems?

A My experience designing and building these kinds of systems actually goes back further than what is in my CV. I started designing, installing and training people on these systems in approximately 1982 with a company named BC Electronics. I worked for them for a number of years while I was working my way through school.

And in I believe it was 1987 I began working with a company named Interface Solutions Incorporated. While at that company I wrote software as well as designed circuitry for a number of different types of building systems that monitor all kinds of events.

And in 1993 I formed Video Design Incorporated. There I also designed various monitoring equipment, including closed-circuit TV, access control, building alarms and similar things. That really was the last position I held where I designed this kind of equipment.

Q You said the monitoring equipment you

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designed in your last position, was that for residential use or commercial use?

A It could have been used in residences. I did install some equipment in what you would consider mansions of the very wealthy. Most of the equipment that I designed was definitely for commercial or industrial applications.

Q What kind of industrial applications or commercial?

A Factories, warehouses, airports.

Q And so how was the -- what kind of features did these systems that you installed have? For instance, you said factory, so what were you installing?

MR. MUTSCHELKNAUS: Objection. Form.

A I'm sorry. Could you ask your question again?

Q You mentioned factories, warehouses and airports. What kind of applications were you installing, hardware or software? If you could explain a little more what the system was?

A Sure. To give you an example of a factory, I installed equipment at Mary K Cosmetics factory where they actually build the powder puffs

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and other things that they sell there. Primarily it was motion detector systems to detect when an area of the factory was being utilized. Sometimes that was tied in to lighting control systems to automatically turn on lights. Other times it was to alert security that somebody was in an area that they weren't supposed to be in.

Q And who was alerted? Who received the alerts?

MR. MUTSCHELKNAUS: Objection. Form.

A Typically, it was an on-site security guard. Occasionally some of the systems had a notification system that would notify somebody at an adjacent building or something like that.

Q And was there remote access to this system?

A Can you explain what you mean by remote access?

Q Well, did you have to be on-site in order to access the system?

A For which type of access?

Q So for lighting control, for instance, or let's actually talk about the alerts. If you wanted to turn off some sort of -- was there an alarm that

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was triggered or could be triggered?

MR. MUTSCHELKNAUS: Objection. Form.

A In some situations certainly there were alarms. In order to turn an alarm off, typically it required going to the user console, usually located at a guard station, but sometimes it was in like the building maintenance department or the building management office. And through a series of menus you would select that, whatever it was, and give it an off command.

Q So you -- did you initially set up the list of the group of individuals to whom notifications would be sent?

MR. MUTSCHELKNAUS: Objection. Form.

A Well, as I mentioned, in this particular system, usually it was sent to only one place, which was the command center or the main terminal for the system. When I would install the system, it definitely entailed creating a list of who was authorized to even use the machine.

I also would create a configuration that's used for all of the inputs and outputs of the devices that are located throughout the facilities.

Q Did each of the individuals who received

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notifications or could receive notifications -- actually, strike that.

For each of the individuals who were authorized to use the machine, did they have their own passwords?

A In some cases they would share a user log-in. For example, at Arco Oil and Gas it was a large production research facility in Plano, Texas that we did. They had I think probably four or five different guard stations. And at periodic times the guards would rotate and go to a different station.

They all used actually the same log-in for all of them. And I gave them a certain level of access into the system. They could see who it was that was coming through various doors that had card use, they could also watch as gates opened and closed and the messages came on the screen.

But they were not allowed to configure which cards in the access control system were allowed to go through which doors.

Q Now, in 1998 which alarm systems were configurable?

MR. MUTSCHELKNAUS: Objection. Form.

A I don't know.

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Q Were there any that you are aware of in '98 that could be configured?

A I guess I would need to have you be more specific by what you mean by configure.

Q So we were talking about systems previously where different events would occur and notifications would be sent to either a central location or where you have access. Were you aware of any alarm systems that had those kinds of capabilities?

A Certainly the systems that I just told you about had a particular level of configuration, and those went back all the way to when I started in 1982.

Q Did -- do you know if Honeywell had an alarm system that was configurable at the time?

A I never installed or worked on any Honeywell equipment. I don't know.

Q Did you work on any, did you install or work on any security company's -- did you ever install or work on any company that provided security systems?

MR. MUTSCHELKNAUS: Objection. Form.

A Are you asking me if I worked at a company

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such as ADT or something like that that is known for doing this --

Q Yes. Like DSC or Tyco are two other examples?

A No. I never worked for any of those.

Q Do you know whether they offered, any of these companies offered alarm systems that were configurable as of 1998?

MR. MUTSCHELKNAUS: Objection. Form.

A No. I don't know about those companies.

Q Are you -- in paragraph five there is a reference to your experience to communication in sort of the middle of the paragraph. You worked over 27 years of professional experience in hardware design, software engineering for embedded systems in the areas of security, digital video, robotics, navigation, communications, signal processing, et cetera.

A Yes.

Q Do you consider yourself an expert in communication?

A Yes.

Q And what does the word communication mean to you?

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A I think I would have to include electronic communication and probably wireless communication.

Q And does that encompass email communications?

A Yes.

Q You referenced experience in design and implementation of graphical user interfaces for displaying and configuring databases residing on servers utilizing software by Oracle, MySQL, and PostgresSQL; correct?

A Yes.

Q Just so I understand, does that mean that you developed application software that made use of those databases?

A Yes.

Q Did you also make use of tools provided by database vendors such as querying tools?

A I'm sorry. I missed that last part.

Q So I was wondering whether you've used any tools provided by database vendors such as tools that allowed you to perform queries?

A Yes.

Q And did you, this database experience that you were talking about, did that also occur as part

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of your building experience?

A I believe my first Oracle experience came about in 1998. I certainly had database experience before that, but not with these three that are listed here.

Q Do you recall what databases prior to --

My question was do you recall what databases you used prior to '98?

A There were a number of embedded databases that were utilized by the products that I designed and installed. I'm trying to recall the names. I'm pretty sure that one of them was actually named B Tree.

Q How is that spelled?

A Capital B and then tree. There also was one that was C Tree, which was an improvement on B Tree. There were others, but I don't recall their names right now.

Q In your declaration, your '601 declaration, you state your opinion with regard to, about the level of ordinary skill for a POSITA, and you mention in the '601, for instance, that the person has to have at least a bachelor's degree in electrical engineering or computer science and at

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least four years of experience in remote monitoring and control systems. Do you see that in paragraph 15?

MR. MUTSCHELKNAUS: Objection. Foundation.

MS. SANKOORIKAL: What's the basis for the objection?

MR. MUTSCHELKNAUS: I withdraw the objection.

A Yes, I see it.

Q Is it your opinion that a person with a degree in computer engineering and four years of relevant work experience would not be a POSITA?

A Yes, if by relevant you mean they have experience in remote monitoring and control systems.

Q Yeah. Okay. But you are not excluding computer engineering as a degree is really what I'm getting at?

A No.

Q Now, and what's the basis for your opinion that a POSITA would need four years of experience?

A That's based on my own personal experience as far as how far I was in my own career and development after getting out of school to the level

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that is described by the patent.

Additionally, in the years of experience in working with other people on my engineering teams that were able to work at the same level of technology as expressed in the patents.

Q Now, I take it you are familiar with SQL? Is that a correct assumption?

A By SQL do you mean SQL?

Q Yes.

A Yes. I am familiar.

Q What is SQL?

A SQL stands for structured query language. It is a database query language that allows through a command structure for data to be retrieved from within the database tables.

Q Would a POSITA have been familiar with SQL?

A I'm afraid I have to answer I don't know.

Q You have experience with the MySQL database; correct?

A Yes.

Q Just to go back, your opinion is that you are not sure whether a person with a degree in electrical engineering, computer science or computer

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engineering with at least four years of experience would have had familiarity with SQL; is that correct?

A That is correct.

Q Is MySQL a multi-user database?

A MySQL can certainly be configured for multiple users. I wouldn't say that it has to be.

Q But you would agree that it could be configured for multiple users?

A Yes, as I said.

Q And was MySQL publicly available in 1998?

A I don't know.

Q And you have experience in PostgresSQL; correct?

A As I state on page 2 of the '601 declaration, yes.

