

EXHIBIT 20

DR. NEIL G. SIEGEL - 11/14/2018

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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
AGIS SOFTWARE DEVELOPMENT LLC,)
Plaintiff,) Civil Action No.
vs.) 2:17-cv-513-JRG
APPLE, INC.,) (LEAD CASE)
Defendant.) Civil Action No.
) 2:17-cv-516-JRG
) Pages 1 to 237
)
)

DEPOSITION OF DR. NEIL G. SIEGEL
TAKEN ON
WEDNESDAY, NOVEMBER 14, 2018

Reported by: PHILIP D. NORRIS
CSR NO. 4980

<p style="text-align: right;">Page 6</p> <p>1 TORRANCE, CALIFORNIA; WEDNESDAY, NOVEMBER 14, 2018</p> <p>2 9:23 A.M.</p> <p>3</p> <p>4</p> <p>5 THE VIDEOGRAPHER: Here begins Videotape</p> <p>6 No. 1 in the deposition of Dr. Neil Siegel, in the</p> <p>7 matter of AGIS Software Development LLC versus Apple</p> <p>8 Inc., in the United States District Court, for the</p> <p>9 Eastern District of Texas, case No. 2:17-cv-516-JRG.</p> <p>10 Today's date is November 14, 2018. The time on the</p> <p>11 video monitor is 9:23 a.m.</p> <p>12 The video operator today is Renee Mayfield.</p> <p>13 This video deposition is taking place at 3635</p> <p>14 Fashion Way, Torrance, California 90503.</p> <p>15 Counsel, please voice identify yourselves</p> <p>16 and state whom you represent.</p> <p>17 MR. RUBINO: Vincent Rubino from Brown</p> <p>18 Rudnick for the plaintiff AGIS. And also with me</p> <p>19 from the law firm of Brown Rudnick is my colleague</p> <p>20 Enrique Iturralde.</p> <p>21 MS. BI: Kathryn Bi from the law firm of</p> <p>22 Desmarais LLP on behalf of the witness and defendant</p> <p>23 Apple, Inc. With me is Ameet Modi, also from the</p> <p>24 law firm of Desmarais LLP.</p> <p>25 MR. BOMBACH: Miguel Bombach from HTC --</p>	<p style="text-align: right;">Page 7</p> <p>1 representing HTC Corporation, from Perkins Coie.</p> <p>2 MR. CHI: Justin Chi from Arnold & Porter</p> <p>3 representing LG Electronics, Inc.</p> <p>4 THE VIDEOGRAPHER: The court reporter today</p> <p>5 is Philip Norris of Epig Court Reporters.</p> <p>6 Would the reporter please swear in the</p> <p>7 witness.</p> <p>8</p> <p>9 DR. NEIL G. SIEGEL,</p> <p>10 having been first duly sworn, was</p> <p>11 examined and testified as follows:</p> <p>12</p> <p>13 EXAMINATION</p> <p>14</p> <p>15 BY MR. RUBINO:</p> <p>16 Q. Good morning. Can you please state your</p> <p>17 full name for the record?</p> <p>18 A. Yes, sir. Good morning. My name is Neil</p> <p>19 Gilbert Siegel.</p> <p>20 Q. Dr. Siegel, when were you first contacted</p> <p>21 by Apple in this case?</p> <p>22 A. I received an email in December of 2017,</p> <p>23 that is about 11 months ago, unsolicited, from a</p> <p>24 lady named Kathryn Bi, asking if I could consider --</p> <p>25 she had a conversation with me about potentially</p>
<p style="text-align: right;">Page 8</p> <p>1 being an expert witness in a legal case, and we</p> <p>2 shortly thereafter had a phone call.</p> <p>3 Q. And did you ultimately agree to be an</p> <p>4 expert in this case?</p> <p>5 A. Yes.</p> <p>6 Q. When did you sign -- well, let me back up a</p> <p>7 second.</p> <p>8 Do you have a formal retainer agreement</p> <p>9 with Desmarais or Apple?</p> <p>10 A. I'm not exactly sure what constitutes a</p> <p>11 retainer agreement. There's an agreement that both</p> <p>12 Apple and I signed that describes the business terms</p> <p>13 of my engagement for this purpose.</p> <p>14 Q. When did you sign the agreement that sets</p> <p>15 forth the business terms of your engagement for this</p> <p>16 case?</p> <p>17 A. Early in 2018.</p> <p>18 Q. So not long after you had the phone call;</p> <p>19 right?</p> <p>20 A. A few weeks after. It may be six weeks. I</p> <p>21 did not check. I did double-check when I got the</p> <p>22 original email. I didn't double-check on the date</p> <p>23 of the agreement.</p> <p>24 Q. So you've at least been working with Apple</p> <p>25 as an expert witness -- in the context of an expert</p>	<p style="text-align: right;">Page 9</p> <p>1 witness in this case since January of this year;</p> <p>2 right?</p> <p>3 A. January or February, yeah.</p> <p>4 Q. And are you being compensated for your time</p> <p>5 by Apple?</p> <p>6 A. Yes.</p> <p>7 Q. What's the hourly rate for which you're</p> <p>8 being compensated by Apple in this case?</p> <p>9 A. One thousand dollars an hour.</p> <p>10 Q. Is it the same for consulting as well as</p> <p>11 testimony time?</p> <p>12 MS. BI: Objection, form.</p> <p>13 MR. RUBINO: Let me ask a different</p> <p>14 question. Sometimes experts charge different rates</p> <p>15 for reports versus testimony in court.</p> <p>16 Q. Is your rate the same for all time spent on</p> <p>17 this case?</p> <p>18 A. The rate is the same for all time for which</p> <p>19 I'm allowed to bill hours on this case.</p> <p>20 Q. So from the beginning of your engagement</p> <p>21 with Apple, how many hours have you spent on this</p> <p>22 case?</p> <p>23 A. About 70 thus far.</p> <p>24 Q. And were you compensated for all 70 of</p> <p>25 those hours?</p>

