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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ALARM.COM, INC., :

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Petitioner, :

7

vs. : Case IPR2016-00116

8

VIVINT, INC., : Case IPR2016-00173

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Patent Owner. : Case IPR2016-00161

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Deposition of SCOTT A. DENNING

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Washington, D.C.

15

Tuesday, October 25, 2016

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12:00 p.m.

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23 Job No. NY-103766

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Pages 1 - 101

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Reported by: Robert M. Jakupciak, RPR

Alarm.com v. Vivint

IPR2016-00116

IPR2016-00161

IPR2016-00173

Petitioner Alarm.com's Exhibit 1118

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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:

1 SCOTT A. DENNING

2 A P P E A R A N C E S

3 On behalf of the Petitioner:

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1 SCOTT A. DENNING

2 C O N T E N T S

3 THE WITNESS: SCOTT A. DENNING

4 EXAMINATION

PAGE NO.

5 By Ms. Sankoorikal

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10 (No exhibits marked during deposition.)

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

15 Exhibit Vivint 2010

16 Exhibit Alarm.com 1101

17 Exhibit Alarm.com 1103

18 Exhibit Vivint 2015

19 Exhibit Vivint 2011

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1 SCOTT A. DENNING

2 P R O C E E D I N G S

3 Whereupon,

4 SCOTT A. DENNING,

5 called as a witness, and having been first duly

6 sworn, was examined and testified as follows:

7 EXAMINATION BY COUNSEL FOR PETITIONER

8 BY MS. SANKOORIKAL:

9 Q Could you state your name for the record?

10 A Scott Andrew Denning.

11 Q And what is your address?

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

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

18 A Yes.

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

22 A Yes.

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

25 A Yes.

1 SCOTT A. DENNING

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

4 A Okay.

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

11 A Okay.

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

14 A No.

15 Q What did you do to prepare for this
16 deposition?

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

22 Q And with whom did you meet?

23 A A number of attorneys at this firm.

24 Q And when did you meet with them?

25 A I've had a number of phone conversations,

1 SCOTT A. DENNING

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

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

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

7 Q What was the last name?

8 A Zho.

9 Q Zho? And for how long did you meet?

10 A I think it was about six hours.

11 Q Did you review any documents?

12 A Yes.

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

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

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

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

23 Q Deposition.

24 A No, I did not read the entire deposition.

25 Q Do you know what parts of the deposition

1 SCOTT A. DENNING

2 you read?

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

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

8 A Yes.

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

12 A Could I please see my declaration?

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

17 And I will hand you also what is Vivint
18 2010, which is your declaration in case IPR
19 2016-00161, and this relates to the '654 patent.
20 And, finally, also Exhibit 2010, in case IPR
21 2016-00173 relating to the '123 patent.

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

1 SCOTT A. DENNING

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

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

6 A Declaration, yes.

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

9 A Yes, I did.

10 Q Okay.

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

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

14 A Yes.

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

18 A I can't think of any.

19 Q Are you aware of any inaccuracies in your
20 declarations?

21 A The opinions that I express are certainly
22 accurate. I have noticed a few grammatical issues
23 that I'm not crazy about.

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

1 SCOTT A. DENNING

2 declarations setting aside typographical errors?

3 A No.

4 Q Is there any substantive information
5 missing from your declarations?

6 A I'm not aware of any.

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

10 A Yes.

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

13 A No.

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

17 A Okay.

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

24 A Yes.

25 Q Do you consider yourself to be an expert

1 SCOTT A. DENNING

2 in these areas?

3 A Yes.

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

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

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

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

25 Q You said the monitoring equipment you

1 SCOTT A. DENNING

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

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

9 Q What kind of industrial applications or
10 commercial?

11 A Factories, warehouses, airports.

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

16 MR. MUTSCHELKNAUS: Objection. Form.

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

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

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

1 SCOTT A. DENNING

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

9 Q And who was alerted? Who received the
10 alerts?

11 MR. MUTSCHELKNAUS: Objection. Form.

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

16 Q And was there remote access to this
17 system?

18 A Can you explain what you mean by remote
19 access?

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

22 A For which type of access?

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

1 SCOTT A. DENNING

2 was triggered or could be triggered?