Q Okay. And could PostgresSQL be configured for multiple users?

A Yes.

Q And was it publicly available in 1998?

A I don't know.

Q You have experience with, with an Oracle database; correct?

A Yes.

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Q And Oracle could have been configured for multiple users; correct?

A Yes.

Q And it was publicly available in 1998; correct?

A Well, it wasn't free. It was available.

Q But a member of the public could buy it?

A Yes.

Q Now, for all three of these examples that I gave you for MySQL, PostgresSQL and Oracle, all of those products supported SQL; correct?

A Various forms of SQL. There were differences between, between them.

Q And as of -- as of 1998 did Oracle allow for the creation of multiple user accounts, each with its own user name and password?

A Yes. If it was configured correctly, it could do that.

Q And also as of 1998 do you know whether MySQL allowed for the creation of multiple user accounts, each with its own user name and password?

A As I said earlier, I am not sure that MySQL was available at that time.

Q Okay. And I assume your testimony would

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be the same for PostgresSQL if I asked you the same question?

A That is correct.

Q Now, as of 1998 did Oracle allow an administrator to define specific access rights for each user account?

A An administrator could configure which tables and even portions of tables a user had access to.

Q And the Oracle database software would automatically enforce those access rights if they --

A Yes, it would.

Q Now, as of 1998 did Oracle supply a client tool for its database server to allow access using SQL?

A Yes. I believe that it did.

Q Do you know the name of that tool?

A No. I don't recall. I did not use Oracle's tools for doing that.

Q Are you familiar with SQL Plus?

A No.

Q As of 1998 did Oracle provide a client tool that allowed connecting to its databases remotely?

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A I'm not sure.

Q So when drafting your opinions for the '601, the '123 and '654 patents, what efforts did you undertake to understand the state of various features and functions in those patents; for instance, remote access, remote configuration?

A As indicated in the reference section, paragraph 12 of my '601 declaration, I list a number of documents there. Certainly these things were considered. Some of them I identified on my own, such as the HP-UX references, which is Exhibit 2016 and 2017, and some of them were provided to me by the attorneys as exhibits from petitions that you filed.

Q HP-UX is an operating system; correct?

A Yes, it is.

Q So with regard to the capabilities of systems that could have provided remote access, remote configuration, what, were there any efforts you undertook to familiarize yourself with the state of the industry or the art as of 1998 apart from what is listed in paragraph 12?

A Beyond recalling my own experience on the projects that I worked at prior to that time, I did

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not undertake any search.

Q I'm going introduce in one shot so its easier, all of the patents, the '601, '654, and the '123, and I will identify them one by one.

I will hand you what's been previously marked -- that has been previously marked as Exhibit 1101 in IPR 2016-00116, the '601 patent; and what's also been marked as Exhibit 1101 in IPR 2016-00161, which is the '654 patent; and what's been previously marked also as Exhibit 1101 in IPR 2016-00173, it's the '123 patent.

Take a look at, in the '601 patent, figures one through five. There is also text associated with that, for instance, at column five, lines 37 to 38.

A Okay.

Q Would you agree that Figures 1 through 5 and the text from the patent related to those figures concern preferred embodiments of the '601 patent?

A The '601 patent, column five, line 37 says description will now be given of the preferred embodiments with reference to Figures 1 through 5.

Q So you would agree with my question?

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A That's what it says.

Q Now, with regard to the '654 patent, I will ask you the same question. Would you agree that Figures 1 through 5 and the associated text concern preferred embodiments of the '654 patent?

A Is there a portion of the specification that you are referring to?

Q Column seven, for instance, line 24 to 25.

A Yes. This is the same text we identified earlier in the '601 patent.

Q And I will ask you the same question with regard to the '123 patent, whether Figures 1 through 5 and the text relating to that, for instance, concerns preferred embodiments of the '123 patent? And I can direct you again to column seven, line 23 to 25 for instance -- 23 to 24.

A Yes. The '123 patent also says that description will now be given for the preferred embodiment with reference to Figures 1 through 15.

MS. SANKOORIKAL: Counsel, a question for you to save some effort. Since the '123 is a continuation of the '654, would you stipulate that the specifications are identical between the '123 and '654? The only difference between the '123 and

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the '654 that we see is there is extra line stating as a continuation of the '654.

MR. MUTSCHELKNAUS: We will tell you the answer after the break. We are not ready to stipulate just yet.

BY MS. SANKOORIKAL:

Q Okay. So going back to the '601 patent, and specifically take a look at paragraph 32 of your '601 declaration, and in paragraph 32 you state, use the phrase the architecture presented in the '601 patent is illustrated in Figure 1. Do you see that language?

A Yes.

Q Okay. Now, since Figure 1, which we just looked at, in each of the Sandelman patents is identical, do you agree that they all represent architectures of the inventions in each of the '123, '654 and '601 Sandelman patents?

A At a high level they represent the inventions.

Q Do you agree that they all represent architectures of the inventions?

A Yes, at a high level they represent the architecture of the inventions.

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Q Now, taking a look at Figure 1, the items labeled 2, 3, 4 and 5, do you believe that those are pieces of remote equipment?

A Yes.

Q And the items labeled 10 associated with each piece of remote equipment is an interface unit; correct?

A Yes. As I state on the bottom of page 11, interface unit ten receives signals.

Q And the item labeled one is the server?

A As it says in Figure 1, electronic message delivery server.

Q And 121, is that the user interface to the server?

A The '601 patent in column seven, line 41 actually identifies that as users. You see that again also in line 51 where it says when a user-contractor 121.

Q But wouldn't you agree that the reference to user is actually the means by which the user uses the system, user interface?

MR. MUTSCHELKNAUS: Objection. Form.

A I would agree that there is a user interface for the user in order to access the

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server. It does not appear to be identified in Figure 1 though. As I said before, 121 is identified as a user. 122, which is the bidirectional arrow, is identified in column seven, line 34 as being the Internet.

Q So your testimony is that 121 is a person?

A My testimony is that the '601 patent identifies 121 as a user.

Q The boxes on the right in Figure 1; 6, 7, 8 and 9, those are user communication devices; correct?

A If you look in my '601 declaration, paragraph 33, more towards the middle of the page, I say that the message delivery server one routes the messages and outgoing exception message to the appropriate user interface; email 6, fax 7, pager 8, and voice 9, et cetera.

Q So, so 6, 7, 8 and 9 are user interfaces?

A As support for that, if we look into the '601 patent at column five, lines 51 through 54 as I have noted there, you can see it. Starting at line 51 the message delivery server one then routes the message as an outgoing exception message to the appropriate user interface.

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MR. MUTSCHELKNAUS: Counsel, sorry to interrupt. We can stipulate that the '123 and the '654 specifications are nearly identical. Our difference is claims and the --

MS. SANKOORIKAL: Yeah. My issue is only with the specification. Go ahead.

A I was finished.

Q Okay. So I'll direct you to column six, line, starting at line six. And it reads: "Based on the configuration of the user message profile, the outgoing exception message or messages is then delivered to the specific end device or devices."

So if you skip down, well, Figures 3A through D show a more detailed view of the various outbound links 12A to D that connect the server one to various electronic media. In Figure 3A server one sends a message over a telephone line 18A to Internet 122 and deposits the message in the user's email box 6. In Figure 3D server one sends a message over a telephone line 18D to the public telephone switch network, PSTN 19, to the user's fax machine seven. In Figure 3C server one sends a message over a telephone line 18C to the user's pager device 53 and then to the user's pager or PCS

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8. In Figure 3D server one sends a message over the telephone line 18D through PTSN 19 to the user's voice mailbox 9.

So I'm going to ask again, the right side of Figure 1 representing boxes 6, 7, 8 and 9, would you agree that those are user communication devices?

A I maintain that the '601 patent identifies those as user interfaces.

Q So how do you interpret the language, take these one by one, in line 14, user's email box 6?

A It's a user's email box as it says.

Q And in lines 16, user's fax machine 7; what does that mean to you?

A It identifies box seven on Figure 1 as being the user's fax machine.

Q So box seven is actually a fax machine?

A Yes.

Q And box six is an email box?

A Yes.

Q And box eight is a, is a user's pager?

A Yes.

Q And box nine is a voice mailbox?