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1 confirming that what you meant was the videos were
 2 produced either by the Army, by TRW or by Northrop
 3 Grumman; correct?
 4 A. That is correct.
 5 Q. They weren't produced by anybody else;
 6 right?
 7 A. As far as I know, that is correct.
 8 THE REPORTER: Can we go off the record,
 9 please?
 10 MR. RUBINO: Sure.
 11 THE VIDEOGRAPHER: We are off the record.
 12 The time is 9:32 a.m.
 13 (Brief recess.)
 14 THE VIDEOGRAPHER: We are back on the
 15 record. The time is 9:34 a.m.
 16 BY MR. RUBINO:
 17 Q. So Dr. Siegel, do you have a technical
 18 degree?
 19 A. I have a degree in mathematics at the
 20 bachelor's level, a degree in mathematics at the
 21 master's level, and a Ph.D. in system engineering.
 22 Q. Are you a programmer?
 23 A. I don't really consider myself a
 24 programmer. I've done quite a bit of programming
 25 over the course of my career, but I didn't really

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1 A. We left TRW to start the company in May of
 2 1980.
 3 Q. What was the name of the company?
 4 A. CompuNet was the original name. We were --
 5 we merged with another small company called Titan.
 6 Titan was the name that was retained for many, many
 7 years.
 8 Q. What did that company do?
 9 A. Was a defense contractor in a small way.
 10 Q. It went public you said?
 11 A. We actually went public by buying a company
 12 that was already public, but -- but by the time I
 13 left the company we were a publicly-traded company.
 14 Q. What company did it buy?
 15 A. I think it was called EMM SESCO. They made
 16 radiation hard memory for spacecraft.
 17 Q. And then about what year did you return to
 18 Northrop Grumman after that?
 19 A. I believe it was January of 1988. It was
 20 still TRW in those days, of course.
 21 Q. So while you were at -- let me ask you a
 22 different question.
 23 What year did TRW become Northrop Grumman?
 24 MS. BI: Objection to form.
 25 THE WITNESS: I should answer?