3 MR. MUTSCHELKNAUS: Objection. Form.

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

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

15 MR. MUTSCHELKNAUS: Objection. Form.

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

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

25 Q Did each of the individuals who received

1 SCOTT A. DENNING

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

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

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

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

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

22 Q Now, in 1998 which alarm systems were
23 configurable?

24 MR. MUTSCHELKNAUS: Objection. Form.

25 A I don't know.

1 SCOTT A. DENNING

2 Q Were there any that you are aware of in
3 '98 that could be configured?

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

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

12 A Certainly the systems that I just told you
13 about had a particular level of configuration, and
14 those went back all the way to when I started in
15 1982.

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

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

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

24 MR. MUTSCHELKNAUS: Objection. Form.

25 A Are you asking me if I worked at a company

1 SCOTT A. DENNING

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

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

6 A No. I never worked for any of those.

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

10 MR. MUTSCHELKNAUS: Objection. Form.

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

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

20 A Yes.

21 Q Do you consider yourself an expert in
22 communication?

23 A Yes.

24 Q And what does the word communication mean
25 to you?

1 SCOTT A. DENNING

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

4 Q And does that encompass email
5 communications?

6 A Yes.

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

12 A Yes.

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

16 A Yes.

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

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

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

23 A Yes.

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

1 SCOTT A. DENNING

2 of your building experience?

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

7 Q Do you recall what databases prior to --
8 My question was do you recall what
9 databases you used prior to '98?

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

15 Q How is that spelled?

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

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

1 SCOTT A. DENNING

2 least four years of experience in remote monitoring
3 and control systems. Do you see that in paragraph
4 15?

5 MR. MUTSCHELKNAUS: Objection.
6 Foundation.

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

9 MR. MUTSCHELKNAUS: I withdraw the
10 objection.

11 A Yes, I see it.

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

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

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

20 A No.

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

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

1 SCOTT A. DENNING

2 that is described by the patent.

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

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

9 A By SQL do you mean SQL?

10 Q Yes.

11 A Yes. I am familiar.

12 Q What is SQL?

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

17 Q Would a POSITA have been familiar with
18 SQL?

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

20 Q You have experience with the MySQL
21 database; correct?

22 A Yes.

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

1 SCOTT A. DENNING

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

5 A That is correct.

6 Q Is MySQL a multi-user database?

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

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

11 A Yes, as I said.

12 Q And was MySQL publicly available in 1998?

13 A I don't know.

14 Q And you have experience in PostgreSQL;
15 correct?

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

18 Q Okay. And could PostgreSQL be configured
19 for multiple users?

20 A Yes.

21 Q And was it publicly available in 1998?

22 A I don't know.

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

25 A Yes.

1 SCOTT A. DENNING

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

4 A Yes.

5 Q And it was publicly available in 1998;
6 correct?

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

8 Q But a member of the public could buy it?

9 A Yes.

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

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

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

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

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

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

25 Q Okay. And I assume your testimony would

1 SCOTT A. DENNING

2 be the same for PostgreSQL if I asked you the same
3 question?

4 A That is correct.

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

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

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

13 A Yes, it would.

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

17 A Yes. I believe that it did.

18 Q Do you know the name of that tool?

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

21 Q Are you familiar with SQL Plus?

22 A No.

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

1 SCOTT A. DENNING

2 A I'm not sure.

3 Q So when drafting your opinions for the
4 '601, the '123 and '654 patents, what efforts did
5 you undertake to understand the state of various
6 features and functions in those patents; for
7 instance, remote access, remote configuration?

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

16 Q HP-UX is an operating system; correct?

17 A Yes, it is.

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

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

1 SCOTT A. DENNING

2 not undertake any search.

3 Q I'm going introduce in one shot so its
4 easier, all of the patents, the '601, '654, and the
5 '123, and I will identify them one by one.