A Yes.

Q Now, is a pager a device?

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A I guess I would have to say a particular pager would be called a device. In the '601 patent, column three, if you look at the top of the page, it says that the system can contact a customer or contractor via a number of different media. It appears that these boxes are more media types than being specific as to a particular device.

Q So when you say media type, what do you mean?

A As I said, the '601 patent, column 3 at the top specifically says the system can contact the customer or contractor via a number of different media, and then lists fax, email, pager, et cetera.

Q So what is the distinction you are drawing? You are saying a pager isn't a device?

A I'm saying that a specific pager, one that I could hold in my hand, is a device.

Q What other types of pagers are you familiar with?

A Well, the box as it's listed here does not point to any specific pager. It's just --

Q Are you aware of any other type of pager besides one that you would hold or --

A What I'm saying is that this box could

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include many pagers, not any one specific pager.

Q You are talking about a class of pagers?

A Yes. As I said, a type of media.

Q So but all of those pagers, you can consider all of those pagers, are all devices; correct?

A Yes.

Q So I have the same question with the fax machine number seven. A fax machine is a device; correct?

A Yes. A specific fax machine is a device.

Q So does the '601 use the word "media" and "device" interchangeably? Is that your testimony?

A I would say no. Media is a, a type of communication. Device is a specific one of those.

Q So a device is a subset of media?

A I would be a little more specific than that in saying that a device is a singular unit of one of those types.

Q Okay. So not to put words in your mouth, correct me if I am wrong, a device is a singular unit of a media of that type?

MR. MUTSCHELKNAUS: Objection. Form.

A I believe that's what I said.

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MS. SANKOORIKAL: We have been going for over an hour. If you would like to take a break now, we can stop or keep going.

THE WITNESS: Sure.

MS. SANKOORIKAL: Okay.

(Recessed at 1:07 p.m.)

(Reconvened at 1:15 p.m.)

BY MS. SANKOORIKAL:

Q What's your understanding of the word "may," for example, in the sentence he may attend a basketball game?

A That attending a basketball game is an option.

Q And is "may" different from "must" if I said he must attend the basketball game?

A Yes, it is different.

Q And in what sense is it different?

A There is a connotation with "must" that it is a requirement.

Q Now, is it your opinion that a message profile must include a list of persons to contact?

A In my declaration on page 24, paragraph 53, I state that specifically each passage indicates that the message profile must specify some

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indication as to who to contact and some indication of a means for contacting those individuals.

Q And is it also your opinion that there must be more than one device per individual?

A Is there a portion of my declaration that you are referring to?

Q No. But we are generally in the territory of 50 and -- I just want to understand your opinion. Is it your opinion that there must be more than one device per individual or that there must be more than one device total?

A Would you please repeat your question?

Q My question was is it your opinion that there must be one device per individual or that there must be more than one device altogether? Or do you have no opinion as to either? I'm not trying to put words in your mouth. I'm trying to understand your opinion.

MR. MUTSCHELKNAUS: Objection. Form.

A I don't believe that I have said that there is a limit to how many devices a single individual can have. I also don't believe that I have said how many individuals can be notified.

Q Okay. Now, take things that jump. You

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would agree that a rabbit is a thing that jumps; correct?

A I certainly had some rabbits that did not jump.

Q But, there are some rabbits that jump; correct?

A There are --

MR. MUTSCHELKNAUS: Objection.

A -- some rabbits that jump.

Q Now, you focus in paragraph 51 on the phrase "may be refer to as"; correct?

A Yes.

Q Now, the example I gave you, things that jump, they may be referred to as mammals; correct?

A Rabbits may be referred to as mammals.

Q And I gave an example of things that jump that may be referred to as animals; correct?

A Yes. Rabbits that jump are animals.

Q Mammals rather?

A Mammals, yes.

Q But a frog is also a thing that jumps; right?

A Yes. Frogs do jump.

Q But a frog is not a mammal, is it?

SCOTT A. DENNING

A No, I don't believe a frog is a mammal.

Q So even though things that jump may be referred to as mammals, mammals don't necessarily include all things that jump; correct?

MR. MUTSCHELKNAUS: Objection. This is outside the scope.

A That is correct.

Q Now, in your declaration in paragraph 76 of the '601 declaration, you discuss read-only retrieval access through a database and access that includes the ability to update data; correct?

A Would you please restate the second half of your question?

Q So I asked whether in paragraph 76 of your '601 declaration you discussed read-only retrieval access and also access that includes the ability to update data?

A Yes. I state as Elmasri's database book explains, different types of access operations, retrieval or update, must be controlled. Is this what you are referring to?

Q I just want to understand what is meant by update. Does that mean making changes to the data stored in the database?

SCOTT A. DENNING

A Yes.

Q And that's making changes, updating both preexisting data and also inputting new data; is that correct?

A Yes.

Q And you agree that database access could include retrieval as well as update or modification; correct?

A I believe what I said is in paragraph 76, as I discussed above, data access could just mean read-only retrieval.

Q I understand that's what it could mean, but could it also mean update or modification as Elmasri's database book explained?

A There are different types of access operations, retrieval or update, as it says.

Q And do you agree with that?

A Yes.

Q Now, in order to configure a database, would you need the ability to update data in the database?

A I can think of numerous databases that I implemented where I did not have to have access.

Q So how did you do that?

SCOTT A. DENNING

A As a software developer, you are able to image a database, pre-configure it with some other software mechanism that the database is created intact and distributed in that form.

Q Okay. Now, to modify a database do you need the ability to update the data in the database?

A So in your question it appears that you are using update and modify to be synonymous? Is that correct?

Q Yes.

A I would agree with that.

Q Once a database has been created, can it be configured without having access?

A I don't know.

Q Now, as of 1998, when a database was created, would it necessarily have had to have application data present?

A I guess I need you to tell me more what you mean about being created.

Q So you mentioned, you mentioned your experience as a software, you could image a database and pre-configure it. What I'm asking is as of 1998, when a database was set up, was it always pre-configured with data present?

SCOTT A. DENNING

A I wouldn't say that it was always pre-configured with data.

Q Now, are you familiar with the create database SQL command?

A It has been a long time since I have used that, so I would not say that I am familiar right now with that.

Q So you don't know what create database, what that command does?

A No. I just don't recall.

Q Now, do you know which alarm system databases in 1998 had data in them without being configured by either the security dealer or the end user?

A Well, I can think of two that I created that were that way.

Q And are you aware of any others? Is that how the Honeywell system operated?

A I'm trying to decide which question to answer first.

Q Can you answer the question about Honeywell?

A As I testified earlier, I'm not familiar with the Honeywell system.

SCOTT A. DENNING

Q And were you familiar with the Tyco system to know whether or not the data in them was not configured by either the security dealer or the end user?

A No, I'm not familiar with the Tyco system.

Q Would your response be the same for DSC?

A Did you say DSC?

Q Yeah.

A No. I'm not familiar with DSC.

Q Apart from your personal experiences, are you familiar with any other system and the capabilities of whether or not data in them had to be configured -- sorry. Strike that.

Apart from your personal experiences, are you aware of any other databases in '98 had data in them without being configured by either the security dealer or end user?

A It certainly appears that the Shetty system by Caterpillar came that way.

Q So repeat what you just said. That the Caterpillar system --

A By Shetty.

Q It appears that way. Is that what your testimony is?

SCOTT A. DENNING

A It is.

Q Now, where does Shetty explicitly say the access is -- strike that.

And when you say it appears that way, what is the basis for that statement?

A Referring to page 16 of my '601 declaration, at the top of the page is a reproduction of Shetty's Figure 1. If we look inside the box labeled 100, you see three different cylinders that represent databases.

If we look at the upper left-hand corner cylinder it's Fleet and Machine Database Means 104. From this particular diagram there appears to be no method at all of configuring it.

Certainly there is nothing that explicitly talks about that in the text that surrounds this. We see the same thing in User Profile Database, that it specifically talks about access to it, but one would not assume that that access means to do any configuration at all.

Q What's the basis for that testimony?

A So in my declaration I give a number of different grounds for that opinion. If we look at paragraph 62: "I understand that, in the Petition,

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Alarm.com relies on Shetty's user interface 110, which only allows the user to access the user profile database, for the claimed remote configuration. But Shetty's disclosure of access does not disclose either the configuring or the remoteness of its user interface."