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1 consider -- I don't offer myself professionally as a
 2 programmer these days.
 3 Q. Do you review code in the course of your
 4 work?
 5 A. I certainly did during my career at
 6 Northrop. I worked 39 years in the aerospace
 7 industry, including 31 years at TRW and Northrop
 8 Grumman, and during that time I acted as a
 9 programmer or viewer of code, but I don't consider
 10 that my main specialty.
 11 Q. When did you start working at TRW?
 12 A. I started in the aerospace industry as
 13 contract laborer at TRW right after Thanksgiving in
 14 1976. I worked as a contract laborer for about six
 15 months, and in May of 1977 I became a TRW employee.
 16 Q. And how long did you work at TRW for?
 17 A. In all, I worked at TRW and Northrop
 18 Grumman, which acquired TRW, about 31 years. In the
 19 middle I left and did a start-up company with some
 20 colleagues, did that for seven years, went public,
 21 etcetera, etcetera, and then wanted to work on big
 22 projects again and returned to TRW. So the 31 years
 23 includes some time before the start-up company and
 24 after the company.
 25 Q. When did you work on that start-up company?

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1 MS. BI: Yeah.
 2 THE WITNESS: Sorry.
 3 It was near the end of 2002.
 4 BY MR. RUBINO:
 5 Q. How long were you at Northrop Grumman for?
 6 A. From whenever the deal closed, which I
 7 think was November or December of 2002, until my
 8 retirement on December 31st, 2015.
 9 Q. Are you familiar with a product called
 10 FBCB2?
 11 A. If by that you mean the -- the U.S. Army
 12 contract that is properly called Force XXI Battle
 13 Command, Brigade and Below, yes, I am familiar with
 14 that product. FBCB2 is an abbreviation that is
 15 often used for that, and there's some other
 16 nicknames that are used as well.
 17 Q. What other nicknames are used?
 18 A. Sometimes it's called the Applique.
 19 Sometimes it's called the Digital Battlefield. And
 20 another common nickname is the Blue Force Tracker.
 21 Q. When did you first become involved with
 22 FBCB2?
 23 A. So I was working at TRW and I was working
 24 as the chief engineer on another U.S. Army contract.
 25 We conceived of an idea, and we started a company-