6 I will hand you what's been previously
7 marked -- that has been previously marked as Exhibit
8 1101 in IPR 2016-00116, the '601 patent; and what's
9 also been marked as Exhibit 1101 in IPR 2016-00161,
10 which is the '654 patent; and what's been previously
11 marked also as Exhibit 1101 in IPR 2016-00173, it's
12 the '123 patent.

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

17 A Okay.

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

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

25 Q So you would agree with my question?

1 SCOTT A. DENNING

2 A That's what it says.

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

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

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

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

12 Q And I will ask you the same question with
13 regard to the '123 patent, whether Figures 1 through
14 5 and the text relating to that, for instance,
15 concerns preferred embodiments of the '123 patent?
16 And I can direct you again to column seven, line 23
17 to 25 for instance -- 23 to 24.

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

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

1 SCOTT A. DENNING

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

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

7 BY MS. SANKOORIKAL:

8 Q Okay. So going back to the '601 patent,
9 and specifically take a look at paragraph 32 of your
10 '601 declaration, and in paragraph 32 you state, use
11 the phrase the architecture presented in the '601
12 patent is illustrated in Figure 1. Do you see that
13 language?

14 A Yes.

15 Q Okay. Now, since Figure 1, which we just
16 looked at, in each of the Sandelman patents is
17 identical, do you agree that they all represent
18 architectures of the inventions in each of the '123,
19 '654 and '601 Sandelman patents?

20 A At a high level they represent the
21 inventions.

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

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

1 SCOTT A. DENNING

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

5 A Yes.

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

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

11 Q And the item labeled one is the server?

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

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

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

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

23 MR. MUTSCHELKNAUS: Objection. Form.

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

1 SCOTT A. DENNING

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

7 Q So your testimony is that 121 is a person?

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

10 Q The boxes on the right in Figure 1; 6, 7,
11 8 and 9, those are user communication devices;
12 correct?

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

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

20 A As support for that, if we look into the
21 '601 patent at column five, lines 51 through 54 as I
22 have noted there, you can see it. Starting at line
23 51 the message delivery server one then routes the
24 message as an outgoing exception message to the
25 appropriate user interface.

1 SCOTT A. DENNING

2 MR. MUTSCHELKNAUS: Counsel, sorry to
3 interrupt. We can stipulate that the '123 and the
4 '654 specifications are nearly identical. Our
5 difference is claims and the --

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

8 A I was finished.

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

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

1 SCOTT A. DENNING

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

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

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

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

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

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

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

17 Q So box seven is actually a fax machine?

18 A Yes.

19 Q And box six is an email box?

20 A Yes.

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

22 A Yes.

23 Q And box nine is a voice mailbox?

24 A Yes.

25 Q Now, is a pager a device?

1 SCOTT A. DENNING

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

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

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

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

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

19 Q What other types of pagers are you
20 familiar with?

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

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

25 A What I'm saying is that this box could

1 SCOTT A. DENNING

2 include many pagers, not any one specific pager.

3 Q You are talking about a class of pagers?

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

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

8 A Yes.

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

12 A Yes. A specific fax machine is a device.

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

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

17 Q So a device is a subset of media?

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

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

24 MR. MUTSCHELKNAUS: Objection. Form.

25 A I believe that's what I said.

1 SCOTT A. DENNING

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

5 THE WITNESS: Sure.

6 MS. SANKOORIKAL: Okay.

7 (Recessed at 1:07 p.m.)

8 (Reconvened at 1:15 p.m.)

9 BY MS. SANKOORIKAL:

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

13 A That attending a basketball game is an
14 option.

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

17 A Yes, it is different.

18 Q And in what sense is it different?

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

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

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

1 SCOTT A. DENNING

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

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

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

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

13 A Would you please repeat your question?

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

20 MR. MUTSCHELKNAUS: Objection. Form.

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

25 Q Okay. Now, take things that jump. You

1 SCOTT A. DENNING

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

4 A I certainly had some rabbits that did not
5 jump.

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

8 A There are --

9 MR. MUTSCHELKNAUS: Objection.

10 A -- some rabbits that jump.

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

13 A Yes.

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

16 A Rabbits may be referred to as mammals.

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

19 A Yes. Rabbits that jump are animals.

20 Q Mammals rather?

21 A Mammals, yes.

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

24 A Yes. Frogs do jump.

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

1 SCOTT A. DENNING

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

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

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

8 A That is correct.

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

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

15 Q So I asked whether in paragraph 76 of your
16 '601 declaration you discussed read-only retrieval
17 access and also access that includes the ability to
18 update data?