Q My question is actually different. My question is your opinion is that, that even though there is a specific discussion about access, one would not assume that access means you do any configuration at all; what is the basis of that opinion?

MR. MUTSCHELKNAUS: Objection.

A So in my declaration on page 33, paragraph 73, I give the, I wrote the plain meaning of configuration and access are different. For example, configuration involves setting up data. I refer then to Webster's dictionary; the choices made in setting up a computer system or an application. In contrast, data access could be defined as retrieval operation on data. Same reference at 12.

Which is to open or retrieve any kind of data or document. This means that access could be understood by a POSA as read-only operation.

SCOTT A. DENNING

Q Now, do you believe that that's the broadest reasonable definition of the word "access," read-only or retrieval?

MR. MUTSCHELKNAUS: Objection. Relevance.

A Yes.

Q That's the broadest reasonable interpretation of access? Is that consistent with Elmasri?

MR. MUTSCHELKNAUS: I'm sorry. I didn't catch the last word.

MS. SANKOORIKAL: Is that consistent with Elmasri. Did I mispronounce it?

BY MS. SANKOORIKAL:

Q Is that consistent with Elmasri?

A So in my declaration '601 on page 9, paragraph 23, I make the statement that: "I understand that in this inter partes review the claims must be given their broadest reasonable interpretation, but that interpretation must be consistent with the specification.

In this instance I do not believe that it is possible to come up with a different definition of access than the one that I just gave you without seriously looking at the specification.

SCOTT A. DENNING

Q Is that based on, on the fact that Shetty does not use the word, the absence of words in Shetty indicating configuration, or update or modify?

A Because Shetty is silent about how the database is configured, the use of the word "access" can only mean read-only. We are just not given any more information to assume anything else.

Q Okay. So you agree that Shetty does not actually say that the access is read-only?

A Could I see the Shetty patent?

Q Sure. I will hand you what's been previously marked as Exhibit 1103, the Shetty patent.

A In answer to your question, a review of Shetty shows that read-only does not actually appear in the text.

Q Now, so you agree that Shetty teaches access to a user profile database; correct?

A Is there a portion of Shetty that you are referring to?

Q It's from your own declaration. Paragraph 62.

A Yes.

SCOTT A. DENNING

Q Okay. And but -- and you agree that the access is via Shetty's user interface 110; correct?

A Is there a part of my declaration that you are referring to where I say that Shetty's access is by the user interface?

Q I direct you to the same paragraph, paragraph 62.

A Well, specifically the last sentence of paragraph 62 says: "But Shetty's disclosure access does not disclose either the configuring or remoteness of its user interface 110."

Q My question was do you agree that the access Shetty teaches is via Shetty's user interface 110?

A I don't see anywhere on here where I say that.

Q The first sentence says: "I understand that, in the Petition, Alarm.com relies on Shetty's user interface 110, which allows only" access -- "which allows a user to access a user profile database."

A Oh, I'm sorry. I was looking at the last sentence.

Q Okay. So you agree that the access that

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Shetty teaches is via user interface 110; correct?

A Yes.

Q Okay. Now, but you agree that Shetty does not explicitly say that the access is read-only; correct?

A Shetty does not specifically say the words read-only.

Q How would Shetty's notification means send out notifications without the phone numbers or emails addresses being stored?

A I don't know.

Q Do you agree that the phone numbers and email addresses are actually stored in order for Shetty's notification means to send out notifications?

A I agree that those would have to be stored.

Q Does Shetty teach the use of any other, any machines other than information managers, warning managers and remote work stations?

A Would you please repeat your question.

Q Does Shetty teach the use of any machines other than information managers, warning managers and remote work stations?

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A Well, in particular, column one mentions mobile machines. That's on line 53. Column two specifically references a computer work station, which I would consider to be a machine. And because you are specifically referencing managers, I found on-board information manager at the bottom of column two, off-board information manager also on the bottom of column two. The bottom of column three, line 63 is a database server. I would consider that to be a machine. I think that's all.

Q Okay. If you could turn to paragraph 70 of your declaration?

A I'm sorry. Which paragraph?

Q Paragraph 70.

A Okay.

Q Do you agree that in paragraph 70 of your '601 declaration that Shetty teaches that its user interface 110 also allows the user to input information relating to a fleet or machine data; correct? And the part I was quoting is, "also allows the user to input information relating to fleet or machine data," in the middle of the paragraph 70.

A Yes. That's at the bottom of page 32 and

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the start of page 33.

Q Yep. If a user were to input information relating to fleet or machine data, that would cause data to be written to the fleet and machine database means 104; correct?

A Yes.

Q So users at least have write access to the fleet and machine database 104; correct?

A Yes. I stand corrected. Earlier I referred to that cylinder incorrectly.

Q And a POSITA would have had the necessary knowledge and skill to implement read, write access to the fleet and machine database; correct?

A Yes.

Q And user interface 110 was used to both access the fleet and machine database and to input information relating to fleet, fleet and machines; correct?

A Yes.

Q Does Shetty teach any other user interface apart from 110?

A 110 is the only device or item identified as a user interface.

Q Now, do you agree that access could mean

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update as well as read-only?

A I believe I previously answered your question when referring to paragraph 76 and in regards to Elmasri's definition.

Q So what's your answer? I'm sorry.

A As I previously stated, I agree with Elmasri that there are different types of access operations including retrieval or update.

Q But in the case of Shetty, your view is that it's read-only access; correct?

A Shetty certainly teaches, as you pointed out in that paragraph 70, that the fleet and machine database allows the user to input information. As we discussed earlier, the definition of access is, could include retrieval or update. So certainly the machine and database means, if you access the fleet and machine database means according to the teaching of Shetty, you could update it or input information.

I don't see any other reference within Shetty for accessing that could be applied the same.

Q So access in Shetty could mean both retrieval as well as updating data?

A I would have to say that when Shetty actually uses the word "access," there isn't a

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connotation of doing any writing of data, modifying or configuring. It appears that the word is only used just a few times.

Certainly in column four, line five, it states users can access the data stored and receive. Again in column four, line eight it says users can also access the data stored and receive.

Q Are you suggesting that Shetty defines "access" differently than the common definition of "access"?

A Yes.

Q There is a definition of "access" in Shetty. What is the definition of "access" in Shetty?

A I guess I would not use the word definition. I would go back to broadest reasonable interpretation in light of the claims, specification, I'm sorry.

In light of the specification, when we look at the word "access," I can't arrive at anything more than a read operation.

Q So you are suggesting that the specification actually teaches a departure from the common usage of the word "access"?

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A I'm saying that I cannot assume more than what the specification provides for that word.

Q But the specification uses the word "access" and access you've already agreed means two different things. Where does the specification say that the second part of the definition, updating data, is not part of the definition of access as used in Shetty?

MR. MUTSCHELKNAUS: Objection. Misstates prior testimony.

THE WITNESS: Would you please repeat your question?

BY MS. SANKOORIKAL:

Q Sure. You testified earlier that "access" has two definitions, retrieval as well as updating data. And I'm asking you where in Shetty the specification states that the definition of "access" includes two aspects, retrieval and updating, does not, is not the appropriate definition of "access"?

MR. MUTSCHELKNAUS: Same objection.

BY MS. SANKOORIKAL:

Q Let me rephrase the question. You previously testified there are two aspects of the definition of the word "access"; updating and

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retrieving. Your opinion is that updating does not apply to Shetty?

MR. MUTSCHELKNAUS: Same objection.

BY MS. SANKOORIKAL:

Q Did I misstate your testimony? Is it your opinion that Shetty teaches updating data?

A Certainly on the bottom of page 32 I make the statement that says user interface 110 also allows the user to input information relating to fleet or machine data.

That does not appear to be what Shetty means when he uses the word "access." These are distinct and different words.

Q What are distinct and different words?

A Allows the user to input information.

Q Isn't that one of the definitions of -- isn't that one of the aspects of access?

A Not under the broadest reasonable interpretation in light of the specification.

Q I'm asking you as per the definition of "access," there is a common definition of the word "access," correct, that you have already testified to?