<p style="text-align: right;">Page 90</p> <p>1 computer, the device.</p> <p>2 But when we talk about designating a unit,</p> <p>3 what we are -- you don't designate a computer, you</p> <p>4 designate a military role. That's how people are</p> <p>5 identified in FBCB2.</p> <p>6 Q. So what you're --</p> <p>7 A. So that was the distinction I was trying to</p> <p>8 get to by this terminology. I apologize if it</p> <p>9 confused you.</p> <p>10 Q. Okay. So you say the unit receives</p> <p>11 information from FBCB2 devices and forwards it to</p> <p>12 other FBCB2 devices, so --</p> <p>13 A. No, that's not what it says, sir.</p> <p>14 Q. It says:</p> <p>15 "Individual FBCB2 units were designated to</p> <p>16 receive information from FBCB2 devices and</p> <p>17 forward it to other FBCB2 devices."</p> <p>18 Am I reading that correctly?</p> <p>19 A. Yes, sir.</p> <p>20 Q. And so was there an FBCB2 device that</p> <p>21 received information from FBCB2 devices or was it</p> <p>22 something else in the unit that received the</p> <p>23 information from FBCB2 devices?</p> <p>24 A. There is an FBCB2 device in that unit, but</p> <p>25 it was designated by the role name that is the</p>	<p style="text-align: right;">Page 91</p> <p>1 military term for the unit.</p> <p>2 Q. And so when you talk about servers in this</p> <p>3 paragraph, "servers consist of computers mounted on</p> <p>4 Army vehicles," those are just the FBCB2 devices;</p> <p>5 right?</p> <p>6 A. Yes, sir.</p> <p>7 Q. And so an FBCB2 device, that same hardware,</p> <p>8 could either be a server or not a server; right?</p> <p>9 A. Correct. It services the FBCB2 mission for</p> <p>10 the user on that military platform, whether it is a</p> <p>11 server or not. But it may serve, as you indicated,</p> <p>12 the additional role of being a server.</p> <p>13 Q. And so is it fair to say that any FBCB2</p> <p>14 device could have been a server?</p> <p>15 A. There is some technical limitations that</p> <p>16 prevented some FBCB2 devices being considered</p> <p>17 servers.</p> <p>18 Q. So let's talk about these FBCB2 computers</p> <p>19 you're talking about mounted on Army vehicles. Is</p> <p>20 it fair to say that any of those FBCB2 computers</p> <p>21 could have been a server?</p> <p>22 A. Subject to the technical limitations I just</p> <p>23 mentioned, yes.</p> <p>24 Q. And I'm not going to ask you specifically</p> <p>25 about those technical limitations, but I'm going to</p>
<p style="text-align: right;">Page 92</p> <p>1 ask you: Did you mention those in your report? Let</p> <p>2 me ask you a different way.</p> <p>3 Can you point to a paragraph in your report</p> <p>4 where you describe those technical limitations of</p> <p>5 the devices that would prevent them from being a</p> <p>6 server?</p> <p>7 A. It was not relevant to the argument.</p> <p>8 Q. So to confirm, you didn't put that in your</p> <p>9 report; right?</p> <p>10 A. It might be discussed in the '559 patent,</p> <p>11 which is referenced in several of these paragraphs,</p> <p>12 but the -- the fact that only some portion of the</p> <p>13 FBCB2 devices in a given unit were eligible to be</p> <p>14 elected as servers was not relevant to the argument</p> <p>15 I was making.</p> <p>16 Q. So to confirm, you didn't discuss that in</p> <p>17 your report; right?</p> <p>18 A. I did not discuss the specific technical</p> <p>19 limitation that would allow some FBCB2 devices to</p> <p>20 become servers and others not eligible to become</p> <p>21 servers, no, sir.</p> <p>22 Q. Have you ever heard the term "mesh</p> <p>23 network"?</p> <p>24 A. I have, sir.</p> <p>25 MR. RUBINO: I think we're being told that</p>	<p style="text-align: right;">Page 93</p> <p>1 we have to take some time to change the tape, if you</p> <p>2 want to go off the record, if that's okay.</p> <p>3 THE VIDEOGRAPHER: This marks the end of</p> <p>4 Media No. 1. Going off the record. The time is</p> <p>5 11:38 a.m.</p> <p>6 (Brief recess.)</p> <p>7 THE VIDEOGRAPHER: Back on the record.</p> <p>8 Here marks the beginning of Volume 1, Tape No. 2, in</p> <p>9 the deposition of Dr. Neil Siegel. The time is</p> <p>10 11:50 a.m.</p> <p>11 BY MR. RUBINO:</p> <p>12 Q. Good afternoon again, Dr. Siegel. So</p> <p>13 before the break we were discussing FBCB2 devices</p> <p>14 and whether or not they could be servers; do you</p> <p>15 recall that discussion?</p> <p>16 A. I do, sir.</p> <p>17 Q. And so I want to direct your attention to</p> <p>18 your report, at paragraph 103.</p> <p>19 A. Okay. Yes, sir.</p> <p>20 Q. So in this paragraph you discuss the</p> <p>21 limitation sending to a second server a request for</p> <p>22 a second georeferenced map data different from the</p> <p>23 first georeferenced map data receiving from the</p> <p>24 second server of the second georeference map data.</p> <p>25 Do you see that limitation?</p>

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