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

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

1 SCOTT A. DENNING

2 A Yes.

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

6 A Yes.

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

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

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

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

18 Q And do you agree with that?

19 A Yes.

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

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

25 Q So how did you do that?

1 SCOTT A. DENNING

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

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

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

11 Q Yes.

12 A I would agree with that.

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

15 A I don't know.

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

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

21 Q So you mentioned, you mentioned your
22 experience as a software, you could image a database
23 and pre-configure it. What I'm asking is as of
24 1998, when a database was set up, was it always
25 pre-configured with data present?

1 SCOTT A. DENNING

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

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

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

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

11 A No. I just don't recall.

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

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

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

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

22 Q Can you answer the question about
23 Honeywell?

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

1 SCOTT A. DENNING

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

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

7 Q Would your response be the same for DSC?

8 A Did you say DSC?

9 Q Yeah.

10 A No. I'm not familiar with DSC.

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

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

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

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

23 A By Shetty.

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

1 SCOTT A. DENNING

2 A It is.

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

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

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

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

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

22 Q What's the basis for that testimony?

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

1 SCOTT A. DENNING

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

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

14 MR. MUTSCHELKNAUS: Objection.

15 A So in my declaration on page 33, paragraph
16 73, I give the, I wrote the plain meaning of
17 configuration and access are different. For
18 example, configuration involves setting up data. I
19 refer then to Webster's dictionary; the choices made
20 in setting up a computer system or an application.
21 In contrast, data access could be defined as
22 retrieval operation on data. Same reference at 12.

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

1 SCOTT A. DENNING

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

5 MR. MUTSCHELKNAUS: Objection. Relevance.

6 A Yes.

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

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

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

14 BY MS. SANKOORIKAL:

15 Q Is that consistent with Elmasri?

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

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

1 SCOTT A. DENNING

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

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

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

12 A Could I see the Shetty patent?

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

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

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

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

23 Q It's from your own declaration. Paragraph
24 62.

25 A Yes.

1 SCOTT A. DENNING

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

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

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

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

13 Q My question was do you agree that the
14 access Shetty teaches is via Shetty's user interface
15 110?

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

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

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

25 Q Okay. So you agree that the access that

1 SCOTT A. DENNING

2 Shetty teaches is via user interface 110; correct?

3 A Yes.

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

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

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

12 A I don't know.

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

17 A I agree that those would have to be
18 stored.

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

22 A Would you please repeat your question.

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

1 SCOTT A. DENNING

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

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

14 A I'm sorry. Which paragraph?

15 Q Paragraph 70.

16 A Okay.

17 Q Do you agree that in paragraph 70 of your
18 '601 declaration that Shetty teaches that its user
19 interface 110 also allows the user to input
20 information relating to a fleet or machine data;
21 correct? And the part I was quoting is, "also
22 allows the user to input information relating to
23 fleet or machine data," in the middle of the
24 paragraph 70.

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

1 SCOTT A. DENNING

2 the start of page 33.

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

7 A Yes.

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

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

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

15 A Yes.

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

20 A Yes.

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

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

25 Q Now, do you agree that access could mean

1 SCOTT A. DENNING

2 update as well as read-only?