A As Elmasri database explains, different

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types of access operations. Different types of access operations, retrieval or update. Those are not the same. There is a big difference between retrieving as an access and updating as an access.

Shetty makes a distinction in which he is very clear when he says inputting versus when he says receiving.

Q That's my point though. Shetty actually teaches both, retrieval of data and inputting data; correct?

A Shetty teaches that the fleet and machine database means allows the user to input information.

Q So Shetty teaches inputting data; correct?

A Shetty teaches inputting data into the fleet and machine databases.

Q Shetty also teaches retrieval; correct? Retrieval of data?

A Retrieval and receiving appears to be the same.

Q So for both of the distinct concepts that we found in Elmasri's explanation of access, both of those appear in Shetty; correct?

A In completely different contexts.

Q But they both appear in Shetty; correct?

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A I have nothing more to add to my previous answer.

Q What do you mean by in completely different contexts? Are they both found within Shetty?

A Again, I have nothing more to add to my answer.

Q Are you unable to answer whether Shetty includes teaching, whether or not they are adjacent or separate, of both retrieval and updating data?

A Is there something about my answer you don't understand?

Q Yes. That's why I'm reasking the question.

A But you have asked the same question. Maybe you should try a different question.

Q No. I'm going ask the same question. This is the question I'm asking now. Are you unable to answer whether or not Shetty includes the teaching, regardless of where it's located in the patent, of both retrieval and updating? That's a yes or no question.

A I have nothing to add to the previous answer that I gave you on that question.

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Q That's not the question I asked you before. My question is different. I asked you whether you are unable to answer that question.

A No. I am not unable to answer that question.

Q Okay. So I will ask the same question again. I'll separate it for you. Does Shetty teach retrieving data?

A Shetty in column four on line five says users can access the data stored on a database server work station and receive electronic mail.

Q Are you agreeing then that Shetty teaches retrieving data?

A I am agreeing that Shetty teaches retrieving data from the database server work station 406 in the form of email.

Q Does Shetty teach updating data?

A Once again, I refer you to page 32 of my '601 declaration where I state: "User interface 110 also allows the user to input information relating to the fleet or machine data.

Q So your issue is that Shetty doesn't teach, specifically teach updating data with respect to a different database? Is that your issue?

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A Yes.

MR. MUTSCHELKNAUS: It's been an hour, counsel. Whenever you are ready for a break.

MS. SANKOORIKAL: Let me finish this line of questioning.

BY MS. SANKOORIKAL:

Q You mentioned Webster's dictionary. Did you -- with regard to the definition of the work "access." Did you consider the new IEEE Standard Dictionary of Electrical and Electronic Terms when looking at the word "access"?

A No.

Q Did you look at the IBM Dictionary Computing's definition of the word "access"?

A No.

Q Did you look at the McGraw-Hill Dictionary of Scientific and Technical Terms's definition of the word "access"?

A No.

Q Did you look at the Microsoft Computer Dictionary, that book's definition of the word "access"?

A As I listed on page 4 of my '601 declaration and the references section, I have

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excerpts from Microsoft Computer Dictionary, Third Edition, 1997.

Q Now, is there -- why didn't you -- why -- why didn't you look at the IEEE Dictionary or the IBM Dictionary of Computing?

A I don't know.

Q You would agree that those are technical dictionaries; correct?

A I'm not familiar with most of the ones that you listed, so I guess I have to say I don't know.

Q Are you familiar with the IEE Standard Dictionary?

A No.

Q Are you familiar with the IBM Dictionary Computing?

A Certainly I've seen excerpts from it, but I would not say that I am familiar with the dictionary.

Q Are you familiar with the McGraw-Hill Dictionary of Scientific and Technical Terms?

A No.

Q I'm almost finished with this line of questioning.

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Now, if you were to deposit or withdraw -- so you cited the Elmasri text excerpt. This is what was previously marked as Exhibit 2015 for IPR 2016-0116. I'll just direct you to page 3, the second sentence.

A Okay.

Q Okay. The second sentence discusses deposit or withdrawal of funds. Do you see that?

A Yes.

Q And a deposit or withdrawal of funds would require writing data to a database; correct? The second sentence.

A The text states that chances are that our activities will involve someone accessing a database.

Q I'm asking for your expert opinion. If you were to deposit or withdraw funds, that would require writing data to a database; correct?

A I have certain been to banks that have no database obviously.

Q Okay. Making a hotel or airline reservation, that would require writing data to a database; correct?

A I cannot say.

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Q You have been to banks that have no databases?

A I have.

Q Okay. Was that common in 1998, banks without databases?

A Actually, when I think back, it was 2001 I went to the Bahamas and there was a power failure that occurred, and the tellers all got out pieces of paper, pencils and flashlights.

Q How about we stick to the United States and not a power outage in the Bahamas. In that instance if you were using an ATM and depositing or withdrawing funds, wouldn't that require writing data to a database?

A I have never worked on a system like that before to tell you how it is implemented.

Q So you have -- you have no expert opinion on that?

A I do not know the airline industry and cannot comment on how their systems are implemented.

Q What about the banking industry? Are you also unable to, to testify whether or not the retrieval of, withdrawal of money from a bank would require writing data to a database?

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A I'm not an expert on banking systems and cannot comment.

Q Apart from a database, how do you think that a bank stores information regarding bank accounts? If it's not in a database, where do you think the information is stored?

A I don't know.

Q Do you have any expert opinion on this?

A No. As I said before, I'm not an expert in banking or airline systems.

Q And same thing with airline reservations; where do you think that information is stored? Do you think it's likely stored in a database or you also have no opinion on that?

A I'm not an expert in airline reservation systems.

Q So in Elmasri's example, Elmasri's example assumes a database. So if you assume a database, if there was a deposit or withdrawal of funds, would that require writing data to a database?

A In order for me to form an opinion on a system like that, I would probably need more details about how the system is implemented.

Q Are you an expert on databases?

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A I'm certainly an expert in the types of database systems that I have worked with.

Q Let's take an Oracle database. Say the bank is using an Oracle database and there was a deposit of funds. Would that have required writing to a database?

A Again, I'm not an expert on banking systems and unless you give me a system diagram or something like that, I cannot say.

Q I want the record very clear as to what you are and aren't able to testify to. So let's go through this one by one.

There is an Oracle database at a bank and that bank holds information about customers's accounts and a customer goes up to the ATM and needs money; would that act require writing data to a database? Again the hypothesis I gave you is with the Oracle database.

A I just don't have enough information to give you a good answer as to whether or not that is true or not.

Q Okay. What more information about the Oracle database would you need?

A I would need to see some kind of a direct

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link from the ATM machine to the Oracle database and all of the mechanisms in between that would allow the transaction to do as you say an update.

Q Regardless of how many links were in between, if the information is stored in an Oracle database with the customer account information, are you saying that that database would not be updated, that it would be a static database, it was never updated? Is that your testimony as to how the Oracle database works?

A I have never implemented a banking system on an Oracle database. The only types of Oracle database systems that I have implemented have to do with alarms.

Q So what have you actually done, since it seems your expertise is limited solely to your personal experience? Is that correct?

A I'm able to offer opinions on a complete argument where I'm given specifications and documents and things to look at. I certainly have the ability as a systems engineer to follow the lines and tell you if things are connected and read the specifications and tell you if under these conditions an update is made.

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I'm not really good at in my mind imagining everything that might be needed to implement a banking system.

Q So what exactly are you able to testify about? What is your personal experiences? You don't know about the banking industry, correct, the implementation of databases in banks; correct?

A That's correct.

Q And you don't know about the implementation of databases in the airline industry; correct?

A That is correct.

Q And you don't know about the implementation of databases for major security systems that I identified previously, like Honeywell, you don't have the familiarity with that either; correct?

A That is correct.

Q So what do you have familiarity with?

A Do you have a copy of my CV?

Q I do. I hand you what's been previously marked 2011. Oh. What's been previously identified as Exhibit 2011.

A So you'll see starting in 1988 according

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to my CV, while at Interface Solutions, designed a number of smaller devices, but in addition to the ones listed there, I designed a software system which is based on a database that was, worked with the American Magnetics, Inc. compatible mag-stripe security card reader. The system allowed inputs for who is allowed to go through what doors, what alarm conditions could be configured, as well as who is authorized to access the system.

Q Did that system allow updates to data in a database?

A Yes.

Q Do you know what concurrency software is?

A Is that a brand name? Is that a generic term? I don't know what concurrency --

Q It's a generic term.

A Concurrency as a general term in computer science means that there is more than one going on at the same time.

Q Do you know what concurrency control software is?

A Concurrency control software in the context of a database would mean that multiple people cannot make up dates to the same record at

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the same time.

Q Now, according to Elmasri, users or user groups were given, were typically given account names and passwords that were used by a DBMS security and authorization subsystem; is that correct?

A Is there a portion of my declaration that you are referring to?

Q Look at page 16.

A Page 60?

Q 16 of Elmasri actually.

A Okay. I'm on page 16.

Q So Elmasri states there: "Typically users or user groups are given account numbers protected by passwords, which they can use to gain access to a database. A DBMS should provide a security and authorization subsystem, which the DBA uses to create accounts and to specify account restrictions. The DBMS should then enforce these restrictions automatically." Do you see that language?

A Yes.

Q Now, all I was asking was the sentence that Elmasri states, typically users or user groups are given account numbers protected by passwords, do

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you agree that that was the case? Do you agree with Elmasri's statement?

A Yes.

MS. SANKOORIKAL: Okay. We can take a break.

(Recessed at 2:44 p.m.)

(Reconvened at 3:05 p.m.)

BY MS. SANKOORIKAL:

Q Where in Shetty does the Shetty discuss database integrity and security concerns?

A Is there a portion of my declaration that you are referring to?

Q No. I was just curious whether Shetty discusses database integrity and security concerns?

A In a quick review, I don't see any that jump out at me.

Q Would a POSITA in 1999 know how to preserve database integrity and security via the use of active server pages?

A Possibly.

Q What's an active server page?

A Active server pages was a mechanism created by Microsoft that allowed code to be written to actually generate the web pages that are

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presented by the server, and is a Microsoft-specific product, and in contrast to typical web development at that time where HTML pages were constructed, the HTML page was static. It's defined and then it's published onto the server. In contrast to that, active server pages allowed a program to be written that actually generates a display page.

Q You said that a POSITA possibly would know how to preserve database integrity and security via the use of active server pages. Why do you say possibly?

A In my opinion given on page 6, a person of ordinary skill in the relevant art of the '601 patent has at least a bachelor's degree in electrical engineering or computer science and at least four years of experience in remote monitoring and control systems. That doesn't necessarily mean that person is going to have written active server pages, scripts using Microsoft's product.

Q If I could direct you to paragraph 83, you quote the '601 patent as saying that the '601 patent also presents to the user information pertaining to the user's interfaces and changes made to the user profile are passed through active server pages 29 to

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protect both the integrity and security of the database.

A Is there a question?

Q Yes. So given that disclosure in the '601 patent, is your testimony still that a POSITA might not know how to use an active server page?

A Yes. They might not know.

Q So one of skill in the art reading the '601 patent would not have understood the significance of that statement or how to do that; is that correct?

A No, that is not correct.

Q So what would one of skill in the art understand that to mean?

A One of skill in the art would have understood what active server pages are.

Q Now, database integrity and security would be concerns whenever there is multi-user write access to a database; correct?

A Could you please restate your question?

Q Sure. Whenever there is multi-user write access to a database, there would be database integrity and security concerns; correct?

A Yes, especially if there are multiple

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users.

Q Now, a POSITA would have been able to limit configuration to the database administrator in an implementation of the Shetty system; correct?

A I'm sorry. Would you please repeat the question?

Q Sure. A POSITA would have been able to limit configuration to the database administrator in an implementation of the Shetty system; correct?

A Is there a particular part of the Shetty system that you are referring to that the DBA would limit configuration to?

Q Assuming that Shetty taught configuration, wouldn't a POSITA have been able to limit configuration to the database administrator? I'm just reasking what a POSITA could do.

A You are just bringing in the term of database administrator and in embedded systems such as I worked on, there would not have been a database administrator. The software pretty much took care of the system itself.

Q Okay. Let's say there is a database administrator, in that circumstance there is an implementation in Shetty, would a POSITA have been

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able to limit configuration to the database administrator?

A I don't know.

Q Would you agree that as of the '601 patent's priority date, a user could access a database either remotely or locally?

A If the networks were configured correctly and if the database was configured correctly and they had the appropriate software which was also configured properly, then they would be able to.

Q Then they would be able to access either remotely or locally?

A Yes.

Q Where in Shetty is there an express teaching that the access is local?

A Is there a part of my declaration that you are referring to?

Q No. You say Shetty -- your -- you have opinions about the capabilities of Shetty as to remote access, and my question is where in Shetty is there an express teaching that the access is local?

A You mentioned that my opinions concerning Shetty and access are referenced -- I'm sorry.

Q Do you need some water?

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A Let me start again.

Q Yep.

A You made the comment that I have opinions that Shetty's access is local, and you would like for me to point it out in the Shetty patent; is that correct?

Q Yes. I would like to know where in Shetty there is an express teaching that the access is local.

A Once again, I would like to ask is there a particular paragraph in my declaration that you are referring to?

Q I would like to know where in Shetty, if there is any express teaching, that the access is local?

A Because Shetty makes it clear, the portions of it that should be remote, anything that is not specifically stated as being remote, one skilled in the art would inherently know that the rest is local.

Q So where is there an -- let me ask the question again. Is there any express teaching that stating the access is local?

A Local access is inherent, not expressed.

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Q If you would take a look at Figure 4 in Shetty?

A Okay.

Q There are dotted lines. What do those dotted lines mean to you or to a POSITA?

A They appear to be some kind of communication links.

Q What kind of communication links?

A It appears to be radio links.

Q And what would the little boxes next to the drawings of each of the computers represent?

A I'm unable to find anywhere in Shetty where it describes what those are.

Q Are they modems?

A Is there a portion of Shetty that you are referring to?

Q I'm asking how you interpret Figure 1.

A Figure 1 or --

Q Figure 4. Sorry. Figure 4.

A As Shetty is silent on the issue, all I can do is assume that those are connections.

Q Do you agree that computers 420 and 422 are remote from the third work station?

A When you say third work station, are you

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referring to column 4, line 8, where it identifies the third work station as being 406?

Q Yes. Yes.

A Please restate your question.

Q No. The third work station is 410. Sorry.

A I'm sorry?

Q The third work station is 410. That's actually a typo in Shetty. So if you see below, it says events may be stored on both the third work station 410.

So really the question is do you agree that 420 and 422 are remote from 410, with 410 being the actual third work station?

A Yes.

Q User interface 110 is the user interface to the warning manager 100; correct? I will refer you to Figure 1.

A Yes.

Q Okay. Now, I think you testified earlier that HP-UX is an operating system; right?

A Yes. My paragraph 100, I state HP-UX is an operating system based on UNIX.

Q Shetty teaches at column two, line 7 to 9,

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a warning manager 100 that is implemented on a computer work station operating as Hewlett Packard HP-UX operating system; correct?

A Yes. That's what it says.

Q So warning manager 100 contains application software running on top of HP-UX; correct?

A Preferably.

Q Now, how could the warning manager perform any of the functions described in Shetty without application software?

A I don't know.

Q Does Shetty contain any teaching that its user interface 110 must be a local user interface?

A Could you please repeat the question?

Q Does Shetty contain any teaching that its user interface 110 must be a local user interface?

MR. MUTSCHELKNAUS: Objection. Form.

A It inherently teaches that, it doesn't expressly teach it.

Q What do you mean by inherently? You mean the legal definition of inherent?

A I mean that one would understand in reading Shetty that a user interface is local unless

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it specifically says that it is remote.

Q Does Shetty only work with a local user interface?

A Yes.

Q Shetty would only work with a local user interface? And if that's your opinion, I would like you to tell me exactly where that is found in Shetty.

A Shetty makes it very clear all of the things that it intends to be remote. Because the user interface does not have anything that indicates that it's anything other than local, including Figure 1, there is no other teaching except that it is local.