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

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

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

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

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

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

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

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

1 SCOTT A. DENNING

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

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

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

12 A Yes.

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

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

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

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

1 SCOTT A. DENNING

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

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

10 MR. MUTSCHELKNAUS: Objection. Misstates
11 prior testimony.

12 THE WITNESS: Would you please repeat your
13 question?

14 BY MS. SANKOORIKAL:

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

21 MR. MUTSCHELKNAUS: Same objection.

22 BY MS. SANKOORIKAL:

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

1 SCOTT A. DENNING

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

4 MR. MUTSCHELKNAUS: Same objection.

5 BY MS. SANKOORIKAL:

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

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

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

15 Q What are distinct and different words?

16 A Allows the user to input information.

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

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

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

25 A As Elmasri database explains, different

1 SCOTT A. DENNING

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

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

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

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

14 Q So Shetty teaches inputting data; correct?

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

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

19 A Retrieval and receiving appears to be the
20 same.

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

24 A In completely different contexts.

25 Q But they both appear in Shetty; correct?

1 SCOTT A. DENNING

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

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

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

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

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

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

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

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

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

1 SCOTT A. DENNING

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

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

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

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

13 Q Are you agreeing then that Shetty teaches
14 retrieving data?

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

18 Q Does Shetty teach updating data?

19 A Once again, I refer you to page 32 of my
20 '601 declaration where I state: "User interface 110
21 also allows the user to input information relating
22 to the fleet or machine data.

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

1 SCOTT A. DENNING

2 A Yes.

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

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

7 BY MS. SANKOORIKAL:

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

13 A No.

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

16 A No.

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

20 A No.

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

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

1 SCOTT A. DENNING

2 excerpts from Microsoft Computer Dictionary, Third
3 Edition, 1997.

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

7 A I don't know.

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

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

13 Q Are you familiar with the IEE Standard
14 Dictionary?

15 A No.

16 Q Are you familiar with the IBM Dictionary
17 Computing?

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

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

23 A No.

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

1 SCOTT A. DENNING

2 Now, if you were to deposit or withdraw --
3 so you cited the Elmasri text excerpt. This is what
4 was previously marked as Exhibit 2015 for IPR
5 2016-0116. I'll just direct you to page 3, the
6 second sentence.

7 A Okay.

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

10 A Yes.

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

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

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

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

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

25 A I cannot say.

1 SCOTT A. DENNING

2 Q You have been to banks that have no
3 databases?

4 A I have.

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

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

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

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

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

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

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

1 SCOTT A. DENNING

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

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

8 A I don't know.

9 Q Do you have any expert opinion on this?

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

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

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

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

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

25 Q Are you an expert on databases?

1 SCOTT A. DENNING

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

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

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

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

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

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

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

25 A I would need to see some kind of a direct

1 SCOTT A. DENNING

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

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

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

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

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

1 SCOTT A. DENNING

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

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

9 A That's correct.

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

13 A That is correct.

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

19 A That is correct.

20 Q So what do you have familiarity with?

21 A Do you have a copy of my CV?

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

25 A So you'll see starting in 1988 according

1 SCOTT A. DENNING

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

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

13 A Yes.

14 Q Do you know what concurrency software is?

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

17 Q It's a generic term.

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

21 Q Do you know what concurrency control
22 software is?

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

1 SCOTT A. DENNING

2 the same time.

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

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

10 Q Look at page 16.

11 A Page 60?

12 Q 16 of Elmasri actually.

13 A Okay. I'm on page 16.

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

22 A Yes.

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

1 SCOTT A. DENNING

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

4 A Yes.

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

7 (Recessed at 2:44 p.m.)

8 (Reconvened at 3:05 p.m.)

9 BY MS. SANKOORIKAL:

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

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

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

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

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

21 A Possibly.

22 Q What's an active server page?

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

1 SCOTT A. DENNING

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

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

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

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

1 SCOTT A. DENNING

2 protect both the integrity and security of the
3 database.

4 A Is there a question?

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

8 A Yes. They might not know.

9 Q So one of skill in the art reading the
10 '601 patent would not have understood the
11 significance of that statement or how to do that; is
12 that correct?

13 A No, that is not correct.

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

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

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

21 A Could you please restate your question?

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

25 A Yes, especially if there are multiple

1 SCOTT A. DENNING

2 users.

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

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

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

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

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

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

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

1 SCOTT A. DENNING

2 able to limit configuration to the database
3 administrator?

4 A I don't know.

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

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

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

14 A Yes.

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

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

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

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

25 Q Do you need some water?

1 SCOTT A. DENNING

2 A Let me start again.

3 Q Yep.

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

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

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

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

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

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

25 A Local access is inherent, not expressed.

1 SCOTT A. DENNING

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

4 A Okay.

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

7 A They appear to be some kind of
8 communication links.

9 Q What kind of communication links?

10 A It appears to be radio links.

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

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

15 Q Are they modems?

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

18 Q I'm asking how you interpret Figure 1.

19 A Figure 1 or --

20 Q Figure 4. Sorry. Figure 4.

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

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

25 A When you say third work station, are you

1 SCOTT A. DENNING

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

4 Q Yes. Yes.

5 A Please restate your question.

6 Q No. The third work station is 410.

7 Sorry.

8 A I'm sorry?

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

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

16 A Yes.

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

20 A Yes.

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

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

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

1 SCOTT A. DENNING

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

5 A Yes. That's what it says.

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

9 A Preferably.

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

13 A I don't know.

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

16 A Could you please repeat the question?

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

19 MR. MUTSCHELKNAUS: Objection. Form.

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

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

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

1 SCOTT A. DENNING

2 it specifically says that it is remote.

3 Q Does Shetty only work with a local user
4 interface?

5 A Yes.

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

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

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

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

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

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

1 SCOTT A. DENNING

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

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

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

10 A Well --

11 Q If you aren't --

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

16 Q What is a command?

17 A I'm sorry?

18 Q What is a command?

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

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

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

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

1 SCOTT A. DENNING

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

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

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

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

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

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

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

1 SCOTT A. DENNING

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

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

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

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

19 A Could you please repeat your question?

20 Q I'm sorry. What did you say?

21 A Would you please restate your question?

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

1 SCOTT A. DENNING

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

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

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

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

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

1 SCOTT A. DENNING

2 Q Yes.

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

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

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

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

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

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

25 One example of what you are asking about

1 SCOTT A. DENNING

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

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

11 A One skilled in the art would understand
12 that a message delivery device or a server that
13 routes the various incoming exception messages would
14 include basically some kind of a connection to a
15 pager network or something as is described in Figure
16 1.

17 Q So there is no express teaching?

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

1 SCOTT A. DENNING

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

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

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

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

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

24 Q Where is that expressly stated in the
25 '601?

1 SCOTT A. DENNING

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

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

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

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

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

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

1 SCOTT A. DENNING

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

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

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

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

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

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

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

1 SCOTT A. DENNING

2 I mean in your experience?

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

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

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

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

14 A It was an identification number.

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

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

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

21 A Please repeat your last question.

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

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

1 SCOTT A. DENNING

2 electronic serial numbers to route through the
3 system.

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

7 A Can you please restate the question?

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

11 A Yes.

12 Q What is the example?

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

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

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

21 Q I'm talking about a serial number.

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

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

1 SCOTT A. DENNING

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

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

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

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

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

21 A I don't know.

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

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

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

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

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

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

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

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

22 Q So --

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

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2 MS. SANKOORIKAL: Yeah.

3 BY MS. SANKOORIKAL:

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

6 A Is that a question?

7 Q Yeah, it's a question.

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

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

12 A Please restate your question.

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

15 A Yes.

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

18 A Yes.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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2 A I don't know.

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

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

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

16 A No.

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

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

25 Q Which ones were those?

1 SCOTT A. DENNING

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

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

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

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

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

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

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

25 Q So in that circumstance is there any

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

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

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

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

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

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

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

21 A If the system is configured correctly,
22 yes.

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

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

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

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

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

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

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

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

22 A So you referred me to which paragraph?

23 Q Paragraph 130.

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

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

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

9 A I can't think of one.

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

19 A I don't know.

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

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

24 (Recessed at 4:54 p.m.)

25 (Reconvened at 5:00 p.m.)

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2 MR. MUTSCHELKNAUS: Back on the record.

3 We have no questions. The witness will read and
4 sign.

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

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

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4

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

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21 _____
Date_____
SCOTT A. DENNING

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2 UNITED STATES OF AMERICA)

3 ss:

4 DISTRICT OF COLUMBIA)

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

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

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

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

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

25



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