Q But my question is must it be remote? Is it only going to work if it's remote? That's the question I asked you. Sorry. Sorry. If it's local. Sorry. Let me ask the question again.

Is Shetty, will Shetty only work with a local user interface?

A Any configuration other than what's in Figure 1 is not Shetty. Therefore, I can only say that Shetty teaches only a local user interface.

Q That's not what I asked. I asked you

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whether Shetty would only work with a local interface? That is a different question than the question you are answering. If you are unable to answer my question, simply state that. That's fine.

A Do we agree that Figure 1 encompasses all of Shetty?

Q I'm not agreeing to anything. I'm asking you your opinion as an expert.

A Well --

Q If you aren't --

A My opinion as an expert is that Figure 1 encompasses Shetty and it only teaches a local user interface. Therefore, if you modify some part of this, well, it isn't Shetty anymore.

Q What is a command?

A I'm sorry?

Q What is a command?

A I would say a command is an order to do something.

Q Is copying a file from one directory to another an example of a command?

A The UNIX command CP is an example of a command that copies from one directory to another.

Q A user interface is not a command, is it?

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A A user interface can certainly include commands. I would not say that a user interface is a command.

Q What communication device identification codes are taught by the '601 patent?

A Is there a part of my declaration you are asking me about?

Q No. I'm asking what communication device identification codes are taught by the '601 patent?

A The '601 specifically addresses your question in column seven, line 53. Actually, go back up to the top.

"An example of the system's operation is as follows. When a user-contractor first signs up with the system, he receives an account on the electronic message delivery server 1. Via the Internet, the contractor is prompted through software to enter the pager numbers, cellular phone numbers, fax machine numbers and Internet addresses of individuals who are to be contacted in the event of an exception condition."

In the instance of the pager, an example of a device ID would be the pager's specific ID number. And the example of the cellular telephone,

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as we know, the cellular telephones have device ID numbers which are the ESN, and the '601 refers to the ESN a number of different times through the specification.

Q What is a communication device ID code for an email receiving device?

A At that time email could be received by mobile devices, which included pagers, also included cellular telephones, so in order to be the same as the information that I just gave you where device ID would be for the pager itself that is receiving the email or the ESN for the cellular telephone that's receiving the email.

Q Is there any disclosure in the Sandelman patents of using a mobile serial number or mobile identification number to identify a user's communication device?

A Could you please repeat your question?

Q I'm sorry. What did you say?

A Would you please restate your question?

Q Sure. Is there any disclosure in the Sandelman patent of using a mobile serial number or mobile identification number to identify a user's communication device?

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A An example of what you are talking about is in the '601 patent, claim 26. It says a system according to claim 22, said system monitoring a plurality of pieces of equipment, each piece having an identification code.

Q So where in claim 26 is the reference to using a mobile serial number or mobile identification number?

A Oh, I'm sorry. Claim 29 provides examples of what you are asking about. A system according to claim 22 wherein said remote communication devices include at least one of a fax machine, an email receiving device, a cellar telephone, a beeper, a pager and a PCS device.

Q I asked about a mobile serial number and mobile identification number. So I'll repeat my question. Is there any disclosure in the Sandelman patent of using a mobile serial number or mobile identification number to identify a user's communication device?

A Because you are using terms that I don't specifically see in Sandelman, and I can only assume what you actually mean is for a mobile serial number to be the ESN, which --

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Q Yes.

A -- which I stated previously is the identifier for a cell phone. Mobile ID number, I can only assume what you are referring to is the number used to identify a beeper or a pager or a PCS device.

Q So mobile identification number in column four, line 30.

A I'm sorry. I'm a little confused by your question. It appears that you are equating the information presented in column four, say line seven on down to line 33, with a user's device, when actually it appears that this is an interface of the system that is actually being described here.

Specifically, line 27 says the information which identifies which interface has sent a message may be embedded in the mobile identification number assigned to the interface unit.

Q So does the '601 use the ESN and MIN to refer to user devices?

A That's a question that I haven't considered before. I'm sorry it's taking me a while to find an answer for you.

One example of what you are asking about

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can be found in column three, specifically starting at line 13. It says: "Preferably, the system includes a centralized electronic message delivery device or server that routes the various incoming exception messages to the desired individuals via the desired electronic media."

Q That wasn't the question I asked. I asked you whether the ESN or the MIN refer to user devices?

A One skilled in the art would understand that a message delivery device or a server that routes the various incoming exception messages would include basically some kind of a connection to a pager network or something as is described in Figure 1.

Q So there is no express teaching?

A Well, that's pretty express. It's saying that there is a server that routes, there is a message delivery device or a server that routes the various incoming exception messages to the desired individuals via the desired electronic media. That media -- I'm not finished yet -- that media in the case of a pager or that media in, for voice would entail a connection to the pager network perhaps or

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a connection to the cellular network perhaps in which these messages are being sent out to multiple devices, and the only way that that could be accomplished is with the description that is provided in the claims that I pointed to earlier by using those specific device identifications.

Q So, but you don't see the words anywhere of the ESN or the MIN of user devices? You are reading into, to what you are extrapolating or reading, whatever you want to call it, from the specification; isn't that correct?

A When looking at the excerpt that I just gave you in column three, one skilled in the art would know that that's the only way that can be done, or that is certainly a method that that can be done.

Q I'm sorry. I don't know what method you are talking about. My question is quite simple. Is an ESN referred to as a user device? I don't know what the method is you are talking about.

A An ESN is an identifier for a particular user device.

Q Where is that expressly stated in the '601?

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A Are you contesting the fact that cell phones have ESNs? Is that the nature of your question?

Q I'm asking where that's stated? That's all I'm asking. It's a simple question. It's a very simple question. If it's not expressly stated, and you are based on your experience intuiting that from --

A Based on my experience, an ESN identifies a cell phone.

Q But you can't point to any specific language in the '601 that identifies an ESN as a user device? How would an ESN have been used to route messages to a device?

A I can specifically point to the bottom paragraph in column five. It says the messages from some of the interface units may be delivered by means of wireless transmissions over the cellular telephone network.

Figure 2 is a detail view of link 11 shown in Figure 1. A message is transmitted from the cellular interface unit via radio frequency link to a nearby cellular transceiver site. The message is then routed to the cellular network or mobile

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switching center. The message is then delivered via data circuits and via router 51 to the message delivery server.

Specifically what I see taught here is that the message delivery server has direct access to the cellular network. Since it can receive messages via the cellular network, it's certainly logical that it could use the ESNs to send messages through the cellular network as well.

Q The electronic serial number? How would the electronic serial number have been used to route messages?

A Continue on with the rest of the paragraph at the top of six: "Specifically, link 11 is for receiving incoming exception and status messages from interface 10 which are in regions wired for sending data via the dialed digits control channel; link 11b forwards messages along the ESN channel to the message server."

Q How would a serial number be used to route messages to a communication device?

A Other than what I described, I don't know.

Q How is a serial number used to route messages? A serial number, in your expert opinion,

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I mean in your experience?

A I don't have experience setting up a cellular phone network, so I can't elaborate on that. I have experience connecting equipment to a pager network.

Q Using -- and you used a serial number to route the messages?

A Yes. The equipment that I installed used the pager identification number to route calls or to route messages to the pagers.

Q And the pager identification number was the serial number of the pager?

A It was an identification number.

Q I'm asking whether it was a serial number?

A I think it was actually called a mobile identification number.

Q I'll go back to my question. How is a serial number used to route messages to a communication device?

A Please repeat your last question.

Q How is a serial number used to route messages to a communication device?

A I'm not an expert in mobile communication networks and can't elaborate on how they use

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electronic serial numbers to route through the system.

Q Are you aware of any instance in which a serial number has been used to route messages to a communication device?

A Can you please restate the question?

Q Are you aware of any instance in which a serial number has been used to route messages to a communication device?

A Yes.

Q What is the example?

A The SMS system used by cellular telephones is an example of what you are talking about.

Q Using a serial number? I just want to make sure I understand. The SMS system that cellular telephones use is an example where they use serial numbers to route the communication?

A Yes. The cellular system refers to the ESN of the mobile device as the messages are --

Q I'm talking about a serial number.

A Are you making a distinction between serial number and electronic serial number?

Q No. I'm talking about the serial number on the actual, that's like written on a computer or

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on a TV set. A serial number. Do you know what a serial number is, a common usage of the word serial number?

A Well, I am aware of a number that is stamped on the back of a TV set that sequentially lists the production order that it went through the manufacturing line.

Q Right. Or the serial number that's on the back of a phone, for instance?

A Phones use a different kind of serial number in that it has an electronic serial number that identifies that particular device to the cellular network.

Q No. I'm talking about the serial number on the phone itself, that is actually on the phone, physically on the phone. I'm not talking about some other phone number or other number. I'm talking about a serial number, the common understanding of a serial number.

A I don't know.

Q You don't know what? You don't know whether a serial number could be used to transmit messages to a communication device? I just want to know --

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A Based on your description of a serial number being a number stamped on the back of a phone, I don't know if that number can be used to route messages.

Q So I will go back to my question. Are you aware of any instance in which such a number was used to route messages to a communication device?

A For your description of what a serial number is, I am not aware of any device that used that number to route messages.

Q What, in the '601 patent what is an Internet address? What does that mean? What would a POSITA understand an Internet address to mean?

A Is there a particular portion of one of the Sandelman patents that you are referring to as having an Internet address?

Q I would have you look at column seven, line 55.

A A POSITA would generally understand Internet address as being a URL.

Q So --

MR. MUTSCHELKNAUS: Again, we are like an hour and 25 minutes from the last break. Whenever you are --

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MS. SANKOORIKAL: Yeah.

BY MS. SANKOORIKAL:

Q So a POSITA would understand that the contractor would enter a URL?

A Is that a question?

Q Yeah, it's a question.

A Yes. A URL is an Internet address and it certainly includes IP addresses.

Q Is a destination IP address necessary to send an email?

A Please restate your question.

Q Is a destination IP address necessary to send an email?

A Yes.

Q An IP address would be needed to send an email?

A Yes.

Q If a user wanted to send an email to another person and knew the second person's email address but not that person's IP address, could the user send the email?

A The answer to your question is that yes, they would be able to send the email. However, if the receivers, the machines on the receiving end did

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not have an IP address, then they would not be able to receive it.

Q So your expert opinion is that you need an IP address in order to receive email?

A I can think of certain devices that did not have IP addresses that work more like pagers that did not have IP addresses. I can't think of any devices on computer type networks or with modern cell phones that do not have IP addresses.

Q I'm going to ask the question again. A sending device, does a sending device need to know or use the receiving device's IP address in order to send an email?

A No. The sending device does not need to know the receiving devices IP address.

Q So what does the sending device need to know in order to send an email?

A I can give you the example of an email client on a personal computer. In the configuration for that client you enter in the IP address of the server that you are going to be connecting. That must be configured. When that happens, the user will be able to send emails without any other IP addresses.

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Q Are you saying that is sufficient information in order to send an email to someone, the IP address?

A I'm saying if the network, the client, the servers are configured correctly, then an email client can send an email.

Q That's not the question I'm asking you. I think you know that. I'm talking about the IP address of the user's outbound email server. Are you talking about the IP address of the -- are you talking about the IP address of the user's outbound email server?

A Yes. The client email, the email client, I'm sorry, will need to know the address of the outbound server.

Q In order for, in order to send an email, is your testimony that the information that is necessary to send an email is the IP address and nothing else?

A My testimony is if the machines are already configured, then the user that is typing an email only needs to know the email address of the --

Q So would an email address always be needed in order to send an email?

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A I don't know.

Q Just so I'm clear, in your expert opinion you don't know whether an email address would always be needed to send it?

A Obviously, there has to be some kind of designator as to who the recipient is when you are sending an email. I can think of early intercompany systems where there was just a designator of the person's name and that was all. I don't know if that answers your question or not. That's why I said I don't know.

Q You earlier testified that you are an expert in communication, including email. Would you care to revise that statement?

A No.

Q Okay. So if you are an expert, can you please tell me whether an email address would always be needed, and in what specific circumstance it would not be needed, if that's your testimony?

A As I just gave you in my example, email is a very broad term. There are and have been many kinds of email systems. Some of them worked by simply typing a person's name.

Q Which ones were those?

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A I believe that there were systems, I'm trying to think of -- Wang Laboratory's systems, Depatha systems in the 1980s used a completely different kind of email than what our systems today have.

Q What was it? If it didn't use email addresses, what did it use?

A As I said, an email address is some kind of a designator. Some kind of a designator has always been required in order to send it.

Q Your testimony is that you didn't know whether email addresses were always used in, did not necessarily use it, so I'm asking what are those other systems?

A I believe my testimony was that based on the way that you presented your question, I don't know how to answer it.

Q I'm sorry. I don't understand. You don't know how to answer what? So this Wang Laboratory system in the 1980s that did not use email addresses, what did it use?

A As I said, I'm equating an email address with a destination.

Q So in that circumstance is there any

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situation in which an email address is not needed for the purposes of sending an email?

A I guess I need you to tell me what you consider to be an email address. You don't like my definition, so please give me yours. What is an email address?

Q I'm not defining it. You are equating it with a destination. So I'm asking what is your definition of an email address? Is it some sort of an identifier?

A It is the identifier of a destination for the email.

Q Using your definition, would an email address always be needed in order to send an email?

A Using my definition of having a destination of some kind, yes.

Q And do you consider for this purpose an IP address a destination of an email sufficient for sending an email?

A If the system is configured correctly, yes.

Q What system is configured correctly? I would like to know the exact example in which an IP address is sufficient to send an email.

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A Oh. I have never considered this question before, so I don't have any particular system in mind. It's just that as a system developer, if you are giving me the parameter that you want a system that uses IP addresses, one could develop.

Q Are you aware of any such system as opposed to one that you are imagining?

A I don't know if I know of any.

Q Okay. What is a device-specific method of contacting a telephone device?

A Are you referring to a part of the '601 patent?

Q No. I'm asking what a -- you say in paragraph 130, "the system can dial a particular phone number and it will reach whatever device is tied to that phone number at the moment. It is not device-specific."

So my question is what is a device-specific method of contacting a telephone device?

A So you referred me to which paragraph?

Q Paragraph 130.

A Device-specific method for connecting to a particular phone is done on the cellular system

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where each phone is, has a unique identifier on the network. That is completely different from the way that land-line phones work where there is just a jack in the wall that has a phone number.

Q So if I understand you correctly, there is no device-specific way of contacting a phone that's on a land-line?

A I can't think of one.

Q In paragraph 131 you say, you start by saying: "Similarly, the system could send an email and the recipient would be able to retrieve that email from nearly any Internet-accessible computing device," and then you go on to say that an email address is not device specific. What is a device-specific method of delivering an email? And in my question I mean an actual device-specific method of delivering an email.

A I don't know.

MS. SANKOORIKAL: We have no further questions at this time.

MR. MUTSCHELKNAUS: We will just step out. We will be right back.

(Recessed at 4:54 p.m.)

(Reconvened at 5:00 p.m.)

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MR. MUTSCHELKNAUS: Back on the record. We have no questions. The witness will read and sign.

(Whereupon, at 5:01 p.m., the deposition of SCOTT A. DENNING was concluded.)

* * * * *

A C K N O W L E D G M E N T O F D E P O N E N T

I, SCOTT A. DENNING, do hereby acknowledge I have read and examined the foregoing pages of testimony, and the same is a true, correct and complete transcription of the testimony given by me, and any changes or corrections, if any, appear in the attached errata sheet signed by me.

_____ _____

Date SCOTT A. DENNING

UNITED STATES OF AMERICA)
ss:
DISTRICT OF COLUMBIA)

I, ROBERT M. JAKUPCIAK, an RPR and Notary Public within and for the District of Columbia, do hereby certify: That prior to being examined, the witness named in the foregoing deposition was duly sworn to testify the truth, the whole truth, and nothing but the truth;

That said deposition was taken down by me in shorthand at the time and place therein named and thereafter reduced by me to typewritten form and that the same is a true, correct, and complete transcript of said proceedings.

Before completion of the deposition, review of the transcript [X] was [ ] was not requested. If requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am not interested in the outcome of the action.

Witness my hand this 27th day of October, 2016.

Robert M Jakupciak